**Parenting apps and the depoliticisation of the parent**

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**Abstract**

In educational research, digital technology has received considerable attention, and in early childhood studies this has largely focused, understandably, on children. Our concern here is with the figure of the parent and on a specific digital technology – apps designed for parents. While apps can be seen as a digital extension of existing information and advice that has proliferated in the turn to parenting, and exhibits many of the characteristics of the parenting culture – e.g. positioning parents as in need of education, drawing predominantly from developmental psychology and neuroscience - the particular affordances of apps draw attention to a more profound shift in how we understand what it means to raise children today, particularly if we reassert the representational – political, pedagogical – dimension of the figure of the parent.

**Keywords:** parent, upbringing, philosophy, apps, community, political renewal, pedagogical representation, personalisation, visualisation

**Introduction**

In the educational research literature, digital technology in general has gained broad attention. This has focused on its potential for and implications for learning practices and outcomes (see e.g. the Special Issue edited by Arnott et al., 2018), and in the field of early childhood studies particularly, the role of play (Yelland, 1999), changes to family literacy practices (Marsh et al., 2017), and parental experiences and attitudes. Characteristically, within the literature focused on children, parents, education, and apps in particular, we see research focused on apps used by children and how parents can deal with that; that is, how parents do deal, should deal, or could deal with apps and their children’s use of them; (for example, as an intervention as part of an experimental study to test the effectiveness of a maths app designed to help parents to support their children’s learning (see e.g. Arnott et al., 2018).

From the perspective of the sociology of technology, Deborah Lupton and Ben Williamson offer a critical analysis of personalised digital technology and how it is reshaping childhood (see e.g. Lupton and Williamson, 2017). Their review looks at how children’s lives and activities are being monitored and measured from before birth, and throughout their lives, to the extent that they describe children as ‘datafied’. Michele Willson (2018) focuses on the implications of the ‘ideal child’ that seems to be sought in our increasing quantification and algorithmicisation of children’s lives.

By focusing on the child, however, other agents involved in the use and making available of the digital devices that monitor children (from smartphones used as baby sleep monitors, to internet-enabled Barbie dolls, to parenting apps, to learning analytics and behaviour reward platforms in the classroom) are not given specific consideration. In some cases, the teacher/parent/healthcare professional are discussed only as ‘stakeholders’ in the life of the child; their specific pedagogical role is not acknowledged. This may in part be due to the, understandable, focus on children in Early Childhood Studies, characterised since the 1990s by acknowledgement and analysis of children’s agency and experience (cf. Kay et al., 2012). Given the extent and rate of change, not only in our formal educational practices but also our day to day lives, that has accompanied the rapid ubiquity of personalised digital technologies, we seek here to address this gap in the way the role of parents has been considered via à vis digital technology, by focusing on apps specifically designed for parents. Before we start to look at the apps, we provide a few notes on where we situate our analysis.

Our argument is situated within the field of philosophy of education and offers a different framing of the current context, focused not on the parenting culture in general but on the figure of the parent in particular. Against the background of an understanding of raising children as an intergenerational relationship - that is, not only constituted by the wider social and cultural context but also in which the parent is representative of it (in contrast to the idea of parenting as a set of skills, a point reinforced by Evans and Holland (2012), or as a series of one-to-one interactions between parent/teacher/other and child) - we seek to articulate an account of the parent as a pedagogical figure under conditions of the digitisation of parenting. We focus on the pedagogical specificity of the figure of the parent, not from the normative perspective of what the parent ought to do versus what lies within the legitimate purview of the teacher, but against the background of an understanding of the representational dimension of raising children as always already political. It may be that our account is seen to go too far the other way, as giving insufficient attention to the child, but this is in order to maintain our focus on the parent as a pedagogical figure; not only in relation to their own children but as, inescapably, members of a political community more broadly.

In the Western philosophical tradition, being a parent has been understood to unavoidably have a representational dimension: parents inevitably represent the socio-cultural meanings that shape their lives and into which they introduce their children. Understanding this as ‘always already political’, as stated above, is to assume that: (1) in raising their children parents lead them towards a public or communal life; (2) in doing so, parents make choices when representing the world (take sides, give consent, utter dissent); and (3) parental representations of socio-cultural meanings can be contested by others, not least by their own children, which puts the nature of the collectivity or community at stake. Political, here, then refers to our embeddedness within communities of flesh and blood others and our inescapable obligations to them; the weight that our everyday sayings and doings have in the initiation of children into language and culture.

In the field of philosophy of education, Stephanie Mackler has recently voiced concerns about how today’s technical approach to childrearing, characteristic of the turn to parenting, obfuscates essential aspects of being a parent, in particular the possibility of reconceiving the world the parent represents in response to the disruption of it posed by the child (Mackler, 2017). Mackler’s account is based on an understanding that derives from Hannah Arendt, and from Klaus Mollenhauer, among others, in the Western philosophical tradition, that conceives raising children explicitly as an intergenerational relationship, in which the parent is a pedagogical figure with (political) responsibility for representing the world to the next generation (Arendt, 2006; Mollenhauer, 2014). If we accept that raising children is inevitably political, for the reasons outlined above, this implies a notion of community in which contestation and renewal are understood to be inherent aspects, rather than issues to be overcome in view of a final cohesion (cf. Cavell, 1990; Blanchot, 1988). Community on this view is neither a fixed entity, nor one to be finalised, but rather is continually in the making, by the very actions of its constitutive parts. This notion of the political, and the necessity of renewal as part for democratic society, has gained increased attention in educational philosophy in recent years, in response to the increased privatisation and instrumentalisation of public space and institutions (see, e.g. Masschelein, 2012; Higgins, 2010; Koerren and Friesen, 2017; Vlieghe and Zamojski, 2017).

In this article we follow this line of thinking, which draws from the Continental educational philosophical tradition (particularly the work of e.g., Mollenhauer (2014), Schleiermacher (Thoomes, 1989), and Arendt (2006)), but also situate our account in the context of recent critical literature in the field of parenting culture studies (e.g. Lee et al, 2014; Faircloth and Lee, 2010), the sociology of education and technology (e.g. Williamson 2016, 2017), and recent work in educational philosophy (e.g. Ramaekers and Suissa, 2012).

We bring together the interrelated notions of community and of upbringing as an intergenerational relationship to address a relatively recent addition to the field of parenting advice: parenting apps. The analysis we provide is situated in the context of wider shifts in how we are governed and govern ourselves today, constituted in part by the increasing role of digital technology, big data, and algorithms, and their ubiquity in our daily lives (see e.g. Bucher, 2018).

The analysis proceeds, broadly speaking, from within a governmentality framework, but this is used not in view of further accounting for how parents are positioned as particular subjects. Important analyses in this vein have been undertaken by Nadesan (2002), Smedts (2008), and Dahlstedt and Fejes (2014), for example. Rather, we use a governmentality perspective - as a concern for how a particular mode of governance takes shape - in conjunction with a pedagogical account of upbringing as an intergenerational relationship to focus on what the design and functionality of apps tells us about the constitution of the parent-child relationship.

The apps we focus on in this article exhibit well-documented features of the current mode of governance; namely, personalisation, visualisation, psychologisation, and the production of the entrepreneurial learning subject. We elaborate on the relevance of these dimensions for the constitution of the representational role of the parent. Our concern here is not with the effectiveness of apps, or with making ideological claims about their potential negative impact. Rather, we address parenting apps as a recent further development of the reconstitution of the parent-child relationship in the turn to parenting, with a particular focus on its political and pedagogical dimensions, and in view of the implications of the particular affordances of digital technologies for our subjectivity.

To set the scene, we begin with an overview of some common features of parenting apps, which we then situate within the existing critical literature on the parenting culture (Lee et al., 2014; Faircloth and Lee, 2010). The description of the apps is not intended to imply a technological determinism in how we view the parenting culture. Rather, as we go on to show, the digitisation of parenting advice is seen not only to further illustrate existing theorisations of parental subjectivation but also to intensify particular elements of it. Against the background of an understanding of the parent-child relationship as an intergenerational relationship, we propose a different reading than we find in the existing, sociological, interpretation of parenting as politicised. Instead we suggest that the parent, as traditionally a representational, pedagogical figure, risks depoliticisation. We argue that parenting apps are not merely an intensification of existing (analogue) technologies of parenting (such as manuals, forums, face-to-face contact with parenting experts),[[1]](#endnote-1) but that they further problematise the understanding of the parent as pedagogical/political figure.

**What can an app do for me?**

As an exhaustive account of the diverse range of parenting apps available is not possible, here we summarise some common features, before focusing in on some specific dimensions. The apps referred to here are aimed at parents of zero to three year old children and/or expectant parents. The description below refers to Baby Manager, Vroom, Parenting Challenge, Parentune, Wachanga, and Wonder Weeks.[[2]](#endnote-2) We refer later in the article to why we limit our analysis to apps focused on this age range.

In general, these apps offer advice**,** e.g. on feeding, exercise and nutrition during and after pregnancy, and dealing with familiar parenting challenges. They provide functions**,** e.g. a feed timer, tasks for your baby to complete, stimulating activities to assist with the child’s development. The advice and activities are generated by information provided by the user: minimally, the child’s date of birth or the month of pregnancy, and the user’s selected interests. In some apps, users can add photos, access forum discussions, and seek expert advice. The apps also allow the user to record information, e.g. kicks (during pregnancy), feeds, baths, temperature, weight (mum and baby), height, nappy changes, sleep, steps taken, favourite toys, and so on, to manage more than one child, and to share information with a partner, family members, and other parents.

To develop our analysis in view of our concern with *pedagogical representation*, we provide a more detailed description of three specific aspects of the selected apps, related to: personalisation and visualisation; the language of reliability and verification; and learning optimisation.

*Personalisation and visualisation*

By adding personal information (e.g. date of birth) and media (e.g. photos), users receive personalised information and activities. Parentune, for example, offers ‘well-timed expert parenting advice on your queries related to health and wellness … education and more related areas for your child,’ ‘personalized as per their child’s age and related topics of interest.’ The information and advice given derives from specific fields, as illustrated by Parenting Challenge – ‘Here you can also read about positive parenting techniques and child development’ – and Wonder Weeks, which offers ‘a handy reminder for new parents that when their baby’s brain is changing, or ‘leaping,’ the baby is making a significant advance in mental development.’

The information provided by parenting apps is not only in the form of personalised ‘recommendations for physical development’ (Wachanga) or information to enable you to learn ‘how to be a brain builder’ (Vroom), but also visual illustrations of this: timelines of events and images, for example. Baby Manager enables you to: ‘Visualize trends and routines of your baby with the timeline.’ It provides: ‘Friendly charts [to] help you understand your child and breastfeeding better, gaining insights into their trends.’ Wonder Weeks provides ‘a personalized daily calendar of your baby’s development that will keep you informed about the (mental) leaps and bounds and the fussy phases of your baby – any time of day or night.’ Vroom gives ‘a glimpse at all that’s taking place inside your baby’s brain!’

*Reliability and verification*

A number of apps emphasise the reliability and veracity of the information and advice given. Parentune describes the app’s content as ‘reliable,’ ‘verified,’ ‘trustworthy,’ ‘tried and tested,’ ‘validated,’ and ‘vetted.’ Parenting Challenge, an app that provides a daily quiz for parents, does so to ‘test your knowledge and preconceptions and see if they’re correct,’ so you can ‘be sure that you have the right knowledge to raise your kids. If you answer incorrectly, you will learn the facts about child development that will give you ideas about the best way for raising children.’ Vroom offers specific information about where the knowledge comes from: ‘Vroom was developed by a group of dedicated scientists, community leaders, and trusted brands, with input from community organizations and families like yours;’ ‘Leaders in neuroscience, psychology, behavioral economics, parenting, and early childhood development are our trusted collaborators.’

*Learning optimisation for the individual and the community*

Many apps, then, support the enhancement of the child’s development, which relies on the ongoing learning of the parent. Parenting Challenge states: ‘Spend one minute a day on this app and improve your parenting skills.’ Parenting in this example is a challenge to be overcome, in which parents are competing with each other: ‘test your ability to crack everyday parenting conflicts while trying to give you a comprehensive understanding of child behaviour. Try answering common parenting questions, find your score and challenge other parents.’ Vroom’s brain-based approach means that: ‘By knowing what is going on inside the head of your baby, you can help him to make the leap more easily and stimulate his development.’

The function of ‘sharing’ information via the apps, common across social media, is expressed in terms of belonging to a community of users. As Parentune states, you can ‘connect with like-minded parents,’ describing itself as ‘a rapidly growing pro-parent community.’ Users can: ‘Connect with parents going through the same stages of parenting’ and ‘be in sync with your fellow parents.’ Vroom states: ‘Together we can build an early learning nation.’ In view of the need to ‘improve your parenting skills’ (Parenting Challenge) and ‘Improve your parental level!’ (Wachanga), the apps enable users to ‘interact with experts’ ‘to make your experience better.’ Thus, the apps serve both individual learning needs and the shared needs of the parenting community.

**Parenting apps, parenting culture, and digitisation**

From this overview of the apps, we can see many of the features that have been identified in the parenting culture more generally.[[3]](#endnote-3) Parenting apps can be seen as digital extensions of analogue parenting technologies, e.g. parenting manuals, websites (e.g. <https://www.mumsnet.com/>), TV series (e.g. *Supernanny*), or face-to-face advice from parenting experts. With their focus on providing advice, addressing parents in their capacity to learn and implement the knowledge provided, parenting apps underscore the idea, critically analysed in the literature, (see e.g. Lee et al., 2014; Furedi, 2008) that parents, today, are assumed to be in need of education and need to professionalise themselves. The predominant discourse sees parents primarily in their capacity as responsible, learning subjects, or ‘the responsibilized parent,’ one who sees the need for learning in order to be able to raise her children correctly (i.e. according to the latest scientific findings) (see e.g. Dahlstedt and Fejes, 2014). Like analogue technologies, parenting apps address parents as requiring knowledge, skills, and strategies to improve their parenting and thus their child’s development and behaviour. The sense that ‘raising children isn’t easy’ is presented as a matter of (lacking) knowledge: parenting is a challenging task that can be tackled by acquiring the right knowledge, which these technologies can provide.

As the descriptive overview of the apps indicated, the knowledge on which the information and advice in the apps is based – as is often the case with analogue parenting resources – derives from developmental psychology, positive psychology, and neuroscience. In this sense, then, they are a further example of the ‘psychologisation’ and ‘neurologisation’ of our everyday lives (e.g. De Vos, 2012, 2016). Both processes refer to the ways in which the (neuro)psychological discourses have altered the discursive positions of the subject since late modernity. (Neuro)psychologisation refers to fundamental changes in how we think and speak about ourselves and others today, and thus how we relate to others, including our children. Majia Holmer Nadesan has addressed the emerging role of the discourse of ‘brain science’, and summarises: ‘The assumption of selective, progressive development is expressed in the infant neuropsychological literature by the idea of neurological fitness, that is, that infant brains can be engineered to excel at cognitive functions if the “right” stimuli are presented at the correct developmental “stage”’ (Nadesan, 2002, p. 404). More recently, Williamson has analysed this in the case of the school-based behaviour management app, Class Dojo, focusing on how it ‘facilitates psychological surveillance through gamification techniques’ and ‘its links to new psychological concepts of “character development,” “growth mindsets” and “personal qualities”’ (Williamson, 2017, p. 440). This developmental, (neuro)psychologically-informed understanding of raising and educating children is present in the parenting apps, as the parent’s attention is channelled towards their children’s development (‘stages,’ ‘milestones,’ ‘brain building moments’), and shapes the form that the personalisation of information and advice takes.

Thus, what it means to ‘parent’ is confined, framed in behavioural and causal terms, in one-to-one ‘parent-child’ interactions, mediated by the app. What it is advisable, and makes sense, to do as a parent is thereby delimited. One app (Vroom) explicitly voices this in neuropsychological language: parents are ‘brain builder[s].’ This illustrates what Jan MacVarish (2016) critically analyses as ‘neuroparenting’, the governance of parents on the basis of neuropsychological research. Neuroscience tells us what parents need to do in order to ensure the optimal wiring of their children’s brains. As Gillies et al (2016) note:

policy and practice discourses of early intervention are now rooted in biological conceptions of neurodevelopment, and increasingly epigenetics (Edwards et al., 2015; forthcoming). … The genetic determinism and reductionism of the past are replaced by a conception of early years plasticity through the interaction of brain as biology and the social as parenting … The downstream policy and practice implications of such constructions are already profound. Contemporary family policy is riddled with unsupported contentions that the quality of early years care is reflected in the anatomical structure of a child’s neural circuits (pp. 228-229).

The parenting discourse entails the evidence-based assertion that if parents use the correct parenting techniques, numerous problems can be prevented and their children will be set on a pathway to a happy, successful future. The mobilisation of parents around the signifier ‘brain’ is particularly powerful; who wouldn’t want their children to develop optimally? Thus, apps offering personalised, real-time guidance on this have a particular force.

Parenting apps, then, can be said to reinforce the instrumental approach to the parent-child relationship, identified as internal to the scientised, governmentalised parenting culture (McIlvenny, 2008; Ramaekers and Suissa, 2012; Mackler, 2017). What it means to raise children is determined from outside, i.e. by experts, from within a scientific discourse, by which parents are reduced to – but responsibilised as – instruments in the realisation of their children’s optimal development. Parents’ pivotal role in this is to ensure that they acquire the right techniques to enable them to perform their tasks as effectively as possible. Parenting apps, as discussed here, provide an individualisable solution to this need for knowledge. What parents need to know and strive for is contained in the app as a body of knowledge; an app offers personalised advice to help them to go from one milestone to the next and, thus, presents itself as an effective means to achieve externally defined ends.

Of course, as the apps summarised here are aimed at the developmental stages between 0-3 years, the information and advice they contain doesn’t pertain to the entire period of child-rearing, and thus to later stages of childhood in which the child’s agency and ability to contest the parent is perhaps more apparent. What we claim in relation to these apps, relevant to the period of pregnancy and the early years, is that it is at this stage that a particular idea of what it means to be a parent is introduced and established. They set the tone (or contribute to setting the tone along with other sources of information and advice) of what raising children should be; the apps are both constituted by and constitutive of this discourse and self-understanding. Parents are ‘steered’ into a particular direction; their focus is narrowed from the very beginning; the apps contribute to the construction of a particular kind of parent, from pregnancy onward: as Daly expresses this instrumentalisation: ‘This is a landscape in which the parent becomes equivalent to a “parenter” – someone who deploys learned skills centring on self and other forms of control’ (Daly, 2013, pp. 227–228). The assumption is that a good parent is one who accesses expertise, identifies learning needs and opportunities, and gauges the success of this by using charts, perhaps provided by personalisable apps. The question of what it means to raise children is, thus, answered already by its external scientific definition; what matters is accurately implementing the evidence-based strategies. The parent as ‘parenter’ is placed outside the existential messiness of raising children to take a detached, expert view of the situation. As Bouverne-De Bie et al. (2006) note, this external, ‘expert discourse on parenting’ puts parents in a rather strange position as they are positioned as ‘spectators of their own situation’ (p. 64). Jennie Bristow similarly argues that families become ‘mere “partners” in child-rearing with officials who presume to know best’ (Bristow, 2009, p. 78). In the parenting culture in general, and arguably to a greater extent in its digitised form, parents are required to take ‘an external view of their own situation, to try to get a clear ‘overview’ of it, and then to decide on the best response: they are no longer expected to take their own point of view as parents, but the point of view of experts (see also Ramaekers and Suissa, 2012).

One of the key claims made by the apps and the knowledge they contain is of the far-reaching consequences of what parents do during this phase of their child’s life. The ‘first 1000 days’ is widely cited as ‘the most significant in a child’s development’,[[4]](#endnote-4) ‘a unique period of opportunity when the foundations of optimum health, growth, and neurodevelopment across the lifespan are established’.[[5]](#endnote-5) Hence, how the parent is addressed during this period seems particularly pertinent in analysing how what it means to be a parent today is presented. The disposition established during that early period is not likely to be abandoned entirely once the child reaches three, but will be part of how a parent understands themself and how to best interact with their child. The assumption is: the sooner you learn how to do this properly, the better. It will stay with you for the rest of your life; it will have long-lasting effects (both on yourself and on your child). (And in this sense the discourse promises the same for both parents and children: the sooner they start doing something, the better, i.e. the more long-lasting the effects will be, equipping both parent and child with necessary skills, attitudes, etc. for life.) While a broader overview of the apps available for parents would be a worthwhile exercise, the sample we have taken here is, we argue, indicative of the discourse of parenting and illustrative of the way in which apps function, whichever phase of child-rearing one is involved with. (And indeed whether or not the app is for ‘parenting’, ‘exercising’, ‘dieting’, ‘sleeping’, the architecture creates a similar feedback loop between the app, the user, and her data).

**The political dimension of parenting apps**

As we have seen, existing analyses of this ‘parenting culture’ provide important criticisms of how the parent is constituted and understood today, and the way in which the parent is addressed in view of the need to ensure optimal learning and development outcomes themselves in order that they can facilitate this in their child in the name of a healthy future community and society. The frequent invocation of causal links between parenting behaviours, children’s neural development, and optimal socioeconomic outcomes leads to the criticism that the parenting culture constitutes a *politicisation* of parenting, i.e. parenting is used and misused as a tool for social policy (cf. Furedi, 2008; Lee et al., 2014). Val Gillies draws attention to, what she refers to as, the ‘political association between parenting and social ills’ (Gillies, 2005, p. 71), by which ‘wider issues of poverty and injustice are sidelined through the construction of a culturally distinct minority [of parents] as the major focus of concern’ (ibid., p. 85). In this way, parenting and family life are seen to have become a public (i.e. a matter of goverment concern and surveillance) rather than a private matter (Gillies, 2012, in Richter and Andresen, p. 13).

The introduction of apps, however, is not simply a further development of the existing parenting culture, i.e. a digital version of the analogue forms of parenting advice. Rather, we argue, in their particular affordances they draw our attention to a more profound shift in how we understand what it means to raise children, particularly if we bear in mind the representational – political, pedagogical – dimension of the figure of the parent. Seen in terms of current analyses of governance, the parent today is an instantiation of the ‘ecological-environmental’ self, oriented not by past and future but by present conditions and needs to which s/he must continually adapt (see e.g. Simons and Masschelein 2008): ‘The ecological subject is someone who recognizes lifelong learning as an indispensable requirement to face changing environments, … who expresses her personhood through an up-to-date overview of the results of her learning life’ (Simons and Hodgson, 2012, p. 26). Personalisable apps offering real-time visualisations enable and constitute precisely this.

This continually adapting, almost homeostatic, individual has been understood elsewhere in terms of Roberto Esposito’s notion of ‘immunity’, a term he uses to describe a condition of modern subjectivity in which the individual practices her freedom in ways that immunise her from the risk of community and its excessive demands (Esposito, 2000). Jan Masschelein and Maarten Simons adopt this concept to understand education under conditions of globalisation. In contemporary discourses of community, the notion refers to shared concerns, the need to achieve and maintain cohesion. This use of community to refer to shared interests and things in common is at odds, however, with its etymological root, *munus*, meaning void, debt, or gift. According to Esposito, they write, ‘community is not a matter of “having” something in “common”, something that we share with others, but of the opposite: it is not a matter of “having” but of “lacking” …’ (Masschelein and Simons, 2002, p. 601). Hence, they continue, ‘the very notion of community includes an infringement of subjectivity and individuality’ (ibid., p. 602). This infringement is experienced in our very living together, with other flesh and blood people, who by their very presence in our community – be it physical, virtual, or imagined – make demands on us. A self-contained, thoroughly accounted for, individuality is at odds with the reality of community. Our current ways of understanding ourselves in term of our competences, our obligations (balancing rights and responsibilities), and the investment in ourselves in view of learning outcomes (seen in the appeal of the causal explanation of parenting strategies, for example) leads Masschelein and Simons to describe our current mode of subjectivation as ‘immunised’; we bracket out that which is excess, that which cannot be accounted for or optimised. The individuality of the ecological-environmental self is oriented by her past performance and learning needs, strategies to address which can be identified with reference to external expertise. In this sense, aims and aspirations, and the means and rationale for achieving those outcomes, are pre-figured, creating a self-contained, i.e. homeostatic, relation to oneself.

In light of this understanding of ourselves as immunised, the particular ways in which this ecological mode of subjectivation is effected can be said to lead to a *de*politicisation. The rendering of upbringing as ‘parenting’ itself entails that parents’ political role is oriented towards something other than raising their children (e.g. the economy; optimal future learning outcomes). There is hardly space to discuss, to contest, what it means to raise children, what the ends of childrearing are.[[6]](#endnote-6) It is here that parenting apps show their distinctiveness in today’s parenting culture. They do not just effect an intensification of existing modes of governing parents: positioning them as in need of education, providing advice, and so on. They actively reveal what is at stake in the parent-child relationship as an intergenerational relationship: the representational role of parents, their possibility to dissent and to be contested by others.

We now return to reconsider personalisation, visualisation, community, and learning optimisation in relation to the three aspects of the political stated in the introduction: (1) in raising their children parents lead them towards a public or communal life; (2) in doing so, parents make choices when representing the world (take sides, give consent, utter dissent); and (3) parental representations of socio-cultural meanings can be contested by others, not least by their own children, which puts the nature of the collectivity or community at stake.

*Personalisation and visualisation as technologies of responsibilisation*

Practices of personalisation have been identified as an important aspect in the operation of the current mode of governance, in two, interrelated ways. First, we can see this at the general level of the neoliberal consumerisation of public and political participation: for example, we are addressed in terms of our freedom to choose where and how we and our children are educated, citizenship is rendered in terms of measurable individual competencies, our health and wellbeing are seen as matters of individual responsibility and self-care, and a mark of education quality is differentiation and the degree of personalised learning provided. Second, and related to this, personalisation refers not only to the fact that we are addressed in terms of individual choice, but also that we are to make these choices visible and/or audible: our very personhood is to be evidenced. This has been analysed in relation to contemporary discourses of citizenship, for example, in which citizenship is framed as ‘an interactive process of identity formation and ownership through the personal expression of voice that requires specific learning processes’ (Simons and Hodgson, 2012, p. 21).

Personalisation as an explicit making-visible of our personhood takes a more tangible form in the ubiquitous use of mobile, personal digital devices. Lupton and Williamson (2017) characterise this in terms of ‘dataveillance’, collecting information through various forms of data:

Dataveillance now frequently operates with the use of digital technologies and takes place at varying degrees of people’s knowledge and consent. Individuals may voluntarily choose to engage in self-surveillance, for example, by using self-tracking devices and software (Albrechtslund and Lauritsen, 2013; Lupton, 2016a, 2016b). Another form of watching, that of ‘intimate surveillance’, describes the monitoring of other people that takes place as part of close personal relationships (such as those between family members and couples) (Albrechtslund and Lauritsen, 2013; Levy, 2015). (Lupton and Williamson, 2017, p. 782)

The distinctiveness of apps lies not only in what information is visualised – the child’s milestones, their growth, photos - but also how the information is presented – curated into timelines, graphs, charts, and calendars. Such surveillance is not only undertaken by the apps or our followers, but also by/of ourselves. As Williamson writes of learning analytics platforms in the school context:

The visualization of data is no neutral accomplishment but amplifies the rhetorical or persuasive function of data, allowing it to be employed to create arguments and generate explanations about the world and to produce conviction in others that such representations, explanations and arguments depict the world as it really appears (Gitelman and Jackson 2013). (Williamson, 2016, p. 131)

Lupton notes such a trend in her research on health monitoring apps: ‘The visual image or data they generate are often privileged as more “objective” than the signs offered by the “real”, fleshly body and patients’ own accounts of their bodies (Chrysanthou 2002; Blaxter 2009)’ (Lupton 2013, p. 398). The use of data visualisations, as feedback on one’s own activities, via the app might act as a more objective form of self-knowledge than one’s own decisions about how to best to interact or play with or feed one’s child, which are typically couched in a language of uncertainty. This raises questions about the extent to which we feel able to trust our own judgement, and the conditions under which we might accept the judgement of others. As Bristow and Furedi report in their ‘Licensed to Hug’ (2008), increased protocols for vetting and governing adults’ interactions with children have changed the informal, taken for grantedness of intergenerational relationships in the wider community. That the information we receive from apps is personalised, that is, it is generated precisely from the user’s inputted data, may lend it greater force, or legitimacy, than advice provided by a book, tv show, or health visitor’s leaflet, for example, or than one’s own instinctive response, as Lupton’s work on mobile health monitoring indicates.

While advice from books and web forums is also perhaps ‘personalisable’ (c.q. parents interpreting generalised advice for their own personal context), as is advice received in a meeting with an expert (the professional asking for specificities of the home context, for example), this personalisation comes after reading the book, or meeting with a professional. In a parenting app, by contrast, personalisation is built into the technology itself, which operates through a combination of specific algorithms, ‘coded instructions … deployed to make decisions, to sort and make meaningfully visible the vast amount of data’ (Bucher, 2018, pp. 2-3). Bucher writes of Netflix and Facebook’s algorithms: ‘User input and the patterns emerging from it are turned into a means of production. What we see is no longer what we get. What we get is what we did and that is what we see … it is largely a matter of users getting back their processed data’ (ibid., p. 2). An app relies on the provision of data not only to generate the personalised content for the user (as an outcome of entering data), but also, and crucially, because an app only works through the personalisation enabled in its design.

This personalisation in (parenting) apps is realised both through static data (user information entered when subscribing) and dynamic data (such as online behavior and behavioral data records). The directness of the input/feedback loop generated in the interplay between data and software protocols, and the continuousness of that bi-directional process, make the digital app distinctive from its analogue counterparts, in terms of the relationship of the user to it. What is made visible to parents is, essentially, themselves and their children. Contrary to analogue technologies, parents are not shown a statistically average or broadly representative parent or child, which they then apply to their own context; they are, effectively, presented with (a processed, personalised version of) themselves. The technology itself, then, is not only a conduit for information but also selects that information in a particular way based on individual data. Personalisation, in this sense, is a mechanism of ‘responsibilization’ (Simons, 2015, p. 722), that relationship of the self to the self in which individuals understand themselves in terms of learning needs for self-optimisation. The design of the apps orients parents to those parts of themselves they want to work on.

As technologies of parenting, then, there is a crucial distinction between the analogue and the digital. The introduction of apps marks a shift from *generalised* advice offered by books and websites, and from personal advice in a face-to-face meeting with an expert, to the possibility of *personalised* content, based on the individual parent’s and child’s inputted data. From the moment of conception onwards, users can enter a variety of details: quantitative data on their physical (e.g. blood pressure, number of kicks felt) and temporal (e.g. due date, first steps) experiences; qualitative data on e.g. emotions; or visual media (e.g. ultrasound scans, photos). They (and their child) can complete age-related tasks or respond to quizzes. This data-based relationship between user and app constitutes an active feedback loop. Each activity enables the further tailoring of information and resources for the parent, thus constituting this ongoing feedback loop (on the role of feedback in governance, see Simons, 2007).

Visualisation is a central facet of this personalised feedback loop between user and app, and a further mechanism of responsibilisation. As indicated above, many apps provide parents with visualisations of trends and routines in their children’s developmental progress. Such in-app graphics and timelines differ fundamentally from those offered in books and on forums. Whereas the latter are static, in need of interpretation and application to the specific context, in-app graphics and timelines are derived from the data provided by the user and thus only exist because of the feedback loop co-constituted by parents. As with personalisation itself, the visualisation of one’s child’s life and one’s own performance is internal to the functioning of the app and inherent to the mechanisms of responsibilisation. Again, what parents see is not a representation to be applied (or not), but a version of themselves.

*Community of parents for learning optimisation*

Although personalised and immunised, it is not an entirely anti-social or atomised notion of the individual that is being invoked, but one that requires self-investment as a form of participation in the wider collective community or society (cf. Masschelein and Simons, 2002). In this context, however, community itself is conceived in a particular way. As noted earlier, the way in which the notion of community is used and understood has shifted. Along similar lines, Rose describes a recent shift from a discourse of resistance to centralised bureaucracy that sought to reaffirm ‘lost authenticity and common belonging’, to ‘an expert discourse and a professional vocation’ (Rose, 2000, p. 175): ‘Communities became zones to be investigated, mapped, classified, documented, interpreted …’ (ibid.) with a new range of professional roles focused on their management and cohesion.

Rose terms this shift ‘governance through community’: ‘a sector is brought into existence whose vectors and force can be mobilized, enrolled, deployed in novel programmes and techniques which encourage and harness active practices of self-management and identity construction, of personal ethics and collective allegiances’ (p. 176). This notion of community is not only physical, or geographically bounded: for example, we might refer to ‘the Muslim community’, ‘the gay community’, ‘the academic community’ in public discourse, and users of particular online platforms are referred to as members of a community. Hence, arguably a further shift has taken place in the notion of community since Rose’s analysis; from a focus on direct governance in terms of community, to community as a devolved locus of self-determination, shared interests, identity-based solidarity, and voluntarism (as we have seen in the UK in the form of the Big Society) that we actively chose to identify with and participate in.

In this context, parenting apps constitute a particular kind of community: an ecological data-based community (cf. Simons and Hodgson, 2012; Simons 2015), in which the user makes herself visible by way of a personalised, curated version of herself as ‘parent’. The user is enclosed within a permanent feedback loop, which, in the apps’ terms is a benefit of being part of their community: the information you need, for your child, tailored to your interests. In the ecological self-understanding this constitutes, parent and child are no longer situated within a pedaogogical institution (c.q. the family), itself located in a community at large, but rather are oriented in an environment of challenges and learning opportunities. Further, this is a community in which they choose to participate because of the shared beliefs, opinions, and aspirations of fellow community members and the advice and information given. In this sense, we can see an immunised, depoliticised notion of community at work, one that overlooks our very embeddedness in political community.

The discourse of parenting to some extent decontextualises (in political and cultural terms), to foreground those aspects of oneself, one’s child, and one’s activities that are pertinent to achieving goals, optimising outcomes, and identifying strategies. Hence, the possibilities of disagreement, of contesting values and actions, is, if not removed, then reduced to a narrow set of parameters, and the likelihood of disagreement is removed by the very choice to join a particular like-minded app community. This is not to suggest that contestation does not exist at all; it is very evident between parents’ (and other online) forums and, in a different way, in those media that specifically seek to skewer the truth of the calm parent, managing daily life and her children’s lives with imaginative play, constant stimulation, and optimal nutrition (blogs such as Hurrah for Gin and Slummy Mummy, for example). But the specific functioning of apps raises questions about the constitution of community and the intergenerational relationship today.

The distinction we draw in questioning the notion of community, then, is not between online and offline sources of parenting advice. As noted above, today, online forums provide an site in which parents, as people, can share information and ideas, and contest what is said, and hence can be seen as communities in a political sense: humans making decisions, offering advice or asking questions, and gauging the degree to which s/he is in agreement with other (or not). S/he can decide which aspects of the advice to take (or not). The distinction lies precisely in where the decision-making agency lies: the interaction when using an app is with a pre-existing body of knowledge, made available by the input of one’s own data. Apps therefore constitute a form of community that operates differently than the analogue (including online fora) forms of advice that are situated within and against existing communities, in the broader, more complex, political sense invoked by Esposito.

In the current context of major political upheaval (Brexit, climate change, etc.) we might understand this collective responsibility in terms of intentional political activity, making explicit our commitments to political causes that may shape the quality of the political and ecological future for our children. But our concern here is with the much more mundane level of what we do when we raise children: we initiate them into a common world - a language, rituals, mores, values - through our everyday representation of them in our own activities and our living with our children day and night. We enact this in very concrete, flesh and blood ways, that may not always be pleasant or immediately fulfilling, but that we do because it is what raising children is for us.

In the way parents are predominantly addressed today they are not asked (required) to relate to that historically embedded political community to which they inevitably belong as human beings. The disruption to our accepted ways of doings things, of articulating the world, is instead translated, we might say, into a learning opportunity, a problem to be solved, an issue to be diagnosed, and thus a need for further parenting expertise. In the case of the use of apps, what children (and parents) do in real life, flesh and blood situations, becomes data. So, in terms of the possibility of disruption, we suggest, we are witnessing a shift that qualitatively alters the nature of disruption (or, perhaps, neutralises it); we are witnessing a shift from a political level (i.e. the level of which we speak when seeing the parent as a figure of pedagogical representation) to the level of digital information that can be ‘dealt with’, calculated, measured, manipulated; from the messy (physical, flesh and blood) interactions with one another (real life confrontations) to interactions mediated by digitised behaviours.

It is for this reason, then, that we refer to the depoliticisation of the figure of the parent. If, in this context, raising children is a matter of proper (neuro)developmental stimulation, of producing the correct effects, then, in an ecological self-understanding, there seems no need for a past (‘tradition’) and its inherited (and, always in principle, contestable) truths, values, and norms. Nor is there a need for educators (parents, teachers) as what Bernard Stiegler calls ‘living ancestors’ who time and again re-embody ‘experience accumulated across many generations’ (Stiegler, 2010, p. 7) and invite their children to partake ‘in the shared experience of exploring a common world’ (Peters, 2015, p. 53). Rather, without reference to or debate on cultural, public norms and values, apps enable parents to navigate a permanently shifting distance between ‘who they are now’ (based on the data entered) and ‘who they can become’ (through the visualisation of the next milestone to be achieved, the next strategy to implement) in what can be called a ‘space of equivalence’ (Simons, 2015): what makes a parent the person she is, is bracketed out of the picture. Community, here, consists of ‘like-minded’ parents who can and should be measurable according to the same performance criteria.

What it means to care, to be responsible, is not only recast in ‘brain-building’ or otherwise development-enhancing terms, as in analogue forms of parenting advice, but also is oriented by comparison with one’s previous or others’ performance. As seen in the description of some of the apps, comparison is explicitly invited. What is at stake for parents (and their children) in, what we have referred to earlier as, an ecological data-based community is the question of whether or not they have, as of yet, achieved the best they can, optimised their learning potential, and registered this to make it visible to themselves and others (within the app community).

In a parenting app, possibilities for dissent are limited, if present at all. It may seem obvious to say that this is because, in the app, there is, largely, no one to talk to and so to disagree with. Also, the point arguably also applies to analogue technologies: parents cannot compete with experts on their own grounds. In apps, however, the knowledge provided is knowledge in which the parent is already involved (via feedback loops) and has, in this sense, tacitly given her approval by subscription to the app. Subscription (i.e. sign up/installation) is our consent to online community. The ecological data-based community of parents enables comparison in view of optimisation, not contestation in view of renewal.

**Conclusion**

As indicated above, while the apps do resemble analogue technologies in terms of the source of the knowledge they provide (developmental psychology, neuropsychology), they differ in the fact that this knowledge is built in to their design: apps are crucially different from books and advice from parenting experts in that what is presented to parents is generated through the feedback loop interaction, through the very interplay of (static and dynamic) data entered. This internality enters the parents in to a significantly different relationship to the available expertise and affects the very claims parents can make.

In an ecological data-based community, what can be meaningfully ‘said’ are claims that can be entered as data that fit the existing categories supplied by the app; claims not about belief or moral judgment but that fulfil the criteria to register achievement of the next milestone or user-determined target. These are not claims about the world, i.e. about what a parent wants to stand for or (re)present to her children, claims that are interwoven with the dynamic context of her own life, claims for which she can thus be called on to justify, that ultimately, when rejected, affect a parent in her very existence as a human being. An ecological data-based community effects, by design, a certain disconnection from the realm of cultural norms and values. Criteria for understanding and norms for action exist only *within* the feedback loop into which parents enter. The normativity, that is, is inherent to the system (cf. Simons, 2015).

A similar argument has been made of analogue technologies of parenting. Nancy Vansieleghem argues that ‘parental services (technologies) and monitoring systems’ create their own ‘sovereign structure,’ which is no longer related to ‘social and cultural norms’ (Vansieleghem, 2010, p. 354). However, the analogue technologies she discusses – instrumentalised and thereby impoverished as they may be – nevertheless still operate against a backdrop of moral and evaluative judgements. While they carry normative assumptions about what it means to be human, a child, and so on, they can still be understood as separate from the parent, and as something s/he can take a critical stance in relation to. Vansieleghem’s argument holds, however, we argue, for parenting apps: here the normativity *is* effectively generated *in* and *by* the system. It is in light of this immunisation from the realm of norms and values, then, that we argue that apps effect a form of depoliticisation of the figure of the parent.

To return to Mackler, the technologisation of parenting overlooks the very real experience of the child’s disruption of our sense of how things should be. Without political community, in the sense of a common world in which to make sense of this, such disruption becomes an individual learning issue, for which apps offer a solution. Our analysis of parenting apps begins to articulate what is distinct about the digital in the constitution of the parent-child relationship. It goes to the heart of the parent-child relationship: pedagogical representation.

In drawing attention to depoliticisation as one feature of the constitution of the figure of the parent, we suggest, in conclusion, and tentatively, that it effects a *de*personalising of parents. The emphasis on personalisation in the parenting apps discussed is not, it seems, a reference to persons as persons. What matters is not the person of the parent, what she stands for, what she finds herself representative of, but whether what she does leads to the expert-verified, app-generated outcomes. The discourse of personalisation goes hand in hand with a de-personalising effect, upheld in the space of equivalence: parents here are, as indicated, ‘like-minded’.

In light of the argument that the digitally mediated parent-child relationship, decontextualised from the cultural and political, effects a qualitative shift in the nature and possibility of the disruption presented by the next generation, it seems that the ubiquity of the digital in our day to day lives requires further consideration at an ontological level, and not just be seen as a further instantiation of a particular discourse or mode of subjectivation. Pursuing such an enquiry from an educational-philosophical perspective requires (re-)articulating the parent-child relationship as a distinctive pedagogical relationship, the existential distinctiveness of which is overlooked by external scientific definitions.

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1. We distinguish between analogue and digital technologies, to refer to books, tv shows, web forums on the one hand, and mobile digital applications, on the other. While web forums might be considered digital technologies, we argue that apps function in a particular way, based on web 2.0 and semantic capabilities, with distinctive implications for the constitution of the parent-child relationship. In this preliminary enquiry, then, web forums are classed as analogue. [↑](#endnote-ref-1)
2. All last accessed 15th January 2019. Baby Manager: <https://goo.gl/4kVbt2>; Vroom: <http://www.joinvroom.org/>; Parenting Challenge: <https://goo.gl/7c6rzU>; Parentune: <https://goo.gl/4yVCzM>; Wachanga: <https://goo.gl/VbgzTH>; Wonder Weeks: <https://goo.gl/x96u11>. [↑](#endnote-ref-2)
3. The critical literature on this is now extensive. A representative survey, however, falls beyond the scope of this article. We limit ourselves to recognizing only some of the critical work on the most salient trends in this parenting culture. [↑](#endnote-ref-3)
4. <https://www.nct.org.uk/about-us/first-1000-days> (accessed 11th January 2019). [↑](#endnote-ref-4)
5. <https://www.unicef-irc.org/article/958-the-first-1000-days-of-life-the-brains-window-of-opportunity.html> (accessed 11th January 2019). [↑](#endnote-ref-5)
6. Resistance to the parenting culture does sometimes come in the form of a negation of its concerns, e.g. the concern that our children are too protected, that parents are too risk-averse, and that in turn has implications for their future mental health, as recently argued by Jonathan Haidt and Pamela Paresky. This account of raising children, however, follows the same logic as the scientised parenting advice: do this, this is the risk/outcome, drawing causal relations between complex, broad scale sociopolitical phenomena, e.g. greater exposure to instances of crime via the media for the current generation if parents; greater instances of child and teen mental health issues [↑](#endnote-ref-6)