

## Digital Connections and Family Practices

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As digital technologies - used socially for information, communication or entertainment – allow for new ways of living social life and of knowing about it, it is increasingly significant that we inquire about the crucial matter of what the digital does to the ways we know about each other, how we live, and what social scientists can learn from and with the digital.

An important remark for investigation of changes linked to digital connections is that there is no proper or clear boundary to what more traditional Information and Communication Technology – ICT – is, and how we have so far referred to it, and the current digital technologies used for information and communication, which have fully moved into mainstream, with the prominence of social media (Berker et al. 2005). In the process of social change, technological innovation and adoption happen unevenly and not concomitantly. What matters is that digitally powered technologies are increasingly around us, a daily component of our lives, whether we are engaged with it ourselves – moving across space, time, emailing, phoning, searching information, tweeting – or by our simple being in contemporary settings, be these rural, urban, remote, cosmopolitan or traditional.

Living in a digitally connected world affects all kinds of our social practices – and relationships. Family is one of those.

However, a focus on family doesn't claim specialness for the exploration of the digital. Here family is simply context, situation, and site for linkages of relationships. These have something to do with marriage, partnership, parenthood or kinship, be these formally or informally recognised (Morgan 1996). While these relationships could be described in different ways, for example as unmarried people living together, biological parents caring for children, and so on, I focus on all sorts of relationships to do with family practices (involving people living together 'doing' family), to inform a way of looking at domestic, everyday, connections in flow, in movement (i.e., not marked by legal or biological – or any other - frameworks). I privilege certain family connections in the reflections I make in this paper: intergenerational, sexual, intimate and fractured in space through migration and borders. I am unable to make any extensive elaboration about the use of theories of practice to think about digital connections. It seems sufficient to say that for 'practices' doing is emphasised over thinking, a practical competence is stressed over strategic reasoning, and mutual or shared intelligibility prevails over personal/individual motivation. Importantly, practices precede individuals, they derive from, and generate effects at, both individual and societal levels. In this way, practices have institutional form, regulative interventions, conventions and rituals; they do not depend on conscious consideration for conduct and are interconnected with other entities in their field (or environment) (Warde 2016), as evidenced in the various practices I discuss in this paper.

Current assessments of the roles of technological digital imprints invoke both their enrichment and hindrance to our current practices of living. The latter echoes more loudly and occupy my attention here. Are digital ICTs affecting our close relations in troubling ways? Are we changing into unsociable, individualistic beings unable to hold conversations, get out

of doors and talk to each other? Are there any spaces of life still unmonitored by technological devices? What digital technologies do to our sexuality and intimacy? Could we still be parents, partners, children and friends who care for each other in unmediated ways - or have we become disabled in this capacity by the mediation of digital connections? Can we learn better about social life by using the capacities of digital technology and data?

I'm unable to properly consider all of these concerns in this paper. My aim is to survey some of the academic and media engagement with these concerns regarding change over time in some key areas affecting family life. Let us begin by considering some of the major digital tools we currently use for relating to other people and the recent pace of these changes.

Emails are nowadays a normalised form of communication, having reached 3.7 billion users since January 2017, nearly 54% of the entire planet, (<https://www.lifewire.com/how-many-email-users-are-there-1171213>), while in 1997 it reached 10 million users. The number of mobile phone users was forecast to grow to 4.77 billion by the end of 2017 (<https://www.statista.com/statistics/274774/forecast-of-mobile-phone-users-worldwide/>), although the distribution worldwide is uneven, with Asia Pacific, the Middle East and Africa having the lowest numbers of users. In June 2017, the most popular social networking site in the world, Facebook, had 2 billion monthly active users (those who logged in during the last 30 days). This was double the amount in September 2012 (<https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>). While these digital information and communication technologies (d-ICT) include public connections of work, education, health and others, a lot of relationships of choice and of familial kind are developed via them. [References accessed on 21 August 2017]. The early 2000s marked the launch of major commercial platforms and devices – Skype, Facebook, iPhone – speedily propelling social media participation, already significant via email, distribution lists, discussion lists, internet chat and other online fora (Coleman 2012).

Table 1 - Timeline of the most used contemporary ICT and platforms

Note: Technologies were developed and perfected slowly. Dates refer to significant moments of user connection and uptake.

<b>Email</b>
1972 – first electronic email with the '@' signal.
1976: Queen Elizabeth II sends an email message on Arpanet, the first head of state to do so.
1996: Microsoft releases Internet Mail and News 1.0, features of Internet Explorer version 3, later renamed Outlook. A few companies - including Hotmail - begin to offer free, use-anywhere, internet email.
1997: About 10 million users worldwide have free web mail accounts.
2014-2019: 4.1 billion active accounts in 2014, expected 5.6 billion in 2019 (1)
<b>Mobile phones</b>
1983 – first unveiled
1992 – first UK consumer phones – First text message on 03 December 1992
2002 – first Europe camera phone
2007 – iPhone launched, as the first consumer <b>smartphone</b> (a device to make telephone calls, with added features for web access, previously found only on a personal digital assistant or a

computer.
2016 - estimated 62.9% of the population worldwide owned a mobile phone. (2)
<b>Laptop:</b> In 1984, IBM announced its first Portable Personal Computer.
2010 - <b>Tablets</b> sales amount to 19 million worldwide, growing since. 2019 – estimates of 170 million laptops and 180 million tablets to ship worldwide. (3)
<b>Skype:</b> provides cost free instant online text message, phone and video chat. Launched August 2003. 2016 – there were 74,000,000 skype users worldwide (4)
<b>Facebook:</b> a social networking service launched in February 2004. <b>Facebook Chat</b> released in 2008, instant message one friend or multiple people. In 2011 incorporation of video and release of mobile app <b>Messenger</b> . 2017 – Facebook users amount to more than 2 billion monthly (June) (5)
<b>Myspace</b> developed 2006 - Users could instant message with friends on their desktops, as well as online starting in 2009. 2008 – peak number of users in December at 75.9 mi. Decreased to 15 mi in Apr 2016 (6)
<b>WhatsApp</b> – instant message, with text, photo, video, indicates the status of users – launched 2009 2017 (July) more than 1.3 billion monthly users (7)
<b>Instagram</b> , a photo-sharing social platform was launched in October 2010. Video sharing was incorporated in June 2013. 2017 (Sep): more than 800 mi users (8)
<b>Snapchat</b> , launched September 2011 – ephemeral multimedia messages referred to as "snaps"; snaps, consisting of a photo or a short video, which can be edited to include filters and effects, text captions, and drawings. Presented as the solution to stresses caused by the longevity of personal information on social media. 2017 (third quarter): 178 million daily users worldwide (9)

Sources for latest number of users – all accessed 19 Nov 2017

- (1) <https://www.statista.com/statistics/456519/forecast-number-of-active-email-accounts-worldwide/>
- (2) <https://www.statista.com/statistics/274774/forecast-of-mobile-phone-users-worldwide/>
- (3) <https://www.statista.com/statistics/272595/global-shipments-forecast-for-tablets-laptops-and-desktop-pcs/>
- (4) <https://www.statisticbrain.com/skype-statistics/>
- (5) <https://en.wikipedia.org/wiki/Facebook>
- (6) <https://expandedramblings.com/index.php/myspace-stats-then-now/>
- (7) <https://www.statista.com/statistics/260819/number-of-monthly-active-whatsapp-users/>
- (8) <https://www.statista.com/statistics/253577/number-of-monthly-active-instagram-users/>
- (9) <https://www.statista.com/statistics/545967/snapchat-app-dau/>

The pace of technological change in information and communication and their consumption rates have been fast, reaching large numbers of people. This quickly extended usability in numbers include extensive capability for monitoring, informing and analysing social life (Orton-Johnson and Prior 2013, Marres 2017). Research in this volume shows that the digital

in information and communication technologies, prevalent in all walks of life, connects families over the lifecourse, affecting routines, relationships, ways of working and of doing intimacy, and privacy. Four main areas were found to relate to connections between ICT and families: intergenerational, intimate couple relationship, transnational or migrant families and lifecourse (Casimiro and Nico, this volume). While I agree about these being prominent areas of connection, I frame my discussion of digital connections and family practices under two headings: (1) intergenerational connections, and (2) connections of sexuality, intimacy, and over fractured spaces. A final section discusses research agendas, focusing on what we know, what we need to know and how to go about knowing. In this I claim for the use of multiple methods to develop knowledge about digital transformations in family practices and beyond, vital for current social sciences.

### **Intergenerational connections**

As I write this paper, the September 2017 issue of the US publication, *The Atlantic*, presents a piece by American academic psychologist Jean Twenge claiming social media is having a truly malign effect on the young. The article, 'Have smartphones destroyed a generation?', follows a book she wrote, revealingly entitled *iGen. Why Today's Super-Connected Kids are Growing Up Less Rebellious, More Tolerant, Less Happy – and Completely Unprepared for Adulthood\* – \*and What that Means for the Rest of Us* (Twenge, 2017). The book draws from data gathered from four large scale nationally representative surveys of 11 million Americans since 1961. The iGeneration consists of teens, and young adults born since 1995, the first generation to spend their entire adolescence in possession of smartphones. Social media and texting have replaced other activities, claims Twenge. iGen youth are together a lot but only virtually. According to Twenge, they experience unprecedented levels of anxiety, depression, and loneliness. They are non-religious, have no community attachment, and show great safety concerns. iGen grows up more slowly than previous generations: 'eighteen-year-olds look and act like fifteen-year-olds used to'. Following publication of these data and claims, reactions from parents and experts abounded in the media (printed and online) exposing concerns over amounts of use, risks, the need for policies, control, precaution, and, importantly for my reflections about this, about the quality of the research on which Twenge bases her claims.

In an interview in the 'Science & Tech' supplement of 'The New Review' in the Sunday UK broadsheet *The Observer* (13.08.17) Twenge describes her engagement with the phenomena. 'In 2013-14 I started to see some really sudden changes...' 'I'd never seen anything like it...' 'It's an absolutely stunning pattern...' 'All the screen activities correlated with lower happiness.' (p.16). The presentation Twenge makes of her work sounds sensationalist. Yet, she also refers to brain development of teens requiring human interaction for development of social skills, and to screen engagement of one hour a day having no detrimental effect on mental health (p.17).

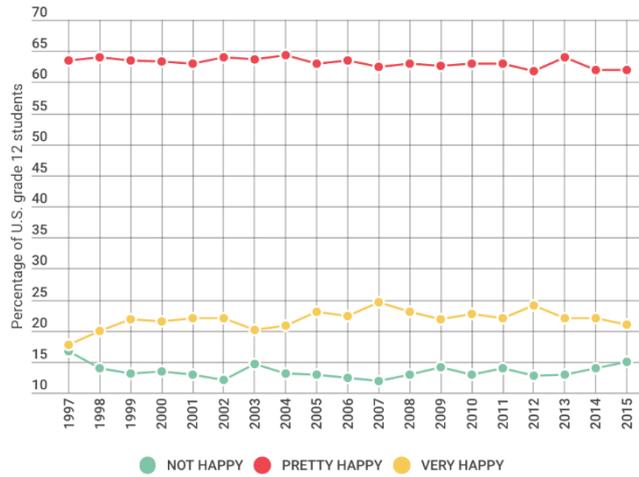
Controversies of these kinds mirror long held views of opposing camps. On one side we find the conservative right claiming that technology leads to moral degradation of youth. On the other, progressives and technophiles try to unravel the complexity of the matter. I found similar stances in my research on domestic technology. In the dominant social sciences

debates of the 1950-60s concerns emerged that women's idleness, generated by the widespread consumption of household technologies, had left room for dangerous ideologies to creep into domestic life, generating family breakdown and crises in the wellbeing of family members. A number of feminist academic studies confronted these conservative views showing, among other things, that technology had facilitated family life in the face of changes such as the growing employment of women outside of the home (Silva 2002). In the contemporary context of digital technology the split between conservative and progressive views echoes similar arguments.

In the heat of this recent debate about smartphones, Alexandra Samuel, a freelance researcher on technology, presented a comprehensive reading of Twenge's claims (<https://daily.jstor.org/yes-smartphones-are-destroying-a-generation-but-not-of-kids/>) (Accessed 23/08/2017). Acknowledging the importance of Twenge's investigation and findings Samuel explores the survey data. Reviewing 20 years of the *Monitoring the Future survey* series (Table 2 below), used by Twenge, Samuel says that '...levels of happiness and unhappiness are largely constant, though we may be heading into a very modest (though not unprecedented) dip.' Similarly, longer length of screen use does not indicate significant unhappiness (Table 3). There is no crisis. Moreover, teens who don't use smartphones show unhappiness. Considering data from the non-partisan Pew Research Centre, based in Washington DC, about the growth of social media use in the US by age (Table 4), Samuel shows that social network adoption bracketing the four years around the introduction of the iPhone, indicates continued growth of teen's usage, and steady usage growth among 18-to-49-year-olds, whom she appropriately refers to as *parents*. An important intergenerational connection is raised. Samuel claims that smartphones and social media are good for 'tuning out' the children. When parents are distracted - something they welcome because children are less interesting than relating to peers or the adult world - parenting suffers. Backing her arguments with psychologist Zussman's (1980) experiment about parental distraction, she notes that encouragement suffers since control and sanction are easier to be implemented distractedly. Disputing Twenge's claims, Samuel suggests that new models for ways of being on line, for both adults and children, need to be created, whereby parents develop digital mentoring practices paying attention to what is enriching in required engagement of digital skills and connections. This implies regular talking, physical proximity, and personal physical human interaction.

Table 2

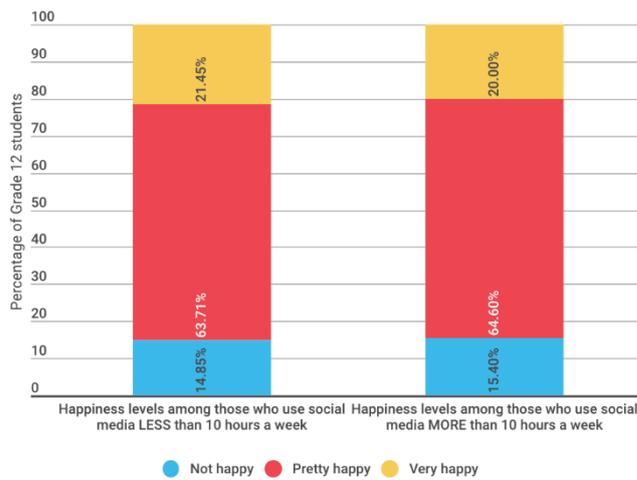
## Twenty years of data shows no teen happiness crisis



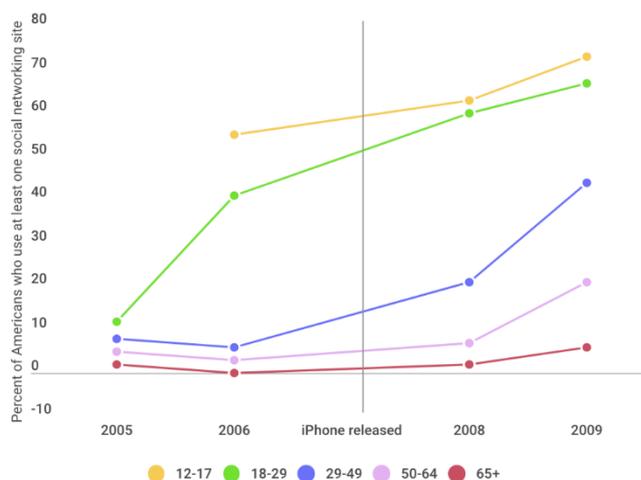
Source: Monitoring the Future grade 12 surveys.

Table 3

## High school students who use social media a lot aren't any more depressed than those who use it a little



## Social media takes off among parents after smartphones appear



Source: Pew Internet and American Life Project.

Various recent interventions add further to the privileged attention to – and disputes over – the wellbeing of children and teenagers, which are relevant to intergenerational changes and concerns of digital technology in family practices.

Evidence to the UK Select Committee Inquiry in 2017 into children’s mental health includes that heavy use of screen devices (games social media and television) lead to socio-emotional risks (ISER, Summer 2017). Yet, the former head of GCHQ (Government Communications Headquarters) in the UK pleaded for children to spend more time online and to be trained in data coding from very young age, and learn vital cyber skills (*Daily Telegraph* 8 August 2017).

According to Ofcom, the UK media regulator, reporting in early August 2017, children aged five to 15 were spending 15 hours a week online, a large increase from the previous year. The UK government children’s commissioner commented on this claiming that online sites and parents needed to take responsibility for the dangers (*The Observer* 06.08.17: 1-8).

It is claimed that children are encouraged – compelled, even – to increase their use of sites through features built in games they engage with. For example, Snapchat currently uses Snapstreak, creating a streak when friends share photos over three consecutive days, but destroys it if a day is missed. Missing one day may ostracize a child who’d feel ‘not liked’. After three years of existence, Snapchat’s main app, Stories (a collection of snaps to tell a ‘story’), that allows users to post photos and videos that disappear after 24 hours, has been cloned by WhatsApp, Instagram, Messenger and Facebook (*The Guardian* 12 August 2017: 12). While Snapchat’s founders claimed that it presented ‘a solution to stresses caused by the longevity of personal information on social media’ (<http://gestalt.law/snapchat-screenshots-copyright/>) (accessed 23/08/2017), ephemera is catching in keeping faithful users. Information appears more enticing when it is volatile, offering non-ending renewal, and demanding engagement.

Although a strong intergenerational concern addresses the wellbeing of children, older people have also been considered. It is thought that the physical isolation of the elderly could

potentially be overcome with access to social media. Also that their care, by family members or professionals, could be enhanced. Research by Quaan-Haase and colleagues (in this volume) shows that technology can in many cases provide real support, and that the process of learning to operate devices provides welcoming socialisation in itself. The fact that familiarity with digital devices is uneven, complicates the productive potential of their use for this population. Perg and colleagues (this volume) show the skills deficit and low motivation of the older users of digital technologies. The potential is great in areas of finance healthcare and recreation. Yet, innovation is also required to address particular physical impairment as loss of hearing, loss of sight and loss of mobility. Neves and colleagues (this volume) equally find that social disengagement, depression, functional decline and premature mortality found among the elderly living in institutions can be made better with the social connectedness opportunities offered by new technologies. This is corroborated by Cuban's (this volume) focus on the management of separateness between ageing parents and their adult children, albeit this including misunderstandings and ambiguous responses, created via technologically-mediated long distance care-giving, which are a poor substitute for personal care.

Conflicts between generations stir powerful emotions. Longitudinal studies are important to infer social change in particular in periods of rapid change. The practices here illustrated are not of the young or the old alone. They are relational, with parents (including elderly parents) and children (young and teens), as well as other social agents (technological innovators included), being implicated. The conditions of socialization of children in the present is markedly different to that of parents socialised in a prior social world. Constant negotiations are needed, in particular face the absence of a wider socio-cultural frames of reference for how to relate to – and with - the digital in all sorts of social spheres affected. Further complications are evident in other areas of social life, like sexuality, intimacy and in relation to spatial mobility, as discussed in the next section.

### **Connections of sexuality, intimacy, and over fractured spaces**

The limits of privacy and respect to others, the revelation of the self, and the risks of too much sharing have been matters of concern in social media. Researchers have argued that pervasive disembodied encounters create boundlessness for individuals (Agger 2012). Drawing from Virilio and Lotringer (2007), DuPreez (in this volume) remarks that vision technology provide too much to see, also taking over the function of sight, as it becomes a 'techno-prosthesis for perception'. This effect resembles those of some traditional technology. Describing the effects of high speed for race drivers, Lesley Hazleton writes in 'Whenever I drive fast' that after three seconds the driver's peripheral vision is completely blurred. 'He can only see straight ahead.' (quoted in Zinsser, 1998:188). A bodily related philosophical assertion is that both too much speed and too much light are blinding (Virilio and Lotringer, 2007:98). DuPreez (this vol.) argues that effects rebound to life offline as the pressure to share online affects the flow and intensity of real time sharing, which is also done in haste – and some detachment. Physical sexual engagement suffers similar processes.

Pornography, in the pre-internet days, separated makers of pornographic material and fans/users of them. These days bespoke porn flourishes (*The Guardian* 'Weekend', 29 July

2017). Fetishes of varied kinds are explored via customer porn, where clients write their own scripts and pay professional porn-makers to shoot what they want. An illustration is the site Pornhub, the world's currently 38<sup>th</sup> most popular in the web, which caters for an expanding new community. The anonymity of social media is seen to have allowed increased misogyny; porn changing the demeanour of men.

Having sex with robots has been a concern in recent television dramas such as 'the Humans' (Channel 4 UK) or 'Westworld' (Sky Atlantic remake of a 1970s movie), as well as in print media. This excites debate about the ways we live. Laura Bates, founder of 'Everyday Sexism' wrote an essay for *The New York Times* expressing worry about the normalizing of rape as machines cannot give consent (<https://www.nytimes.com/2017/07/17/opinion/sex-robots-consent.html?mcubz=1> accessed 22-09-2017). Bates' essay relates to the launch of a sex robot named Roxxy TrueCompanion, which changes into various 'personalities': Wild Wendy, S&M Susan and Frigid Farrah. The discussion is centred on the uses and vision about violence in sex related to boundaries between sexual fantasies, which may be gratified with a robot, and violence, which plausibly has nothing to do with the machine, which cannot consent to sex, being transposed to human sexual encounters. Yet, it is important to remember that the concern about robot is limited: sex dolls, which have existed nearly forever, as much as robots, do not either consent or refuse sex!

A relevant real life illustration about sexuality and the digital is in an investigation I carried out (Silva 2010). Related to the sexual lives of participants in my ethnographic study of home life, Lucey discovered various pornographic websites listed under her husband's Henry 'favourites' in his Internet browser. The sites contained children's sexual exploitation and bestiality. In Lucey's words, they were 'racist, sexist, offensive, grotesque, unimaginable' (Silva, 2010:172). While Henry used the web for his sado-masochistic encounters, he claimed not to be a hard-porn user and would never transgress to the horrifying levels of the material Lucey found on his computer. Naively, in 2003, Henry believed nothing could be linked to his Internet Service Provider (ISP), unaware that 'cookies' (identifiers on a user's machine employed to compile a history of browsing activities) constructed his digital profile on the web from his masochistic searches, expanding the field of his tastes, as cookies are designed to do.

Amidst all this, a strong concern about the digital is surveillance both at public and private levels. Everyday activities are monitored and recordable to a considerable high degree, movements are traced, search engines know our preferences and opinions, and we are invited to get ourselves known in exchange for knowledge about ourselves: when we wake up, how fast and where we walk can be registered and returned to us in statistical formats and appraisals, in self-knowledge formats. This surveillance resonates within family relationships: parental and partnering practices are affected.

Who has the right to spy on whom? 'Of course parents have a right to spy on their kids' is Barbara Ellen's article title in *The Observer* (20.08.17, p.13) where she reports that a father with expertise in digital products created an App to force his 13 year son (distracted by video games) to respond to his calls or texts. The 'ReplyASAP' app locks a smartphone and sounds an alarm that only stops when the recipient replies by text. It enables tracking and

controlling, it shows when a message is seen, if a phone is turned off. Ellen's argument for the right of parental interference is based on the need of parents to *know* children are safe overriding the moral entitlement of privacy.

One can accept the argument that in certain cases spying relates to being concerned for someone's wellbeing. Yet, in adult relationships, these are often connected to mistrust and control. Research on mobile phone use by couples show the negotiation of intimate relationships passing through the control by men – usually the norm- of women's movements being exacerbated by the surveillance potential of mobile technology (Silva, 2014). Geolocation services are currently built into smartphones. These are commonly designed to find lost or stolen phones; yet, if someone knows the password to a person's cloud account, they can follow their movements constantly via the software. Spyware is cheap and easy to install in phones via computers or emails, allowing to listen in and record calls, read texts, see photos and even watch someone via their phone's camera. These practices have been discussed in the media and cases of great distress have been documented (<https://www.theguardian.com/lifeandstyle/2015/jan/25/spyware-smartphone-abusive-men-track-partners-domestic-violence>) (Accessed 23-08-17). They have been given ambiguous labels as 'intimate surveillance' (Leaver 2017), or 'friendly surveillance' (Marwick 2012), yet a crucial component in them is power used for domination.

Academic literature on domestic work has pointed about the controlling use of spyware on nannies and maids (Sinanan and Hjorth this volume). The regulation and disciplining of bodies and care practices grows with technological potential and the bringing together of disparate cultures in home care via the use of migrant services. As in other areas of social life, worthwhile and disruptive practices are found. Migration in the contemporary world does not involve the 'social death' of separateness experienced in the nineteenth century, argue Sinanan and Hjorth (in this volume). Nowadays, it is possible to 'do family' at a distance, giving and receiving care, maintaining intimacy, they say. Yet, it is important to acknowledge the quality and limitations of contact. Likewise, Gillespie and colleagues (<https://theconversation.com/phones-crucial-to-survival-for-refugees-on-the-perilous-route-to-europe-59428> - accessed 22-09-2017) have found that mobile phones are extensively used in making, improving, generating family connections in the recent European refugee movements. Yet they empower and threaten refugees at the same time.

The issue of borders has featured strongly in matters of surveillance. Immigration targets and the displacement of people have been key foci. Refugees learn about routes and the cost of transport, which borders are open and which are closed, through their phones. They also learn weather conditions for sea crossing. Phones empower but are also dangerous. Digital traces enable surveillance via GPS location by people or the governments refugees are trying to escape from. Social media interactions and networks can also be spied on. One indication is the recent European governments' attempts to take to task Facebook and Twitter for allowing fake accounts intervening in election results with commentary and spread of one-sided opinions – said to be part of a wider Russian Putin intervention to shape international politics. Digital surveillance encompasses very private and most public matters.

The media presents a number of cases affecting family relations on a daily basis, particularly in the UK currently facing Brexit negotiations. Some cases are ordinarily dealt with taking the digital as an integral participant. An illustration is a US surgeon hired by the NHS, with a British wife, who failed to get visa for their two adopted children aged 10 and 12. The Home Office letter sent to them, following an appeal, stated as one of the grounds for refusal that one of the parents could return to the US ‘...with the boys and stay in touch with the rest of the family through email and Skype.’ The newspaper *The Guardian* (05 August 2017: 7) quotes the family’s solicitor saying ‘It’s unlawful for the Home Office to suggest modern forms of communication can be used to maintain a relationship between a minor child and a parent.’ Regardless of the lawfulness of the case, it’s curious to note how mainstream digital technologies have come to feature in legal cases.

Connections and disconnections abound in the digital-human interface, as illustrated in these stories. Many resolutions and negotiations are done on a case by case basis. These affect parents, children, partners, as well as national boundaries, movements of people and legal guidelines to the rights of the person and the politics of family relationships. Challenges are great for a renewed sociological imagination. Social science enquiry is fast working on these issues, recharging the sociological agenda to capture the array of matters affected by digital transformations.

### **Research agendas**

A claim I have made in my work on technology is that their use, and indeed innovation patterns, are not an imposition, the material is not determining of socio-cultural appropriations, but that adoption, uses and adaptations are part of a desire of how to live; it comes from us, our choices and abilities. My claim does not imply disregard for the effects of materiality in social life or the strong influence of corporative interests. My emphasis is on technology being taken up not by force, victimization or seduction, but rather by a desire for a way of living, a connection. Yet, there are unintended consequences in technology adoption, as in other social engagements. Here is the crux of the problem, and where it’s most useful to turn to social sciences knowledge.

I presented disputed interpretation about the effects of digital technologies on the young generation and on adults or older people considering social interaction and isolation as well as significant entanglements in sexuality, intimacy, surveillance, movements of bodies across space and changes over time. The illustration of various practices affecting personal and family relationships indicate interconnections of various fields with the uses and adoptions of the digital. It also shows some necessary regulative interventions of an institutional kind, currently in dispute. An understanding of the workings of power (institutional, corporative, in social divisions of age, gender, sexuality, class and ethnicity) appears key to capture current dynamics of digital connections in family life: to learn about it, to curb potential crashing effects, to bring to fruition productive ways of social engagements and flourishing ways of living with the digital.

### **What we know – what we need to know**

Outlining various approaches to connections between families and technologies, Mauthner and Kazimierczak (in this volume) describe the posthumanist perspective as being one where these are not separate entities, being historically dynamically constituted in material and cultural practices. This is the way I researched the innovation patterns of household technologies in the 20<sup>th</sup> century in the UK (Silva 2010). My approach was adopted in the search for models to understand the specificities of a lifecourse perspective regarding technology and family connections, as discussed by Mead and Neves (in this volume) with a claim for the incorporation of the notion of ‘technological nexus’ to consider the intersections of social structures, technologies, and the immediate contexts of deployment (Silva, 1999: 57).

Can the digital be a device for intervention in social life and an instrument for its analysis? (Edwards et al. 2013, Marres and Weltevrede 2013). Because the digital coordinates individuals’ movements in time and space throughout the day to bond, share and plan, it should be possible to analyse family connections by the means of the digital (Casimiro and Nico, this volume). Storytelling is another way of doing family using the potential of digital technologies. According to Patino (this volume) the digital offers multimodality and liminal spaces, providing potentially rich explorations. Maddox (in this volume) explores the prospect of ‘digital methods’ to study the lifecourse. These interventions in knowing realistically express caution since consistence cannot be assumed either for different groups of people or longitudinally. Potential overrepresentation of people from certain locations are clearly a problem, as well as of certain characteristics of age, gender, race, or wealth, as data carry the imprints of the devices, platforms applications and attached users (boyd and Crawford 2012, Driscoll and Walker 2014). Moreover data is already classified in their own production process (Uprichard 2013). Large data sets, collected by technological means, carry an array of methodological problems for researchers and create problems of interpretation. I considered some of these in a paper about ‘what’s [yet] to be seen?’ via video recordings (Silva 2007), but I’m unable to elaborate about this in detail here.

An important contextual issue regarding the generation of research material about the digital concerns the ‘traces’ left by different engagements – ontological perspectives, epistemological and methodological approaches - on the material of research. This is not a particular issue regarding family, or the digital. What we know about these relationships depends on what we seek to know and the instruments of our knowledge practices.

The salient questions I listed in the introduction refer to our changed sociability in face of the digital. Clearly the exploration depends on the models for being online and for being sociable that we seek to develop. This bears on our values about relationality intergenerationally – the roles of parents for younger children, the care of the elderly parent – and in partnership – the sorts of intimate lives regarding sexual relations, privacy and sharing we desire to have. The heightened context of the digital interference via monitoring of our lives and the mediation of our relating is exacerbated by the absence of guidance about how to relate to each other and to these new things in our lives. While we want the digital to do certain things for us and our social living we are also concerned about it doing more than we can handle or differently

than we wish. And our 'we' is a very extensive social field pervaded by interest and power (including state power) differences.

As Ricouer (1971) argues, texts – and I extend this to material gadgets and also data in general - are not just produced under certain material conditions embedded within socio-cultural contexts, because texts – and gadgets, and data - are also produced to do something. Regarding social science knowledge interventions in this field, this means that the research material - whether interview, text, online data, or other artefact - becomes part of the context to be understood.

Material knowledge evidence can be re-observed, re-analysed and re-interpreted in different ways, but the coherence of the interpretation will depend on the fit of data with theoretical criteria involved in ontology, epistemology and methodology. It is important in this regard to note, as stressed by Hodder (1994:401), that material culture – and material artefacts to produce data – can 'speak back': interpretations can be challenged in view of interpretation of the context, in view of the 'traces' left in each iteration. Differing from Derrida's (1978) provocative assertion that meaning does not reside in the text, I maintain that while there is much more than the text itself, texts - as any research data - need to be understood in the context of their production and of their reading, of their re-production and re-reading. This implies situating the socio-cultural context of a researcher's engagements with research material. Digital connections are particularly relevant for this.

Once identifying what's yet to be known, how to go about knowing?

### **How to go about knowing**

Scripting refers to the ways in which social action is imprinted into technology whereby the technical apparatus demands particular actions from the user. I explored this notion extensively in my paper 'The cook, the cooker and the gendering of the kitchen' (Silva 2000), discussed in detail by Mead and Neves (this volume). Digital platforms similarly 'script' action (cf. Akrich 1992). They have a template of activity capturing data of particular kind: likes, clicks, heart shaped icons, following, flagging, sharing, quoting, and so on, which limit the scope of what interaction is mediated between users, the type of sociality created. The limitation is compounded by the format and structuring of data, always implicated in particular ontologies and their attached classification systems (Bowker and Star 2000). Because of this scripting, it has been strongly claimed that the investigation of the ways in which people actually use, and what they make of the use of the technologies at their disposal is fundamental to understanding how they are embedded in sociability (Silva, 2000, 2007, 2010; Slater 2002).

In her recent book on *Digital Sociology* Noortje Marres (2017) nicely invokes Max Weber's (1905/1968) assertion that social enquiry must contend with the fact that the ideas people have about the social interact with what happens in it. This means that knowledge about social life and social life itself is inherently interactive (cf. Cicourel 1964). For Marres (2017: 19) this leads to an examination of how the social world is transformed by the very digital ways we currently have of knowing social life. For me, this means that technology use needs to be approached from the broad perspective attending to the architecture of the

device/machine, the script/data produced, and the situation/context in which action takes place, including the participation of other agents in a 'technological nexus' (Silva, 2000). This follows a strong claim that technology does not make people do things; that people adapt what they want to do to the capacities of the technology, but desires and capacities are balanced by the affordances particular to the socio-material context of living. Noortge Marres (2017:70), in my view, presents a similar argument regarding a 'holistic view on digital social life', saying that 'sociality is enacted with digital media technologies in various ways, varying across different settings and occasions (...) and ...multiple entities participate in the configuration of sociality with digital media technologies: setting, data, contexts, methods.'

More specifically, how to go about knowing about digital connections and family practices is best devised through embracing the full range of research devices required by specific questions of investigation. My suggestion is that complex research questions require more than one method. This eclecticism provides the plausibility of interpretations in a coherent manner, from various angles, with a variety of methods.

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