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**THE DATAFIED FAMILY:  
ALGORITHMIC ENCOUNTERS  
IN CARE, INTIMACIES,  
ROUTINE AND PLAY**  
ONLINE EVENT  
WORKSHOP PROGRAMME

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28 June 2023

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## INTRODUCTION

From body-trackers, non-human digital support apps, smart home tech, parenting apps and gadgets, surveillance devices from the womb to the cradle, technologies of intimacy and play in the Internet of the Things, and wellbeing and wellness support bots – the textures of family life are changing – at disparate paces across global cultures and economies with a steady increase in family technologies, which are subtly, and not so subtly altering the doing of care, intimacy, leisure, learning, play, routine and more. *The Datafied Family* – a day-long, international, virtual workshop – interrogates these issues and will bring international voices at the cutting-edge of Sociology, Communications, Education, Data Science, and Health and Wellbeing – to meet the University of Surrey's research clusters across its faculties around digital societies, technology and society, family sociology and health, parenthood and childhood.

The Datafied Family – will raise and respond to a set of key questions – without restricting its topics to these alone. Overarchingly, we ask:

1. In what ways have family dynamics – routines, caring, intimacies, leisure, play, learning, parenting and more – been interrupted, (re)shaped, or transformed by the steady algorithmizing of everyday family life?
2. What material artefacts – toys, apps, smart home tech, educational applications, portals and meta-portals – punctuate family life and to what effect?
3. What inequalities, injustices, and power dynamics are being rehearsed or reshaped through the datafication of family life?
4. How is the algorithmic shaping of domestic routines and rapports encountered in practice, resisted, or reshaped through human agency?
5. What global perspectives remain less visible and unincorporated in theorising the datafied family, including the disparities between the global north and south?

### **Workshop Organiser:**

Professor Ranjana Das (University of Surrey)

### **Administrative support:**

Ms Mirela Domic, Ms Louise Jones (Institute of Advanced Studies) and Ms Basudha Guha Khasnobis (University of Surrey)

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# PROGRAMME

## WEDNESDAY 28 JUNE

Virtual event - all times in BST

- 09.00 – 10.00 **Welcome and Keynote Session 1**  
Usha Raman, University of Hyderabad, India *"Family Decision Making and Health Data: Cultures of Resistance, Denial and Belief"*  
Giovanna Mascheroni, Catholic University of Milan, Italy *"The Datafied Habitus: Sociodigital Inequalities and Lived Experiences of Datafication Among Italian Families"*
- 10.00 – 11.15 **Home - Data - Chair: Paul Hodgkinson**  
Esther Dermott, Dr Natasha Carver, Dr Aisling O'Kane, University of Bristol, UK *"Caring Practices in the Digital Home"*  
Val Gillies, University of Westminster, Rosalind Edwards and Helene Vannier-Ducasse, University of Southampton, UK *"Calibrating families: Data behaviourism and the new algorithmic logic"*  
Laura Carter, University of Essex, UK *"Categorising the 'troubled family': data sharing, binary classifications and family role stereotyping in children's social care in England"*  
Ekaterina Hertog, Lulu Shi, University of Oxford, UK *"Who wants a smart wife? And what should she be doing?"*  
Bjørn Nansen, Jane Mavoa, Simon Coghlan, Martin Gibbs, University of Melbourne, Australia *"Family location tracking apps: a cross-platform content analysis of public discourse"*
- 11.15 – 11.20 Break
- 11.20 – 12.35 **Foetus, Infant, Child, Ancestors - Chair: Emma Head**  
Rieke Böhling, ZeMKI, University of Bremen, Germany *"'You Are Your History' – The Datafication of Genealogical Research"*  
Rivka Ribak, Gal Shayovitz, University of Haifa, Israel *"The Datafied Family in Embryo"*  
Katrin Langton, Queensland University of Technology, Australia *"Constructing Contemporary Parenthood in Digital Spaces: infant feeding applications and the mediation of Australian parenthood"*  
Angelica Martinez Ochoa, University of Texas, USA *"Nurture Online: Digital platforms of milk sharing"*  
Caroline Redhead, Lucy Frith and Leah Gilman, University of Manchester, UK *"Datafied DNA and donor-conception"*
- 12.35 – 13.20 Lunch Break

13.20 – 14.20

### Keynote Session 2

Sonia Livingstone, London School of Economics and Political Science, UK *"Families today - mediated, platformed, datafied, digital: scoping the challenges ahead"*  
Veronica Barassi, University of St Gallen, Switzerland *"A new time for AI Agents? Critical questions on Family Life, AI Ethics and Generative AI"*

14.20 - 15.50

### Parenthood in Platform Societies - Chair: Ana Jorge

Courtney Hagen Ford, North Eastern University London, UK *"Family surveillance products: what are they and why do they matter?"*  
Ranjana Das, University of Surrey, UK *"Parents' algorithm literacies amidst datafication: Dimensions, markers and implications"*  
Pamela Ugwu-dike, Silke Roth, Anita Lavorgna, Morena Tartari and Natalie Djohari, University of Southampton, UK *"A zemiological analysis of digital parenting cultures: The case of risky 'sharenting' on social media sites"*  
Irida Ntalla, University of Arts London, UK *"Apps for the single mum"*  
Tama Leaver, Curtin University, Australia *"Uploading Infancy: Dashboards and Devices of Mobile Parenting"*  
Dr. Yuwei Lin, University of Roehampton, UK *"Parkrun and The Datafied families"*

15.50 – 16.00

Break

16.00 – 17.30

### Schools, Families, Datafication - Chair: Emily Setty

Karla Zavala Barreda, University of Amsterdam, Netherlands *"Who is teaching kids to read? The influence of rankings and algorithmic culture on apps for children"*  
Karley Beckman, Tiffani Apps, University of Wollongong, Australia *"School social media and the datafication of children and families"*  
Emma Head, Keele University, UK *"The digitisation of schooling and family life: mothers' experiences of parenting primary school aged children in the UK"*  
Elizabeth Fetterolf, Microsoft Research New England, USA *"Caring Surveillance and Surveillant Care in Amazon's 'Alexa together'"*  
Francisca Porfírio, Ana Jorge, Rita Grácio, Universidade Lusofona, Portugal *"Everyday Parenting: Portuguese families dis/engaging with/from digital technologies"*  
Luci Pangrazio, Deakin University, Jane Mavoa, University of Melbourne, Australia *"Studying the datafication of Australian childhoods: Learning from a survey of digital technologies in homes with young children"*

17:30

Conference Closure

# KEYNOTE SPEAKERS

Usha Raman



Usha Raman is a Professor in the Department of Communication at the University of Hyderabad. Her academic interests span journalism pedagogy, cultural studies of science, health communication, children's media, feminist media studies, and digital culture. She currently is a columnist for *The Hindu*, and edits a monthly magazine for school teachers, called *Teacher Plus*. Most recently, her work has focused on civic engagement and digital social networks, and feminist digital methodologies. She is co-founder of the IDRC funded initiative *FemLabCo*, which explores the future of women's work. She is currently serving as the Vice President of the International Association for Media and Communication Research.

Giovanna Mascheroni



Giovanna Mascheroni PhD in Sociology, is a sociologist of digital media, and Associate Professor in the Department of Communication and Performing Arts, Università Cattolica del Sacro Cuore. She is currently leading WP6 in the H2020 project *ySKILLS*, and *DataChildFutures*, a national project investigating the data practices of Italian families with children aged 0- to 8-year-olds. Her work focuses on the social shaping and the social consequences of digital media, Internet of Things and datafication for children and young people. She has published extensively in international journals (including *New Media & Society*, *Journal of children and Media*, *Social Media & Society*, and *Information, Communication & Society*) and edited volumes. Her latest book, *Datafied childhoods: Data practices and imaginaries in children's lives*, co-authored with Andra Siibak, has been published in Autumn 2021 in the *Digital Formations* series (Peter Lang).

Sonia Livingstone



Sonia Livingstone is a professor in the Department of Media and Communications at London School of Economics and Political Science. Taking a comparative, critical and contextualised approach, Sonia's research asks why and how the changing conditions of mediation are reshaping everyday practices and possibilities for action, identity and communication rights. She has published twenty books on media audiences, particularly examining the opportunities and risks for children and young people afforded by digital and online technologies, and with a focus on media literacy, social mediations, and children's rights in the digital age. Sonia has advised the UK government, European Commission, European Parliament, Council of Europe and other national and international organisations on children's rights, risks and safety in the digital age. She was awarded the title of Officer of the Order of the British Empire (OBE) in 2014 'for services to children and child internet safety.'

Veronica Barassi



Veronica is an anthropologist and Professor in Media and Culture in the School of Humanities and Social Sciences as well as Co-director of the Institute of Media and Communications Management at the University of St. Gallen, in Switzerland. She is the author of different articles in top-ranked academic journals and three books, including [Child | Data | Citizen: How Tech Companies are Profiling Us from before Birth](#) with MIT Press (2020). Veronica's research on children's data has featured in international mainstream media in the UK, the U.S., Italy, Turkey, Spain, India and Poland. In 2018, the Information Commissioner's Office of the UK Government used her research as evidence for the development of age appropriate design code, in 2019 the Irish Government invited her to discuss AI Ethics at their Digital Summit, and in 2020 she has been invited to speak at the Global Child Forum, which is founded by H.M. the King and H.M. the Queen of Sweden. Prof. Barassi Ted Talk on [What Tech Companies know about your Children](#) has reached more than 2 million views.

# ABSTRACTS

## KEYNOTE SPEAKERS

**Family Decision Making and Health Data: Cultures of Resistance, Denial and Belief**  
*Usha Raman, University of Hyderabad, India*

Patients mill around in the lobby of a diagnostic centre and primary clinic in a busy part of Hyderabad, waiting for blood samples to be drawn or for reports to be picked up. Some are directed to a practitioner to discuss the implications of a diagnosis. As she speaks with a young woman and her mother, the clinician in charge, a scientist with long years of experience in diagnosing genetic-linked blood disorders, weighs the numbers and graphs on the report with what she can read of the family, as she tries to explain what it all could mean. She knows that the information could be devastating; it could damage the young woman's chances of a good marriage and stigmatize them in their conservative community. Yet the management of the condition requires people to make personal choices that affect the health of the wider community.

Discourses about datafication of the body traverse the spectrum between the macro, the meso and the micro, even nano scales, operating at the level of public health epidemiology on the one hand and personal health tracking and individual patient monitoring on the other. These discourses may draw their substance from large scale, population-based surveys that aim to build evidence for policy at the state level, or from

the networked clinic, that contributes to the evidence base for medical service provision, or again, from communities of networked individuals, offering up and harvesting the data of their bodies to make everyday decisions about a variety of practices. Operating within and alongside these inter-related systems of understanding, however, are individuals who interact with data (big and small) in varied ways, negotiating between multiple cultures and normative structures to make meaning in their own ways. These could include health practitioners who must balance their disciplinary understanding with socio-cultural sensitivities, or mothers who need to feed numbers on a diagnostic report into parenting strategies, or indeed, families who choose to set aside genetics to avoid stigma.

In this paper, I explore the micro-politics of data driven health decision making and practices within families and across the care-provider/seeker divide, to understand attitudes towards both big and small data and datafication, particularly in the cultural landscape of the Global South

**The Datafied Habitus: Sociodigital Inequalities and Lived Experiences of Datafication Among Italian Families**  
*Giovanna Mascheroni, Università Cattolica del Sacro Cuore, Milano, Italy*

The mediatization and datafication of childhood is often addressed as a generalised and homogeneous experience, at least across European countries.

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However, critical data studies have long warned about the need to contextualise data practices and imaginaries in individuals' everyday lives (Breiter & Hepp, 2018; Couldry & Hepp, 2017; Kennedy & Bates, 2017; Kennedy et al., 2015; Mascheroni & Siibak, 2021). Our qualitative longitudinal research involving three waves of data collection with 20 Italian families with at least one child aged 8 or younger—including interviews and observations (N=58), app-based media diaries (N=17) and maps drawing (Watson et al., 2022)—shows how family life is undergoing a process of deep mediatization (Hepp, 2019). Yet, while all families live digital media-rich lives, they variously engage in and make sense of data practices and algorithmic systems. Different datafied habitus emerge based on: the family's social, cultural and economic capital; the range and type of digital media available (including IoTs and AI-based devices such as smart speakers, smart TVs, smart toys, wearable devices); the specific media practices in which children and parents engage; parental mediation strategies; parenting cultures; and technological imaginaries. Together, these shape different datafied habitus, consisting of set of practices, resources, schemes and classifications (as in Bourdieu's (1986) classical notion of the habitus), that configure different lived experiences of datafication and generate new sociodigital inequalities (Helsper, 2021).

**A new time for AI Agents? Critical questions on Family Life, AI Ethics and Generative AI**

*Veronica Barassi, Professor of Media and Culture, School of Humanities and Social Sciences, University of St. Gallen Switzerland*

Over the past decade, our daily lives have been slowly colonized by AI agents that gather, analyze and make meaning out of our personal data. Up until recently these AI agents were operating behind the scenes, as in the case of social media targeted content. Yet the rise of generative AI (such as ChatGPT) has opened-up new possibilities for children-AI-communication and has the potential to transform the ways in which families work, live and socialize. As researchers we are thus confronted with critical questions about the technological, historical, and social change we are living, and about the impact these technologies will have on the human rights of children and youth. Bringing together the findings of two ethnographically informed projects one on the datafication of children (2016-2019) and another one on voice-operated toys (2021-2023), this keynote will reflect on some of the ethical challenges that we are faced with when we think about the rise of generative AI. What kind of cultural values do these technologies embody and how do they transmit them to our children? Which structural inequalities are they amplifying? What impacts can we foresee for the human rights of children?

### **Families Today - Mediated, Platformed, Datafied, Digital: Scoping the Challenges Ahead**

*Sonia Livingstone, London School of Economics and Political Science, UK*

A decade ago, a project called 'Family Platforms' mapped the emerging issues for European families living in an increasingly mediated world. A new project called 'Platforming Families' will explore the consequences of recent changes in research, society and technology. With these projects bookending my analysis and grounded in fieldwork from 'Parenting for a Digital Future', I will scope the challenges ahead for families.

## **ABSTRACTS**

### *Session 1 - 'Home - Data'*

#### **Caring Practices in the Digital Home**

*Esther Dermott, Dr Natasha Carver, Dr Aisling O'Kane, University of Bristol, UK*

Discussions of the impact of technological developments often ask questions about the impact of digital innovation on how we act and think. This paper (part of a wider project and programme of work) makes the case for taking seriously how individuals appropriate new technology into their everyday lives.

The use of commercial smart home devices is growing with the increased availability of a variety of devices and their relatively low cost. These devices are used for a variety of purposes, for example energy consumption and home security, and to support activities

of daily living (Soubutts et al. 2022). Here, we develop that understanding to explore how parents and their children appropriate voice assistant devices into family life as a dimension of intimacy and care, given that the landscape of care relies on a relationship infrastructure of emotions and caring practices which are often grounded in intimacy born of shared activities (e.g. Gabb and Fink 2013).

The project (funded as part of the ESRC Centre on Socio-Digital Futures) has recruited c15 households to explore their use and views on voice assistants (Amazon Alexa) in the home. In depth, longitudinal data will be collected via 1) contextual interviews with the household members (both parents and children) at the start and end of the study 2) an 'out-of-box' interview shortly after adoption 3) transcripts of Alexa commands 4) co-design skills session with families.

#### **Calibrating Families: Data Behaviourism and the New Algorithmic Logic**

*Val Gillies, University of Westminster, Rosalind Edwards and Helene Vannier-Ducasse, University of Southampton, UK*

Family intervention is a long-established mechanism of state control, but recent technological developments are facilitating new regulatory capacities and objectives. This paper will explore how contemporary policy interventions in the UK are converging around a technological solutionist ideology that centres family relationships as core instruments of social management. The last decade has seen a marked techno-administrative turn, with family state

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relationships increasingly mediated through online portals and dashboards. Over the last few years this data centric model has accelerated towards an algorithmic approach to governance through the incorporation of big data surveillance, predictive analytics and behavioural interventions to monitor and regulate populations. We trace the embedding of data collection frameworks into apparently conventional family intervention programs and show how this 'datafication' was made into a core delivery tool. We also highlight how secrecy, or at the very least strategic silence, has restricted public knowledge of how and why data is being collected and used in the UK. We show how parents and children are being quantified and translated into data points to support new logics of choice manipulation, ceding unprecedented power to financiers, data analytic companies, platform developers and big tech companies. We argue that public and private data extraction and its furthering of behaviourist agendas have serious implications for families and as such deserve critical scrutiny.

#### **Categorising the 'Troubled Family': Data Sharing, Binary Classifications and Family Role Stereotyping in Children's Social Care in England**

*Laura Carter, University of Essex, UK*

This paper presents one chapter from my PhD thesis, which uses feminist and queer approaches to consider the human rights impact of the collection and sharing of data in children's services in England. My thesis draws on critical data studies to examine how the collection and use of data interact

with systems of power: they shape who can know what about the world, and to what uses this knowledge can be put. This chapter examines one specific case study in existing programming in children's social care: the 'Troubled Families Programme.' This programme, as I show, has as a key objective the increasing use of data by the local authorities. I will argue that the concept of 'family' in this data does not correspond with how the concept is defined in law, policy or practice.

I situate the collection and sharing of data within the history of information-gathering and decision-making in children's services and with the political choices which have shaped service delivery and datafication. Classification and categorisation are used to define the 'family' as a unit of analysis, which enables the identification of the 'problem family,' and further its definition as implicitly outside of the norm. Through examining the ways in which data systems classify, categorise and stereotype individuals who are known to social services, I show how the expectation that individual and family lives are legible to computers is used to normalise certain forms of families, and stereotype those who do not comply as 'troubled.' I argue that the use of data in this programme encourages and naturalises simplistic, Aristotelian classification: both to categorise people into families, and in order to classify families into 'troubled' and (implicitly) 'normal.'

Data collection and sharing is portrayed as actively beneficial for child welfare provision in the UK; however, in this paper, I argue that it promotes a simplistic view of what makes a good family. In place of families

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that work together, and state support that works to support them, the 'Troubled Families Programme' and its associated datafication project support an antiquated idea of what makes a good family and promote work as the solution to all ills.

### **Who Wants a Smart Wife? And What Should She Be Doing?**

*Ekaterina Hertog, Lulu Shi, University of Oxford, UK*

Unpaid household labour is a major social and economic activity that underpins families and households and is essential for social functioning. At the individual level, household labour is critical to health and well-being, but it is also very time consuming and shared unequally within households. The rising demand for robots to assist with domestic work, such as robotic vacuum cleaners, indicates that some people are turning to digital technologies to solve the work-family crunch.

Despite the increasing digitalisation of domestic work, we know little about individual attitudes to domestic smart technologies and how these vary by personal and family characteristics. This issue is important because differential acceptance of domestic technology could potentially deepen existing workload inequalities across genders and classes, could expose some segments of the population to privacy risks, and transform family interactions.

This paper provides the first picture of acceptability of domestic technologies to UK adults. It is based on a vignette survey we

are conducting, which was sent to 12,000 UK respondents selected to match a nationally representative sample on several core demographic characteristics. Our vignettes describe a fictitious family situation where respondents have access to smart technologies that can do housework and care work and are asked to decide whether they would like to use the smart technology. We expect a complex picture to emerge where respondents vary in how acceptable they believe domestic automation to be depending on their family situation, the task at hand and their own characteristics. Preliminary results indicate diverse patterns of acceptability. To give one example, partnered respondents are more open to automating housework, compared to care work. Single respondents are equally open to automating housework and care but are keen to do pet care themselves.

### **Family Location Tracking Apps: A Cross-Platform Content Analysis of Public Discourse**

*Bjørn Nansen, Jane Mavoa, Simon Coghlan, Martin Gibbs, University of Melbourne, Australia*

Families currently use a range of technologies to locate, track, and inform each other of their physical location and activities. These include GPS-enabled devices and dedicated location-based software applications such as Life360. To date, whilst research has focused on perceptions and uses of these tracking technologies within private family contexts. To date, however, there is no research into how these technologies are received in the wider public imagination. This paper

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contributes to knowledge about family location tracking technologies by investigating public representation and debate around their uses, meanings, and impacts. The study offers a topic-based and thematic content analysis of public conversations about Life360 and family tracking apps on three key social media platforms - Twitter, YouTube and TikTok. The study offers both a platform-specific and cross-platform analysis to understand how these technologies are publicly perceived and contested. The themes identified across the three platforms align with their varied cultures of use and platform vernaculars, with Twitter emphasizing newsworthy topics and events, YouTube focusing on commercial product reviews and tutorials, and TikTok posts using humour and memes to express everyday experiences and political expressions. Finally, the cross-platform analysis highlights the power of an antagonist and ambivalent platform vernacular found within the younger user community on TikTok to influence wider public topics of discussion across other social and mainstream media.

### *SESSION 2 - 'Foetus, Infant, Child, Ancestors'*

#### **"You Are Your History" – The Datafication of Genealogical Research**

*Rieke Böhling, ZeMKI, University of Bremen, Germany*

Genealogical platforms (such as Ancestry or MyHeritage) provide their users with the opportunity to research their family histories on their computers and smartphones. These

platforms transform the ways in which individuals can research their families' pasts and do family memory work. They offer a) vast amounts of digitized historical documents, b) DNA testing and an evaluation of users' ancestry, as well as c) a forum for connection and collaboration among users. In my current project I analyse how genealogical platforms shape and transform media practices related to family memory – one area of datafication that affects families.

The project combines a mapping of the platforms and an analysis of the platforms' affordances with research into the lived experiences of the platforms' users (by means of qualitative interviews). In doing so, it zooms in on a range of problematic issues: Firstly, issues of data protection and digital traces regarding potentially sensitive information (such as DNA test results) and the use of this information by the platforms. Relatedly, it scrutinizes users' perceptions and reflections upon these issues. Moreover, the project considers the role of algorithms and artificial intelligence in structuring the supply and consequently the interpretation of historical information by way of the selection of available historical records. Finally, it contributes knowledge on the impact of media platforms, technology and artificial intelligence on everyday life and media practices related to (family) memory.

In my presentation, I want to focus on first insights from my fieldwork and discuss how these platforms facilitate constructions of individual and collective identity and "doing family" (see also Lohmeier & Böhling, 2017), especially with regard to categories such as nationality and ethnicity.

### **The Datafied Family In Embryo**

*Rivka Ribak, Gal Shayovitz, University of Haifa, Israel*

As against the normalization of self-tracking technologies (Crawford et al., 2015), pregnancy apps introduce the unborn into social networking and data commodification. Through interviews with women who use, partially use and do not use such apps, the proposed presentation explores how women discuss the tension between the information gained and submitted, and how they embrace as well as resist the features that these apps afford them.

Adding to research based on interviews (Connor et al., 2018) or focus groups (Lupton, 2016) with women, and interpretive readings of the apps themselves (e.g. Lupton & Thomas, 2015), we shed light on women's hesitations and negotiations as they "walkthrough" (Dieter et al., 2019) the app with the interviewer. In turn, this methodological move allows us to consider the extent to which users are coerced into use and are unable to opt out (Barassi, 2017), heading Wyatt's (2014) call to incorporate non-use – and non-uses – into the study of use.

Preliminary interviews suggest that non-use is predicated on familiarity with the apps; and that the interviewees discuss pregnancy apps as residing within an ecosystem of fertility/reproductive apps, some of which (e.g. menstruation and breastfeeding) are acceptable. At this point, the commodification of the datafied body – a

major cause for scholarly concern – does not come up in the interviews as the reluctance to transition from an authoritative source of information into an informal one ("I preferred to avoid that part... it was intended to create a community of pregnant women... I understand, but in practice it was stressful"); and resistance – albeit rudimentary – to potential use of personal information for political purposes ("I became pregnant when Roe v. Wade was turned... And my decision to delete the app came totally from not wanting information about when I became pregnant, or when was my last period, be part of some database.").

### **Constructing Contemporary Parenthood in Digital Spaces: Infant Feeding Applications and the Mediation of Australian Parenthood**

*Katrin Langton, Queensland University of Technology, Australia*

Infant feeding applications (IF apps) are popular mobile applications used in early parenthood, to track infants' routines and parents' caregiving practices, such as babies' feeds, nappy changes, and sleep. These tools have received attention from multiple disciplines – as mobile health technologies, and as socio-cultural artefacts. In the health sciences, most research to-date has focussed on determining app quality, by assessing how well in-app information aligns with public health guidelines of infant feeding, or by evaluating apps' potential efficacy in promoting public health breastfeeding goals. In the humanities, IF apps are commonly criticised for their role in normalising the datafication of mundane aspects of family life. This normalisation contributes to the production of ever-more

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complete and continuous data flows about parents and children, often without sufficient transparency to enable users to meaningfully consent or object to the sharing of their personal data. As part of a wider ecology of apps that track reproductive health, IF apps are also criticised for their gendered disciplinary politics that reinforce women's roles as responsible (digital) reproductive citizens. Yet, little is known about the role of these tools in the wider context of family life, beyond a focus on mothers' perspectives only. This study combined walkthroughs of Australian-designed IF apps FeedBaby and mum2mum, and interviews with Australian parents from a range of family backgrounds – including fathers, same-sex couples and single parents – to explore the role of IF apps in the context of contemporary Australian parenthood. The findings affirm the importance of critiquing IF apps as tools that can be problematically experienced as quantifying, reductive and disciplining technologies. However, within the context of family life, IF apps and their data also assume qualitative roles and meanings, for example as communication tools within the parenting team, that allow their reconceptualization as tools that can facilitate experiences of empowerment.

### **Nurture Online: Digital Platforms of Milk Sharing**

*Angelica Martinez Ochoa, University of Texas, USA*

This paper explores how online networks (re) construct caring and nurturing practices of the family through the shaping of the female body as a body that produces human

milk in ways that resemble old and gendered forms of labor and creates new ones. Through the analysis of three online communities of breastmilk exchange that afford both ease, access, and opportunity (Eats on Feets Facebook Groups, Facebook Market, and OnlyTheBreast.com), this essay explores how digital networks together with the technology of the breast pump and apps that keep track of breastmilk production, mobilize the female body and its milk into objects that are sometimes exchanged as commodities and others, as commerce-free pieces of labor in an era of economic relations led by the gig economy and augmented by digital platforms.

This paper studies the different elements that play a role in the exchange of breastmilk in families that sell, donate, buy or acquire breastmilk through online networks. These elements include features of the platform, type of users, network's guidelines and values, safety measures, post content, price of the exchange, type of commitment, motivations for the exchange, and family dynamics. What opportunities for families is the online exchange of breastmilk bringing? How is that shaping, transforming, or imitating family life? What inequalities and power dynamics are being exposed and reshaped? The essay is not only putting three different sites/networks of breast milk dissemination in tension while exploring these questions, but by extension, it also shows the difference between a mutual aid social network and a commercial gig economy site as spaces embedded in family life. The paper illustrates that tension and difference, which becomes clear through the juxtaposition.



### **Datafied DNA and Donor-Conception**

*Caroline Redhead, Lucy Frith and Leah Gilman, University of Manchester, UK*

The ConnecteDNA research project explores the impact of direct-to-consumer genetic testing (DTCGT) on gamete (egg and sperm) donor conception. One of the implications of the increased popularity of DTCGT is that donors, donor-conceived people and parents through donor conception can share their (or their child's) DNA data on DTCGT databases and, using the 'matching' function these sites offer, in combination with social media platforms and 'official' sources of information, sometimes very easily, and sometimes completely unexpectedly, identify unknown genetic relatives.

Drawing on semi-structured interviews and focus group discussions with donors, donor-conceived people and parents through donor conception, we explore the power of the DTCGT companies, in combination with social media platforms, over bodily material re-incarnated into the internet. In that environment, DNA data is no longer an embodied blueprint, unknowable until it plays out in the space-time of someone's life. Rather, DNA information in electronic form has, for donors, donor-conceived people, and their families, the power to interrupt, to radically (re)shape, or transform families. DTCGT, often marketed as harmless fun, is sometimes just that. However, DNA shared through DTCGT sites has relational consequences that can also shock, traumatise and cause deep rifts within family landscapes. Our research explores (whether and) how donors, donor-

conceived people, and their families make sense of life after finding or uncovering information from DTCGT, and how they think the regulatory environment needs to change to offer protection for future families through donor conception.

### *SESSION 3 - 'Parenthood in Platform Societies'*

#### **Family Surveillance Products: What are they and why do they matter?**

*Courtney Hagen Ford, Northeastern University London, UK*

In the digital age, parents are grappling with the demands of intensive motherhood and involved fatherhood, they are also trying to find ways to manage their children's emergence into the wider world. Monitoring children is by no means a new practice, but it is increasingly becoming technologised through the use of family surveillance products (FSPs). These products, whereby parents can monitor their children's geolocation, their spending, their connected device usage, as well as their 'screen time', promise much in the way of allaying risks. This paper seeks to propose that FSPs are the means through which intimate surveillance (Leaver 2015, 2017) is enacted in everyday life.

This paper, comprised of data from the author's PhD thesis, provides an original contribution to the field by taking into account the perspectives of both parents and children in the same work. Diverse members of sixteen different families were invited to participate in semi-structured

interviews, with the resulting data analysed through the precepts of grounded theory. In addition to this, 1026 media clips and 2162 app store reviews for FSPs used by families were also gathered and analysed, in order to situate families' reasons for using these products in a wider social context. Insights into surveillance, gender, risk, consumption, contemporary parenting, and contemporary childhood will be offered.

#### **Parents' algorithm literacies amidst datafication: Dimensions, markers and implications**

*Ranjana Das, University of Surrey, UK*

Despite the attention to parenting and datafication in terms of the shaping of children's experiences and datafied childhoods, understanding of parents' literacies in relation to algorithms and datafication is still scant. In this paper, I present four dimensions and for each dimension – some key empirical markers of parents' algorithmic literacies in a broader context of parenting and parenthood amidst datafication. Analysing data from 'think-aloud' interviews with 30 parents of children aged between 0 to 18, across England, I draw upon media and digital literacies scholarship to consider the contexts of parents' algorithm literacies – the competencies, conversations and events which contextualise parents' literacies with algorithmic interfaces. Next, I draw out four dimensions of parents' algorithm literacies including algorithm awareness, technical competencies, critical capacities, and championing their and their children's best interests, identifying practical markers for each dimension. I reflect on the broader implications of these for parenting and

parenthood in datafied societies, and note that algorithm literacies are, forever, a work in progress, in fluidity and flux across the diverse courses of parenting journeys, deeply contextualised in the resources and restraints parents encounter in their daily lives.

#### **A Zemiological Analysis of Digital Parenting Cultures: The Case of Risky 'Sharenting' on Social Media Sites**

*Pamela Ugwu-dike, Silke Roth, Anita Lavorgna, Morena Tartari and Natalie Djohari, University of Southampton, UK*

Risky sharenting occurs when parents and guardians regularly share sensitive and identifying information about children on social media platforms. The practice fuels the datafication of children's lives, exposing them to risks of cyberharms whilst potentially contaminating their online and digital identities.

This paper unravels the infrastructural and structural barriers impeding ongoing efforts to disrupt legal but harmful digital cultures of parenting of which risky sharenting represents an example. To achieve its objectives, the paper draws on insights from zemiology (the study of social harms) to analyse the policies instituted by social media platforms and the data from a digital passive ethnography of a Facebook group of parents practising sharenting.

With insights from the documentary analysis and ethnography which form part of an interdisciplinary study of sharenting funded by the Economics and Social Research Council (ESRC), the paper reveals

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that whilst the infrastructural barriers to harm prevention are posed by the design logics and rationalities of social media platforms, structural obstacles stem from regulatory gaps in contemporary AI governance. Together, these empower and enable the designers of the main social media platforms to embed in their technologies, visible and invisible affordances capable of inviting and facilitating harmful forms of use.

This paper draws on the findings of the discourse analysis and digital ethnography to develop a remedial framework that outlines the harm causation process enabled by regulatory gaps and technology affordances, and the points at which preventative policies should be introduced to disrupt the process. Through its analysis of the nexus of regulatory gaps, technology affordances, and harms, the paper advances the interdisciplinary scholarship on AI ethics and governance. More specifically, by providing the empirical example of risky sharenting, the paper expands the nascent literature on the harms of emerging cultures of digital parenting facilitated by AI technologies.

#### **Apps for the Single Mums**

*Irida Ntalla, University of Arts London, UK*

The proposed paper aims to explore tailored apps for single parents as spaces to share public and private experiences considering ethics of care and potential practices of solidarity. Building upon findings of a pilot survey study conducted last summer on understanding digital engagement by single mothers in the UK, this paper will pay

attention through an ethnographic approach to specific apps such as Frolo and Peanut. These apps are developed as spaces for community building and support networks, encouraging sharing everyday realities, also conceived as resources to navigate these. In the context of single motherhood, they are also spaces to meet and date new partners. Single mothers are a diverse group, and are becoming more visible in popular media, as well as in mediated and digital narratives, providing space for more heterogenous and potentially emancipatory storylines; yet the category of 'single' or 'lone' mothers is closely linked to those that raise the children alone without a partner or other support, maintaining a stigmatisation of single mothers that intersects with class, race and age-based partialities, and the binary of 'problematic' versus 'good' motherhood. Through qualitative content analysis of the categories, topics, visual material and public discussions in the app, the paper will consider how single motherhood is presented, self-represented and negotiated in the app considering how are these communicated and shared in the lines of race, age, and class.

#### **Uploading Infancy: Dashboards and Devices of Mobile Parenting**

*Tama Leaver, Curtin University, Australia*

Smartphones, apps and a multitude of sensors have facilitated almost every imaginable activity not only being enacted and tracked on mobile media, but simultaneously being aggregated and analysed against existing data and norms to produce a wide array of dashboards and indicators of health, success, achievement

and normality. Parenting can involve many highly anxious experiences, amplified even more so for brand new parents. In the months surrounding a new-born entering the world, parents and carers have an increasingly large array of devices and apps available to them, each promising to ease some of the anxieties of parenting by providing indicators the were seemingly indivisible before about the health, development and wellbeing of an infant. Wearables might track everything from heartrate to breathing, apps might provide an array of soothing sounds or initial words customised to specific developmental milestones or personal inputs, and in exchange the parents are almost always provided reassuring dashboards and indicators showing their child is recognisably well. Green indicators lights tracking 'your child's progress' are always available, whether the parents are in the same room, or somewhere else entirely. Increasingly normalised cameras for cribs and caring often mean an infant is available as a streaming video feed to parents whenever they rely on the caring services of others. This chapter seeks to map some of the ways in which infancy has, in effect, been uploaded as part of these new parenting practices, mapping both the new opportunities and reassurances which are available, but also looking at the sometimes unintended exchanges of a child's data and privacy as app and device makers claim ownership of various forms of infant and child information. To map present and future concerns, this chapter will combine a detailed reading of several popular parenting apps and infant wearables with a reading of the 2017 'Arkangel' episode of

the dystopian near-future Black Mirror series to extrapolate the potentially quite negative future impact of such information extraction on both children as they grow, and the relationship between parents and children.

#### **Parkrun and The Datafied Families**

*Dr. Yuwei Lin, University of Roehampton, UK*

The parkrun events have expanded exponentially over the past decade since it was 'a time trial' (parkrun.org.uk). Every Saturday 9 am sharp (in England and Wales, start time may vary in other countries) hundreds of runners gather in local parks to join a 5k running event organised by local volunteers (and 2k run on Sunday 9am for children aged 4-15). Through running, volunteering, organising the events, participants have been generating a vast amount of data. The organisation parkrun has become a data institution.

This paper discusses the parkrun data practices (core and peripheral) and data cultures and how that shapes a family's routines and relationship. Based on autoethnography and content analysis of social media data on Facebook and Twitter, this paper shows that parkrun, the weekly 5k run on a Saturday morning and the weekly 2k junior run on a Sunday morning across the UK, has had impacts on shaping a family's routines and subsequently changed the relationships between family members (parents and children, between partners). This paper identifies the visible and invisible data practices and different types of labour. Through examining the data practices and labour, this paper observes positive changes

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in a family as well as some discontinuities or frictions (for example, which parent can afford to do the running in a family with young children). Sociological concepts such as temporality, (in)visibility, and labour (emotional labour, unpaid labour) will be employed to critically examine the parkrun phenomenon and its impacts on families in the UK.

#### SESSION 4 - 'Schools, Families, Datafication'

##### **Who is Teaching Kids to Read? The Influence of Rankings and Algorithmic Culture on Apps for Children**

*Karla Zavala Barreda, University of Amsterdam, Netherlands*

Digital media targeting young children (0-5) is increasingly subject to the sociotechnical process of "platformization" (Nieborg & Poell, 2018). Research on this subject has been primarily focused on the role YouTube Kids' recommendation systems play in the production of video content – often of dubious algorithmic provenance (Bridle, 2017; Burroughs, 2017). Yet there is scant research on the role similar algorithmic systems play in the production of the ever-growing digital market of apps for children. As such, this paper studies how apps for young children are affected by "platformization" and offers a critical analysis of the emerging "algorithmic cultures" (Striphas, 2015) of apps for children.

To understand the relationship between distribution and the production of children's

apps, this paper focuses its attention on a particular app genre that education researchers have critiqued as an unruly "Wild West": early literacy apps (Guernsey et al., 2012). From a software studies perspective, I critically scrutinise the platform's distribution conditions and the "ranking cultures" (Rieder et al., 2018) influencing young children's educational apps through the empirical analysis of 343 scraped app store search results.

By arguing how the "Wild West" of educational apps is a manifestation of algorithmic cultures, this paper problematizes the role that recommendation systems play in the distribution, access, and production of children's apps. The discussion reveals several characteristics of the algorithmic cultures of apps for young children, including the perceptible bloating of the genre by generic free-for-download and formulaic app families. Additionally, considering the cultural logic behind this group of apps for children highlights tensions of this double-step mediation process on app stores. First, the centralized role of recommendations as gatekeepers of content for children as a vulnerable population. Second, the challenges platforms pose to digital parenting (Mascheroni et al., 2018) by operationalizing their economic priorities through algorithms.

##### **School Social Media and the Datafication of Children and Families**

*Karley Beckman, Tiffani Apps, University of Wollongong, Australia*

In recent years schools have embraced the use of social media platforms including

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Facebook and Instagram as a means to connect with children's families and the broader community (Rosenberg, et al., 2022). The use of such platforms by schools typically involves the curation and sharing of daily school activity in the form of digital images, videos, organisational information and records. This curation and sharing practice, undertaken by schools on behalf of children and their families, contributes to the datafication of children. This occurs through outward flows of data shared with school communities, inward flows of data shared with the social media platform, and onward flows in digital data economies. Thus, the utilisation of such platforms in school contexts raises critical questions about the datafication of children, the agency of children and their families in this practice and the role of the school in protecting children's digital rights. Research exploring this phenomenon is limited. A small number of studies have examined school leader's uptake of digital platforms documenting the benefits and challenges (Cox & Mcleod, 2014; Bowman, Giles, Orange & Wiles, 2018). However, there is a paucity of research that employs a critical lens to understand school's social media practice including the impacts on home and school relations and the rights of children and their families within this complex entanglement. The study described in this paper aims to understand the datafication of children through schools' practice of sharing on official school social media sites together with parents understanding and engagement with their school social media practices. We share findings that present a detailed depiction of the data types generated through school social media

practice along with parents' perceptions of school social media use including the coercive nature of the practice, increased digital labour and impacts on familial agency.

##### **The Digitisation of Schooling and Family Life: Mothers' Experiences of Parenting Primary School Aged Children in the UK**

*Emma Head, Keele University, UK*

This paper focuses on the adoption of online learning platforms by schools in the UK, the increasing use of digitised forms of school-home communications, and the impacts these have on mothers with primary school aged children. Drawing on qualitative data from a study of families living in the West Midlands, this paper explores the ways in which educational technologies and digitised communications blur the spaces of home and school and impacts on mother-child relationships. Some mothers emphasised the importance of placing boundaries around 'home time' and 'school time' as a way to manage the demands from schools to engage with digitised homework. Other participants spoke about the emotion work they did to help their children to manage these early years of formal education and online homework. In conclusion, the paper reflects on the way in which the contemporary digitisation of education increases the labour of mothers and can be understood as part of the contemporary configuration of intensive motherhood. I also reflect on the ways in which mothers' understandings of their children's wellbeing are being shaped in relation to an increasingly datafied system of primary schooling where there is an emphasis on meeting targets.

### **Caring Surveillance and Surveillant Care in Amazon's "Alexa Together"**

*Elizabeth Fetterolf, Microsoft Research  
New England, USA*

Hochschild (2003) argued that individuals face a commodity frontier – the expansion of the market into intimate life as care is privatized. Amazon continues to pursue this frontier with “Alexa Together,” an eldercare system facilitated by the world’s most popular voice assistant. Unlike nursing or companion robots often referenced in discussions of care AI, Amazon does not purport to replace human caregivers; rather it allows individuals to “check in on loved ones with help from Alexa.” Feminist STS critiques of Alexa have focused on the VA as secretary (Lingel & Crawford, 2020), “smart wife” (Strengers & Kennedy, 2020), and domestic servant (Phan, 2019), but this new program evokes the home care worker, a heavily surveilled workforce comprised largely of low-wage women of color. Eldercare monitoring systems like Alexa Together create multiple layers of surveillance – intimate, workplace, and corporate – and they are an excellent case study for exploring the blurry boundaries between public and private. In this study, I explore Alexa Together’s relationship to both care and surveillance through a qualitative content analysis of its public-facing materials, including video advertisements, blog posts, FAQs, how-to videos, and customer support guides, with attention to the visions, of care, home, family, and data collection presented. I observe three key themes emerging throughout the materials. First, monitoring via Alexa Together is portrayed as a form of mediated intimacy between “loved ones,”

across distance. Secondly, there is a focus on privacy, but only at the intimate level. While “intimate surveillance” (Levy, 2014) is seen as a threat, data collection by Amazon is minimized. Finally, Alexa Together presents a shaky corporate care infrastructure based on the technology’s “imagined affordances” (Nagy & Neff, 2015) rather than its actual capabilities. These factors are cause for concern, as monitoring technologies are increasingly proposed as market solutions to the growing eldercare crisis worldwide.

### **Everyday Parenting: Portuguese Families Dis/Engaging with/from Digital Technologies**

*Francisca Porfírio, Ana Jorge, Rita Grácio,  
Universidade Lusofona, Portugal*

This paper looks at the complexities of people’s engagement with and disengagement from digital media, by focusing on micro-environments of everyday situations in the scope of family life in the Portuguese context. In 2022, 88% of Portuguese households had access to the internet, with broadband or slower connection (Pordata, 2023). However, and as a response to the role of technology as a “backbone” (Lomborg & Ytre-Arne, 2021) in the daily life, some forms of disconnection have been prioritized in specific domains, such as the family. Our guiding question is: how are online and offline realms articulated in everyday parenting? We approach people’s dis/engagement with media as “embodied and affectively experienced” (Coleman & Paasonen, 2020, p. 1); and conceptualize everyday encounters with

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digital media in the home as atmospheres (Sumartojo & Pink, 2018), i.e., ephemeral elements of our everyday experiences and environments, that encompass the sensorial modes of engagement – including movement – as well as affective modes – including memories and imagination that are evoked and created experientially. We thus consider the materiality of devices as well as their dynamic role in particular situations of relations between people in space and time – in this case, in the home / among the family.

The paper draws on an ongoing study on the use of digital media in the context of family life, deploying ethnography (observation and interviews) with 5 diverse families with children up to 12 years-old, in Portugal. Family negotiations can be exhausting and demoralizing, especially with children and teenagers. We aim to understand how different families negotiate digital dis/connection in everyday life, and to gather more knowledge about how digital and social media culture permeates families’ lives (in care, play, information, etc), but also about how decisions occur in the family to keep parts of their everyday private, while making others public.

### **Studying the Datafication of Australian Childhoods: Learning from a Survey of Digital Technologies in Homes with Young Children**

*Luci Pangrazio, Deakin University, Jane  
Mavoa, University of Melbourne, Australia*

The home is a crucial site of young children’s early encounters with digitally connected technologies. It is here that their

emerging digital footprints are being formed and where digital data about them is being produced then collected, analysed and commodified in varying ways. While much is speculated about the rise of intelligent assistants, baby monitors, connected toys and goods, there is little quantitative information available about what sorts of devices households with children actually contain. This article reports on findings from an online survey of 504 Australian households with children aged 0-8 years. The survey was designed to capture a snapshot of internet connected devices and goods in households as a way of contextualising current discussions around the datafication of childhood. Results indicate that Australian households with young children are indeed highly connected, and this is primarily via devices already well domesticated into everyday family life such as TVs, computers and smartphones. We discuss several key points emerging from our findings, including: the safety and security of the household as a primary motivator for using smart home devices; the different rates of acceptance of the datafying objects in the home; and the Googlization of family life. We conclude the paper by outlining a research agenda that more accurately reflects the digital realities of Australian family life.



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