Digitisation, securitisation, and upbringing: interrelations and emerging questions

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Abstract

In recent years we have seen a tightening of safeguarding legislation and protocols that overlap with anti-terror legislation to give particular shape to discourses and practices of risk management and early intervention, particularly in early childhood education and parenting. Such developments have taken place in a context in which digital technology has become ubiquitous, enabling the role of surveillance in modes of governing to take on new forms at both macro and micro levels. Here as well as giving an overview of literature on the digital in general, we also focus more specifically on the parent-child relationship and the use of digital technology by parents. Securitisation has received less attention to date than digitisation in educational research though it has been bought into focus particularly by high-profile policies such as PREVENT and events such as the Trojan Horse scandal in the UK. Here we survey recent theorisations of securitisation from other fields, but again focus specifically on its relation to childhood and parenting. We bring digitisation and securitisation together here to consider how the particular form of individualisation produced today are recasting how we think about parents, teachers and children.

We are warned of an emerging 'crisis of childhood',[1] and such concerns have been exacerbated by the privations necessitated by the COVID19 pandemic.[2] The issues to which children are exposed today - new forms of terrorism, Brexit (in the UK at least), environmental degradation, inequality, identity, poverty, bullying online and offline, pressures of high stakes testing – add not only to the anxieties they – and their parents – experience, but also to pressure on parents, schools and governments to solve such problems.

The ways in which community relations and global politics since 9/11 have been conducted have given a particular shape to the public and political discourse around raising children and risk prevention. In response to threats of terrorism and radicalisation, as well as high profile cases of child abuse in recent years and the risk of online grooming, we have seen a tightening of safeguarding legislation and protocols, which overlap with anti-terror legislation and give rise to discourses and practices of risk management and early intervention, particularly in early childhood education and parenting.

Such developments have taken place in a context in which digital technology has become ubiquitous, enabling the role of surveillance in modes of governing to take on new forms at both macro and micro levels. Much has been written in educational research about the potential benefits, risks and challenges of digitisation, across levels of education and from a variety of theoretical perspectives (see e.g. Rumsvik 2009; Edwards 2015; Lewin and Lundie 2016; Williamson 2016). Here we broaden our focus, to include literature on the digital in general, but also try to restrict our educational focus to the parent-child relationship and the use of digital technology by parents. To a lesser extent, securitisation has also been a focus of recent educational research, particularly since high-profile policies such as PREVENT[3] and events such as the Trojan Horse scandal in the UK.[4] Again, in this review we broaden our focus to capture recent theorisations of securitisation from other fields, but also focus specifically on its relation to childhood and parenting.

Our interest in bringing digitisation and securitisation together here is based on pressing questions that emerge from recent policy initiatives, and research we have undertaken so far, which suggest that digitisation, securitisation and the particular form of individualisation produced today are recasting how we think about parents, teachers and children:

- To what extent is children's freedom of movement delimited by these developments?

- To what extent is parents'/primary carers' agency in relation to the next generation reconstituted by digitisation and securitisation?

- To what extent is teachers' professional judgment framed by these concerns rather than pedagogical ones?

- To what extent does the focus on an individualised form of citizenship compromise our ability to tolerate plurality?

Having identified these broad questions, our intention had been to convene a conference that brought together perspectives from early childhood, digital sociology and educational philosophy to explore the ethical, political and pedagogical implications of these emerging and powerful trends. Alas, COVID19 had other plans. We are glad, however, to be able to present articles in this special section that would have been the keynote papers at that conference. While we have missed the enriched discussion that would have been offered by their invited respondents and conference participants, we hope that these articles, and the introduction we offer here, can contribute to a wider conversation, until we can convene again in person.

In what follows, we treat securitisation and digitisation separately, at least at first. Broadly speaking, these have not been considered together in the literature we have explored, at least not explicitly. What emerges from the review of the literature that follows is a greater sense of how they are interrelated: digitisation facilitates particular forms of securitisation and risk

prevention; the concern for security (be it at individual, community or national levels and their interrelations) shapes how digital technologies are designed and used. Critical research in both areas indicates a common concern with governance and subjectivity, and understandably so. In what follows we indicate some of the main findings and theoretical approaches. We begin by outlining what is meant by securitisation, how it manifests in educational policy and practice and critical analyses of this. We then consider digitisation in a similar vein before returning to our opening questions and our central educational focus, upbringing.

Securitisation

Since the mid-20th century, the way government agencies have understood security, i.e. 'protection against threat' (Gearon 2015, 265), has broadened. The term securitisation is now used to describe the growing role of sectors, departments and institutions not ordinarily involved in security and intelligence. In the post-war period this growth has been reflected in the expansion of security and intelligence studies into, for example, the political, societal, economic, environmental and religious domains (Gearon 2019, 329). In this sense, security is seen as part of wider modes of governance (rather than a concern confined to the military), a framing found in the field of Security Studies, in which the 'logic of routine' model of understanding securitisation draws on Foucault and Bourdieu (Bourbeau 2015). In this model, securitisation is seen as 'a process of establishing and inscribing meaning through governmentality and practices', e.g. those of security professionals, 'in which technology comes to hold a prominent place' (396). Theorisations of securitisation in Security Studies, then, have adapted to account for the role of digital technology.

Educational discourses and practices are seen to have become 'securitised' since the terrorist attacks on the USA in September 2001, at national, European and international levels (Gearon 2015; 2019). The extent of securitisation in education leads Gearon to refer to the 'counter-

terrorist classroom' (2013) and the 'counter-terrorist campus' (2017abc; 2018). In the UK, securitisation has gained particular critical interest in educational research since the introduction of the UK PREVENT legislation in 2015, a tenet of the government's anti-terror legislation that placed statutory duty on educational and social institutions for the prevention of radicalisation and reporting of at-risk children and young people. We acknowledge that there are clear instances of, and ongoing questions to be asked about, this in relation to higher education, e.g. related to 'no platforming' of radical speakers and fears over freedom of speech on campus (Gearon 2015, 272), the potential impact on security-/intelligence-sensitive research itself (ibid.) and the risk of damage to 'relations of trust and openness in institutions by silencing and marginalising students and staff who might otherwise wish to engage in the exploration of different questions and ideas' (O' Donnell 2016, 54). Here, however, in view of our concern with how securitisation and digitisation intersect with upbringing, we are predominantly focused on how such policy shapes discourses and practices relating to families, young children and schools.

In the UK, the securitisation of education predates the PREVENT policy. Winter and Mills locate its underlying logic, and its requirement for educational institutions to focus on Fundamental British Values, as 'symptoms of the much-older colonial education-security relationship' (2020, 47) given its racialised framing. More broadly, securitisation as prevention against threat or protection from risk is evident throughout modern societies in terms of the ways in which criminality, and binaries of normal/abnormal, sane/insane, were established in the late nineteenth and early twentieth centuries.

Governing risk

The family has long been a site of intervention in this regard (Donzelot 1979; 1991). Following Foucault, Donzelot situates 'new forms of intervention by the state into the family, through

compulsory schooling, legislation on the protection of minors and on divorce' (Donzelot 1991, 173), in relation to the problematic of governing the then emergent welfare state. Justification was needed to intervene in a sphere that was seen as a natural form of association that pre-existed the state; until this point, social solidarity, 'the interdependence of the individuals composing society' (ibid., 172), provided this. Specifically, such intervention was justified because:

> (a) By enlarging opportunities, by the social promotion of the individual, it acts as a force for emancipation, and creates freedom.

> (b) By reducing risks, by the promotion of the social and the corresponding limitation of the irrationalities of the economic, it acts as a force for socialization, and creates collective security. (Donzelot 1991, 174)

The forms of intervention and monitoring to which families were subject differed by class, according to Donzelot, but were all broadly informed by psychoanalysis and other psy-disciplines as deployed by the caring professions (ibid.; see also McCallum 2007; Rose 2001).

A specific example of the way in which particular bodies of knowledge shaped the definition of problems and forms of intervention relating to children and families is found in McCallum's genealogical research in this area. He traces the ideology of child protection and safeguarding to the ability of radiology – specifically paediatric radiology – to detect broken and fractured limbs: 'In coalition with more prestigious disciplines such as paediatrics and psychiatry, radiology gave birth to a new social problem. During the 1950s and 1960s, a new category of person found itself attached to the hospital in the form of the "battered baby"' (McCallum 2014, 461). While new terms such as maltreatment and child abuse pathologised the role of parents, conditions for children did not significantly improve. Medicalisation reduced child abuse to technical matter (ibid.). There was a shift away from criminal proceedings against

parents to preventative work (McCallum 2014, 461). McCallum refers to Thorpe's 'survey of social work case records in Australia', which 'showed extensive enquiries into parenting behaviours, with only a very small proportion resulting in children being assessed as "at risk" … the vocabulary of "child abuse" led professionals to "spectacularly miss the point" about the contexts in which allegations arise – that is, the massive over-representation of poor and disadvantaged people, especially single female parent families and Aboriginal people' (Thorpe 1994, 196 cited in McCallum 2014, 462). As McCallum notes, the shift to intervention rather than criminalisation of parents failed children and stigmatised those specific groups in society that tended to be most affected by poverty and poor health.

> A rationality of 'securitisation of populations' may not of itself produce poverty relief and a reduction of family violence, but it built a grid for assessing the 'habits and mode of living' (Victoria, Children's Court Act, 1906) of that part of the population whose performance in a range of life circumstances might be regarded as problematic. (McCallum 2014, 462)

As such, marginality itself became criminalised as, often, behaviours ordinarily dealt with by parents and teachers – e.g. 'truanting, parental defiance, shop-lifting, sexual promiscuity, fare evasion and "offensive behaviour"' (Carrington 1993) – were tried before a Children's Court when committed by those already known to the welfare and justice systems, particularly girls and Aboriginal children. Judgements were then made not on the basis of law but on the basis of deficit discourses and individual conduct, or counter-conduct, i.e. the extent to which the child did not conform to norms, e.g. 'pattern of behaviour, bodily gesture, a certain attitude, a way of life' (McCallum 2014, 464).

> Sentencing was based on the logic of 'preventative intervention' rather than judicial logic. 'Deficit discourses' were utilized in the identification of pre-delinquency, and

such a classification seemed to be sufficient to justify the committal of welfare cases to institutions. 'Deficiencies' were held to be located in the individual children or their families, so that children and families were held responsible for school failure. Cultural differences and marginality were criminalized, and family poverty translated into family pathology. (464-465)

While state and professional intervention into 'at risk' children's and families' lives is by no means a new phenomenon, then, the extent to which the language of security is present, the groups that are particularly subject to pathologising or criminalising discourses and the manner and logic of intervention have altered over time.

Recent trends in securitisation

There are at least three specific trends that are notable in the more recent forms of securitisation we wish to draw attention to here (for reasons of space and for their particular relevance to our concerns): the first relates to anti-radicalisation, as mentioned above in relation to PREVENT; the second relates to prevention of future issues; and the third is found in the contemporary discourse of resilience.

Lundie (2017) traces the more recent, explicit securitisation of education to the political response to the 2001 race riots:[5] this led to New Labour's 'community cohesion' agenda, following significant reports at the time (e.g. Cantle 2001[6]) that framed community fragmentation in racial terms. Trevor Philips, then chair of the Commission for Racial Equality, echoed this, referring to the country's risk of 'sleepwalking into segregation'. After 9/11, however, the framing of the security threat shifted from a racial to a religious one (Lundie 2017; 2014). The religious education curriculum in schools had been 'the primary vehicle for community cohesion education' (Lundie 2017, 117), but the religious and the racial became conflated after 9/11 resulting in 'a hardening of the securitisation of education' (ibid.), as under

the PREVENT Strategy oversight moved from local school leaders to the Home Office (Lundie 2014). As Elwick and Jerome (2019) note, the security agenda sits in an educational context in which children are encouraged to explore diversity and identity in order to better understand sociopolitical issues, such as terrorism, extremism and radicalisation, which places teachers in the difficult position of 'navigating between two paradigms' (339). This tension between paradigms is also reflected by Anderson (2020) in her contribution to this special section, when she reports that early years teachers feel compromised by the promotion of fundamental British values and how it conflicts with the ethos of welcoming and celebrating equality and diversity in their educational settings. O'Donnell raises the further pedagogical concern that securitisation undoes the educational endeavour because 'neither teacher nor student can fully know which ideas, views, interpretations and thoughts are permissible' (O' Donnell 2017, 179).

The promotion of a particular set of values, and the renewed focus on safeguarding, adds to a sense that caring for our children entails future-proofing them. There is a considerable literature on the way in which the parent-child relationship has become scienticised and instrumentalised through the discourse of parenting, in which a causal relationship is often posited between what a parent does and the child's future outcomes (cf. Lee et al. 2014; Ramaekers and Suissa 2012). This second aspect of 'securitisation' we identify entails optimising the child's future potential, in part, through the reduction of the risk factor presented by parents. Lundie has suggested that this 'precautionary logic' 'depoliticises the governance of risk' (Lundie 2019, 326): the ways in which we are asked to invest in and interact with our children in particular ways in order to secure optimal development becomes common-sense, supported by science, and seems, after all, to be morally straightforward. In view of securing such development, the contingencies of the everyday are seen as problems to be ironed out and avoided in future rather than part of the complexity and compromise of being human (Ramaekers and Suissa 2012; Mackler 2018).

As identified in the earlier historical account of the governance of risk, the knowledge drawn upon to inform interventions derives from particular fields. In addition to the modern psy-disciplines, neuroscience now plays an increasing role in the understanding of children development (see Macvarish 2016 for a critical account). The now iconic image of two brains, side by side, one 'normal', one having suffered 'extreme neglect' (Perry 2002) has been taken up internationally as 'solid, objective evidence of the formative importance of attentive mothering for babies' brain development and the need to intervene early to ensure that children's brains are not damaged by substandard parenting' (Gillies et al. 2017, 2). Gillies et al highlight how such interventions are focused on prevention at the level of the individual, i.e. 'on parents and how they rear their children' (3), rather than on 'the unequal social and material conditions in which children live' (ibid.), which supports Lundie's claim of depoliticisation. Gillies et al's critical account of current discourse around early intervention and the evidence that supports it seeks to disrupt the widespread 'contemporary understanding that poor parenting results in substandard future citizens who are not fit for the economy of today's world' (3-4). As we will see further below this is accompanied by a recent education policy focus on 'nurturing personal traits of determination and resilience' (37) in order to prepare children to withstand what this precarious future might bring.

This brings us to the third trend, the general discourse of resilience, which Burman (2018) discusses in the context of the UK government's Character and Resilience Manifesto (Paterson et al. 2014). The notion of [social] resilience, appearing here as a character trait, has a wider usage in economics, where it is used to refer to the ability of e.g. businesses or countries to recover from crisis in view of securing their longevity.[7] As Burman notes, 'resilience features strongly in neoliberal economic policies that emphasise individual, rather than state, activity and responsibility' (417). The economic principle, then, is operationalised as a psychological one in current discourse directed at the level of the individual, and specifically at children and

their preparedness for the future. The explicit securitisation discussed above is also noted by Burman when she writes: 'Alongside the global war on terror, commentators have noted how families are now seen through a "securitised lens", such that the discourse of individual and community resilience has shifted to national and international security agendas' (Burman 2018, 431).

Burman identifies a specific focus on 'how children figure within configurations of hypothetical futures, whether as future citizens or as economic actors in the service of the state – rather than individual, familial, or community – security and wellbeing' (418). Echoing Suissa's (2015) earlier critique of character education as displacing the political, Burman argues that this individualisation effects an occlusion of the social: the 'precarity of current economic and political insecurities' are individualised and responsibilised as they are rendered as 'qualities (traits and characteristics) to be found within (primarily working class) children' and children's development then becomes an indicator 'of economic and social futurity' (419). Related terms such as mental toughness and Carol Dweck's 'growth mindset' have also had roles in e.g. sport psychology and military training and, Burman suggests, the shift of resilience from these domains into education should be noted (424). The focus on resilience in the Manifesto is not only targeted at school-age children: 'Early intervention remains a key theme … but this lies in the domain of parent training and education' (430). Parenting is identified therein as 'a learned skill in which we can all improve' (Paterson et al. 2014, 27).

Digitisation

The 'securitisation' discussed above is effected not only through protocols governing how to care for children and designation of at-risk groups, but also through the measurement and recording of these. The enactment of the responsibility of teachers, health and social care

professionals and parents is increasingly mediated via digital technologies that offer real-time, continual progress monitoring and incident reporting.

Much has been written about the extent to which childhood and schooling has become digitised, from both supportive and critical perspectives. Often, the focus of both perspectives has been on schooling, and understandably so given the increased responsibility placed on schools and the growing role of digital technology in their internal and external governance and in the education they provide. A growing body of research, however, is concerned with the use of digital media in the home environment, as a source of information and advice for parents and expectant parents and as a way for parents to engage children in developmental activities.

Datafication

Critical literature on the digitisation of education and childhood has described children as 'datafied' (Lupton and Williamson 2017), as key milestones and developmental benchmarks, achievements and projections – in education, health, and play – are recorded and monitored digitly. While how children use computers has been a research focus since the 1980s, Lupton and Williamson (2017) argue that there has been less of a focus on 'how children are the objects of a proliferating range of digitized surveillance practices that record details of their lives' or on the specific implications for children's rights of the data security and privacy issues these practices raise. They identify a tension between the discourse of children's rights and its concern with voice, e.g. the concern of the UN Convention on the Rights of the Child that 'children are enabled to "speak for themselves"' (cf. Lee 2001; Lupton and Williamson 2017, 769) and the discourse of data rights that sees data as able to '"speak for themselves", free from human bias, positionality or predetermined framing' (ibid.). As they note, 'datafication and dataveillance displace concerns for eliciting voice with a focus on "objective" data that contain "actionable insights" for future intervention in children's lives' (ibid., 781). Parents are a

significant source of such data, from sharing news of pregnancy, along with ultrasound photos, on Facebook, to monitoring foetal growth and pregnancy symptoms through an app, to the recording of biometrics data through 'wearable devices, changing mats, baby scales, clothing, dummies, feeding bottles and toys embedded with sensors' (783).

Within the wider discourse of risk prevention, parents (and grown-ups more generally) are addressed in terms of their responsibility for their own and their children's health and learning. Hence, much critical literature is concerned with the ways digitisation, and the practices of data-gathering and self-knowledge it entails, are constitutive of particular forms of governance and subjectivity. A significant body of research in this domain has developed under the title of critical digital health studies, the insights from which offer important insights into the functionality and usage practices of individual digital self-tracking devices and wearable technologies.

Parents and forms of the digital

Whether we are discussing digital technologies for children, schools or families, it is worth noting the different forms digitisation has taken in recent decades. Lupton, Pedersen and Thomas (2016) undertook an extensive review of literature relating to the way in which parents in particular use digital technology, ordered according to these developments, from websites and blogs, to social media and apps. Websites providing information, advice, and adverts, for different groups of parents became popular in the 1990s, offering a source of advice that complemented that of healthcare professionals and families (731). Being able to use their chat forums anonymously meant users were not constrained by the norms of face-to-face communication, and the sites were reported to alleviate depression, lift self-esteem and give access to new perspectives on and possibilities of motherhood (731). Less has been written on fathers' use of these sites, Lupton et al note, though sites were found to reinforce traditional

gendered parenting stereotypes and promote consumer solutions to parenting issues rather than address these gendered imbalances. Offering similar content to websites, blogs are often more confessional in style, e.g. personal mommy blogger sites, and focused on community formation and offering space for women to 'negotiate the tension between themselves and their role as mothers' (732). Within gender studies, assessments vary as to whether these blogs 'reject ideologies of "good" mothering' or 'reinforce a hegemonic role of women as nurturers' (733).

The rise of the smartphone has further changed the format in which information is presented and accessed and the role of the digital in day to day practices of raising children. Lupton et al note that:

> Mothers of young children, in particular, have begun to rely on smartphone functions to maintain connections at the same time as caring for their children: texting or accessing a news site or search engine online, for example, while feeding their infants in the middle of the night (Gibson and Hanson 2013; Lupton 2016). (Lupton et al. 2016, 733)

Digital media has been found to be 'another way for women to perform "good" motherhood by continuing to communicate with and show affection and concern for their children and thereby maintain familial bonds and intimacy when physically separated' (733). Fathers also use apps such as Skype and FaceTime to stay in touch when living or working away, and while Lupton et al suggest it may be possible to say that they also perform fatherhood in this way, the literature is more limited.

Social media platforms such as Facebook, Youtube, Pinterest, Twitter and Instagram are used by parents as a way of sharing content, such as announcing a pregnancy or sharing images. On Facebook, found to be the most popular platform with parents, there are specific pages for parents, e.g. to enable connection with other parents nearby geographically or in similar

circumstances, such as other parents of children with SEN. Fathers use it to find other stay-at-home fathers, and LGBTQ parents also use the platform as a way 'to help feelings of isolation, marginalisation and stigmatisation' (734).

In addition to general social media platforms, hundreds of apps specifically for parents and prospective parents have emerged in recent years, many designed to track fertility, pregnancy and the newborn stages. These can often be connected to wearable devices, such as smart watches, and 'smart' objects, such as digital baby monitors and sensor-embedded clothing.[8] According to Lupton et al's review such apps are more popular than fitness apps, and offer information and support that is easy to access, either to fill knowledge gaps or as a source of information for those who may lack access to other resources (735).

The capacities of digital media in the form of smartphones, e.g. for digital surveillance and constant connection, can both 'empower and constrain'; they can offer reassurance but can also intensify pressure on mothers (736). Research has identified that 'pregnancy and parenting apps privilege the responsibilisation of pregnant women and mothers for monitoring their own and their children's bodies', individualise the experience despite the promise of promoting social networks and 'reproduce stereotypical, gendered and heteronormative assumptions' (736). By 'constructing a digital profile of their children by uploading information about them – and often before children are born', parents are of great commercial value in a digital knowledge economy due to the data they are making available and the profiles that can be constructed from it. Although such data is at risk of being accessed and used illegally for fraudulent purposes, parents generally expressed minimal concern over what they were sharing and often didn't check privacy settings (737). Where concerns were expressed it was by parents whose privacy was important to them, e.g. LGBTQ parents (736) whose identity might make them a target of abuse.

MHealth, Web 2.0 and subjectivity

Parenting apps can be seen in the context of broader mobile health – known as mhealth – developments, which in turn have been identified as the next stage in the 'longer term "tracking as care" discourse related to early motherhood (see Wajcman 1991)' (Thornham 2019, 173). As with these longer term practices there is a normative dimension to the culture of tracking and the datafied self (Lupton 2016). The work of datafication that apps do is seen to atomise and disaggregate the lived experience of motherhood (Thornham 2019, 179), and while this is not new in itself, Thornham argues, the data silences in such apps – e.g., they count intentional feeding, not leakages; duration and frequency of sleep, not quality (179) – 'renders invisible – indeed, erases – the "fleshy" maternal body' (179).

Deborah Lupton has, as Sanders (2017) notes, led the way in exploring the 'more insidious effects' of self-tracking devices, focusing particularly on 'mhealth' applications. The mhealth devices of particular interest to Sanders have gained traction, she argues, in the wake of the 'fat panic' in the US, echoed elsewhere in the form of an 'obesity crisis'. Such public health concerns, she argues, grant 'new legitimacy' to 'a vast assemblage of biometric and regulatory mechanisms', of which digital self-tracking devices are the most recent addition (39).

Often the way such devices function is theorised in terms of the 'neoliberal discourses of individualism, choice, meritocracy and mobility' (Thornham 2019, 173), and from a Foucauldian/governmentality studies perspective. For example, Thornham (2019) writes:

> Tracking and biosensor apps are part of a wider discourse of biopower, disciplining bodies over time while also generating data to be used by others to discipline us, thus reconfiguring traditional notions of structure and agency (O'Riordan 2017, 49). (Thornham 2019, 172)

Thornham notes, however, that they expose and position 'subjects in ways that not only rarely match their own lived sense of identity but are also increasingly difficult to interrupt and disrupt' (171). Thornham conducted research as part of a group of mothers attending a breastfeeding café who all used a variety of parenting apps. She notes the synergy that exists between the data gathered by the apps, i.e. the categories they provide for users to enter information, and the data recorded during appointments with health visitors and midwives. The participants' comments indicated that 'the women use the apps to cement their conversations with health professionals and to verify their own practices as being correct and "okay" … because [the apps' data] were understood by the mothers as more "accurate" or "truthful" than the women themselves' (176-7).

Thornham's research has led her to describe the subject of, what she terms, the 'datalogical anthropocene' as vulnerable, as we are 'exposed to and positioned by the datalogical in lived, affective and ideological ways' (172). The constitution of our datalogical existence relies on the interaction of our data with algorithms, or algorithmic media, whose power and agency is only just beginning to be understood (see e.g. Bucher 2018). Cheney Lippold (2017) writes that although 'algorithmic identities can never fully square with our lived experience, they are nevertheless gaining traction in terms of decision-making power, policy, normative practices and discourses' (145, cited in Thornham 2019, 181). Hence, Thornham suggests: 'Agency is not with the body in this scenario, but with the technological economy that reconfigures the body in its own terms' (181).

That the digital is an increasingly ubiquitous feature of our daily lives leads Wilson and Yochin (2017) to refer to the 'digital mundane'. In relation to the domain of raising children, they write: 'everyday discrete decisions, for example, about length of sleep for the baby, amount and type of food, breastfeeding, clothes, playtime activities are all being atomised and simultaneously elevated to the consequential' (cited in Thornham 2019, 181). The normative discourse of

consequentiality, constituted in part by the causal relationship posited in much parenting information and advice (Ramaekers and Suissa 2012), is arguably intensified, then, when communicated via individual digital devices.

As indicated in the review of literature by Lupton et al (2016) and Thornham's (2019) work with mothers, critical analyses of different forms of digital media identify the ways in which they constitute different subject positions (e.g. mothers and fathers, the good mother, heteronormative assumptions regarding roles) and individualise and responsibilise those roles in particular ways. Of course, tracking of individuals, whether in the domains of health, education, or indeed security, did not emerge with the advent of digital technology, as we saw in the earlier discussion of securitisation. As Bernard notes:

> Ultimately, what is most striking about today's methods of self-representation and self-perception – the profiles on social media, but also the various location functions on smartphones or the bodily measurements of the 'quantified self-movement' – is the fact that they all derive from methods of criminology, psychology, or psychiatry that were conceived at various points since the end of the nineteenth century. (2019, 3)

While the different forms of engagement and ways in which parents are addressed are evident from Lupton et al's review, less clear is the way in which the affordances of these technologies change the very mode of subjectivation. For example, Bernard argues that the internet culture of the early 1990s offered a sense of utopianism and emancipation from fixed identities and subject positions. He writes that 'the subject was thought to be a fluid and amorphous category' (2019, 24), described in terms of 'difference, multiplicity, heterogeneity and fragmentation' (Turkle, 1995, 185, cited by Bernard 2019, 23). It offered not only a freedom from ascriptions of identity related to family, gender, sexuality and so on, but also a freedom from physical location: 'A precondition for these imagined utopias of freedom was of course the

"placelessness" of online communication – an internet user's physical location is irrelevant when he or she is moving in cyberspace' (55). New modes of self-presentation have emerged, however, in the era of web 2.0 and the way we use smartphone apps: 'users now had to have fixed identities and positions: a "profile" and a "location"' (55-56). He writes:

> The horrifying vision from 2010 of a cell phone functioning like an electronic ankle bracelet is today's banal reality, but this 'fetter' is not perceived to be coercive and restrictive – rather, it is seen as liberating, social, and identity-shaping. (2019, 51)

Although the sense of placelessness, or alternative realities, and loss of or change of identity through avatars, for example, is still very much part of the online gaming experience, the more mundane use of smartphone apps seems, Bernard suggests, rather than the freedom of anonymity, to offer a fixity that 'could not be better suited for police surveillance' (ibid., 26). We have seen this tension between freedom and control in the way social media has been used in election campaigns recently. The democratising potential of the internet as such has been questioned in view of the way in which the worldwide web, particularly since the advent of web 2.0, orders and privileges particular sources of information. The locating of ourselves and our identities in terms of our preferences (where we are, what links we follow, what we share and like) has now become a valuable source of data not only for advertisers but also for political entities, seeking to shape public opinion, as seen in the allegations relating to the use of Facebook data by Cambridge Analytica.

The digital is political

The political implications of digital technologies relate not only to formal democratic processes, such as elections, or explicit political participation, such as engagement with political or campaign groups online, e-petitions and the ability to debate issues via forums and microblogging sites such as Twitter. The mediation of our interpersonal relationships, and our

relationship to ourselves, by digital technologies and their algorithmic functions, changes our very relationship to the political, as the information and advice we receive is based on our previous behavior and preferences, removing the possibility of alternative perspectives, which, if they do appear, can be blocked. We have analysed this in relation to parenting apps to suggest that the parent's role as a political figure – one who stands between their child and the world – making judgements based on values and moral convictions, responding to the disruption that others, including the child, pose to their beliefs and assumptions, are recast when this decision-making is mediated by an app (Ramaekers and Hodgson 2020).

Raising Children

The parent-child relationship is by no means absent from the literature on digitisation, and the way in which this relationship is shaped by discourses related to security and risk prevention has also been addressed. The critical approaches to these developments derive predominantly from early childhood studies (e.g. Gillies et al. 2017), digital sociology (e.g. Williamson 2017), critical digital health studies (e.g. Lupton et al. 2016), media and cultural studies (e.g. Thornham 2019), and sociology more generally, and have tended to take a broadly political perspective, albeit deploying different methods and theoretical framings. As we have seen, they have drawn attention to the production of particular subject positions and the power relations this constitutes, the silencing or denial of particular subject positions or experiences (e.g. female, embodied experience; experiences that cannot be measured) and the maintenance of particular hegemonic subject positions (e.g. of motherhood, fatherhood).

To what extent do the existing theorisations of the securitisation and digitisation of education and upbringing address the questions stated at the outset, which seek to investigate their interrelationship?

To what extent is children's freedom of movement delimited by these developments?

Critical analyses of the digital self-tracking of children, through pregnancy and early childhood in particular, imply that the child's freedom is curtailed to some extent by the logic of risk prevention that informs their usage and the knowledge of being monitored by their parents. This phenomenon within the contemporary parenting culture is often referred to as a loss of freedom – for both parents and children – as advice is seen to fuel parents' fear of everyday risks, as argued, for example, by Frank Furedi in *Paranoid Parenting*. This argument is based in part on a libertarian sense of resisting any external expertise about parenting and trusting one's own judgment, which then informs a normative sense of what children's (and parents') freedom ought to look like. The Foucauldian-derived governmentality perspectives that inform many of the critical analyses discussed above, however, invite us to question how digitisation and securitisation shape the ways in which parents and children practice and are encouraged to practice their freedom today and, indeed, to think about how this reshapes our very understanding of freedom. As Bernard notes, there has been a shift from a concern with the possibility of the permanent surveillance via smartphones, to an active engagement in this surveillance. The way in which the notion of freedom is recast in the interrelation between digitisation and securitisation relates not only to our subjectivity as citizens but also to how this notion of freedom functions in our understanding of the aims of upbringing. In Ben Williamson's contribution to this special section, we see further potential for reshaping children's freedoms as the emerging field of predictive sociogenomics potentially renders them more of an object of manipulation and control as their potential futures are calculated at birth or in utero.

To what extent is parents'/primary carers' agency in relation to the next generation reconstituted by digitisation and securitisation?

The question of how digitisation and securitisation reshapes how we conceive of and practice our freedom relates directly to that of parents' and caregivers' agency. Thornham (2019), for

example, addresses this in her reflection on the ways in which parents use apps, which become a source of authority in terms of their knowledge of themselves and their child. The ways in which digital technologies, such as mhealth apps and parenting apps, shape our decision-making, and indeed the range of options from which we are to make a decision, marks a shift from non-digital sources of information and advice, such as books or face to face appointments with a healthcare professional. The separation between the source of information and the parent in these non-digital sources is less distinct when using a digital technology, which does not work without the inputting of personal data. Although, as Michel Vandenbroeck reminds us in his contribution to this special section, the ways in which parents can and are expected to exercise their agency has always been shaped by prevailing discourses and practices, digital tracking of the testing and measurement of children today increasingly directs parents' attention to the future implications of their everyday actions, and their individual responsibility for this. Vandenbroeck's analysis draws attention to the conception of education that informs the OECD's the Early Learning and Child Well Being Study (IELS) through world-wide testing of the skills of 5 year-old children, it aims to 'help countries improve the performance of their systems, to provide better outcomes for citizens and better value for money' (OECD 2017 cited in Vandenbroeck 2020). Though the economic orientation of such a statement may no longer come as a surprise, Vandenbroeck's concern is 'the complete lack of dialogue with the educational communities' and thus that 'the daily practices of professionals and parents' are 'decided without discussion with the direct stakeholders: parents, early years practitioners and local communities' (ibid.). The securing of future achievement then entails a conception of education decided externally to the teaching profession, which then directly shapes its practices and priorities. The datafication of children, and the ways in which it might shape the ways in which parents enact their agency, is also detailed by Williamson's article (2020). His analysis points to the implications of the emerging field of sociogenomics, the ability to predict probable

future educational outcomes on the basis of DNA and the ability of parents to make calculations on that basis.

To what extent is teachers' professional judgment framed by these concerns rather than pedagogical ones?

Vandenbroeck's analysis draws out the clear economic imperative driving what is measured and how in education, which risks compromising teacher's educational judgments. Elwick and Jerome (2019) and O'Donnell (2020) note the tension for teachers in terms of their desire to foster an inclusive ethos that celebrates diversity, and the need to implement a statutory duty to explicitly teach 'fundamental' 'British' values in the classroom. Anderson (2020) further elaborates on this tension in her contribution in her analysis of the experiences of early years leaders. The implementation of the PREVENT duty, particularly as leaders were accountable to external bodies such as Ofsted for its quality, led to leaders and practitioners feeling that their professional judgment on how to care for children and prevent potentially dangerous behaviours was neither consulted nor valued. They reported that the policy requirements compromised the ethos of early childhood care and education as well as the relationship with diverse groups of parents they had successfully built.

To what extent does the focus on an individualised form of citizenship compromise our ability to tolerate plurality?

Much of the literature we have discussed above refers in some degree to the individualised way in which citizenship and education are understood within neoliberal governance. As Burman noted, the individualist 'discourse of resilience has shifted to national and international security agendas' as families are now seen through a 'securitised lens' (Burman 2018, 431). Anderson notes the tension this raised between early years leaders and parents where the promotion of fundamental British values in educational contexts, as required by the security-led PREVENT

agenda, led to feelings of exclusion and otherness. It was not the leaders as such who were personally unable to tolerate plurality – their professional ethos was to do just that – but the frameworks of accountability and the moral imperative to evidence work to prevent risk. Vandenbroeck addresses a related point in his critique not only of the economic conception of education and the scientifically-supported definition of it promoted by the OECD's testing regime but also of the lack of discussion with stakeholders about whether this is a conception of education we wish to promote and why. The appeal to science, he argues, to remove the ideological and subjective, closes down democratic debate on what is desirable, while also ignoring the ideological nature of the choices made in such a scientific approach.

The concerns mentioned earlier in relation to the implications of the digital for democracy also speak to concerns about our ability to tolerate plurality. In an increasingly personalised online environment we can curate what we do and don't see, unlike in the contingent social world and the alterity we experience there. Notions of community are recast in digital environments, such as apps, referring not to pluralist, diverse spaces of contestation but to spaces populated by like-minded individuals. What is at stake for members of such data-based communities is whether or not they have achieved the best they can according to the criteria contained in the app. The inputting of data, the visual feedback received and the ability to share and compare with others, enable real-time monitoring of whether users have optimised their learning potential, and registered this to make it visible to themselves and others (within the app community). This sense of community as characterised by the like-mindedness of its members is at odds with a more political notion of community in which we continually search for that which binds us, for example in the form of mundane practices and a shared language, rather than coherent sets of interests, likes and dislikes.

The representational nature of upbringing

On the basis of the latter notion of community we have sought to articulate an account of what it means to raise children (Ramaekers and Hodgson 2020). Whereas critical analyses of the digitisation and securitisation of education – and of the parenting culture more generally – are based on the sense that the pedagogical institutions of school and family are inappropriately politicised, we have suggested that the notion of the community invoked among like-minded users of apps are instead depoliticised; the sense of what it means to raise children narrowed to particular behaviours to lead to particular outcomes. This, we suggest, denies that being a parent has a representational dimension: parents unavoidably represent the socio-cultural meanings that shape their lives and into which they introduce their children. Upbringing, then, is always a political event, in the sense that: in raising their children parents lead them towards a public or communal life, that is, our gradual introduction of our children into a common world is not only limited to preparation for future productivity; in doing so, parents make choices when representing the world (take sides, be partial, give consent, utter dissent), that is, in our day to day activities we make moment to moment judgments in response to our children's and other's questions and actions as well as giving reasons (as best we can) for these; and parental representations of socio-cultural meanings can be contested by others, not least by our own children, which puts the nature of the collectivity or community at stake. There is no guarantee that what we wish to or intend to pass on to our children will be accepted by them or taken as we meant.

Each of the four articles that follow address the ways in which digitisation and securitisation impact this issue of representation and the fact that it is overlooked in the parenting conception of raising children and in political – as opposed to pedagogical – critiques of this. Babs Anderson's research with leaders in the early years sector expresses this tension in relation to the introduction of the Prevent agenda. This placed upon them a duty not only to implement enhanced safeguarding practices, but also to explicitly promote 'fundamental British values'

through the curriculum. This created a tension between leaders and parents, who felt their own values were being judged and undermined, and leaders' themselves felt their own pedagogical judgements on the teaching of values and their professional autonomy was denied by the need to uphold security policy in their educational setting. Governmental intervention into children's education and development and into family life and its measurement is not, as noted above, a new phenomenon. The ability to digitise such information and gather it digitally is often seen as a more objective way to gather such information, as it removes the subjective element of the educator or healthcare professional. Not only does this particular form of gathering 'data' risk undermining professional judgment and autonomy, Michel Vandenbroeck argues that it denies the very ideology contained in the decisions about what to measure and how. Such decision-making ought to be subject to democratic debate; accepting unquestioningly the outcomes oriented discourses that abound in education, he suggests, further reinforces that there is only one – economic – language in which to speak about education. What is at stake in not engaging in such questioning comes to the fore in Ben Williamson's article on controversies relating to the use of computational biology. Advances in DNA sequencing enable 'prediction' of health and educational outcomes, the datafication of such contingent factors as society, environment, culture and upbringing further evidencing the omission from ideology from discussions of what it means to raise children. The resurgence in interest in biological accounts of educational ability coupled with the processing power of big data are producing new ways of understanding children and their development and of predicting their outcomes, intensifying calculative reason to the biological level. The possibility of analysing our DNA and those of our children to gain insight in to (and potentially minimise risks or optimise) their futures already to some extent exists, as Williamson reports. Our will to gather knowledge on ourselves and our children in the form of real-time data and digital feedback has become increasingly commonplace with the advent of web 2.0 and the apps now (often) freely available. Kip Kline

considers what these digital forms mean for our understanding of raising children and how sharing our achievements and comparing them with others via social media fundamentally changes how we relate to our children, and to ourselves. Kline draws on Jean Baudrillard's notion of the 'ecstatic' to explore how the affordances of today's social media, in particular Facebook, to archive, to share and hence also to surrender to permanent surveillance of whatever we feed into them (be this data on ourselves or on our children), contribute to a condition of extracting the messiness, the flesh and blood experiences of raising children, ultimately leading to what he tentatively calls a form of 'ecstatic parenting'.

These articles and the foregoing review offer a first attempt to consider the relationship between the phenomena of digitisation and securitisation, how they are constitutive of new forms of individuality, and how they are reshaping our relationships to ourselves and others, not least our children.

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[2] https://www.theguardian.com/society/2020/may/06/work-child-mental-health-coronavirus; https://news.un.org/en/story/2020/05/1063822
[3] https://www.gov.uk/government/publications/prevent-duty-guidance
[4] https://www.birminghammail.co.uk/all-about/trojan-horse
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