

SURVEILLANCE CAPITALISM: THE HARM TO CHILDHOOD, THE INSUFFICIENCY
OF PARENTAL CONSENT AND THE CONSEQUENT IMPERMISSIBILITY

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ABSTRACT

Today, children are embedded actors in an unprecedented economic system called surveillance capitalism. It profits from exploiting their data to manipulate and direct their future behaviour. What's more, this economic system is not inherently unlawful. According to current legislation, though children cannot themselves consent, if parental consent is given, surveillance capitalism in the lives of children is permissible. In this paper I show that the current legislation allows for outcomes that are morally wrong. I first cast doubt on the possibility of valid parental consent by challenging whether, in the context of surveillance capitalism, consent can really ever be properly informed. I then show that even if valid parental consent is possible, it is not sufficient to be morally transformative. Considering a wider set of contexts, I argue that parental consent is sufficient for an action only if the benefits associated with that action surpass the risks for the child. Building on an authorship-based account of what it means to 'be a child', I then show that the benefits of surveillance capitalism do not surpass the risks because this economic system both interferes with a child's development of authorship and fails to reflect their absence of authorship. Parental consent, for surveillance capitalism, is therefore insufficient.

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INTRODUCTION

In 1982 the National Science Foundation published a report discussing the prospects for teletext and videotext in the United States. Whilst it lauded the broad possibilities for these information-services technologies, spanning entertainment, news, banking, and shopping (Silverman, 2017), the report also cautioned that “at the same time that these services will bring a greatly increased flow of information and services into the home, they will also carry a stream of information out of the home about the preferences and behaviours of its occupants” (Adler et al., 1982). Even though the development of more advanced systems has meant that both teletext and videotext have been “banished to the dustbin of technological history” (Silverman, 2017, p. 147), the warning given four decades ago of the threat that technologies might pose retains profound relevance.

Today your movements both within and beyond your home, the messages that you send and receive, the words that you speak, the impulse purchases that you make, the contents of your shopping basket and the searches that you enter are most likely all being recorded, processed, analysed, bought, and sold (Bridle, 2019). What’s more, it is not just happening to you. It is probably also happening to your brothers and sisters, your mother and father, your grandparents, and most alarming of all, your children. It is incredibly difficult to escape from this process of grotesque extraction that is both unprecedented and immaculately designed. The implication of this, is that today there are two groups of people who are regularly under surveillance. The first group consists of those with an electronic tag around their ankle, under surveillance due to a court order. The second group consists of almost everyone else (Jergler, 2013).

The purpose of this surveillance is profit, and the primary mechanism to achieve this is behavioural modification. We are being strip-searched by tech giants like Google and Facebook for our most private experiences, our conscious and subconscious thoughts, feelings, and actions, in order to herd our behaviour with cues, rewards, and punishments that push us

towards outcomes that are most profitable for them (Laidler, 2019). Yet despite the invasiveness of this surveillance, we are almost completely unaware of it. Pokémon Go, an augmented reality game developed by Niantic, itself an internal start-up within Google (Paavilainen et al., 2017), provides a clear example of this. Pokémon Go was presented to players as an innocuous game to go out and find virtual Pokémon figures in their local neighbourhood. But it is much more than this. The truth is that Pokémon Go is a means for Google to influence real-world behaviour for its own gain, directing players to specific locations including fast-food outlets like McDonald's (Zuboff, 2019a, p. 312). The reason for this is self-explanatory, players find themselves walking through the doors of the golden arches in their effort to collect Pokémon figures and decide to buy a Big Mac whilst they are there.

Some might think that this is relatively harmless, after all, it is just one cheap fast-food burger. But this line of thinking is dangerous. After its release in July 2016, 21 million individuals entered into the world of Pokémon in the first week (Doward et al., 2017), and by the end of its first year, Pokémon Go had been downloaded over 500 million times worldwide (Gilbert, 2016). What's more, Pokémon Go is just one example. Facebook has around 2.93 billion monthly active users (Iqbal, 2022). Google is used by 4.3 billion people worldwide (Walsh, 2021). The scope of this invasive and invisible coercion is, therefore, monumental. It goes far beyond directing us to spend a few dollars on a fast-food burger whilst we search for virtual figures around and about. The reality is that the contents of our lives are being taken and turned into products that ultimately control our behaviour (Sherman, 2019). Yet what is most alarming of all, is that for most of us, this has not sent shudders down our spine. We have not responded in uproar or revolt. Instead, we are numb.

There are several reasons for this response. What is happening now is unprecedented, it is insidious, it is inherently unintelligible, it is largely unlegislated and, until recently, it was also nameless. The hopeful truth, however, is that this system of surveillance for behavioural modification, named '*surveillance capitalism*' by Shoshana Zuboff (2019a), is not inevitable. It was invented and its implementation remains a choice.

This paper takes a critical look at surveillance capitalism in the setting in which it is most alarmingly applied, to the lives of children. I will show that it remains wrong to embed children in this economic system *even if* valid parental consent has been given. In the context of surveillance capitalism, I will demonstrate that parental consent is insufficient.

The paper is structured as follows. The first chapter is an exposition of surveillance capitalism. I track the development of this system at Google and its expansion to other tech giants including Facebook, Amazon, and Microsoft. I then show that today, children are firmly embedded in surveillance capitalism, a reality that means that they have entered into the market economy as economic objects for the first time since the end of widespread child labour more than a century ago. In this chapter I also outline the two main pieces of legislation that regulate surveillance capitalism in the lives of children today. The second chapter considers the rationale for two claims that are presupposed by both of these pieces of legislation, the first being that children themselves cannot consent to surveillance capitalism, and the second being that parental consent is sufficient for its permissibility. In doing so, I argue that parental consent for an action is sufficient only when the benefit for the child surpasses the risk.

In the third chapter I consider a more obvious objection to children's involvement in surveillance capitalism, that whilst parental consent is sufficient, valid consent is not possible because it cannot be informed. I show that there is compelling reason to doubt the possibility of valid consent but contrarily assert that this is not in fact what is most ethically troubling about surveillance capitalism.

The fourth chapter considers what exactly it means to 'be a child'. Rejecting two standard approaches to demarcating childhood from adulthood, I show that an account based on authorship best accommodates our intuitions surrounding childhood. With this in place, the fifth chapter is dedicated to arguing for the insufficiency of parental consent in the context of surveillance capitalism. Drawing comparisons with other contexts in which parental consent is

insufficient, I show that surveillance capitalism in the lives of children remains wrong even if valid parental consent is given because the risks associated with this economic system exceed the benefits for children. Building on the authorship-based account of childhood defended in the previous chapter, I show that this is because surveillance capitalism both interferes with a child's development of authorship and cannot reflect their absence of authorship in the consequences that it imposes. Potential objections to my argument for the insufficiency of parental consent are also anticipated and responded to in the fifth chapter.

1 | SURVEILLANCE CAPITALISM, BEHAVIOURAL MODIFICATION AND CHILDREN

1.1 | Surveillance Capitalism, an Economic System of Behavioural Modification

We are currently living through what has been described as the most “profound transformation in our information environment since Johannes Gutenberg’s invention of printing in circa 1439” (Naughton, 2019). The invention of printing was revolutionary. It undermined the authority of the Catholic Church, it brought about the rise of what we now recognise as modern science, it created new professions and industries, it changed our understanding of childhood, and it altered the very structure of our brains (Eisenstein, 2005; Kertcher & Margalit, 2005-2006; Naughton, 2019; Postman, 1994; Wolf, 2008). At the time of its invention, however, nobody could have known that any of this would have been the case (Naughton, 2019). It is only retrospectively that all of the implications could truly be comprehended. Today we find ourselves in a similar position. The magnitude of the transformation we are living through is likely to be comparable, yet right now it is difficult to foresee what all the repercussions will be. Nonetheless, whilst still early on, we find ourselves at a critical and privileged point in time to determine the power that we give it to shape the future.

The catalyst in the transformation we are living through today is a new economic order based on the capture, analysis, and sale of behavioural data for commercial purpose. Heralded in her seminal work *‘The Age of Surveillance Capitalism: The Fight for a Human Future at the Frontier of Power’* (2019a), Shoshana Zuboff has named it ‘surveillance capitalism’. This new subspecies of capitalism is unlike industrial capitalism which she argues profits from exploiting natural resources and labour. Instead, it profits from exploiting behavioural data. More specifically, Zuboff defines this post-industrial form of capitalist production as the “unilateral claiming of private human experience as free raw-material for translation into behavioural data” (Zuboff, 2019a, p. 379). In giving a name to this form of economic oppression, Zuboff has provided the vocabularic armament required to confront it. Notwithstanding criticism (e.g.,

Ball, 2019; Cohen, 2019; Evangelista, 2019; Morozov, 2019), I outline this economic system through the lens of Zuboff because the aspects of her account that are pivotal for my argument find sufficient external support.

Surveillance capitalism was invented and perfected by Google. For the purpose of this paper, this process can be simplified into two stages. Early on Google discarded the search-related behaviours of its users (Zuboff, 2019b). It was simply regarded as waste. The first pivotal change came when Google discovered that this continuous flow of behavioural data could be collected and used to transform Google's search engine into a recursive learning system that constantly improves its search results (Zuboff, 2019c). The first stage of the development of surveillance capitalism, therefore, is defined by the capture and use of behavioural data. At this point, though, it was used exclusively to improve Google's search engine. The users were therefore the sole beneficiaries.

Google's unique ability to access continuous detailed behavioural data made it increasingly possible for it to be known what a particular individual, at a particular time, in a particular place, was thinking, feeling, and doing (Zuboff, 2019b). Critically, this allowed Google to predict the future of human behaviour. This defines the second stage of the development of surveillance capitalism. Google discovered that private human experiences previously used solely to improve the quality of search results, could now also be sold for profit (Zuboff, 2019c). With this, the primary purpose for collecting behavioural data shifted from making service improvements for the benefit of users, to maximising profits for the benefit of Google. Furthermore, because this system is optimised when it feeds on every possible aspect of human experience, rather than passively collecting behavioural data as it had done previously, Google began hunting for this data increasingly aggressively from progressively broad and diverse contexts (Zuboff, 2019a, p. 94).

Although the origins of surveillance capitalism can be traced back to Google, it no longer has a monopoly on this economic system. Facebook, Microsoft, Amazon, and arguably also Apple

indirectly, all harvest behavioural data (Holloway, 2019a). In fact, the mechanisms of surveillance capitalism have now become the default model for Internet-based businesses generally (Zuboff, 2020). Crucially for all these corporations, the purpose of this collection is to manipulate human behaviour towards economically desirable ends. For example, a secret social experiment conducted by Facebook in 2014 under the title '*Experimental Evidence of Massive-Scale Emotional Contagion Through Social Networks*' uncovered how to engineer subliminal cues and social comparison dynamics to change users' real-world behaviour and emotions, all whilst entirely bypassing user awareness (Meyer, 2014). Furthermore, two years prior an article released under the title '*A 61-Million-Person Experiment in Social Influence and Political Mobilization*' detailed how Facebook influenced voting behaviour in the run-up to the 2010 United States midterm elections by planting voting-related cues in the News Feeds of 61 million American Facebook users (Bond et al., 2012). What this makes abundantly clear, is that we, as the users, are not the customers of surveillance capitalism, rather we are the source of the raw material that is required for its functioning. In other words, we are "the objects of a technologically advanced and increasingly inescapable raw material extraction operation" (Zuboff, 2019a, p.10). Whilst vast domains of knowledge are accumulated *from* us, they are not accumulated *for* us.

Whilst surveillance capitalism makes use of technology, it is not an inevitable result of technology. Rather, it is an economic logic that was invented and meticulously perfected. This is important to note because it goes against the narrative pushed by tech giants that surveillance capitalism is an inevitability of technological advancements. To give an example, in 2009 when it was uncovered that Google maintains search histories indefinitely, the CEO at the time, Eric Schmidt, acknowledged this by saying that "the reality is that search engines including Google do retain this information for some time" (Bartirolo, 2009). This, Zuboff notes, is incorrect. She writes, "in truth, search engines do not retain, but surveillance capitalism does" (Zuboff, 2019a, p.15). By conveying the sense that surveillance capitalism is inevitable, it instils in individuals a sense of defeatism, that nothing can be done and therefore we must accept it. But

it is not inevitable. It is an economic system that was invented, and it is still a choice whether or not it should be implemented.

1.2 | Surveillance Capitalism and Children

Today children are embedded actors within surveillance capitalism (Holloway, 2019b). It is naive to think otherwise. Their lives are now being captured, collected, and commoditised (Watson, 2021). What's more, the possible avenues for data capture are increasing at an alarming rate. Gone are the days when the internet could only be accessed through laptops, tablets, and smartphones (Longfield, 2018). The network of physical objects that are embedded with sensors, software, and other technologies for the purpose of connecting and exchanging data over the internet, including smart home infrastructures, smart toys, and wearables, is rapidly expanding (Holloway, 2019b). This has brought about a massive surge both in the proportion and types of behavioural data that can be harvested from children. It is no longer only children's search and viewing histories that can be claimed by surveillance capitalism. It is becoming increasingly possible to capture across more settings and more ways what children are saying, thinking, feeling, and doing. For this reason, surveillance capitalism has seen children being inducted into the market economy as economic objects for the first time since the end of widespread child labour in the latter part of the 19th century (Holloway, 2019b). The difference is that today, it is their data rather than their physical labour that has economic value.

Pokémon Go, which is especially popular among children, collects the names and locations of its users (Holloway, 2019b). Beyond this, it also accesses the contents of users' USB storage, their accounts, photographs, network connections, and phone activities, and can activate users' devices even when they are in standby mode (Holloway, 2019b). Niantic, the developer of Pokémon Go, further reserves the right to share all the data collected with third parties for economic purposes (Rottenberg, 2016). Similarly, TikTok, a social media platform popular among children that facilitates the creation and sharing of short videos, collects vast amounts of user data including location, internet address, copied clipboard text, browsing history,

messages, and contacts (Watson, 2021). Furthermore a 2020 analysis by *The Wall Street Journal* found that TikTok collected ‘media access control’ addresses, a type of persistent identifier which enables the tracking of users online, without the user’s ability to opt out (Poulsen & McMillan, 2020). The collection of unparalleled quantities of data about their users’ activities, by the likes of not only Pokémon Go and TikTok, but tech corporations more broadly, allows for stunning economic return (Moore, 2016). Whilst widespread child labour may have come to an end, surveillance capitalism has meant that children’s involvement as economic objects in the market economy persists.

Surveillance capitalism in the lives of children is principally governed by two pieces of legislation, the United States Children’s Online Privacy Protection Act (COPPA) and the European Union General Data Protection Regulation (GDPR). COPPA is a US federal law enforced by the Federal Trade Commission (FTC). It was passed in 1998 and has been in effect since April 2000 with updates being made in 2013 to include stronger provisions (Interactive Advertising Bureau, 2019). It is often considered to be the global gold standard in children’s data privacy rules (e.g., Interactive Advertising Bureau, 2019). The law regulates the collection of personal information from children under the age of thirteen and applies to operators of commercial websites for children and websites that act with the ‘actual knowledge’ that they are collecting, using, or disclosing ‘personal information’ from children aged under thirteen years (FTC, 2013). Under COPPA, operators are prohibited from collecting any personal information from children under the age of thirteen without verifiable parental consent. Here, personal information includes anything that can be used to track a child across sites, apps, or devices (FTC, 2013). It therefore considers as personal information to include persistent identifiers, precise geolocation, full IP addresses, full user agents, photos, videos, and voice recordings of children. Under COPPA, if an operator either needs or seeks personal data from a child they must obtain verifiable parental consent prior to collection (FTC, 2013).

Implemented in 2016, the GDPR-K – the part of the GDPR concerned specifically with children – effectively replicates COPPA in Europe with some important nuances. Much like

COPPA, under GDPR-K, the processing of personal data of a child is only lawful if consent is given by the “holder of parental responsibility over the child” (European Parliament, 2016, Article 8.1). Furthermore, both laws require that operators are transparent regarding the collection of data and its usage. GDPR-K diverges from COPPA in that it defines the age of consent as sixteen rather than thirteen, though it does allow individual member states to lower the age of consent to a minimum of thirteen, in line with COPPA. For both regulations, if the user is below the age of consent, the harvesting of their personal data requires verifiable parental consent. Importantly, though, under neither regulation is surveillance capitalism, *per se*, prohibited. If verifiable parental consent is given, the application of surveillance capitalism to children is permissible.

There are legitimate concerns regarding the effectiveness of both COPPA and GDPR-K, supported by evidence of widespread violations of these regulations. To offer an example, YouTube, a subsidiary of Google, paid \$170 million in 2019 to settle allegations brought forward by the Federal Trade Commission and the New York Attorney General that the company illegally collected personal information in the form of persistent identifiers from children without first notifying parents and obtaining their consent (FTC, 2019). These identifiers, which are long-lasting references to digital resources, were used by YouTube to anticipate the future behaviours of viewers of child-directed channels which enabled the delivery of highly profitable targeted advertisements. Similarly, following their analysis of the privacy practices of 5855 children’s Android apps, researchers at the University of California concluded that over half of the apps potentially violated COPPA (Reyes et al., 2018). These concerns must be addressed. After all, regulation is only successful if it holds sufficient authority to ensure it is adhered to. Whilst there is more to gain from violating legislation than observing it, this will not be the case. Nonetheless, the question of how to enforce existing regulation regarding the use of surveillance capitalism in the lives of children is not what I am considering here. Rather I am interested in the fact that under both COPPA and GDPR-K lawful cases of surveillance capitalism are possible, parental consent, under these regulations, renders the application of this economic system to children permissible.

2 | PARENTAL CONSENT AS A REGULATORY MECHANISM

Consent permeates our law. It is one of the most powerful and important building blocks of society (Richards & Hartzog, 2019). Perhaps unsurprisingly then, consent is by far the most common means of legitimising data processing in the online environment (Jasmontaite & De Hert, 2014). Consistent with this, it is central to the legislation governing surveillance capitalism in the lives of children. More specifically, two claims related to consent necessarily underlie the requirements imposed by both COPPA and GDPR-K outlined in the previous chapter. The first claim is that children are themselves unable to give consent to surveillance capitalism. The second claim is that parental consent is sufficient to render permissible the application of this economic system in the lives of children.

Whilst these claims are presupposed by both COPPA and GDPR-K, neither piece of legislation explicitly acknowledges them, let alone defends the truth of them. The purpose of this chapter, therefore, is to consider the most reasonable foundation for both the claim that children cannot themselves consent and the claim that parental consent is sufficient. Doing so initiates a discussion of consent in the context of surveillance capitalism and begins to lay the groundwork for my main argumentation later in this paper that parental consent is in fact insufficient. I will show that the first claim is best defended by arguing that surveillance capitalism is both too significant and too complex for children to be able to give consent. I will then show that the second claim, that parental consent is sufficient, is best defended by arguing that the benefits associated with surveillance capitalism surpass the risks. In the remainder of the chapter, I will acknowledge and then set aside the complex question of what it is to ‘be a parent’.

2.1 | The Justification for why Children Cannot Consent

There is widespread support for the principle that individuals ought to be treated alike unless a difference in treatment can be justified (e.g., Anderson & Claassen, 2012; Cohen, 1982). It is according to this principle that arbitrary discrimination against people based on gender, race,

age, or disability is morally wrong. I assume, therefore, that there is good reason to accept this principle. As such, if, as according to COPPA and GDPR-K, children cannot themselves give consent to surveillance capitalism, then some reason must be offered that justifies this difference in treatment.

Across many other contexts for which adults and children are treated differently, a difference in the ability to truly understand the relevant facts is appealed to as a means of justification (Henkelman & Everall, 2001). This reasoning closely relates to the deeply entrenched idea that consent, to be valid, must be adequately informed (e.g., Dougherty, 2020; O’Neil, 2019). For example, the typical narrative for why children cannot consent to most sexual activities is that they are not able to actually understand what the activity entails and therefore whether it is something that they want (e.g., Finkelhor, 1979). Saying this is not to deny that a child could have a rudimentary understanding of what sexual activities entail but rather to deny that they could really understand the possible physical and emotional short-term and long-term implications with sufficient clarity to give consent. Similarly, when children are considered unable to consent to medical procedures it is because they “lack the maturity to be competent enough to fully understand” (Williams & Perkins, 2011, p. 99). Consistent with this, exceptions can be made such that a child may consent to or withhold consent from medical procedures “if the child is of sufficient understanding to make an informed decision” (Children Act, 1989, Part V, 43.8).

In the context of surveillance capitalism, explicit justification for this difference in treatment of adults and children is notably missing. Within COPPA, no justification is given for why it rules that children cannot consent. Instead, the truth of this claim is taken for granted. GDPR-K, on the other hand, writes that “children require data specific protection with regard to their personal data as they may be less aware of the risks, consequences, and safeguards concerned with their rights in relation to the processing of personal data” (European Parliament, 2016, Recital 38). Whilst this is not explicit justification for prohibiting children from giving consent, it does seem to be hinting at a reasoning that is similar to that appealed to in both the context

of medical procedures and sexual activities, that children cannot give consent because they do not understand the relevant facts.

To interpret the justification for the first claim in this way is consistent with discussions more broadly of children and the online environment. Consumentenbond, a Dutch non-profit promoting consumer protection, for example, notes that “children are still developing and learning, they are easily influenced, cannot fully understand the consequences of their actions, and are gullible” (Consumentenbond, 2021, p. 9). Palfrey and Gasser (2008) also highlight that children often lack knowledge of their rights as data subjects and are unaware of their exposure to online risks. Similarly, Jasmontaite and De Hert (2014) write that “despite their ability to actively surf the Internet and independently engage in various virtual activities, children are deemed to be a more vulnerable group of users than adults” (p. 20).

This rationale for the first claim would also be consistent with neuroscience research suggesting that the prefrontal cortex – implicated in planning complex behaviour, decision making, predicting outcomes, adhering to goals, and anticipating future consequences of current actions – is not fully developed in children (e.g., Teffer & Semendeferi, 2012). There would, therefore, be an empirical basis to the narrative that children are not as able to make decisions about certain things, particularly those with significant long-term consequences, and this is why they cannot give consent for surveillance capitalism, just like they cannot give consent for most medical procedures and sexual activities.

To say this is not to say that children cannot ever give consent. We generally recognise that children can, for example, give consent to having their hair brushed or their feet moved when getting shoes fitted, though even in these cases we acknowledge that a child’s refusal to give consent can be overridden. Rather it is to say that whether or not children are able to consent to an action depends on the significance and complexity of that action. When a child gets their hair brushed or shoes fitted, it is relatively simple for the child to fully understand what the action will entail. Furthermore, the long-term consequences of these actions are either non-

existent or not significant. This is not the case for medical procedures or sexual activities. These are complex actions with often significant long-term consequences. We can suppose, therefore, that some figurative scale of complexity and significance exists with a child having their hair brushed and shoes size measured at the one end, and a child undergoing medical procedures or engaging in sexual activities at the other end. Furthermore, along this figurative scale, there exists some tipping point between these actions where the complexity and significance make it such that a child can no longer give consent. According to the rationale that I have suggested best justifies the claim that children cannot themselves consent, surveillance capitalism is considerably closer to the second category of actions on this figurative scale, if not beyond them.

2.2 | The Rationale for the Sufficiency of Parental Consent

Just because a child cannot consent to an action, this does not necessarily mean that it is impermissible for them to be embedded in that action. There are actions for which, though a child cannot themselves consent, parental consent is sufficient to make them permissible. This is typically the case for medical procedures. Though children, or at least most children, cannot consent to medical procedures, parental consent is generally sufficient. Importantly though, there are also actions for which this is not the case. It remains wrong for a child to engage in these actions even if valid parental consent can be given. This is typically the case for children using cigarettes or legalised recreational drugs, consuming alcohol, and engaging in sexual activities.

Considering more generally what distinguishes actions for which parental consent is sufficient from actions for which it is insufficient is useful for uncovering the most reasonable justification for the claim underlying COPPA and GDPR-K that parental consent is sufficient to make surveillance capitalism permissible in the lives of children. Furthermore, because parental consent is typically sufficient for medical procedures but typically insufficient for sexual activities, cigarettes, alcohol, and legalised recreational drugs, to identify the most

compelling justification for the second claim underlying COPPA and GDPR-K, it will be useful to consider what demarcates these categories of actions.

One approach to this distinction centres on risk – defined as the product of the probability and the severity of some harm (Hansson, 2018). On this account what distinguishes most cases of sexual activity, cigarette, alcohol, and legalised recreational drug use from most medical procedures is that the risk associated with the first group of actions is higher than the second group. This certainly has some intuitive appeal. After all, we typically think that the risks for children associated with sexual activities, alcohol, cigarettes, and legalised recreational drugs are relatively high. For example, children, girls in particular, risk being subjected to shame, humiliation, and social exclusion for engaging in particular sexual activities (e.g., Kohli, 2016). Furthermore, research suggests that exposure to legalised recreational drugs and alcohol during development can cause long-term or even permanent adverse changes in the brain (e.g., Campolongo et al., 2007; Rubino et al., 2009; Verrico et al., 2014).

The problem with this approach, however, is that the risks associated with medical procedures for which parental consent is sufficient, can also be relatively high. First, the harms can be severe, including significantly worsening a current condition, paralysis, brain damage, permanent injury, or even death. Second, for some medical procedures, the probability of these harms occurring can be notable (e.g., Cecconi & Muchembled, n.d.). Risk, alone, is therefore not a satisfactory means of distinguishing between actions for which we regard parental consent as sufficient and those for which we do not.

An alternative approach is to say that the benefit – defined as the product of the probability and the magnitude of some good – generally distinguishes medical procedures from sexual activities, cigarettes, alcohol, and legalised recreational drugs. It can reasonably be assumed that there is a benefit associated with any medical procedure, after all, if there was not why would the procedure be carried out. The problem for this approach, however, is that there may also be benefits associated with actions for which parental consent is insufficient. For example,

if a child consumed a small amount of marijuana, a recreational drug legal in many jurisdictions, they may experience a pleasant euphoria and sense of relaxation, as is commonly observed in adults (Volkow, 2021). Likewise, it is reasonable to suppose that a child, like adults, may experience pleasure and relaxation from using cigarettes (Borderías et al., 2015). It would be incorrect, therefore, to claim that a child could never benefit from an action for which parental consent is insufficient.

Revising this account, it might instead be suggested that the distinction can be defined by a difference in the scope of the benefit. This approach has the advantage that it can acknowledge the fact that there might be benefits associated with actions for which parental consent is insufficient, whilst maintaining that these actions are distinct from those for which parental consent is sufficient because of difference in the scope of these benefits. The trouble, however, is that this is also not always the case. It is reasonable to suppose, for example, that parental consent might be sufficient for a lifesaving medical procedure *even if* the probability of it being successful is negligible. In such a case, though the magnitude of the good is very high, the benefit for the child is actually very low because of the negligible probability. That the benefit of a medical procedure might therefore not be greater than the benefit of using small amounts of marijuana show that this approach is unsatisfactory.

The distinction between actions for which parental consent is sufficient and those for which it is insufficient in fact centres on the risks relative to the benefits. Parental consent is sufficient to be morally transformative only when the benefits associated with an action are greater than the risks. This is why, in the context of legalised recreational drugs, parental consent is typically insufficient. A high chance of a temporary sense of euphoria or relaxation is generally outweighed even by a low chance of permanent adverse changes in the brain because the magnitude of the harm is so much greater than the magnitude of the good. Similarly, this is why parental consent is generally insufficient for sexual activities, cigarettes, and alcohol. Most would agree, for example, that the risks of a child drinking an entire bottle of vodka surpass the benefits.

On the other hand, parental consent is usually sufficient for medical procedures precisely because the benefits tend to be greater than the risks. For example, when a child undergoes an operation for a broken leg, it is because the benefits of the operation surpass the risks. Furthermore, the benefits outweigh the risks in the above example of a medical procedure to save a child who will otherwise certainly die, even if the probability of the procedure being successful is negligible. Without the procedure the child will die, therefore, even if there is a very high likelihood the child will still die if the operation occurs, there is no negative outcome that could occur due to the operation that would not occur in the absence of it. As such the benefits remains greater than the risks.

The claim that the sufficiency of parental consent is defined by the benefits of an action relative to the risks is strengthened by considering instances where these trends are not followed. For example, we sometimes think that parental consent is sufficient for alcohol consumption, such as for an older child to occasionally have a beer or alcopop. In this case, due to the age of the child, the frequency of the consumption, and the type of alcohol, it is appropriate to suggest that the benefits are greater than the risks. On the other hand, very occasionally, a medical procedure is ruled impermissible *even though* parental consent has been given. For example, in June 2017 the Supreme Court in the United Kingdom rejected a legal appeal in the high-profile case of Charlie Gard, a British infant with a severe genetic disorder (Paris et al., 2017). Though parental consent was given for an experimental treatment, the court ruled that it was impermissible to go ahead with the treatment. The reason given by treating physicians was that continued intensive care and the proposed treatment were futile and the infant could probably still experience pain. The defining feature, therefore, of the ruling that parental consent in this case was insufficient, was that the risks to the infant were greater than the benefits.

I have argued that the risks relative to the benefits is the most convincing way to distinguish between actions for which parental consent is sufficient and actions for which it is not. On the basis of this the most reasonable defence for the claim underlying COPPA and GDPR-K that

parental consent is sufficient is that the benefits of surveillance capitalism in the lives of children surpass the risks. In the fifth chapter I will show that this second claim cannot be justified, parental consent is in fact insufficient *because* the risks for children of surveillance capitalism surpass the benefits.

2.3 | The Concept of ‘The Parent’

In discussing the most likely rationale for the assumption that parental consent is sufficient, I have not yet said anything about what it is to ‘be a parent’. Whilst it is not strictly necessary for my argument, acknowledging the complex nature of parenthood brings a broader sense completion to my paper. I will not defend any particular account of parenthood or of who should have parental rights over a child. Importantly, this is not required for the purpose of my paper. The argument that I develop in this paper remains equally successful under any account of parenthood. For this reason, I will simply present a brief sketch of the current literature.

In contemporary society there is no simple answer to the question ‘what is a parent?’. Considerable shifts in the formulation of ‘parenthood’ have been observed (Sclater et al., 1999). For most, the time has passed when parenthood could exclusively be defined by a particular genetic relationship (Hill, 1991). It is now generally held that a direct genetic link is neither necessary nor sufficient to qualify as a parent. Even this, however, is contested, with some holding that the mistake we have made as a society is in regarding as parents many social carers of children who lack this genetic connection (Bainham, 1991). Judge De Meyer, for example, giving judgement in the European Court of Human Rights in 1997 noted that, “it is self-evident that a person who is manifestly not the father of a child has no right to be recognised as her father” (X, Y, and Z v. The United Kingdom, 1997). From this alone, it is apparent that what can be said with certainty is that ‘parent’ is a contested concept.

This is further complicated by the fact that formulations of ‘parenthood’ across academic disciplines including law, sociology, psychology, philosophy, history, and criminology differ

from one another (Sclater et al., 1999). Of course, it must be clarified to what extent these differences in the formulation of ‘parenthood’ are genuine rather than being purely semantics (Bainham, 1991). Nonetheless this suggests that striving for a single account of what it is to ‘be a parent’ may be misguided. Rather there may be several distinct concepts at play. For example, being a parent in a legal sense may mean something different from being a parent in a biological sense which may in turn also differ from being a parent in the sense of being in an appropriate normative relationship (Austin, 2007). If so, it would often be necessary to determine which is the most appropriate concept given the context. However, since the success of the argument I am making in this paper does not depend on adopting a particular concept of parenthood, I will leave it open as to what is the most appropriate conceptualisation in this context.

3 | CHALLENGING THE POSSIBILITY OF VALID PARENTAL CONSENT

In this paper I am arguing that it is morally impermissible for children to be embedded in surveillance capitalism. The rationale that perhaps would be most typically given for this claim is that obtaining valid parental consent is not possible. The idea, therefore, is that whilst parental consent would be sufficient to make surveillance capitalism permissible, the impossibility of valid parental consent renders the application of this economic system to children morally impermissible. This is consistent with broader concerns about the possibility of valid consent to data-processing (e.g., Custers et al., 2018; Schermer et al., 2014). In this chapter I will briefly defend this standard rationale, that parents may indeed be precluded from giving valid consent to surveillance capitalism, before suggesting that despite this, the validity of consent is in fact not the most ethically troubling thing about surveillance capitalism.

Consent has the power to transform morally impermissible actions into morally permissible actions (e.g., Alexander, 1996; Kleinig, 2010; Hurd, 1996). Consent, for example, changes the act of entering into someone's house from trespassing to visiting (Schermer et al., 2014) and changes the act of cutting someone from actual bodily harm to surgery. In order to be transformative, though, consent must be valid. Though accounts differ somewhat, it is generally accepted that this requires that consent is voluntary, informed, and given by a competent individual (e.g., Bullock, 2018). For consent to be informed, the consent giver must have sufficient information about the context and consequences of the action being consented to and have capacity for moral judgement (Schermer et al., 2014). In the context of data-processing, there are several reasons to think that informed consent might not be possible.

The information regarding the context and consequences of consent in the digital environment is usually provided to the consent giver in the form of a privacy policy. Due to the highly complex nature of data processing, these policies are typically incredibly lengthy (Schermer et al., 2014). Indeed, McDonald and Cranor (2008) estimated that if consent givers were to read all the privacy policies presented to them, it would take 244 hours annually. The result is that

individuals simply do not have time to read the information that is required for their consent to be informed. This is enhanced in the case of parental consent being given to surveillance capitalism in the lives of children. This is because these individuals are presented with both the privacy policies in relation to the processing of their own data and the policies in relation to the processing of their child's data. It is therefore reasonable to assume that the time that would be required to read all the privacy policies presented would surpass McDonald and Cranor's estimate quite substantially. If a parent is simply unable to read all the information required, and as such they can be neither properly informed about what they are consenting to nor the consequences that such consent may have, then this undermines the validity of their consent.

The second challenge to informed consent relates not to the magnitude of the information provided, but to its complexity. Even if individuals were to read all the privacy policies presented to them, there is no guarantee they would in fact be able to make sense of what they are consenting to or the consequences of their consent (Schermer et al., 2014). Privacy policies are highly complex, a reflection of the complexity of the data processing that are about. Most people, therefore, are unable to acquire, understand and process all the information that is relevant to make a decision about consent to data processing (Acquisti & Grossklags, 2005, p. 27). Furthermore, because data-processing technologies are continually advancing, it can be extremely difficult to predict the future potential of personal data (Custers et al., 2018). The problem with this, as noted by Solove (2013), is that "it is virtually impossible for people to weigh the costs and benefits of revealing information or permitting its use or transfer without an understanding of the potential downstream uses" (p. 1881). If a parent is not reasonably able to understand the information presented to them regarding the context and consequences of an action, then even in the case that they actually had the time to read this information, the consent given would not be fully informed, and in turn, thereby compromising its validity.

There are genuine reasons, then, for doubting the possibility of valid parental consent in the context of surveillance capitalism. Furthermore, if the barriers to informed consent cannot be resolved, then surveillance capitalism will be impermissible. My argument, however, does not

depend on this being the case. Rather I will show that *even if* valid parental consent can be given, surveillance capitalism in the lives of children remains morally impermissible. For this reason, I will show that the problem of valid consent is not the most ethically troubling thing about surveillance capitalism.

4 | THE CONCEPT OF CHILDHOOD

Up to this point, this paper has centred on the notion of childhood. I have talked about what it means to say that children are embedded actors in an economic system that predicts and modifies their future behaviour. I have also talked about the most convincing rationale for the assumptions central to COPPA and GDPR-K that children cannot themselves consent to surveillance capitalism but that parental consent is sufficient. I have not so far, though, talked about what it means in fact to ‘be a child’.

The idea that children have a status that is different from adults is evident in our everyday attitudes (Schapiro, 1999). It is evident in the fact that we think that adults have special obligations towards children including to protect, nurture, and educate them. Furthermore, it is evident in the fact that we think children are not permitted to exercise the full range of rights enjoyed by adults. For example, whereas an injured adult in need of life-saving medical treatment has the right to refuse treatment, even if it is imprudent to do so, a child, on the other hand, does not (Schapiro, 2003). Lastly it is evident in the fact that we do not think children are responsible for what they do in the same way that adults are. For example, we typically think that it would be inappropriate to punish a child for stealing as we would punish an adult.

The question I address in this chapter, then, is what it means to ‘be a child’. I consider this not only to justify the assumption that the status of children is different from adults, but also to spell out more specifically what this means. This is important because grasping what it means for someone to ‘be a child’ informs why parental consent is insufficient to make surveillance capitalism in the lives of children permissible. More specifically, I will show that understanding childhood is the basis for understanding why it is wrong to embed them in this economic system even if valid parental consent is given. Confronting the question of the nature of childhood therefore provides the foundation required to see what is truly ethically problematic about surveillance capitalism.

In this chapter I will first show that there is good reason to avoid both of the standard accounts of childhood, according to which to be a child is to be below a certain age, or to be lacking in certain competencies. I will then present a more satisfactory account of what it is to ‘be a child’. This account frames childhood in terms of authorship, more specifically, a child is someone who lacks authorship for their choices. In the remainder of this chapter, I will then defend an authorship-based account by showing that it better captures our intuitions about childhood than either an age-based or a competency-based approach.

4.1 | Childhood as Defined by Age

Childhood is often distinguished from adulthood on the basis of age. According to this approach, age itself is decisive. Any individual below a particular age threshold is a child and any individual above is an adult. This approach is very common. In the context of surveillance capitalism, it is used by both COPPA and GDPR-K where the threshold is defined as thirteen and sixteen respectively. More broadly it is used to determine whether an individual can purchase alcohol, vote, join the military or get married. On this account, what it means to be a child, then, is to be below a particular age.

Whilst there are clearly practical advantages to this approach, to treat an individual differently nonetheless requires justification. Practicality, alone, cannot justify the imposition of this difference in status. Likewise, there does not seem to be anything morally relevant about age per se. Instead, the typical justification given is that whilst age per se is not morally relevant, it acts as a proxy for features that are morally relevant, such as competency, capability, reflective-capacity, and maturity (Anderson & Claassen, 2012). The problem, however, is that age does not perfectly coincide with any of these features. It is straightforward to recognise that, for any age threshold set, there will be individuals below the threshold whose competency, capability, reflective-capacity or maturity exceeds those of individuals above the threshold. Arguably this might be the case for the competency of an 11-year-old who is the primary carer for a dependent parent. In fact, it would be impossible to define an age threshold such that it could be known

with certainty that every individual below the threshold lacked a morally relevant feature that was possessed by every individual above the threshold. To the extent that age is used, individuals will be grouped according to a morally irrelevant criterion. That ‘being a child’ simply means being below a certain age appears therefore to be a claim that is convenient yet morally indefensible.

4.2 | Childhood as Defined by Competence

Given that much of the criticism against an age-based approach centres on the idea that treatment should be directly related to an individual’s possession of the requisite competence, it is perhaps unsurprising that the other main approach says that what it is to ‘be a child’ is to be lacking in certain competencies. This certainly has some appeal. Unlike age it is obvious why competence might be morally relevant per se. Furthermore, most individuals who we would ordinarily call children are, after all, less competent than most individuals we would ordinarily call adults. This holds true across several different ways in which we might define competence, including the ability to provide for oneself, the ability to make good decisions, or the ability to keep oneself out of harm. There are two obvious reasons for this. Those who we would ordinarily call children generally have more limited life experience and, unlike those we would ordinarily call adults, they are still developing neurologically.

There are, however, at least two problems with defining what it is to ‘be a child’ in terms of competence. First, as I have already hinted, there are many ways in which we might choose to define competence. If childhood is defined by competence, is there really a characteristic that is common to all instances of competence? If there is, what exactly is this characteristic? Following a Wittgensteinian line of thinking, it might be doubted whether there is really a characterisation of competence that is both broad enough to encompass all the dimensions that are important but also specific enough to get at what we think really matters (Wittgenstein, 1953). If, instead competence is defined by several distinct characteristics with distinct thresholds would an individual have to pass a certain number of specific thresholds to qualify

as an adult or would it rather be that an individual is an adult in some contexts but a child in others? This observation highlights the complexities in specifying a competence-based account. I recognise, though, that it does not highlight a fundamental problem with a competence-based approach.

A fundamental problem, however, does exist. If competency is the threshold that determines whether an 11-year-old is a child or an adult, then it is also the threshold that determines whether a 40-year-old is a child or an adult. Competency cannot go only in one direction (Anderson & Claassen, 2012). If it is relevant for demarcating childhood from adulthood, then it is relevant regardless of age. This is problematic precisely because we do not think, regardless of their competency, that a 40-year-old should ever count as a child. In fact, it would be regarded as incredibly degrading to suggest so. This account, therefore, has the unpalatable consequence that a 7-year-old and a 40-year-old with complex learning difficulties could both count as children.

It might be suggested that a more nuanced competence-based account could avoid this problem. Therefore, instead of simply saying that a child is someone below a specified competence threshold, we might rather say that a child is someone currently is below this threshold *but will at some point pass it*. This attempts to capture our basic idea that a child is an individual who in some fundamental way is not yet developed but who is in the process of developing (Schapiro, 1999). On this account then, the 40-year-old with complex learning difficulties would be an adult because, though they have not passed the competence threshold, they also never will. This refined account therefore avoids one category of problems encountered by the more basic competency approach. It does however encounter at least two new problems.

First, how exactly are we to know whether or not an individual will achieve the required level of competence *at some point*. This account requires that we classify individuals as children or adults based on predictions we make about their potential for future development. Whilst of course, there may be some instances in which it is very clear that a particular individual will

never reach a certain level of competency, there are likely to be many more individuals for which this is much more difficult to know. This revised account therefore encounters an additional implementation problem alongside those associated with the original competency account which also apply here.

Second, and more concerning, is that different but equally unpalatable consequences remain. For example, on this account if an individual with complex learning difficulties develops more slowly, such that they obtain certain competencies but only at a much later point in time, then they would still be a child up until that point. If, however, they never obtained those competencies, then they would be an adult. This account therefore has the peculiar consequence that a 40-year-old is an adult both if they have passed the threshold, and if they never pass the threshold, but not if they will pass it but only at some later point in time. Similarly, on this account a 7-year-old who will likely never reach the competence threshold due to very complex learning difficulties would count as an adult. Neither of these situations are palatable. That ‘being a child’ means being below a certain competence appears therefore, like age, to be a claim that is unsatisfactory.

4.3 | Childhood as Defined by Authorship

I have suggested that we encounter problems if we try to define what it is to be a child in terms of competence. Even so, I recognise that the intuition underlying this approach, that children are different from adults because they lack reason, seems compelling. In the remainder of this chapter, I will present an account of childhood that is consistent with this intuition yet does not appeal to competence. To do so I will make use of an argument developed by Tamar Schapiro in her papers ‘What is a Child?’ (1999) and ‘Childhood and Personhood’ (2003). Schapiro suggests that the intuition that children lack reason allows for two interpretations, though she acknowledges that they are typically conflated (Schapiro, 2003, p. 575). According to the first, a child’s lack of reason consists in them being incapable of making good choices. This interpretation underlies the competence-based approach, which I have already suggested is

unsatisfactory. According to the second interpretation, however, a child's lack of reason consists in them being incapable of making their own choices. It is this second interpretation that Schapiro appeals to in her account of what it is to 'be a child'.

According to Schapiro, to say that an individual is capable of choosing a particular action is to say that the action can be attributed to them normatively. This does not simply mean that the individual stands in the correct causal relationship to that action – this would be non-normative attribution – but rather that the individual is the author of that action.

Schapiro claims that children are incapable of making their own choices because they do not have authorship for their actions. On her account, when an infant throws a toy onto the floor, this action can be attributed to them non-normatively since they are “the locus of certain psychological processes through which the action is produced as an effect” (Schapiro, 2003, p. 586). The action however cannot be attributed to them normatively. The child did not really choose to throw the toy because they do not have authorship for throwing the toy. For Schapiro, then, being able to bring about certain actions is not sufficient for an individual to be an adult. Rather an individual is an adult only in the case that they are related to their actions in the correct way, that they are the author of their actions.

In defending her account of what it is to 'be a child', Schapiro draws on Kant's explanation of how children can be distinguished from both nonhuman animals and humans with 'full personhood'. Like Schapiro, Kant views this distinction as centring on reason, which he conceives as the exercise of the capacity to be law to oneself (Kant, 2017). According to Kant, nonhuman animals lack reason. This is because they do not have the capacity to be a law unto themselves. Instead, nonhuman animals are governed by nature's law which is embodied in their instincts. These instincts exclusively determine the choices that nonhuman animals make. Therefore, when an animal chooses a particular action, their choice is in accordance with nature's law. Accordingly, Kant writes, “animals are by their instinct all they ever can be, some other reason has provided everything for them from the outset” (Kant, 1960). Importantly this

is not to say that nonhuman animals could not be competent in certain respects. This would be problematic. Rather, this account can allow, for example, that a chimpanzee might learn to communicate using sign language (e.g., Terrace, 1986). However, on this account, the animal has chosen to act in this way as a result of instinct.

For Kant, the characteristic difference then between nonhuman animals and humans with ‘full personhood’ is that only the latter have reason. This entails that they have the capacity to act on a law which in no way derives its authority from instinct. This is not to say that for humans with full personhood their instincts do not influence them, but rather that they have the capacity to decide whether or not to act on them, their instincts need not determine what they do (Schapiro, 2009). Humans with full personhood therefore act according to their own authority, not the authority of nature. As such, Kant writes that “man needs a reason of his own” (Kant, 1960). For Kant, then, the concept of full personhood hinges on obtaining of reason. Someone with full personhood has achieved liberation in the sense that they can exercise the capacity to be a law to themselves.

Schapiro equates Kant’s concept of a human who has ‘full personhood’ with an adult. From this, she argues we can now give an account of what it is to ‘be a child’. When we are young, our instincts exclusively determine how we choose to respond to the things with which we are presented. We, therefore, like nonhuman animals, lack the capacity to be a law unto ourselves. However, unlike nonhuman animals, we do not remain in this state. Over time we become liberated from the authority of nature such that we can act instead according to our own authority. In other words, we gradually gain authorship over our actions. Children, according to Schapiro, are therefore those individuals who are not yet liberated from nature, but will be at some point, and so are currently incapable of making choices that are truly their own.

4.4 | Defending an Authorship-Based Account of Childhood

In the next chapter I will show, using an authorship-based account of childhood, that parental consent to surveillance capitalism in the lives of children is insufficient. Beforehand, I will defend my use of this account by showing that it better captures our intuitions about childhood than either of the other accounts considered. This is not to say that an author-based account of childhood is perfect, childhood is after all a very complex concept, but rather to say that across several dimensions it functions better than either an age-based or a competence-based account.

On this account, to classify someone as either a child or an adult is not to make any comment about their competence. Indeed, Schapiro writes that her account is “different from seeing childhood as a condition in which a certain type of proficiency – a certain type of knowledge, or experience, or judgement, or skill – is lacking” (Schapiro, 2003, p. 589). Unlike competence-based accounts, it would pose no problem for an authorship-based account of childhood if an 11-year-old was much more competent than a 40-year-old. What is relevant for this account is not whether someone can make good choices, but rather whether they can make choices that are truly their own.

Alongside not encountering the same problems as a competence-based account, an authorship-based account also does not encounter comparable problems. More specifically this account is less vulnerable to classifying a 40-year-old as a child or an 11-year-old as an adult. Considering these in turn, it is more reasonable to suggest that a 40-year-old is capable of making choices that are their own rather than being governed by instinct than to suggest that they are capable of making *good* choices. We may, for example, agree that a 40-year-old who has lost everything to gambling is incapable of making good choices. Even so, they may still have the capacity to decide whether or not to act on their instincts. Arguably this is evidenced when they choose to play a game with a low return though high odds rather than acting on their instinct to play a game with a higher return though lower odds. A comparable case can also be made for a 40-year-old with complex learning difficulties. Though a 40-year-old may very well be incapable

of making good choices, they are less likely to be incapable of making their own choices. An authorship-based account therefore better captures our intuitions about who should be an adult. On the other side, it is reasonable to assume that an 11-year-old might have localised authorship, the capacity, in specific contexts, to decide whether or not to act on their instincts. This is not a problem for an authorship-based account. They can allow that an 11-year-old has localised authorship whilst maintaining that they are not an adult because they do not yet have global authorship.

Lastly, an authorship-based of what it means to ‘be a child’ can accommodate our intuition that childhood is in a way related to vulnerability (e.g., Herring, 2018; Schweiger & Graf, 2018). It is often thought that children, unlike adults, are vulnerable. According to Anderson (2013), an individual is vulnerable to the extent that they are “not in a position to prevent occurrences that would undermine what they take as important to them” (p. 135). Whilst broader, this definition can accommodate the accepted idea that vulnerability is related to being exposed to risks (Herring, 2018, p. 9). Given that children’s choices are determined by their instincts, there may be instances where they can prevent events from happening that would conflict with what they regard as important, but this is no guarantee. It will depend on whether their instincts are consistent with what they view as important. Furthermore, it is reasonable to suppose at least sometimes that a child’s instincts will conflict with what is important to them, at least in the longer term. In these cases, children will not be able to prevent an occurrence that would undermine what is important to them. For this reason, children are vulnerable.

At this point it might be suggested that a competence-based account can also accommodate this intuition. The reasoning would be that an individual is competent to the extent that they can make good choices (Schapiro, 2003, p. 575) and good choices are those that do not undermine what is important to that individual. Therefore, an account that defines what it is to ‘be a child’ in terms of competence can accommodate the intuition that children are vulnerable. But a competence-based approach centring on the capacity to make ‘good choices’ arguably must impose an objective account of what good choices actually are. How, otherwise would

we know whether or not an individual was competent. But under an objective account there is no guarantee that an individual's ability to make 'good choices' means they can prevent things from happening that would undermine what *they regard as important*. The implication then is that under a competence-based account an adult would qualify as vulnerable just because an objective list of 'good choices' does not line up with what is important for them. Therefore, not only can an authorship-based account accommodate our intuitions about the relationship between childhood and vulnerability, it does so better than a competence-based account.

5 | THE INSUFFICIENCY OF PARENTAL CONSENT

Whilst consent typically makes an action permissible that would have otherwise been impermissible, it does not always. There are some actions for which consent is not sufficient to be morally transformative. In the second chapter I argued that this is the case when the risk is greater than the benefit. In this chapter, I will show that the application of surveillance capitalism to children falls into this category of actions.

I will first argue that if children benefit from surveillance capitalism it is most reasonably because this economic system enhances convenience. I will maintain, however, that the risks vastly surpass these benefits. More specifically, appealing to the account of childhood that I outlined and defended in the previous chapter, I will argue that surveillance capitalism poses a risk to children both by interfering with their development of authorship and by failing to reflect their absence of authorship in the results that it imposes on them. In the remainder of the chapter, I will anticipate an objection based on my acknowledgement in the second chapter that parental consent is typically, *but not always*, insufficient in the context of alcohol, cigarettes, legalised recreational drugs, and sexual activities. I will show why, in the context of surveillance capitalism, parental consent is *always* insufficient.

5.1 | The Benefit of Convenience

The claim that surveillance capitalism enhances convenience is the claim that is most often appealed to in both justifying and valorising this economic system (Zuboff, 2020b). Among other things, surveillance capitalism makes it easier to queue music, turn on the heating, buy groceries, search for a recipe, remember to purchase concert tickets, book flights, and check the weather. It makes the world better arranged for our convenience and arguably in a fast-paced society, we are benefitted by mechanisms that make the demands of life more manageable (Huberman, 2021). It might be suggested that children, therefore, benefit from the convenience provided by surveillance capitalism.

Whilst this might be true, there are two things worth noting. The first is that children, like adults, are not the intended beneficiaries of surveillance capitalism in which they are embedded. Rather the intended beneficiary of a corporation's implementation of surveillance capitalism is the corporation itself. Children are merely the raw material required for its functioning. As such, benefits that are accrued to them are arguably either coincidental by-products that can be dressed-up as intended benefits or are in place to justify extractive processes (Huberman, 2021). Indeed, Huberman (2021) notes that "convenience plays a crucial role in supporting, perpetuating, and legitimising extractive relationships between capitalists and consumers" (p. 338). Therefore, whilst convenience might benefit children, it was not implemented *because* it benefits them. For this reason, the benefit appears somewhat tainted and thereby lessened.

Even if I am wrong about this, and the benefit of convenience is in fact the same regardless of the intention behind it, there is a second point worth noting. Whilst we recognise the benefit that convenience affords adults we might question whether it does so to the same extent for children. After all, do we really think that convenience enhances childhood? We could, for instance, rest a ladder on the side of a tree that a child is trying to climb to make it more convenient for them to get to the top, but this would overlook why they are climbing the tree in the first place. Here, offering convenience does not benefit the child. In saying this I am not claiming that convenience *never* benefits children. Children, for example, benefit from the convenience of living nearby free museums and parks. I am rather suggesting that something about the precious nature of childhood seems to be lost when we place emphasis on making their lives more convenient. If convenience, therefore, is a benefit for children, it appears to be a lesser benefit than it is for adults.

5.2 | Surveillance Capitalism and the Development of Authorship

Having considered the most widely advertised benefit of surveillance capitalism, I turn now to outline the risks imposed on children by this economic system. In doing so, I will maintain that the risks greatly surpass the benefits, and for this reason, parental consent to surveillance capitalism is insufficient. I will first show that surveillance capitalism imposes a risk on children by interfering with their development of authorship.

If the demarcation between childhood and adulthood is defined by a person becoming the author of their actions, then it is appropriate to view childhood not only as a period of time when an individual lacks full authorship, but also as a period of time when authorship is developing. After all, to deny this is to be committed to either maintaining that all children lack authorship entirely because it is binary or that they lack it because it develops gradually but an individual is an adult as soon as they have one instance of local authorship rather than when they have global authorship. Since neither of these is convincing, I take it therefore that childhood is defined both by the absence of full authorship and the development of local authorship. For this reason, a child will be harmed in the case that they are embedded in an action that interferes with this development.

To show that surveillance capitalism interferes with a child's development of authorship, an account must first be given of what it is to develop, and therefore also to interfere with the development of, authorship. If an individual has authorship when they have the capacity to decide whether or not to act on their instincts (Schapiro, 2003), then it is reasonable to assume that the development of authorship in a given context at least involves being supported in becoming able to identify instincts, becoming able to form choices in relation to those instincts, and becoming able to act on those choices. For example, a child developing authorship for their choices in the context of food involves them first becoming able to identify that their instinct is to eat cake, chocolate, and sweets, then becoming able to form a choice on the basis of reasoned deliberations about those instincts, for example to eat cake, chocolate, and sweets but

only after first having something more nutritious, and finally becoming able to act on that choice and first eat some fruits and vegetables. Furthermore, part of what is required for a child to develop authorship is ensuring that they have the space needed to become able to do these things. So just as removing a child's potty would interfere with their development to become toilet trained, so removing spaces in which they can practise identifying instincts and making choices about those instincts and acting on those choices interferes with a child's development of authorship.

Surveillance capitalism does precisely this. As stated and evidenced in the first chapter, the primary mechanism of this economic system is behavioural modification, it directs the behaviour of children towards economically valuable ends. Furthermore, the modification almost entirely bypasses user awareness, a necessity to maximise effectiveness (Zuboff, 2019a). For both these reasons, it removes a space where children could otherwise have been developing in authorship. This is because it interferes with their learning to identify their instincts, their learning to form choices in relation to those instincts, and their learning to act on those choices. The success of surveillance capitalism in the context of Pokémon Go, for example, relies on individuals acting on their instincts once directed to fast-food outlets rather than making considered choices. What's more, this space in which surveillance operates is becoming increasingly large. As the reach of this economic system widens, so does the number of settings in which behaviour can be modified and thereby also the number of settings in which authorship development is interfered with. Surveillance capitalism, therefore, is interfering with a child's development of authorship with increasing severity.

At this point it might be objected that there are many other instances when a child's development of authorship is interfered that we do not regard as particularly problematic. This is arguably the case when a parent tells a child that they have to go to school, or that they have to eat their vegetables, or that they have to put on a coat before going outside in the snow. In all of these cases a parent appears to impose a particular decision – to go to school, to eat vegetables, or to put on a coat – rather than supporting the child to themselves identify their

instincts, make reasoned choices in relation to these instincts, and act on these choices. It might be argued, therefore, that surveillance capitalism isn't really doing anything that a parent doesn't do every single day, thereby undermining the severity of the harm it is imposed.

But surveillance capitalism differs in two significant ways. First, although surveillance capitalism interferes with authorship development, a parent telling a child that they will go to school, eat their vegetables, or put on a coat, need not likewise interfere with this development. There are two reasons for this. First, some of these actions in fact promote authorship development so requiring them cannot constitute interference. Take school for example. Arguably school is a context in which among other things, a child develops authorship. A parent requiring that their child goes to school therefore is not in fact interfering with their authorship development, rather it is promoting it. Second, a parent can require these things of their child whilst still promoting their authorship development. For example, a parent can help a child to see that their instinct is to not put on a coat or not eat their vegetables, and also support them in coming to understand what it means to make a choice on the basis of reasoned deliberations about those instincts. Neither of these hold in the context of surveillance capitalism.

But even if I am wrong and parents in fact do often interfere with authorship development, surveillance capitalism still differs in another important respect. Parents interfere in this way precisely and only because they believe that doing so is in the best interest of the child. They think that the child, in the long run, will be better off as a result for their interference. Parents interfere when they think that the benefits of doing so surpass the risks. The same cannot be said for surveillance capitalism. Surveillance capitalism interferes in a child's development of authorship development not for the child's benefit but for the benefit tech giants like Google, Facebook, and Amazon. In fact, it interferes in spite of what it might do for the child. Once again, children are not the intended beneficiaries of surveillance capitalism, rather they are the raw material required for its functioning. The observation that there seem to be other instances

in which a child's development of authorship is interfered with, therefore, does not undermine my argument that surveillance capitalism poses a risk to children as a result of this interference.

5.3 | Surveillance Capitalism and the Reflection of the Absence of Authorship

Arguably interfering with the development of authorship in children, a defining feature of their childhood, surpasses any benefit of convenience that might be afforded to a child by surveillance capitalism. To strengthen my claim however, that the risks of this economic system outweigh the benefits, I will show that surveillance capitalism also fails to reflect the absence of authorship in children.

Earlier in this paper I noted that we generally think that it is morally wrong to impose the same punishment on a child that we impose on an adult (e.g., Schapiro, 1999). For example, whilst if an adult steals from a shop, we think it would be appropriate for them to be arrested, prosecuted, and convicted, we recognise that it would be inappropriate to do the same to a child. This intuition can be accommodated within the authorship-based account of childhood that I have defended. Though a child and an adult might carry out the same action, only the adult is the author of that action. Unlike an adult, when a child acts, they act without authorship. As such, responding to a child's actions indifferently from an adult's by arresting, prosecuting, and convicting them both, fails to reflect the absence of authorship in the child. Responding in this way would fail to reflect this not because the consequences imposed are the same for a child and adult, but rather because the consequences imposed are too severe given that the child's choice to act in this way cannot truly be said to be their own. By instead asking the child to apologise and return the stolen item, their lack of authorship is reflected.

For some actions, like stealing, the consequences are chosen. When someone has committed theft, it is a choice whether to arrest, prosecute and convict them or whether instead to ask them to apologise and return the item. When the consequences are chosen it is always possible for them to reflect an absence of authorship in the case that the agent who carried out the action is

a child. This is because it is possible to impose different consequences on adults and children. For other actions, though, the consequences are rooted in the action itself. A clear example of this is cigarette use. We cannot choose what the consequences of cigarette use are. This is not to say that the consequences are therefore guaranteed, after all someone might develop lung cancer from their cigarette use but they also might not. Rather this is to say that, unlike theft, we have no ability to select the consequences of cigarette use. The consequences are also rooted in the case of alcohol and legalised drug use, and sexual activities. For example, whilst it is perhaps somewhat possible to choose the physical consequences of sexual activities, this is not the case for the emotional consequences.

For actions for which the consequences are rooted in this way, the consequences imposed are the same regardless of whether the agent embedded in the action is an adult or a child. For example, the consequences of cigarette use do not differ whether the agent embedded in the action is a child or an adult. Significantly this means that it is not always possible for the absence of authorship in children to be reflected in the way that they are when a child who has stolen from a shop is asked to apologise and return the item rather than being arrested and prosecuted. This will depend on the significance of the consequences. Where the consequences of an action are minimal, it is reasonable to claim that the absence of authorship of the child embedded in the action can be reflected. This is because if there are essentially no consequences for an action, then the consequences can in no way be said to imply authorship. For example, though the consequences of eating an apple cannot be chosen and as such are the same for both an adult and a child, they are negligible. For this reason, the absence of authorship in children can be said to be reflected. On the other hand, whilst the consequences of using cigarettes are also not chosen, unlike with eating an apple, they tend to be severe and permanent, including brain damage, DNA mutation, increased risks of tumours, heart attacks and stroke. The severity of these consequences means that if children are embedded in the act of using cigarettes, their absence of authorship cannot properly be said to be reflected.

Importantly, I will show that this is also the case for surveillance capitalism. To do so, two things must be shown. The first is that the consequences imposed by surveillance capitalism are the same regardless of whether the agent embedded in this economic system is an adult or a child. The second is that the severity of these consequences is such that it cannot be reasonably claimed to reflect the absence of authorship in children. In showing that the first point is true, I will also show that the second is.

Surveillance capitalism harvests from users the same types of behavioural data, by the same means, and critically, for the same purpose, regardless of whether the user is a child or an adult. The results of surveillance capitalism are the same for all users, their behaviour is directed by the tech giants, for the benefit of tech giants. Furthermore, unlike their footprints in the sand, a child's digital footprint is not periodically washed away. Rather, as with adults, it is etched in place, often shared with third parties thereby making it impossible to totally erase. For example, whilst the browsing history of a user can be deleted, what is stored in Google's servers cannot be deleted regardless of whether the user is an adult or child (Warren, 2018). Likewise, Amazon indiscriminately retains the transcripts of interactions with its smart assistant even after individuals delete their recordings (Ng, 2019). It therefore does not matter whether, for example, the individual searching for Pokémon figures is a 9-year-old or a 40-year-old, Pokémon Go still collects their names, locations, photographs, phone activities and accounts and reserves the right to share this data with third parties (Holloway, 2019b). Furthermore, it is still interested in modifying their behaviour to enhance economic return.

Therefore, whilst the consequences of being embedded in surveillance capitalism may be vastly different from using cigarettes, they are alike in the sense that their consequences are imposed indiscriminately, regardless of whether the agent involved is an adult or a child. Furthermore, they are alike in their severity. The contents of the lives of children are being taken and turned into products that ultimately control their behaviour, and there is no way that this content, at least in its totality, can be redacted. For these two reasons, surveillance capitalism fails to reflect the absence of authorship in children.

It might be argued, however, that whilst currently the consequences imposed by surveillance capitalism are indiscriminate between adults and children, there is nothing that necessitates that a child's absence of authorship cannot be reflected. Surveillance capitalism could instead, for example, only collect certain types of data from children or erase their digital footprints at periodic intervals, thereby reflecting the absence of authorship in children. It might be thought that the argument I have presented, therefore, holds only against a particular form of surveillance capitalism. There are, however, at least two reasons why this is not the case.

The first is that for an action to reflect the absence of authorship in children, what is required is not that the consequences imposed on children are less severe than adults but rather that they are sufficiently minimal. Even if the types of data collected from children, or the period of time for which they are held, are restricted, the consequences may still be too severe to reflect a child's absence of authorship. This is particularly likely given that we cannot lessen the fact that the purpose for this data collection is behavioural modification. Surveillance capitalism without behavioural modification is ineffective. Arguably so long as a child's behaviour is being directed, the consequences imposed are too severe to reflect their lack of authorship.

Second, it is not obvious that it is in fact always possible to collect fewer types of data from children than adults, or retain this data for a shorter period of time. Whilst it might be possible in the case that a child is using a specified children's account, often this is not the case. For example, how could it be discerned whether the user engaging with a smart home device is an adult or a child. There is a pragmatic question, then, as to whether surveillance capitalism could really be applied to children differently from how it is applied to adults.

Both of these reasons cast doubt on the strength of the objection against my argument that surveillance capitalism, as a system, fails to reflect the absence of authorship in children. Coupled with the fact that surveillance capitalism interferes with the development of authorship in children, this shows that the risks imposed by this economic system surpass the benefits. For

this reason, parental consent for surveillance capitalism is insufficient, and as such, the current legislation allows for outcomes that are morally impermissible.

5.4 | Why Parental Consent for Surveillance Capitalism is *Always* Insufficient

Before closing I will respond to two objections that might be raised against my argument more generally. In the second chapter I argued that parental consent is typically, *but not always*, insufficient in the context of alcohol, cigarettes, legalised recreational drugs, and sexual activities. I argued that this is because in most cases the risks surpass the benefits, but in some circumstances this may not be true. In this chapter I have argued, however, that in the context of surveillance capitalism, parental consent is *always* insufficient. The seeming disparity between these conclusions may be questioned. It is, however, justified.

Risk is best conceptualised as existing on a scale. The risk associated with drinking an entire bottle of vodka is different from the risk associated with drinking an alcopop. Likewise, the risks imposed by these actions differ for a 7-year-old and a 17-year-old. Along this scale of risk, however, there are tipping points, points at which the risk quite dramatically increases, often because the harms become very difficult to reverse. In the case of alcohol, for example, in the short-term the tipping point is intoxication, in the long-term it is dependency and alcohol-related neurological impairments. We can allow that, whilst beyond these tipping points parental consent is insufficient, before they are reached, the benefits surpass the risks and parental consent is, therefore, sufficient. Having this more nuanced view of the sufficiency of parental consent depends, though, both on being able to know what the tipping points are, and also being able to know when they are being approached.

In the context of alcohol, cigarettes, legalised recreational drugs, and sexual activities it might be possible to know these things. A parent, for example, can reasonably identify when their child is nearing intoxication. In the context of surveillance capitalism, it is much more difficult both to know what the tipping points of risk are, and when they are being approached. This is

because, unlike alcohol consumption, surveillance capitalism is unprecedented, it is inherently unintelligible, and we are blind to the mechanisms which support its operation (Zuboff, 2019a). For this reason, it is possible to acknowledge that risk also exists on a scale in the context of surveillance capitalism, yet maintain that these other differences entail that whilst parental consent is *typically* insufficient in the former context, it is *always* insufficient in the latter context.

5.5 | The Necessity of the Insufficiency of Parental Consent

The second objection that might be raised against my argument more generally is that it is unnecessary. After all, if we believe that most parents act in the best interest of their children, then we might think that it is difficult to explain why prohibiting children's involvement in surveillance capitalism would actually make children better off. Under the current legislation it is already up to parents whether to allow surveillance capitalism to be applied to their children, that is permissible implementation requires that parental consent is given. Therefore, surely now what we should actually be concerned about is whether parents are really fulfilling the duties they have towards their children. The absence of stricter legislation is not an inherent problem, it is only a problem for 'bad' parents. The current legislation is sufficient, if there is a problem with children being embedded in surveillance capitalism, then it can be traced back to parents.

This line of thinking, however, overlooks several complicating factors thereby implying that the landscape surrounding surveillance capitalism is much simpler than it in fact is. More specifically it implies that nothing is lost when parental consent is withheld. This is incorrect. Whilst it is quite possible for digital technologies to exist without surveillance capitalism typically this is not presented as an option (Zuboff, 2019c). Rather we find ourselves being presented with non-negotiable 'take it or leave it' scenarios (Custers, 2001). It is often, therefore, not possible for a child to use a digital technology unless parental consent for surveillance capitalism is given. In other words, consenting to surveillance capitalism is often

a requirement for children to use digital technologies. This means that parents are often presented with a difficult choice to either allow children to be embedded in surveillance capitalism, or to prevent them from accessing the benefits of digital technologies, thereby also risking subjecting them to social exclusion (Valentine et al., 2002).

It is therefore not about parents failing to act in the best interest of their children. It is about parents being forced to make a choice that they should not have to make. The only way to remove children from the grasp of surveillance capitalism should not be to remove them from digital technology altogether. My argument, far from unnecessary, is critical for ensuring that children can avoid surveillance capitalism whilst fully participating in a digital society and reap the benefits of doing so.

CONCLUSION

Until a little more than 150 years ago children in most countries spent their days in labour (Dessy & Knowles, 2008). It is now widely recognised that child labour imposes harms on children that vastly outweigh any benefits that they might receive. Today, in accordance with international standards, most countries have child labour laws that recognise the impermissibility of children's involvement in labour (International Labor Organisation, 1999, Convention 182), and the insufficiency of parental consent in this context. More specifically it is acknowledged in legislation that the harms relative to the benefits for a child entail that children's involvement in labour remains wrong even in the case that parental consent is given.

Today as a result of the widespread implementation of surveillance capitalism, most children are once again involved in the market economy as economic objects. Whilst regulation of the application of surveillance capitalism to children does exist, I have shown in this paper that it is inadequate. Under both COPPA and GDPR-K, it is permissible to embed children in this economic system if parental consent is given. I have argued that it is, in fact, impermissible. By considering a wider set of contexts, including medical procedures, engagement in sexual activities, and legalised recreational drug use, I have maintained that the sufficiency of parental consent hinges on the relation between the risks to the child and the benefits. More specifically I have demonstrated that parental consent for an action is sufficient only if the benefits of that action surpass the risks.

In the context of surveillance capitalism, I have shown, however, that the risks for children are greater than the benefits. Rejecting both an age-based and a competence-based account of what it is to 'be a child', I defended an account based on the concept of authorship by showing that it can better capture our intuitions regarding childhood. Using this account of childhood, I then argued that surveillance capitalism interferes with a child's development of authorship and, in the consequences that it imposes on them, fails to reflect their lack of authorship. I maintained that on the basis of this, together with the observation that children are not the intended

beneficiaries of surveillance capitalism and at best benefit minimally and coincidentally, it is thereby justified to assert that the risks imposed by this economic system typically exceed any benefits that a child might receive. I have shown that the consequence of this is that parental consent to the implementation of surveillance capitalism is *always* insufficient. It can never be permissible to embed a child in this economic system. The burden of responsibility now falls on the likes of Google, Facebook, Amazon and Microsoft to ensure that children, that is individuals who lack authorship, are entirely removed from this system of economic oppression.

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