A Research Agenda to Examine the Political Economy of Digital Childhood

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A MESSAGE FROM PROFESSOR SUSAN DANBY, CENTRE DIRECTOR

In 2021, the Australian Research Council (ARC) funded a Centre of Excellence devoted to studying and researching 'the digital child'. The focus of this Centre is on very young children from birth to age 8, and describes and examines their everyday lives with and through digital technologies, their learning and their health in the family, and various kinds of kindergarten, childcare and early primary education experiences.

The Centre brings together six universities across Australia, as well as partner investigators from North America, Asia and Europe and a range of public bodies and civil society stakeholders, to focus on a holistic understanding of what it might mean to 'grow up digital' today.

The Digital Child Working Paper Series reports on our work in progress. There are five series of papers aimed at different audiences:

A **'how to'** series offers instructional papers aimed at early career researchers or those new to the principles and practices of structured review.

A **'discussion'** series consisting of discussion papers aimed at the scholarly community, raising larger conceptual challenges faced by researchers at the Centre and drawing on forms of literature review.

A **'reviews'** series consisting of scoping reviews, literature reviews and systematic reviews, all addressing specific research questions particular to any of the programme disciplines in the Centre.

A **'methods and methodologies'** series consisting of digital research capacity building resource-rich discussion papers, offering more technical support for the research community and allied scholarship. These are more focused on methods and methodologies.

A **'policy'** series consisting of more public facing, policy-oriented papers produced for stakeholder engagement.

Each of the working papers has been authored by members of the Centre and has been subject to review as explained in each paper. The arguments in each paper represent the view of the authors.

We hope that readers find each of these papers stimulating and generative and that all sections of society can draw on the insights, arguments and ideas within the papers to create healthy, educated and connected futures for all and every child.

Professor Susan Danby

Director, Centre of Excellence for the Digital Child

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EXECUTIVE SUMMARY

This paper is part of a series of review papers aimed at stimulating discussion and debate amongst scholars about key themes, concepts, and theories underpinning research into digital childhood and what it might mean to be a digital child. These reviews draw on recent and relevant academic literature and aim to ask and frame new questions for research. This paper has been checked by the series editorial team to ensure it meets basic standards around clarity of expression and acceptable and inclusive language. It has also been presented in a seminar held by the ARC Centre of Excellence for the Digital Child, and any feedback given has been considered.

This review investigates how the historical concept of a political economy of childhood might be usefully applied to children growing up in the digital age with a view to establishing an innovative research agenda. The review first defines what a political economy of digital childhood has meant historically in order to map working definitions. It then characterises research into the differing political economies of:

- communications and the media
- children and consumerism,
- digital consumption,
- and the family and education to see how such traditions might be either brought together or kept apart.

It argues that the research arena of digital childhood sits at a confluence of these academic research traditions bringing together studies of the political economy of the media and of childhood. The paper then reviews contemporary research into the political economy of digital childhood and concludes by offering areas for further research and enquiry structured around the key themes of: markets; institutions and platforms; and value.

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INTRODUCTION

A large swathe of anything to do with the digital, children and family life involves questions of cost and value. This includes the purchase of phones, computers or tablets, expenditure on tariffs, the relationship between advertising, data and services, the uses of platforms for free or as part of a subscription, and the role of online shopping or comparing the prices of utilities.

While much research into digital childhoods pays attention to the study of uses, meaning and effects – that is to say, how digital technologies are changing how people live, interact with each other or learn and whether it does us any good - understanding digital technology use in a language of goods and services frames research into impacts and effects in terms of access, opportunity, rights, fairness and social injustice.

Much discussion about digital childhoods draws on four 'C's': **commodification, commercialisation, consumption and competition.**

- Commodification refers to the process of turning ideas and people into things that can have monetary value. For example, children's play, which is often taken to have deep social emotional and personal value, also becomes a commodity when it is bought and sold as a computer game.

- Commercialisation refers to the process of creating markets for goods and services aimed either directly at children or at families (who of course make the actual purchasing decisions for children).

- From visiting theme parks to buying branded pyjamas to toys and food, watching adverts or educational products, children are frequently targeted as consumers and many adults from parents/guardians to teachers, museum docents and playgroup leaders now work in markets whose commercial logics dictate what children might want, have and desire.

- And from this perspective, competition is always present. This is not only a question of different commercial organisations competing for children – specially to engage them as long-term consumers - but also a common way of describing the experience of childhood itself: caught between play and school; competing for attention; competing for time, interest and engagement.

AIMS

The larger historical concept that best describes childhood in these terms is that of a 'political economy' and this review examines how the idea of a political economy can offer a useful conceptual lens to make sense of digital childhood. The aims of this paper are thus to:

- establish what this perspective can bring to researching the changing role of technology in contemporary childhoods (and what its limits might be);
- summarise what concepts, analytical approaches, methods and traditions have been used to date;
- ask whether new political economy approaches are required due to changing institutional and production structures in digital contexts and contemporary childhood;
- and to speculate how we might use such thinking and such language to establish a different kind of interdisciplinary research agenda to complement other traditions of enquiry

SUMMARY

The review works its way through these aims by first defining what a political economy of digital childhood has meant historically (SECTION 2) in order to offer working definitions and conceptual maps. It then characterises research into the differing political economies of:

- communications and the media (SECTION 3)
- children and consumerism, (SECTION 4 and)
- digital consumption (SECTION 5),
- and the family and education (SECTION 6) to see how such traditions might be either brought together or kept apart.

It argues that the research arena of digital childhood sits at a confluence of these academic research traditions bringing together studies of the political economy of the media and of childhood. The paper then reviews research into the political economy of digital childhood to date (SECTION 7) before offering areas for further research and enquiry (SECTION 8).

SECTION 2 – THE HISTORY OF THE POLITICAL ECONOMY OF DIGITAL CHILDHOOD

The term 'political economy' emerged in the 18th century to describe systems of social organisation, trade, colonialism and capital - not just as economics but the relationship between how an economy functions as a social whole and its political order: that is, how it is controlled and how principles of fairness and justice or injustice are enacted. In the abstract the concept has been defined as:

> "How values of all kinds are produced, distributed, exchanged, and consumed (the economic); how power is produced, distributed, exchange and exercised (the political); and how these aspects of the social world are related at any given place and time." (Graham, 2017:2)

In relationship to childhood studies, Hart & Boyden (2018) characterise a political economy 'as a field of study concerned with the relationships between the exercise of power and the distribution of resources' (p162). Key principles obviously involve the extent to which modern societies can be analysed in terms of markets and the role that value – especially money – plays in the distribution of wealth and poverty within that society. Readers will be familiar with principles of capital and labour, input and output, supply and demand. These concepts underpin how we understand the very nature of society itself historically and today, even if digital technologies have rendered some of these processes more complex than was previously the case.

So how can these ideas be applied to digital childhood? What could we mean by a political economy of childhood and why is such a concept useful?

First of all, we note that there is often a confusion of analytical perspectives in determining whether a field like 'digital childhood' is best understood in terms of the part it plays within the larger political economy of the society in which it is embedded, or whether it constitutes a distinct domain in itself, let alone how it might be distinguished from older norms about childhood. For example, digital children and childhood might simply be seen as an extension or part of the larger changes in the digital economy.

Examining how children and/or families use streaming services like Disney Plus or YouTube or indeed the range of educational software available through Apple's App Store or Google Play is a productive way to explore how children spend their time, how entertainment and leisure is constructed for them, how the costs and barriers of entry and use will stratify families and how data about children and their use of these platforms can be extracted and used, along with analyses of threats to privacy and online safety.

In these hypothetical examples, it is open whether we are discussing a political economy in general or in relationship exclusive to children and childhood. Thus, we might ask:

- If it is necessary or helpful to see these kinds of research questions in terms of a discrete field?
- Is it sensible or helpful to draw a boundary around analysis of the political economy of, for example, the Apple App Store in respect of apps for children or Apps in general?

- Are there particular dimensions of the political economy that exclusively describe digital childhood that cannot be found in other aspects of analysis of political economy? (And do these definitional distinctions matter and if so, to whom?)

This tension is encapsulated by contrasting three analyses of childhood and political economy. The first is a recent interest in the political economy of childhood (Hart & Boyden, 2018) showing how social structures change under neoliberalism and can thus explain changes in the differing lives of children. In other words, contemporary features of childcare, theories about child development and education can be explained as being determined by the logic of neoliberal societies themselves. Here, children and associated changes in childhood can best be approached through the larger perspective.

In contrast, (Wintersberger, 1994) explores analyses of how children themselves have been characterised in terms of key resources – inputs in an economic system - and thus from various comparative social anthropological perspectives can be analysed as they are viewed almost as 'inputs' in a society. Rather than seeing childhood as a domain in which other systemic features of the political economy are applied, it, childhood and the control of children in and of itself, offers the basis for understanding the creation of value, capital and labour (Graeber, 2014).

Another good example of the eclectic reach of analytic perspectives is the powerful analysis by Michael Gallagher of mobile phones and children (Gallagher, 2019). In this piece on the geology of media the attention is on the material effects of mobile technologies. This is not as might be expected from studies about children in countries of the global North where the interest is on social or psychological effects, but the consequences of mobile phones for children in the Congo is that children are often used as labour in the mining of the rare minerals needed in the handsets. The article explores the consequences for digital childhoods by counterposing the effects of mobile phones in these material terms as opposed to customary attention to social, psychological and interpersonal impacts. By understanding media use in terms of an economic chain a very different case can be made about the long-term effects of mobile phones on the category 'children' themselves. In other words, the analytic utility of political economy is quite elastic and even in reference to childhood can, by focusing on key constructs, both help us make sense of societies at large as well as explain how all sorts of dimensions of childhood itself can be explained by larger social pressures.

Indeed, the key moment in the application of the theory of political economy to children came with the historical perspective that childhood itself was a distinct phase in the history of human societies (Ariès, 1962). Historians argued that a distinct type of human experience separate from adult life emerged in the early capitalist economies in the countries of the global North and one key indicator of the concept of childhood itself was the growth of goods, services and indeed a marketplace for this 'new' identity, this new life phase. The history of toys and clothing (Cook, 2004) in the 19th century made the case that industries, business and markets aimed at the child consumer not only became a key feature of mainstream economic activity, but began to educate the child to become a new type of 'consumer-subject' in these societies. Studies of consumerism focused on social inequalities and the moral threats

that treating childhood as a marketplace might pose to the well-being of the developing child (Kline et al., 2003; Buckingham, 2000; Seiter, 1995).

In much of this debate, the 19th-century Romantic view of childhood was characterised as a natural state of being threatened by contradictions in the capitalist marketplace. Scholarship has been keen to point out that the notion of a natural state is in itself a relatively recent ideological proposition that cannot be disentangled from the emergence of subjectivity in modern societies. Thus, we can see how the application of a linguistic repertoire from economics to children and childhood is both productive and controversial. The language of economics stresses impersonal structural forces – summed up in Adam Smith's famous phrase describing the 'invisible hand of the market' – and focuses on the creation of measurable value. This often sits in contradiction to attitudes towards children and their development which is frequently understood in terms of naturalness and pricelessness – perhaps summed up in William Wordsworth's poem 'Intimations of Immortality from Recollections of Early Childhood'. There is no easy and obvious way to reconcile these differing languages and perspectives, and this perhaps explains why discussions of consumerism and children, unequal childhoods, value and worth often arouse heated debate.

Within these discussions of the child as a consumer, the role of the family life took on increasing significance given that the market in which the child operates was reliant on the symbolic and long-standing values of the parents who do the actual purchasing. Here the child consumer positioned within a diverse range of different markets and value systems merges with the child as the object of value, trade and investment. Annette Lareau's highly regarded study of childhood in the US (Lareau, 2003) used the phrase 'concerted cultivation' to describe forms of middle-class upbringing (referring to forms of intense education, out-of-school classes, language use, expectations and discipline) and this significantly focused attention on the construct of a child as immanent human capital, as a repository for adult desires - to be shaped in respect of the consolidation of class and family-based capital.

Post-Second World War culture drew attention to the new consumerist marketplace for children in the US and Europe, and especially the emergence of children's media (see below). In these studies, discussion has tended to focus debates on political economy simply in relationship to private commercial interests. We will see this repeated below in discussions around YouTube (owned by the global multinational Alphabet, Google's parent company). However, the political in political economy draws attention to the fact that private ownership in markets – how we normally understand the effects of commercialisation – work in concert with the ways that they are authorised and sometimes capitalised by the state.

It is the nation state that underwrites the well-being of children born under its jurisdiction and so questions of regulation, children's rights, parental responsibilities, access to different markets and equalities - in terms of provision as well as the delivery of core childcare services from preschool to formal education (including the government funded media production for children) - are all determined by national law and national cultural norms. It is a mistake not to imagine that a political economy of digital childhood only refers to privately-owned supra-national or universal phenomenon and does not have to account for the ways that different national traditions and different current political settlements affect the

lives of children; even as digital technologies offer global platforms that on the surface might seem to conflict with national powers.

Even this brief survey of the contribution of theories of political economy to the study of children and childhood shows that is it a generative analytical approach. It structures study into discrete areas of commodification and commercialisation as they relate to aspects of children's lives. It also offers a route into the study of other practices, forms of upbringing, education, theories of development and of learning and policy imaginaries because the perspective highlights how children are materially shaped by their circumstances (Dezuanni *et al,* 2015).

SECTION 3: THE POLITICAL ECONOMY OF THE MEDIA

Studies of pre-digital media drew on a range of uses of political economy in respect of both the political economy of communications and the role of media institutions and industries. Together these have introduced key sets of concepts, research programs and analytic perspectives.

Meehan & Wasko's (2014) history of the tradition of political economy of the media, mainly in the US, notes the field's position in terms of critical communications research and in particular a focus on: the relationships between journalism and democracy, the monopoly role of telephony as a carrier (as opposed to publisher) and the role of Hollywood in terms of both economic and 'soft' power. They point to a history of scholarship that raises questions around the relationship of labour to communication especially in the context of the post-Second World War Anti-Communist witch hunts and debates around the growth of media imperialism as a proxy for US power. They counterpose administrative researchers focusing on how to make communication work more effectively (acknowledging early mid20[th] century concerns around propaganda and control) with a critical tradition that asks in whose interests' media systems might work?

The answers draw attention to the way that media and communication industries and practices serve the vested interests of capital. Graham (2007) draws attention to the Canadian economic geography of Harold McInnes and its influence on the work of Marshall McLuhan, which was particularly important in exploring the relationship between the state and mass communication industries especially how they contributed toward creation of the nation state as well as a wider series of social values.

By the time digital technologies come into the picture and scholars began to reflect on 'the scope and scale of new media supply and the [ ] ways that our lives are mediated by digital technologies and services' (Mansell, 2004: 3), a solid tradition had been established. This balanced attention to 'the structure of production' with 'content, meaning and the symbolic' and thus argued that any 'political economy of the new media must be as concerned with symbolic form, meaning and action as it is with structures of power and institutions' (Mansell, 2004;4). Contemporary scholarship thus focuses on the intersection of institutional studies and audience interactions, especially how data and data related industries now drive contemporary capitalism (Zuboff, 2019). The study of Google in Zuboff's work, for example, highlights how the company works to influence regulatory policy, global trade, social values and profit, and echo earlier studies of the cultural industries of Hollywood which also brought together wide social perspectives around cultural value, representation and ideology with more concrete studies of producers, institutions, government regulation and social norms.

For several reasons, studies of children's television and media produced for children in general offer us the opportunity to appraise the contribution that political economy analyses of media and communication can make. They draw on and develop the traditions analysed above as well as begin to open up some of the interrelationships between children's media and children's culture more generally. Unlike 'adult' or mainstream media, children's media is produced *for*, not by children (Bazalgette & Buckingham, 1995),

and so exemplifies the more general problematic of how value is produced and circulated in markets by the media *in extremis*.

Jeannette Steemers' study on preschool television approaches the phenomenon through a mixture of historical analysis of broadcasting policy and cultural history alongside typical industry accounts from contemporary actors within the network of institutional relationships that comprise the field of preschool television (Steemers, 2010). The historical account draws attention to the role of public service broadcasting in creating the field of preschool television and allows us to see how commercial interests (especially Disney and Nickelodeon) began working in this area of television and thus catalysed what has now become a significant global marketplace.

Through examining the mixture of prescriptions about what constitutes good, bad, educational and appropriate television and then examining the relationship between franchises and cross branding tie-ins, Steemers' study explores the complex relationship between 'the best interests of children' and 'financial gain' through discussion about 'educational and other benefits' (p2). It thus stands as a case study opening up larger questions about 'the broader institutional settings of production and the tensions that exist between creativity and commerce, between artistry and industry, between innovation and convention, between structure (organisational constraints) and agency (creative autonomy)' (p2). The fact that children are a special audience and that the space of preschool TV is explicitly and reflexively constructed only highlights the field of children's media as a classic case for the way that value is constructed through market operations.

In the context of digital childhood, preschool TV is especially interesting because of the ways that 'pre-schoolers are not consumers in the same way as older children' and thus the family – parents usually – stand as proxy consumers who need to be addressed by broadcasters, producers and creatives[1]. Again, the challenge of who gets to speak on whose behalf comes to the fore in this arena. The historical perspective is particularly helpful in articulating the ways that traditions around public service goals (for example, developing in TV the 1950s, or even in Cinema from the 1920s), then become renegotiated and recalibrated through the processes of global expansion in the 1990s, and of course through the opportunities created by digital production technologies - as well as how different modes of consumption are possible through subscription bases and so forth. Because the audience itself (young children) is very difficult to research, other parties and their concerns tend to 'speak for' children themselves and this too opens up discussion about the ways that struggles for ideological value dominate perceptions about what counts as good or bad entertainment.

Central to Steemers' study is the principle of what she calls a 'production ecology', which includes putting together not just how television content is made 'but how it is funded and distributed across different platforms, [creating] complex relationships between broadcasters, producers, distributors, rights-owners, financiers, regulators, advocacy groups and licensed merchandise interests' (Steemers, 2010:212). Looking

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[1] Intriguingly, this may change with digital media where children are allowed to flick between videos / channels on an app like YouTube kids.

forward to the impacts of global digitalisation and the ways that multiplatform and web-based forms of distribution are transforming modes of consumption, this approach points to both forms of study that are institutional and historical in nature, as well as fields of study, exploring the interstices of these different competing interests.

Preschool TV, as an example of children's media, is clearly important in any conceptualisation of digital childhood and points to the ongoing role that traditional content creators and broadcasters still play in children's lives. It also identifies the constant and ever shifting relationship between regulation, social norms and creativity. This may differ in emphasis when we examine the different spaces and places that children now consume media: see Section 5 below. In projects we might wish to develop around, for example, 'an Internet for children', this kind of study will point the way towards the kind of theory, evidence and argument that might help us characterise the nature of popular media in the lives of young children today.

SECTION 4: CHILDREN AND CONSUMERISM

Scholars of children's media have argued that there has been a rather awkward separation of media from other studies of children's lives and childhood even where the focus has been on changing modes of commercialisation and consumerism (Buckingham, 2013). This is significant because early studies of children's media (e.g. Meyrowitz's 1985 study on television and the home) were concerned with trying to understand media effects rather than the relationship of children's culture in childhood more generally. Similarly, but from the reverse point of view anthropological studies of children's culture (e.g. Lancy, 2014) seemed to ignore the role of media within it. Despite this rather uneven start, the new sociology of childhood (James et al., 2004) was extremely focused on the significance of the child's place in post-Second World War markets and the more general impact of commercialisation on children's lives.

Early scholarship of the commercialisation of childhood tended to focus on disparities between the power of marketeers and the vulnerability of the child and indeed their family (Kline, 1993). Principles of false desires, intra-family pressures and wider manipulation tended to dominate critical study in this period. The last 20 years have seen a series of more qualitative accounts that step away from broad interpretations of ideological effects and examine the complex interaction of consumer goods in terms of symbolic meaning and relationships (Cochoy et al., 2017). Political economy approaches to the study of toys, marketing, play with toys and family life (Goldstein et al., 2005) began to offer more nuanced accounts of the complex set of relationships between markets, desires, children's agency and the broader picture of the marketization of everyday life.

Of course, children's media play a central role in this matrix of influences and impacts, and early studies of children's digital media drew attention to the phenomenon of 'transmedia' 'media mixes' (Ito, 2005) that blurred the hitherto distinct boundary between goods (toys), children's media, markets and consumption. In the new era of Mutant Ninja Turtles, Pokémon and Yugioh (Kinder, 1993; Tobin, 2004), the blurring of boundaries between product, media, brand, play, learning and consumption began to open up a new field for the study of commercialisation where older paradigms of the consumer blended with ideas around participatory culture (Jenkins, 2006). In this new digitally mediated online/off-line experience (what Floridi (2014) calls 'onlife') older paradigms about what constituted a product or indeed the activity (or labour) of the consumer suddenly started losing foundational assumptions so that the post-Second World War paradigm that tried to stand outside the commercialisation of childhood seemed to expand exponentially.

Whereas the older theories of consumption started from the premise of a marketplace that was extrinsic and measurably outside of the family home, the overall impact of media franchises (for example, the way that Star Wars developed its original market in toys in the 1980s) alongside the ways that traditional toys became increasingly intertwined with the consumption of popular media (and here Lego is the classic example) seemed to pre-empt the ways that digital media accelerated transmedia experiences to the point where commercialisation of childhood has become a default position. Of course, these changing trends were accompanied by a whole host of shifts in consumer protection, legal regulation, media

governance, and above all changes in the ownership and economics of both media and childhood-focused companies themselves.

SECTION 5: DIGITAL CONSUMPTION; ENTERTAINMENT AND CHILDREN'S MEDIA

With the arrival of digital technologies, the trends described above further accelerated the intertwining of family life and the consumption of popular media and transmedia experiences, particularly on digital platforms. Cunningham and Craig (2019) argue that a shift in media concentration (metaphorically, at least) from Hollywood to Silicon Valley has coincided with the rise of 'social media entertainment' (SME) as a significant force in media production and consumption. SME features media production outside traditional studio systems, often concentrated in either the home, or in small collectives, as exemplified by YouTubers and other media creatives operating on platforms like Instagram and TikTok. Social media entertainment is often highly popular with young children, and at various times the top ten YouTube channels identified by aggregators such as Social Blade (https://socialblade.com) have been dominated by young children's content. (For example, in April 2021, the second highest ranked YouTube Channel internationally is *Cocomelon – Nursery Rhymes* [2] (108 million subscribers, 97 billion views). Young children's channels make up three of the top ten channels in Australia: *Bounce Patrol - Kids Songs* (22 million subscribers), *CKN Toys* (17.2 million subscribers), and *The Mik Maks* (2.16 million subscribers).

Social Media entertainers frequently create content which is largely unique to the digital environment, including new media genres such as unboxing videos, Let's Plays, slime videos and challenge videos. The Let's Play genre is particularly interesting from a political economy perspective because it involves a creator producing content on a game, often breaching conventional intellectual property arrangements. For instance, the digital platform Minecraft is used to produce Let's Play content which is shared with an audience on YouTube. In this case, Microsoft (who owns Mojang, the company that produces Minecraft) allows third party producers to use Microsoft's intellectual property to create wealth for themselves and Google/Alphabet (the company that owns YouTube) (Dezuanni, 2020). This arrangement is presumably acceptable to Microsoft because they know that Let's Play videos provide powerful ongoing support for the Minecraft franchise. Here the platform entertainment model seems to recalibrate the commercial relationships that characterise traditional media. Although these concerns may seem a step removed from children's digital culture experiences, they play a pivotal role in children's entertainment and their relationships to the major technology companies.

There is an unresolved tension in the production of children's content for platforms whose terms of service suggest the platforms should be accessed by young people over the age of thirteen (which is clearly being ignored by millions of children and their parents). In addition, there is a tension with legislation such as the United State's COPPA law and the European GDPR-K legislation that aims to protect children's privacy by limiting the collection of their data and their exposure to advertising. More broadly, the content regulation processes available to the digital platforms complicates their ability to moderate children's content effectively, leaving them somewhat vulnerable to the accusation that they are not safe

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[2] https://www.youtube.com/channel/UCbCmjCuTUZos6Inko4u57UQ

spaces for children. For instance, the so-called 'Elsagate' controversy and associated moral panic in the late 2010s, (featuring videos in which the Frozen character Elsa was featured in horror and sexually suggestive content), forced YouTube to demonetise thousands of YouTube accounts producing children's content (Walzcer, 2021).

Social media entertainment also differs from traditional media in how it is produced and used by children. Successful social media entertainers frequently work together in loose arrangements, or in semi-industrial collectives such as multi-channel networks and influencer networks to build their visibility, subscriptions and income (Cunningham & Craig, 2021). While this model has some echoes of traditional studio systems, the focus of creator labour is frequently 'relational' (Baym, 2018) in that work consists of personal interactions with fans on social media, giving the impression that social media entertainers are more accessible to their fans.

Another key difference is that social media entertainment is driven by algorithms designed by the digital platforms, ostensibly to increase 'watch time' and the number of interactions a user has with media content. In addition, content access and decision making is automated or semi-automated through recommendation systems, typically with the goal of optimising the delivery of audience members to advertising content (Hallinan and Striphas, 2014). A key claim in digital media research is that platform algorithms operate in opaque ways with significant impacts on consumer choice (Gillespie, 2013).

SECTION 6: THE POLITICAL ECONOMY OF THE FAMILY AND EDUCATION

Theories of political economy have animated studies of both the family and education systems (mainly schools and schooling) since the growth of social sciences in the 19th century. Anthropological approaches to family structure and the family unit and its place within the larger body politic lay behind emerging scholarship of the industrial societies of the global North - for example, in the work of Durkheim and Weber (e.g. Weber, 2003). The economic function of the family unit, with subsequent attention being paid to the gendered division of labour - particularly explored in contrast between agricultural and urban social worlds - are now taken for granted not just by academic scholarship but in huge rafts of social policy from tax benefits to the very structure and principles of the welfare state.

A similarly (and often interrelated) set of principles have underpinned the study and organisation of education systems in countries around the world. From the early role of schooling, in taking children out of the labour force and then preparing them for the labour market, through theories about the social reproduction of society through schooling (Bowles & Gintis, 1976) to analyses of school systems and the nation state (Meyer et al., 1997), the relationship of education to economic growth (Goldin & Katz, 2008) or the role of education in the stratification of society itself (Bourdieu & Passeron, 1990). It is virtually impossible not to encounter analyses of political economy in discussion about the way schools and education systems work from micro to macro perspectives. The rise of commercialised EdTech only underscores the importance of this focus.

Because the very concepts of the institution of the family and schools are foundational principles in such a huge raft of social and economic policy, their conceptual frameworks permeate applications and contemporary developments of such institutions in the digital era. Contemporary interest has particularly focused on: social inequalities in children's lives; the changing structure of family life; the pedagogization of domestic leisure; and the role of educational technology as a global business working across the markets of school systems within nation states.

Many educational systems in countries of the global North have radically restructured under the pressures of neoliberal economic reform and this has especially opened up schools to market forces as state schooling has become privatised (Ball, 2007; Ball, 2008). As both cause and symptom of some of these changes, educational technology is the most visible sign and expense involved in many of these transformations (Selwyn, 2010). Research has consistently focused on the growing place of global multinational tech companies in schools as infrastructure, curriculum materials, assessment technologies, learning analytics, teacher control and surveillance as well as pupil monitoring and home-school frameworks. The COVID pandemic of 2020 seemed to accelerate the place, purpose and role of digital

technologies in education[3]. This is part and parcel of domestic marketplace for educational toys and services purchased by families to seek competitive advantage for their children as much as it has raised questions about the ways that tech companies now mediate homeschool learning (Kumar et al., 2019). Indeed, education is a key driver of tech companies' attempts to monopolise technology ecosystems in the home. It is often difficult to mix hardware purchases and subscriptions across ecosystems, and for simplicity and convenience, families may be tempted to buy into the Apple system, or the Google/Android ecosystem (Corser, 2020). This also extends to the educational technology market in schools, who may offer an iPad 'Bring Your Own Device' program, or, alternatively, be kitted out with Google Chromebooks, or the Microsoft Surface.

The concern with the ways that the business interests of Ed-tech companies can now shape forms of curriculum, assessment and school organisation is always approached within the broader context of the politics of schooling within individual countries - but of course in this context raises questions about the role of global multinationals in hitherto purely national jurisdictions. It is also situated in debates about the changing relationship between home and school and perspectives on the ways that families take on changing responsibilities in respect of purchasing educational advantage for their children (Sefton-Green & Erstad, 2018).

The ways that family responsibilities for educational opportunity have come under increased scrutiny needs to be seen in the context of studies that pay attention to social inequality and stratification within nations, communities and neighbourhoods. Here changes in the structural composition of the post-Second World War hetero-nuclear family have connected with scholarship into new elites, the effect of racialised and class based social stratification, all of which combine to create new patterns of family life and new concerns for the contexts in which children grow up and learn (Lareau, 2011; Livingstone & Sefton-Green, 2016).

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[3] https://issuu.com/educationinternational/docs/2020_eiresearch_gr_commercialisation_privatisation?fr=sZDJ kYjE1ODA2MTQ

SECTION 7: DIGITAL CHILDREN AND DIGITAL CHILDHOOD

The history of scholarship investigating political economy approaches to digital childhood has consistently been preoccupied with inequality returning again and again to the study of differential access to digital technologies, in contrast to a concern with use and meaning (Livingstone, 2002). Attention to the digital has only reinforced the proposition of multiple childhoods (Qvortrup et al., 1994) constructed, regulated and lived by children that are not only different between countries but between very different social worlds within single nations. Much research has concentrated on the policy and social justice implications of differential access to digital technologies across school and home, including large scale projects such as EU kids online[4] or Global Kids online[5].

This focus has been intensified in 2020 with the realisation that domestic access to digital technologies fundamentally affected educational opportunity for the world's schoolchildren. The extent to which unequal childhoods can be remediated by schooling and the societal implications of such differences in variation remain foundational questions. What counts here is not so much claims for theoretical originality in the way that such research is framed, but more how it is received and how policy and practise responds to consequences.

And interest in the consequences that stem directly from features of a digital childhood has galvanised two research areas: first, an intensified interest in parenting; and secondly a different kind of focus on children's rights and their place within changing regimes of regulation by both commercial and state interests.

Analyses of parenting in the digital age frequently draw on differences in forms of post Bourdieuian social and cultural capital (e.g., Savage 2015). Rather than just thinking of parenting as an unchanging natural activity, studies like Sonia Livingstone and Alicia Blum Ross' *Parenting for a Digital Future* (Livingstone & Blum-Ross, 2020) show how aspirations for good childhood come into conflict with everyday tensions and squabbles over 'screen time' and attention, alongside fears and anxieties about the ways that the digital can communicate directly with children outside of parents' watchful gaze. Parenting is a reflexive self-conscious activity drawing on a range of information sources and popular discourses, and has become highly responsibilized and highly wrought as a seemingly impossible activity to manage in the face of so many competing demands on children through digital media.

These themes often play out through the kinds of access children have to the internet (Livingstone and Blum-Ross, 2020). On one hand there is a tendency to create online 'walled gardens' for children, such as the virtual worlds of *Neopets*, *Club Penguin*, and *Minecraft Realms* which offer 'safe' multiplayer spaces. On the other hand, the internet remains relatively open to many children. The places and spaces in which children use internet resources is also of interest, whether these are in the home and regulated through

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[4] https://www.lse.ac.uk/media-and-communications/research/research-projects/eu-kids-online [5] http://globalkidsonline.net

forms of surveillance (screens allowed in the living areas, but not bedrooms, for instance), or used in the car / public transport on the way to school, in restaurants as adults have 'grown up' conversations or in community and commercial spaces, where an internet connection is available. Digital playdates may also feature in family life, either through children bringing their devices with them when they visit a friend, to enable interactive play; or through virtual co-play (with live video links) in an online multiplayer space.

The family and the household themselves draw on different funds of knowledge and resources so a second complementary stream of research has focused on the ways that infrastructures, governments, regulatory policy and indeed companies themselves structure and organise forms of especial authority in respect of children just as children's media tried to do (Section 3 above) in the seemingly dangerous consumer culture after the Second World War. The asset-based approach has been to focus on children's rights[5] in order to stress opportunities and agency that emerged as characteristics of the new childhood studies (Corsaro, 2011; Third et al., 2020; Spyrou et al., 2018). While a thread from earlier studies of consumerism emphasised children's vulnerability in the marketplace, the digital often emphasises children's agency and above all the benefits of forms of connection and learning created by these new opportunities.

What is at stake in these themes is understanding how activities online and with digital technologies are now understood in terms of the profit interest of the fast-evolving forms of surveillance or platform capitalism (Srnicek, 2016; Zuboff, 2019). These broader analyses of a changing economic order basically argue that the key value in digital culture lives in the data produced by everyday interactions and that platform capitalism depends upon the capacity to extract, analyse, commodify and then monetise data within and across a relatively small set of global super companies.

As Veronica Barassi (2020) has most recently shown (Barassi, 2020) virtually every dimension of contemporary childhood from conception, birth, 'sharenting' on social media, care, health, household expenditure, everyday family life (especially leisure-related purchasing and activities) are now mediated through digital platforms, which are accessed through phones, tablets, and smart home devices, and even embedded in the Internet of toys (Mascheroni & Holloway, 2019). Barassi's description of the ways that digital platforms offer an extremely complicated mixture of coercion, intrusion, choice and surveillance is driven by the analysis of the ways that data and datafication drive new forms of contemporary social organisation and capitalism.

The relationship between datafication and platform capitalism is still emerging just as it is constantly being renegotiated through legislation (COPPA, GDPR). Indeed, a key part of the digital rights movement is precisely aimed at ways of asserting individual human rights and protections within this fast-changing environment that has moved well beyond anxieties over the child and consumerism (described in Section 4) in pushing into the intimacy of the home and trying to play a part in virtually every aspect of quotidian life. It is not surprising that attention has been paid to forms of parenting as a way of trying to come to

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[5] https://5rightsfoundation.com/our-work/childrens-rights/uncrc-general-comment.html

terms with and control the particular ways that datafication and platformization have now inserted themselves into every aspect of contemporary childhood.

SECTION 8: RESEARCH QUESTIONS AND A RESEARCH AGENDA

8.1 Summary

In Section 2, this paper asked how can we apply ideas derived from the study of political economy to digital childhood? And how and why might such a conceptualisation be useful?

There is clearly a long-standing tradition of research in social sciences covering the media, communications, family, education and childhood which draws on common language, a common conceptual framework and which draws on shared themes. Significant is the attention to the balance between lived experience, the role of the nation state, common cultures and now the effect of globalisation accelerated by digital technologies. The separate traditions of study have tended to produce their own genres of research where questions of evidence, validity, representation and plausibility carry differing weight for different audiences. Yet the shared interest in the role of markets, the effects and nature of consumerism, the regulatory function of the state, cultural norms and the concern with the creation and maintenance of value repeats as much as it is clearly now a focus for the study of digital childhood.

8.2. Research methods, models and traditions

There are no particular methodologies or types of research projects exclusive to a focus on political economy of digital childhood. The field is as susceptible to the principles of social science research as others. There are, however, particular inflections to the range of research produced in this area. First of all, there is an emphasis on historical accounts and historical studies – we might take the account of preschool television as a case in point (Steemers, 2010). This perspective clearly aims to capture periods of change, mainly in social and economic life. Post Second World War growth is often counterposed with the era of neoliberalism that began across the countries of the global North in the 1970s. The meaning of post digital social worlds is argued through contrast and difference from earlier eras.

Secondly there is a preponderance of institutional accounts. Studies of companies, national systems of regulation and control, particular authors or phenomena like Pokémon (Tobin, 2004) are often ways of narrating change. Institutional studies also draw attention to the ways that a range of social actors play a part in any analysis of political economy so drawing together writers, producers, intermediary businesses and social actors alongside consumers and families as well as children themselves all contribute to a theoretical ambition to theorise networks or webs of relationships. The theoretical attention to forms of communities of practice (Lave & Wenger, 1991), practice theory (Turner, 2013), or actor network theory, the rise of socio-technical assemblage (Latour, 2007) analyses all of which stress the complexity of social life and the ways that competing interests ebb and flow in their control are also a hallmark of this mode of analysis.

Third, in more recent years a strand of critical research has emerged that is focused on analysing the data policies, governance and implications of digital technologies in schools. This methodological approach includes research that examines digital technologies from *within* the school setting through ethnographic accounts of how students, teachers and administrators engage with digital infrastructures (Selwyn, Nemorin & Bulfin, 2018; Pangrazio, Selwyn & Cumbo, under review); and from *outside* the school, through critical analysis of the data policies and governance of these technologies (Perrotta et al., 2020; Manolev, Sullivan & Slee, 2019; van Dijck, Poell & de Waal, 2018). Using a similar critical approach, recent work by Kerssens and van Dijck (2021) has expanded the analytical frame to consider the tensions that arise when commercially owned digital platforms are inserted into national public school systems. A range of methodologies are used to do this multidisciplinary work from digital ethnography, infrastructural mapping, digital 'walkthrough' methods (Light, Burgess & Duguay, 2018) and critical policy analysis.

Finally, it is worthwhile acknowledging the rhetorical role of small-scale qualitative research. Both recent studies about parenting and the lives of digital children experiencing digital childhoods (Livingstone & Blum-Ross, 2020: Barassi, 2020) are notable for the ways that they try to extrapolate from felt experience within family life especially reflexive accounts by parents or children. The point here is that in analysis of changing social trends it is important to offer empirical accounts at a fine-grained level and indeed being able to offer analyses that bring together micro and macro perspectives has proven central to the success of scholarship in this area. From this point of view, it is notable that the large-scale quantitative analyses of childhood often driven by health economists or even accounts of changing family consumption patterns are perhaps less common in this field and offer opportunities for further work.

8.3. Key Themes and Research Questions

8.3.1 Markets

The first set of questions suggested by a political economy approach to digital childhood revolve around ways that both childhood and children are positioned within markets and how different families and children might understand and relate to such processes. Digital goods and services have clearly created a new set of products (devices, apps, games (including in-game purchases, currency, 'loot boxes', etc.), subscriptions, data access and storage et cetera) just as they have equally extended and transformed pre-existing ones.

The growth of transmedia phenomena mean that even traditional purchases, food and clothing have now become implicated in forms of branding just as the classical practices of consumption, like shopping, have now become datafied so that, for example, supermarket loyalty card schemes play a part in purchasing and consumption activities. In other words, it is difficult to disentangle the market of childhood from a wide range of digital transformations.

Research Questions (Markets)

1. We would thus want to know how families (and of course differences in their constituent parts) purchase and consume within the household and then more specifically the role of digital

products and services within the larger frame. How are purchasing decisions made and prioritized?

2. How what is deemed appropriate for children - the spaces of childhood - is constituted through the consumption of specific activities (e.g. a subscription to Disney+), its place within the overall economy of household expenditure and its relationship to other economies of time and attention needs to be plotted.

3. How digital technology platforms create demand in families for new categories of products, and new points of purchase (such as in-app purchases).

4. How digital transforms or affects all household expenditure and especially the ways that it mediates the construction of childhood?

5. What is the role of edutainment and other forms of digitally mediated 'educationalization' and digitally mediated play as being two commonly understood axiomatic dimensions of childhood?

6. How do EdTech markets work within and across national jurisdictions and how do they influence home purchases, domestic digital media use and consumption?

7. How social transformations can lead to new markets (in the ways that the COVID pandemic seemed to create new markets for digital play and learning)?

8.3.2 Institutions and Platforms

A second set of questions revolve around companies, institutions and corporate bodies that either sell or mediate services/goods and/or are responsible for marketing and/or regulating access to markets. The focus here should not necessarily be on classical distinctions between state and market or private and public but on the more recent phenomenon of platformization. Digital platforms themselves encompass the well-known public facing end of new companies and/or institutions (e.g. YouTube, Minecraft) as well as a key point of entry for more traditional pre-digital forms of organisation (e.g. Centrelink or Woolworths) and additionally new forms of credit, finance and consumption like *Post-Pay*.

One of the key challenges of the way that people interact with platforms is the extent to which their activities (or labour) on the platform creates value and meaning for the institution and the platform, whether that is in terms of user-generated content, direct knowledge or data extraction and commodification. Here, we now have to account for platform experience that is algorithmically mediated so that content access and decision making is automated or semi-automated through recommendation systems, typically with the goal of optimising the delivery of audience members to advertising content (Hallinan and Striphas, 2014).

Both companies seeking to offer services to families and/or children as well as national regulatory bodies and welfare delivery services now structure and organise their relationships and their products via platforms.

Research Questions (Institutions and Platforms)

1. How do platforms 'see' and know children, families and their households as they construct products and services?

2. How do they research, develop evidence and hypothesise benefits (profits), audiences, reach and interaction?
3. What do platforms need from government and what role does government play in legitimating platforms as a mode of civic participation?
4. How do the principles and practices of datafication drive development, investment and imagination?
5. How are children and families' cultural experiences automated and mediated by platform algorithms?
6. Are there examples of platforms for children that bring together private companies and public institutions in innovative and generative ways? How are their architectures, business models and governance distinct from commercial platforms?
7. How do platforms create new cultural products for children via the structures of 'social media entertainment' and through 'micro-celebrity' creativity?
8. How do platforms and their businesses communicate horizontally (for example, companies within early years education) or vertically (whole life course businesses like supermarkets) and how do they operate in concert, in competition and as part of the wider digital ecology of platform growth?
9. What are the innovation opportunities for learning and family health?
10. How do local, state, federal and global companies do business with each other in relationship to children's marketplaces and what challenges and opportunities do Australian platforms face in these global challenges?

8.3.3 Value

The third set of questions are concerned with value(s). There are benefits and dis-benefits for users – children and their families – often expressed in terms of time usage (usually when negative) but in other kinds of intangibles like learning, engagement, interest, motivation, development and growth. The digital espouses notions of good and bad experience, social interaction and communication, future oriented educational ideals and normative behaviours. All of these sets of values are frequently expressed in psychological and developmental theories.

There are also wider sets of value relating to the common good – i.e. wider social and civic states of being - and these frequently revolve around questions of equality of access, exclusion and social marginalisation, as well as maintenance of elite positions and social advantage. Finally, there are sets of values relating to the wider economy and forms of social control in terms of generating income but also in terms of population management. Key here are challenges as to whether the digital is creating a good or better or desirable notion of childhood.

Research Questions (Values)

1. How are qualities of digital experience defined, measured and understood by families and children? How are they defined, measured and understood by platforms, regulators and in other forms of public discourse?

2. We want to know especially how the digital acts as a qualifier or mediator for play, learning and education and indeed offers frames for understanding the very nature of what it is to be a child in Australia today.
3. Does the digital create new and distinctive sets of values or recalibrate pre-existing ones?

ABOUT THE AUTHORS

Professor **Michael Dezuanni** undertakes research about digital media, literacies and learning in home, school and community contexts. He is the Program Leader for Digital Inclusion and Participation for Queensland University of Technology's Digital Media Research Centre which produces world-leading research for a creative, inclusive and fair digital media environment. He is also a Chief Investigator in the ARC Centre of Excellence for the Digital Child.

Michael is the author of 'Peer Pedagogies on Digital Platforms - Learning with Minecraft Let's Play videos' (MIT Press 2020), he has edited three academic books, and is the author of over 45 journal articles and book chapters. Michael has served on advisory committees for the Australian Digital Inclusion Alliance, the Australian Media Literacy Alliance, national charity The Smith Family, the Australian Curriculum and Assessment Authority (ACARA), and the Alannah and Madeline Foundation.

Dr **Luci Pangrazio** is an expert in datafication, young people's digital and data literacies, and digital cultures. Her role as Chief Investigator in the Connected Child program focusses on the datafication of young children's technology use – what data is being collected, how it's being used, and the implications.

Dr Pangrazio is currently Chief Investigator on an ARC Discovery Project examining the use of digital data in schools and ways to improve its capture and use. As an Alfred Deakin Postdoctoral Fellow, Dr Pangrazio is also working on a project to investigate new ways to understand digital data. Recent books include *Young People's Literacies in the Digital Age: Continuities, Conflicts and Contradictions* (2019, Routledge) and *Learning to Live with Datafication: Educational Case Studies and Initiatives from Across the World* with Julian Sefton-Green (2022, Routledge).

Julian Sefton-Green is a Professor of New Media Education at Deakin University, and Chief Investigator at the Centre of Excellence for the Digital Child. He has worked in many countries researching young people and family use of digital technology in everyday life. His research is mainly ethnographic, focussing on socially marginalised communities, social inequality and the powerful ways that people demonstrate ingenuity, creativity and resistance often when education systems are stacked against them.

Professor Sefton-Green has worked as an independent scholar and has held positions at the Department of Media & Communication, London School of Economics & Political Science and at the University of Oslo. He has written widely on many aspects of media education, new technologies, creativity, digital cultures and informal learning and has authored, co-authored or edited 20 books and spoken at over 50 conferences in 20 countries www.julianseftongreen.net

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