Reproducing Digital Inequality

Wealthy and Poor Parents' Approaches to Parenting in a Digital Age

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Abstract: In this paper we examine how parents' access to resources—financial but also related resources, including cultural and social capital—influence how they approach digital media in their own and their children's lives. We detail 2 case study families, the Apaus (a low-income Ghanaian-British family) and the Thiebaults (a high-income French family living in London). Both families have sons who are learning to code, but how they pursue this interest and how they are supported by their parents illustrate how parental access to resources influences connected learning experiences. Contra the theories of Annette Lareau, we show how both families are actively turning to digital media to "cultivate" their sons' interests, at great costs relative to their very different resources, but that this cultivation may well be unequally converted into opportunities in the future.

Digital Media in Diverse Homes

Throughout our interview with Cecilia Apau, the screen of a desktop computer in the corner of the room has been flashing. The black screen is alarmingly cut with bars of irregular pixelated bright colors—the telltale signs of a virus. Two of her children are playing on a supermarket-brand tablet and a smartphone, with another tablet lying broken in the corner. When we ask Cecilia, who works as a budget grocery store cashier, what happened to the computer, she shrugs, unsure of what is wrong or how to fix it. In contrast, Michel and Josephine Thiebault estimate that there are at least 15 top-of-the-line screen devices in the house, but to father Michel, a high-ranking corporate executive in a technology company, the cost was negligible.

These two families represent some of the extremes of family life in London, and yet there are some similarities. Both are migrant families, common in London. Cecilia Apau came to London from West Africa, Michel and Josephine Thiebault from Western Europe. Both homes are filled with technology, albeit of very different kinds—in the case of the Apaus the most affordable, and therefore with more restricted capacity, and adding up to a much more significant percentage of Cecilia's limited income. The Thiebaults, in contrast, think little of upgrading their devices to the latest models. Although their lives are different in many respects, both homes are nonetheless inhabited by digital-media enthusiast children, including sons (13-year-old Marc Thiebault and 8-year-old Eugene Apau) who are currently learning to code. Yet this interest, too, looks very different in its pursuit. Marc attends an expensive coding summer camp at a top London university to learn Python; Eugene attends a free weekly after-school program at his underresourced primary school to learn the more basic program Scratch.

In this paper we examine how parents' access to resources—financial but also related resources, including cultural and social capital (Bourdieu, 1986)—influence how they approach digital media in their own and their children's lives. We discuss the enduring importance of social class while also highlighting the ways in which economic resources do not necessarily determine how "media rich," or not, a family's home is (Livingstone, 2006). In narrating the experiences of parents well below the

poverty line, those earning almost inconceivable salaries, and the majority in between, we show how class is powerful and yet not straightforward.

In her influential book, *Unequal Childhoods,* Annette Lareau (2011) differentiated the practices of "middle-class" and "working-class" parents in order to explain how the social reproduction of advantage and disadvantage occurs—inadvertently but systematically nonetheless—through the aggregate result of parents drawing on unequal resources when seeking individually to do their best for their child. Middle-class parents, especially, are often held to be so self-interestedly competitive that by pressuring themselves and their children to achieve ever more, they drive an ever-larger wedge between their families and those living in poorer circumstances. Broadly, we agree with this analysis, but we also question and complicate the account in several ways.

First, we show how "concerted cultivation" now occurs well beyond just middle-class families, both extending the reach of the concept but also, thereby, repudiating Lareau's contention that working-class families instead rely on an assumption of "natural growth." Thus, across society and certainly including many poor and marginalized families, we find parents making considerable efforts to "cultivate" (i.e., resource and support the individual achievements of) their children, albeit in diverse ways, and with diverse outcomes. Indeed, they are often aware that, as Lynn Schofield Clark argued, while middle-class children benefit from the social distinction that their parents' privileges confer, this is often at the cost of "the ethic of respectful connectedness" preferred by working-class families (Clark, 2013). Second, we pay particular attention to the ways in which digital media are deployed as agents of cultivation, with parents hopeful that through embracing digital devices, resources, and expertise, they can provide their children with a competitive advantage (or, more anxiously than ambitiously, prevent their falling "behind"). This is particularly evident in the current fashion for "coding" in which both Eugene Apau and Marc Thiebault are engaged. In this paper we detail the lives of these two boys in order to demonstrate how, while their parents share some level of investment in digital media as a tool for their child's advancement, the ways in which they invest in this belief financially and emotionally will come to yield very different results.

Methods

This paper is based on a mixed-method study of U.K. parents conducted 2014–2018. We conducted qualitative semistructured interviews with 73 families in London in 2015 and 2016, followed by a quantitative survey of 2,032 parents across the United Kingdom in late 2017. For our qualitative research we specifically recruited families with dependent children (below the age of 18) who were highly diverse in socioeconomic status, family composition, ethnicity, and age of child(ren). We included parents from a wide variety of different ethnic and religious communities, living on annual incomes ranging from under £15,000 per year to well over £100,000. We met parents at school parents' evenings, at children's centers, through parenting organizations, and their children's after-school programs. Beyond our emphasis on recruiting a diverse range of families, we also proactively sought out families who, in one way or another, have confronted the idea of a "digital future" with distinct purposes or from a distinct perspective. This included families with children with disabilities—because they are so often excluded (Alper & Goggin, 2017) and because many expressed heightened hopes and concerns about what digital media might offer their children or see digital media as a much-needed workaround for social or economic inclusion in the future. It also included parents of children who had in some sense "voted with their feet" by attending a digital media and learning program—including code clubs and media arts and digital making programs.

The main grounding for our analysis comes from this qualitative fieldwork. Parents were interviewed face-to-face, generally at home although some we met for an interview in a public setting—usually while they were waiting for their child to come out of a class or in a café if they preferred. More than two thirds invited us to their homes, where we could see for ourselves the influx of digital devices in family life—sometimes neatly stacked away and awaiting permission to use, other times casually present underfoot or easily within reach, for use as desired. Some interviews were conducted with the whole family together. Sometimes we talked to parents both with and again without their children joining in; sometimes we talked to parent and child separately. Sometimes we observed the children in the coding or digital media class, sometimes also interviewing their teachers.

Taking an ethnographic approach (Coleman, 2010; Skinner, 2012) we complemented our semistructured interview protocol with a "media tour" around the home where permitted and including some creative participatory methods to elicit participation from very young children (A. Clark, 2010). Insights from the interviews and observations then informed the design of our national survey of U.K. parents. We surveyed 2,032 British parents of children aged zero to 17, of which 95% were recruited via an online panel, supplemented by 5% of specifically no- or low-Internet–using parents recruited face-to-face at home. Although this paper will primarily focus on the results from our qualitative data, we will also complement findings from our quantitative survey where appropriate.

Theories of Families and Social Class

One of the most widely cited theories of families and social class was initially based on intensive qualitative fieldwork with the families of 9- and 10-year old children. After spending many hours with families of very different economic means, Lareau (2011) came to differentiate between "concerted cultivation," the practices of middle-class parents, and "natural growth" as the practices of working-class parents. According to Lareau, "concerted cultivation" describes how middle-class families consistently intervene in the educational experiences of their children. These parents (often, although not always, mothers) concertedly place their children in a series of environments in which they are exposed to new skills, connections, and ideas. Yet however pressurized such dedication to cultivating children might be, in Lareau's return to some of the families she initially interviewed 10 years later she showed how their strategies were, to an extent, successful (Lareau, Adia Evans, & Yee, 2016). Lareau found that middle-class parents were able to transmit to their children an understanding of the logics of institutions and how to question or even "game" these—for example, they were taught to navigate the structures and rules in their schools and later universities, and to negotiate new and advantageous paths in ways that working-class children were not. When she reinterviewed the students and their parents she found a number of ways in which the middle-class parents had "converted" their cultivation into academic and other successes (Lareau & Cox, 2011).

In contrast, Lareau characterized working-class parents as more concerned about children's place within the family, and that parents' attentions—amid pressures such as insecure jobs or housing or caring responsibilities for extended families—were instead focused on immediate needs and dilemmas. In Lareau's analysis, working-class parents were less likely than middle-class parents to believe that among their "crucial responsibilities" are the elicitation of "their children's feelings, opinions and thoughts" (Lareau, 2011, p. 3), were more likely to see strong boundaries between children and adults, and less likely to negotiate with children or spend time and resources establishing leisure-time pursuits for them. Calling this the philosophy of "natural growth," Lareau proposed that while this meant that working-class parents were no less loving, they were more at odds with the logics of the middle-class

institutions the children might later navigate, such as school, university, health systems, or employment. These institutions operate according to what Lareau calls the "dominant set of cultural repertoires," meaning that families from nondominant communities are often perceived by middle-class professionals as "deficient" (Alper, Katz, & Clark, 2016) or indeed "troubling" (Ribbens McCarthy, Gillies, & Hooper, 2013). Although working-class parents have high hopes for their children, this mismatch of "cultural repertoires" means that middle-class families are more often able to transmit their "differential advantage" to their children (Lareau, 2011, p. 5).

In this paper we detail the experiences of two very different families. In so doing, we find evidence that both contests and supports some of this theorization of class. We found very few low-income families in our study engaging in what Lareau calls "natural growth"—all were working hard to support their children and provide them with a variety of opportunities even though they had very limited resources. This is in keeping with Dermott and Pomati's (2015) findings that many of the attributes of "good parenting" are practiced by parents regardless of social class, but that higher-income parents engage in these much more intensively, leaving lower-income parents left seeming derelict in their duties. At the same time we find evidence to support Lareau's theorization of "conversion," for even though all of the parents we will now detail were engaged in "cultivating" their children to the extent they were able, their drastically different circumstances will undoubtedly mean that their children are differentially able to capitalize on their parents' investments (Lareau et al., 2016).

Below the Poverty Line

Single mother Cecilia Apau and her three children live in government-subsidized housing in South London. Cecilia migrated to the United Kingdom from West Africa 13 years ago; her three children were born in England. Despite living on a household income of less than £15,000 per year from her work as a cashier in a low-cost grocery store, in the past four years Cecilia has purchased a desktop computer, a laptop, two tablets, and two smartphones for her family's use, alongside a flat-screen TV with a cable box. When asked why she had originally decided to buy the now virus-ridden computer, she answered:

> Cecilia: Because my daughter [Esi, 12] needed to use the computer for homework and things like that.
>
> Author: So did she use it for her homework?
>
> Cecilia: Because it's not working, she doesn't usually. They use one of the Kindles, the tablets, to do it.
>
> Author: Okay, so how long has it been broken for?
>
> Cecilia: Almost a year now.

The tablets had been purchased so that her children could practice "maths, spelling, reading, anything. … I want them to learn every day, to improve their reading." She has downloaded around 20–30 apps that she deems "educational," but she could not say what she thought the children were learning from them. Most of the apps were free ones that she had found herself, but one was specifically designed to prep for the year-end standardized tests, as recommended by a teacher at Esi's former primary school.

Cecilia encourages her youngest son, Eric, 4, to "read books" on YouTube by typing in the name of a favorite book (e.g., *Jack and the Beanstalk*) and watching a video of the pages of an illustrated book being flipped while a voice-over reads the story. Cecilia reports, "It helps him, because I've got three

[children] and I'm working as well, I don't have time to read. So … it's like I'm reading it to him." When we asked Cecilia if she told her children's teachers about what she was using at home, she said, "It hasn't occurred to me" and that she was too busy to linger at school, but neither do the teachers ask. Cecilia does not really worry about her children's safety online, even for Esi, who has her own smartphone, as she trusts her not to look at anything "inappropriate." Cecilia has a basic level of digital literacy: She can download apps and use WhatsApp and Facebook to keep in touch with friends and family, but the first email she ever sent was to us, responding to the request for an interview.

In contrast, Eugene, 8, is especially enthusiastic about digital media and signed up for his school's volunteer-run after-school coding club. At the club Eugene quietly got on with his coding using Scratch, although he was not the most advanced. Cecilia said she would like to see Eugene's creations but could not because

> this one [desktop] is not working. … I don't know what he is doing really. … He tries to explain to me but I don't really understand what he's trying to tell me. … He really wants to show me what he did. … He keeps pressing me to fix it but there's nothing I can do.

Ultimately Eugene left code club, describing it as "boring." His mum wondered if this was "because he can't practice it at home."

Wealthy Elite

White French parents Michel and Josephine Thiebault had originally come to London for Michel's high-level corporate job. The Thiebault home is a drastic contrast to the Apaus'. They access their property through a private gate with its own doorman and security system, which has the effect of cutting them off from the more mixed nearby area. For Michel, teaching young people about technology is not just about "embrac[ing] the digital trend." Josephine shares Michel's enthusiasm, signing the boys up for technology camps and sitting on the board of DigiCamp—the expensive summer technology camp where we first met Marc, 13, in his Python II class. Neither Josephine nor Michel seem especially concerned about what their children will encounter online, trusting them for the most part. Michel and Josephine emphasize the importance of learning to create rather than passively consume technology, and they have educated themselves substantially to be able to support and encourage their sons' interests. Although she does not work in technology herself, Josephine differentiates between the affordances and possibilities of different coding languages such as Java versus Python, noting with pleasure when Pierre, 18, describes coding as "just like learning how to write."

From an early age Marc taught himself to use Java to create mods in *Minecraft* and is following along with Code Academy tutorials on YouTube to continue with his Python class and create his own "RPG" (role-playing game). His own digital skills are a proud point of differentiation when he compares himself to his peers, as he scoffs at friends at school who "just have an iPhone. … They just play on it, but they don't even know how it works." Both Marc and Pierre have spent several summers and school holidays attending intensive technology camps—Marc starting at age 7—including a camp at Stanford, where the family formerly lived, to learn "coding, robotics, engineering of solar car and engineering robotics, many things like that." All told the boys have attended about a dozen such camps each—which means the family has spent many thousands of pounds in enrollment fees and travel. Pierre is poised to go to university, hoping to study Computer Science and is awaiting the results of his applications. Marc dreams of returning to Stanford to study engineering. Looking into their son's futures, Michel

and Josephine are both driven to support their sons in meeting challenges, but they are also subtly but decidedly assured about their abilities to do so.

When Michel describes the future he imagines a world of "sensors … artificial intelligence systems" and notes that "if you don't understand a piece of that, you are going to be completely lost." Unlike for "pathetic" others who "don't have a clue about computing" and who use computers uncritically (he describes bank tellers evocatively as acting "like robots"), for whom this technology may come to look "magical," Michel sees his sons as agents who will be better able to navigate the digital world as a "natural element of culture" using their superior knowledge. He goes so far as to describe their arguably superadvanced critical understanding of the digital world as skills that "any gentleman should have." Josephine tempers this language somewhat, but she shares Michel's vision of their sons as able to navigate the future and crucially retain the ability to choose their own pathways, in a way that other children may not. She says,

> I think if you understand the digital economy, everything around digital, you will be more independent, and you will have more choice and be able to choose. … [I want to] give them a chance for the digital life, because I don't want them to be passive guys, so I would like [them] to be active guys … to be active in this future.

Conclusions

Although the technology that the Apaus have is in many ways limited, and the activities the children engage in are fewer, proportionate to the time and resources she has available Cecilia Apau is investing, heavily, in her children's future, and she is embracing technology to do so. In common with other poorer families, she has prioritized buying computers, even when this caused her financial hardship or when she could not guarantee consistent access, because she believed that this would help her children. This, she considers, is part of providing the "basic conditions" (Mayo & Siraj, 2015) for academic success at home, along with other activities such as sending her children for extra tuition, buying academic workbooks, and so forth that demonstrated her investment in her children (Dermott & Pomati, 2015). In writing about low-income families Lareau is also clear that these children are deeply loved, and that their parents "worried about them, and sought to help them" but that class made a "critical difference in the resources parents could bring to bear on their children's behalf" (2011, p. 262). Cecilia's desire to buy the computer, despite the hardship it brought her and her inability to help support its use, is consistent with the finding that poorer parents are equally, if not more, likely to identify educational benefits for computers (Wartella, Rideout, Lauricella, & Connell, 2013). However, Cecilia's case also shows how beliefs and realities do not always match up. She had purchased the technology, but she could not support its use or troubleshoot when things went wrong. Although Cecilia had some enthusiasm for Eugene's interests, or at least a wish to support it and therefore exhibited an "embedded theory of learning" (Sefton-Green, 2013) for why it would be helpful to him (and was to some extent "cultivating" this interest), ultimately it seemed unlikely that he would pursue this interest in the future. Cecilia has a sense that coding is a good thing but no tools to support it and no great sense of loss when Eugene disengages from it. Is anything really lost for him? The promise remains vague, as does the sense of missed opportunities—which are only vaguely articulated by the school (indeed the club is run by volunteers and not teachers) and any government rhetoric about coding is too far removed for her to access.

In contrast, Pierre and Marc Thiebault seemed poised to turn their experiences in connected learning settings into future academic achievement and success, with their parents' help. In part, this was

due to Michel and Josephine's intimate knowledge of the opportunities that they were well placed to "broker" (Barron, Martin, Takeuchi, & Fithian, 2009; Hamid et al., 2016) for their sons' opportunities, but although this was in some sense intensive—in terms of time and finances—on the other hand Michel and Josephine did not actually appear overly stressed about their son's futures, given their confidence in some kind of positive outcome. In contrast to Lareau's depiction of parents anxiously attempting to conserve their class position, there is considerable variation among parents of all levels of socioeconomic status (SES). So Michel and Josephine were confident that they could use their institutional knowledge to create interventions specific to the outcomes they and their sons desired (Lareau & Cox, 2011), as opposed to Cecilia's more generic belief that technology would help her kids learn. Michel and Josephine support Marc and Pierre's interests, and although "coding" is diverting in the present their ambitions are set higher. In a sense, they seem already assured of a successful pathway ahead. So, insofar as children are not equally able to "convert" their knowledge gained at home and in their community into value that is recognized and rewarded by schools, universities, or employers, we suggest that it is less a failing of parental philosophy, intent, or effort that accounts for inequality but, rather, a failing of society that unequally resources its children and, especially, is often deaf to the interests, knowledge, or achievements of its poorer and minority children.

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