



Organized Immaturity in a Post-Kantian Perspective: Toward a critical theory of surveillance capitalism

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Abstract

Organized immaturity has been defined as the erosion of the individual's capacity for the public use of reason, pressured by control patterns of socio-technological systems built on obscure operating principles, ideologies, or regimes. Recent studies of surveillance capitalism explore the technological advancements of digitalization and analyse their negative impacts on information integrity and user autonomy. We identify organized immaturity as a deeper cause of these impacts and develop elements of a critical theory to explain the maturity-eroding effects of surveillance capitalism and to theorize an agenda for countermeasures. We first identify, describe and analyse infantilization, reductionism and totalization as emerging patterns of surveillance capitalism, which organize immaturity in human individuals and collectives. We then define the individual abilities and public deliberation principles needed to exercise maturity in private and public life, using Habermas's theory of communicative action, as applied to human moral development, and Kant's mentalist approach to individual maturity. Finally, we use these principles as a critical foundation and guide for citizens to nurture and protect individual maturity and democratic society from the infantilization, reductionism and totalization induced by surveillance capitalism.

Keywords

democratic society, digital technologies, Habermas, Kant, organized immaturity, public reason, socio-technological systems, surveillance capitalism

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Organizational research has increasingly been concerned about the mixed blessings of socio-technological systems in the advent of ‘big data’ (Varian, 2014), ‘brain–machine-interface’ (Musk & Neuralink, 2019) and the ‘fourth industrial revolution’ (Schwab, 2016). These phrases label a new stage of societal development that integrates technologies such as the Internet, mobile and cloud computing, platforms and social media, sensors and the Internet of Things, robots, artificial intelligence and virtual realities into pervasive socio-technological systems – namely, societal structures and orders that, through the use of technology, transform profoundly the way humans interact, work and live (Bridle, 2018; Greenfield, 2017; Harari, 2016; Mayer-Schönberger & Cukier, 2013).

More generally, socio-technological systems have been defined as ‘relatively stable and influential modes of human–technology interaction’ (Scherer et al., 2023, p. 410). In the new information age, digital technologies are shaping this interaction in unprecedented ways. They can offer new benefits and conveniences to users (Harcourt, 2015), from promising ‘increasingly autonomous ways of working and living’ (de Vaujany et al., 2021, p. 675), to curing diseases or addressing disabilities (Musk & Neuralink, 2019) and enabling sustainable development (Stock et al., 2018). At the same time, they have been found to establish opaque systems of surveillance and control that are ‘becoming mobile, flexible, pervasive and unbounded’ (de Vaujany et al., 2021, p. 675). Such systems intrude in private and social spaces in non-transparent and largely unregulated ways, creating dependencies and power imbalances without democratic control. Their users are often unaware that they are being manipulated by mechanisms they do not understand and for purposes they do not know. This new socio-technological system has been described as ‘surveillance capitalism’ (Zuboff, 2015, 2019, 2022).

More profoundly, use of digital technologies such as ICT platforms (infrastructures) seems to have perverse effects – leading not to an increase in individual autonomy, as hoped for,

but to a *loss* of it. Furthermore, it is a loss to which people voluntarily ‘agree’, by opting in, lured by the attractiveness of everyday conveniences (Harcourt, 2015) and unaware of underlying structures and processes that are beyond their control but are, in turn, insidiously controlling them (Lanier, 2018; West, 2019; Zizek, 2020). Fundamental questions such as who knows what, who decides, and who decides who decides (see Zuboff, 2019: pp. 181–182) are no longer democratically agreed upon, as the resulting governance systems are de-personalized and operate outside democratic entitlement and scrutiny. Beyond intruding on people’s privacy and eroding their social and political autonomy, such systems can corrupt independent thinking. While democratic institutions and structures may still be present in the *polis*, the citizens populating it are in danger of losing the critical-reflective abilities required to exercise public self-governance in a democratic society (Cohen & Fung, 2021; Crouch, 2004; Dryzek et al., 2019).

We contend that a deeper cause underlying the loss of autonomy observed and critiqued in the extant literature is the erosion of humans’ capacity for using reason in individual and collective decisions. We hereby label as ‘*organized immaturity*’ precisely this erosion of human capacity for the public use of reason, under the pressures of socio-technological systems (see also Scherer & Neesham, 2021, 2022; Scherer et al., 2023). It is a ubiquitous phenomenon that requires careful examination, together with the role of organizations and organizing in promoting or inhibiting it. Understanding and explaining this phenomenon is, we argue, crucial to developing a critical theory of surveillance capitalism.

While the societal diffusion of digital technologies has progressed rapidly, with significant effects on individuals’ social relations and consciousness, critical organizational analysis has yet to catch up and explore these developments (Trittin-Ulbrich et al., 2021). Recent in-depth studies of the causes of surveillance capitalism and their systemic effects (Zuboff, 2019, 2022; see also Gigerenzer, 2022; Kitchin, 2022;

West, 2019; Zizek, 2020) provide a wealth of empirical evidence about how such effects are generated, and (to a lesser extent) about the role of organizations in these processes (Harcourt, 2015). However, clear theoretical foundations for critiques of surveillance capitalism as a socio-technological system and for suggestions to reform it are yet to be established. Some studies (see, e.g., Flyverbom et al., 2019; Trittin-Ulbrich et al., 2021; West, 2019) lack explicit theory, while others refer to critical-theoretical sources in general terms, without developing specific applications – see, e.g., de Vaujany et al. (2021) and Harcourt (2015) on Foucault, Harcourt (2015) on Deleuze, Zizek (2020) on Hegel and Lacan, and Zuboff (2015, 2019) on Arendt. We therefore emphasize the need to develop a specific critical theory of this new form of capitalism, to better understand its transformations and to identify measures for protecting and strengthening the individual's autonomy – not only as a matter of private well-being but also, more comprehensively, as a necessary premise for increasing one's capacity for public reason and, with it, one's proper exercise of citizenship and democratic governance.

Essential to the effectiveness of a critical theory of surveillance capitalism is, we argue, a thorough understanding of the phenomenon of organized immaturity. To advance this understanding, we are seeking to: (a) identify the ways in which surveillance capitalism as a socio-technological system organizes immaturity in human individuals and collectives; (b) define the individual abilities and public deliberation principles needed to exercise maturity in private and public life; and (c) apply these principles for collectives of mature citizens as a guide to nurturing and protecting individual maturity and democratic society from emerging patterns of influence and control generated by surveillance capitalism.

To achieve objective (a) above, we examine Zuboff's concept and critique of surveillance capitalism, focusing on her observations and illustrations of the 'Big Other' – namely, the opaque and uncontrolled authority that emerges

from digital technologies, shaping the consciousness and behaviours of humans (Zuboff, 2019, p. 20). We select from Zuboff's (2015, 2019, 2022) critique those illustrations that specifically indicate immaturity as hereby defined. From this evidence we identify three emerging patterns – namely infantilization, reductionism and totalization – that characterize surveillance capitalism, in that they lead to the erosion of maturity and subordinate the autonomy and power of citizens to forms of governance by impersonal systems that operate beyond democratic control. However, in critically summarizing Zuboff's work, we identify a lack of critical theory to explain, and suggest systemic countermeasures for, the maturity-eroding effects of surveillance capitalism. While we acknowledge that Zuboff (2022) does suggest institutional regulatory countermeasures to abolish surveillance capitalism, we note the need to further theorize and apply countermeasures to organized immaturity, in order to make Zuboff's project possible.

To fill this theoretical gap and achieve objective (b), we refer to Habermas's theory of communicative action (Habermas, 1984, 1985) and his analysis of the communicative conditions of the individual and her moral development (Habermas, 1990, with reference to Kohlberg, 1981). Our purpose is to formulate normative-theoretical principles for the exercise of public reason by individuals and collectives in democratic governance. However, for an adequate understanding of Habermas's assumptions about the individual abilities and skills required to exercise maturity in interaction with others in public matters, we build on both Kant's mentalist and Hegel's historicist approach, guided by Habermasian critique (Habermas, 2003). This analysis enables us to utilize the Habermasian concept of communicative reason as the foundation of critique and reform of social relations, supported by the Kantian concept of the rational self and the Hegelian concept of the socio-cultural embeddedness of individuals and their interactions. In this context, we identify three Habermasian principles that define what we may call *socialized maturity* (namely, reversibility of

standpoints, inclusion, and reciprocity) (see Habermas, 1990, pp. 122 ff.), which must be supported by three Kantian principles that define what we may refer to as *introspective maturity* (namely unprejudiced thought, enlarged thought, and consecutive thought) (see Kant, 1790/1914, § 40). This framework combines key conditions for the mature use of reason in socialized settings (such as public deliberation) with key individual abilities for reflective-introspective thinking.

Finally, to reach objective (c), we apply the Habermas–Kant framework developed here to suggest avenues for organizational change and societal reform that push back on the forces of surveillance capitalism and help to counteract infantilization, reductionism and totalization – and to foster maturity (in both individuals and democratic collectives). By applying this framework, our analysis provides a consistent theoretical basis for Zuboff’s (2015, 2019, 2022) macro-level critique of surveillance capitalism and a focus on the individual maturation process as embedded in the communicative conditions of digital society (see Habermas, 2022). Our aim is to lay the foundations for a critical theory that not only defines and explains the phenomenon of organized immaturity but also facilitates more radical and effective solutions to combat and prevent it.

Surveillance Capitalism: An Evaluation Of Zuboff’s Critique

While we also acknowledge the works of others, we mainly focus on Shoshana Zuboff’s (2015, 2019, 2022) seminal book and papers – as these contain, to date, some of the most elaborate, influential and frequently cited critiques of today’s digitalization-mediated society. Zuboff (2015, p. 75) defines *surveillance capitalism* as a ‘new form of information capitalism [that] aims to predict and modify human behavior as a means to produce revenue and market control’. This development has the potential to submit humans’ individual autonomy to the control of the Big Other, an opaque apparatus

driven by technological advancements, the profit motives of business firms and the immediate desires of billions of users who subscribe and connect to it in search of enhanced conveniences in their economic, social or everyday life. Despite the alluring improvements offered by this technology to human living conditions (see Harcourt, 2015; Gigerenzer, 2022), the Big Other influences individual behaviour in non-transparent ways, for purposes that serve the economic and political interests of actors who are not accountable to others and who largely operate beyond democratic control systems and the rule of law (see also West, 2019).

The connectedness of people and tools via the Internet is ubiquitous: virtually any social interaction, economic transaction or physical movement of individuals finds its way into the big-data inventories of information and communication technology (ICT) firms (Trittin-Ulbrich et al., 2021; West, 2019). The grip of this trend is overwhelming, as individuals are rendered powerless if and when willing to separate themselves from this networked process of data generation and accumulation. As a consequence,

nearly every aspect of the world is rendered in a new symbolic dimension as events, objects, processes, and people become visible, knowable, and shareable in a new way. The world is reborn as data and the electronic text is universal in scale and scope. (Zuboff, 2015, p. 77)

While digitalization enthusiasts largely welcome this development and emphasize its benefits for both individuals and business actors due to the decrease in transaction costs (e.g. Varian, 2010, 2014), others (such as Bamberger & Mulligan, 2015; Eubanks, 2018; Harcourt, 2015; West, 2019; Zuboff, 2019) are highly critical of its implications for liberal society and democratic governance. The main concern is that data are collected ‘typically . . . in the absence of dialogue and consent’, by way of ‘intrusion into undefended private territory until resistance is encountered’ (Zuboff, 2015, p. 78). As much of this data is personalized, it

can be analysed and sold to advertisers for micro-targeted ads in order to influence users' purchasing decisions. This creates markets in behavioural control, 'composed of those who sell opportunities to influence behavior for profit and those who purchase such opportunities' (Zuboff, 2015, p. 85). In this process, the behaviour of users of digital conveniences becomes a commodity (Zuboff, 2022).

Through systematic and continuous *experimenting* with algorithms and a large number of users and interactions, Internet firms can develop comprehensive surveillance and influence tools to perfection (Zuboff, 2019, 2022; see also Eubanks, 2018; Harcourt, 2015). The influencing may take clearly undemocratic forms, as is the case of social media organizations and clandestine hacking service firms found to be involved in manipulating voting behaviours and political choices (see Lanier, 2018 and Zuboff, 2019, on Cambridge Analytica; The Guardian, 2023, on 'Team Jorge').

Varian's (2010, 2014) transaction cost saving argument in favour of the new technologies is criticized by Zuboff on the grounds that our perspective on the social costs of economic transactions should be expanded to include loss of individual autonomy, social trust and shared democratic values (Zuboff, 2022). Influenced by Arendt (1958/1998), Zuboff argues that complete technological control of information about users is undesirable: the 'impossibility of perfect control within a community of equals' is the 'price of freedom' in a liberal society (Zuboff, 2015, p. 81), because mutual social contract, no matter how imperfect, is to be preferred to a reduced level of freedom 'given under the condition of non-sovereignty' (Arendt, 1958/1998, p. 244). In the context of surveillance capitalism, individual freedom and autonomy are restricted and controlled, in unprecedented ways, by the opaque functioning of algorithms that determine the choice architectures of individuals. Consequently, the aggregate effect of users' voluntary actions is inescapable conformity with these choice architectures.

Zuboff's critique of 2019 highlights three unprecedented effects of surveillance capitalism on human society: insistence on privileging 'unfettered freedom *and* knowledge' (Zuboff, 2019, p. 495); generalized loss of social reciprocities between people; and promotion of a new type of 'collectivist' society whose material life is supported exclusively via transactions governed by the Big Other, while the rest of human complexity is treated with 'radical indifference' (Zuboff, 2019, p. 376). This radical indifference refers to the instrumentarian power of Big Other technology to reduce 'human experience to measurable observable behavior while remaining steadfastly indifferent to the meaning of that experience' (Zuboff, 2019, pp. 376–377). These three effects lead Zuboff to conclude that 'surveillance capitalism must be reckoned as a profoundly antidemocratic social force. . . a form of tyranny that feeds on people but is not of the people' (Zuboff, 2019, p. 513). Loss of democracy is primarily interpreted as an aggregate loss of individual autonomy and voice, an unprecedented denial of the historical 'achievements of the individual as a source of autonomous moral judgment' (Zuboff, 2019, p. 516).

Zuboff's ideas of 2015 to 2019 are integrated and further developed in a 'unified field perspective' elaborated in her *Organization Theory* article of 2022 (Zuboff, 2022, p. 10). Her conclusion that surveillance capitalism is a systemically anti-democratic social order is supported by updated evidence and the theoretical framework. Zuboff (2022) suggests that governance and control deficits are the result of the overarching effects of the imperative economic logic that from the beginning is built into surveillance capitalism as a socio-technological system. In her new paper she describes the progression of economic operations, governance modes and social harms along four consecutive stages: (1) the *commodification of human behaviour* via the unlimited extraction of data; (2) the *concentration of computational knowledge* of production and consumption; (3) the development of tools for *remote behavioural actuation* for behavioural influence; and finally,

(4) a *systemic dominance of surveillance architectures* that fend off democratic control and themselves take over total control of governance. Zuboff argues that later-stage harms, such as misinformation, can only be moderated by a strengthening of the democratic order via a modification of the economic operations in the earlier stages.

Although progressing significantly from a local-individual level (2019) to a global-institutional level (2022) by engaging in analysis of the institutional contest between surveillance capitalism and liberal democracy, the reforms proposed by Zuboff (including the most radical ones) still depend on the capacity of individuals to recognize and resist the dominant forces of surveillance capitalism. Yet, given the overwhelming evidence (provided in abundance by Zuboff and others) that the forces of surveillance capitalism exercise control on individuals at subliminal levels, it is unclear how and where individuals may be able to find adequate inner and social resources to lead the institutional revolution required to (re-)establish democracy in an information civilization.

To make the most of Zuboff's evidence and recommendations, her critique must be continued with a specific analysis of the deeper effects of surveillance capitalism on the consciousness and behaviours of its citizens. In this context, we argue that there is more to surveillance capitalism effects than conformity (as loss or lack of information integrity, autonomy, reciprocity and genuinely human experience, as illustrated above). More fundamentally, there is a loss or lack of maturity understood, in a Kantian (Kant, 1784) sense, as a capacity for public reason – where public reason is defined as the individual's exercise of reason for collective benefit, and in relation with, other individuals, as a competent citizen in a community of free and equal people able to govern themselves. Thus defined, an immature person who may have her autonomy guaranteed within a particular socio-technological system is still missing the inner will, knowledge and/or skills to exercise it. We therefore need to take a closer look at those specific aspects, or *emerging patterns of surveillance capitalism*, that induce and organize immaturity

as erosion of individuals' (both personal and socialized) abilities to use public reason. This is to better understand what impacts of socio-technological systems need to be resisted and/or avoided, at both individual and collective levels.

Organized Immaturity in Surveillance Capitalism: Emerging Patterns

The evidence gathered by Zuboff and others (e.g. Bamberger & Mulligan, 2015; Bridle, 2018; Broussard, 2018; Eubanks, 2018; Harcourt, 2015; Hari, 2022; West, 2019; Zizek, 2020) suggests a number of emerging patterns that characterize surveillance capitalism. In our present analysis, we are specifically interested in those patterns that induce organized immaturity. Our examination identifies three main types of systemic patterns that have this effect. First, we refer to patterns that induce subordination of individuals' judgement to external judgement by systems, algorithms and/or machines that 'know better', and label this category *infantilization*, by analogy with constraining a mature person into the role of a child who must obey parental authority. Second, as is evident from Zuboff's analysis, there are patterns that reduce individual human complexity to datafiable and commodifiable information, thus leaving out important adaptable human abilities for reflective engagement in public life, and we refer to these as *reductionism*. Third, we label as *totalization* those patterns that extend datafication and surveillance processes to all aspects of an individual's life, to influencing human behaviour and predicating the whole system's ability to determine human living conditions based on its complete, unfettered access to all users in the served (i.e. datafied) population. We summarize these patterns below, illustrating how they induce and organize immaturity in humans.

Infantilization

Zuboff (2019) documents instances of infantilization as dependency behaviours seeking

protection from uncertainty and responsibility. Increasingly pervasive social media practices turn individuals of all ages into adolescents dominated by the pressure of others (p. 465). Aspirations to promote human society as a forum for asserting one's individuality are replaced with aspirations to conformity with the behavioural hive. Fear of missing out and fear of exclusion from the hive operate as control mechanisms that keep individuals 'aligned' with the logic of the new socio-technological system, and thus erode their autonomy (pp. 465–466; see also Hari, 2022). The author remarks that the physical time span (measured in years) of 'emerging adulthood' has visibly increased in the recent generations of 'digital natives' (pp. 452–453), generalizing a 'homing to the herd' mentality and resulting in a weakened ability to differentiate oneself (as one's self) from others.

Infantilization effects of technology are not new. Pre-21st-century critiques have highlighted the propensity of modern socio-technological systems to 'decide' on behalf of individuals and thus significantly restrict spaces for autonomous decisions. Such systems push individuals into a pre-mature stage, whereby they wish to 'escape from freedom' (Fromm, 1941/1969) and, instead, rely on the directives of an authority that suppresses or controls their individuality either by setting restrictions and incentives for behaviour or by corrupting their consciousness. In this way, the individual maturation process is distorted, and even reversed (Habermas, 1990; Kohlberg, 1981; Selman, 1981). As a result, human beings are likely to be severely restricted or even prevented from developing moral consciousness and cognitive, communicative and social capacities that are constitutive of mature individuals as competent and enlightened members of democratic society (as described in Habermas, 1990).

Organization studies have also emphasized similar unprecedented infantilization effects of digitalization in the workplace, e.g. fear of exile (Hafermalz, 2021). However, in the absence of explicit antidotes, we contend that focusing on a revival of the Enlightenment project of achieving human maturity as independent (autonomous)

exercise of public reason is essential for organization research to advance theory in an effective emancipatory direction.

Reductionism

Zuboff (2019) illustrates how comprehensive automation creates *radical indifference* as 'observation without witness' (p. 376) – namely, a form of 'knowing' about the individual without comprehending the human meaning of his or her experiences (see also Zizek, 2020). In this way, the human being is reduced to a set of predictable behaviours (see Alaimo & Kallinikos, 2017). At the same time, the new socio-technological system focuses on aspects that are built into their inner logic (i.e. the economizing on the commodification of human behaviour) while neglecting aspects that may be of significance for individuals (Lanier, 2018; Zuboff, 2019, 2022). This adds to the autonomy-eroding effect of infantilization: rather than being able to exercise reason independently, humans' minds are conditioned, beyond individual control, in ways that serve the priorities of the socio-technological system.

Surveillance capitalism thus also erodes social relationships and fosters 'instrumentarian collectives': individuals are connected and controlled via a ubiquitous infrastructure that automatically collects big data on individual and collective behavioural patterns. This data is fed into an AI architecture that not only predicts but creates incentives to steer and control behaviour, so that this capacity to influence individual and collective behaviours can be economized and sold to third parties without the targets' awareness (Zuboff, 2019, pp. 416–444; see also Gigerenzer, 2022). Consequently, individuality diminishes and makes room for controllable 'organisms' (Zuboff, 2019, p. 365) that display patterns of predictable swarm-like behaviour: 'the automation of the self as the necessary condition of the automation of society, and all for the sake of others' guaranteed outcomes' (Zuboff, 2019, p. 382).

Forms of socio-technological reductionism have been criticized in the past – for example,

by Marcuse (1964) in his book *One Dimensional Man*. However, what is unprecedented now is the ability of new technologies to replace functions such as experience, consciousness and understanding with algorithmic imitations of these functions, and to influence humans into adopting these imitations as if they were originals (or to make them perform even better than the originals, as suggested by Zizek, 2020). Organizational scholarship has noted the exploitive nature of social media and its tendency to reduce participants to sources of free labour (Beverungen et al., 2015), to trackable consumers (Martin, 2016), to disembodied presences in virtual space (Hafermalz & Riemer, 2020) or to ‘basic objects’ (Alaimo & Kallinikos, 2021, p. 1385). It is therefore timely that organization studies should research forms of reductionism induced by new technologies.

Totalization

Building on Zuboff’s narrative, the emergence of surveillance capitalism can be summarized in terms of three consecutive stages of socio-technological development (see also Scherer et al., 2023), with cumulative effects toward total surveillance and control: voluntary connection and data sharing; fragmented external surveillance; and integrated external surveillance. The *first stage* (voluntary submission) is illustrated by the advent of IT and social media platforms such as, respectively, Google and Facebook, to which users deliberately subscribe (Harcourt, 2015). While the explicit narrative is positive and imbued with an air of objective inevitability, key decisions about how these systems are being used by a few to extract economic rents and to control the many are not transparent, not democratically arrived at, and not sufficiently regulated by national or transnational law (Lanier, 2018). The *second stage* (fragmented control) involves a system such as the Internet of Things (IoT) – namely, a network of physical objects with sensors that collect data to be exchanged on the World Wide Web. The IoT is an enabler of conveniences and, at the same time, an uncanny, possibly illegitimate, ‘decision-maker’ and ‘moral agent’ in our

lives (Lanier, 2018). Unlike the first, these second-stage systems do not require individuals to be subscribed to platforms. The systems collect data in passing, often leaving targeted individuals largely unaware of the surveillance procedure. Scholars are warning against privacy threats, and also against the potential for extending social control and political manipulation to non-subscribers (Lanier, 2018; Wachter, 2018; Zuboff, 2019). The *third stage* (integrated control) involves integrating the various data-collecting points and positioning the IoT to operate at both collective (e.g. from city to national) and individual (e.g. brain–machine interfaces) levels. Illustrative here is the concept and practice of Smart City – a fascinating idea with an equally powerful dark side that advances the fragmented systems of the second stage to fully integrated systems of surveillance and control (Bär et al., 2020; Vanolo, 2014). IoT networks with terminals in key City areas collect data from citizens, devices, buildings and other resources. This big data is processed and analysed (via machine learning) not only to observe but also to manage a multitude of dynamic urban systems (e.g. transport, utilities supply, waste management, crime policing, hospitals, schools). Beyond communicating data, these systems also decide and act, embracing the entirety of social life, and comprehensively monitoring and controlling individual behaviours. This potentially erodes individuals’ autonomous thinking and ability to control their own social environments (Colding & Barthel, 2017; Krivý, 2018), leaving them hardly any possibility to escape the systems’ enormous influence. Accordingly, integrated ICT systems condition and shape not only human behaviour but also human consciousness.

The totalizing propensities of modern technologies have already been critiqued by authors such as Arendt (1958/1998), Marcuse (1964) and Foucault (1982, 1984). However, what is new now is the insertion and intrusion of technology in aspects of human life previously ignored and unscrutinized by totalizing systems. Literally, surveillance technologies are reaching ‘under our skin’ (Harari, 2016; Musk & Neuralink, 2019; Zizek, 2020). Organization

research has noted that new ICTs tend to submit all facets of human lifeworld to the totality of absolute standpoints, be it the rationality of the capitalist economic system or the doctrine of a political or religious ideology that leaves no alternative (de Vaujany et al., 2021; Fleming & Sturdy, 2011; Hancock & Tyler, 2004). Whereas, in totalitarian states of the pre-digital age, private realms were retreats where individuals could partly separate themselves from the forces of the surveilling apparatus, in surveillance capitalism the ubiquitous technical devices and IoT connecting points dilute and overcome the barriers between the private and the public (Trittin-Ulbrich et al., 2021). This process is intensified by private and state organizations colonizing the personal, autonomous spaces of employees or citizens in the name of meeting individual needs or serving collective interests. As a result, individuals are stripped of the potential to create their own future (Zuboff, 2019, p. 524).

In examining these three effects of surveillance capitalism on human individuals and society, we also note the unprecedented result of their combined actions, which reinforce each other and augment their domination beyond the simple sum of the parts. It is not just that there is little room left for individuals to protect their privacy and autonomy. Our deeper concern is that erosion of individuals' capacity for public reason has generalized the success of impersonal systems in escaping social control and public accountability, thus posing unprecedented challenges to rule-of-law democracy. The presence of organized immaturity also explains how the values of democracy can be compromised while traditional democratic processes are still in place: generalized individual behaviours that are devoid of requisite maturity to exercise public reason can render democratic institutions powerless and meaningless.

In this context, the question to be raised is: Do we have the right concepts and theories to explain organized immaturity well enough so that effective avenues for emancipation could be created?

Building a Conception of Organized Immaturity for the Information Age

While the power of surveillance capitalism to induce and organize immaturity is unprecedented, the good news is that human society has a history of technocratic challenges to its democratic institutions, at least since the 18th-century European Enlightenment as its modern expression. To build up a concept of organized immaturity that can adequately capture the realities of surveillance capitalism, we refer to Habermas's (1990) concept of maturity as derived from Kohlberg's (1981) model of moral development. However, Habermas's definition of maturity as individual behaviour that is socialized for the purposes of democratic citizenship and governance cannot be properly understood without reference to its historical legacy, anchored in Kant's introspective conditions for individual maturity and in Hegel's conception of the individual as socio-culturally embedded and historically shaped. To fully understand Habermas's conception, we engage in a brief genealogical examination of the concept of (im)maturity, in a semantic build-up from Kant and Hegel to Habermas following Habermas's argument as developed in his seminal paper collection *Truth and Justification* (Habermas, 2003).

Kant's mentalist conception of (im)maturity

The problem of immaturity was identified and examined as soon as the Enlightenment project of modern democracy took shape. In his *Critique of Judgement* (Kant, 1790/1914), Kant formulates three maxims as necessary conditions for the development of autonomous human beings (Kant, 1790/1914, § 40; see Clarke & Holt, 2010; Fleischacker, 2013, p. 22) – 'to think for oneself; to put ourselves in thought on the place of everyone else and; always to think consistently' (Kant, 1790/1914, § 40). We can elaborate on these maxims and formulate three principles of maturity: (K1)

unprejudiced thought means that mature individuals need to rely on their own judgements rather than passively adopting the view of authorities, so-called ‘guardians’; (K2) *enlarged thought* means that mature individuals need to transcend the peculiarities of their ‘subjective private conditions’ and reflect upon their own judgements ‘from a *universal standpoint*’ which can only be determined by placing oneself ‘at the standpoint of others’ (Kant 1790/1914, § 40) and, therefore, subjective judgements are not taken for granted but continually reexamined through the imagined view of others in search for new alternatives, improved judgements and better solutions; and (K3) *consecutive thought* allows individuals to think consistently and to create links between the two other maxims based on logical coherence and fundamental epistemic and moral premises. As all three principles refer to an individual’s ability to engage in independent reflective thinking (or introspection), we may refer to this kind of ability as *introspective maturity*.

In contrast, the immaturity described by Kant represents the lack of introspective maturity required to effectively apply the above-mentioned principles – or at best a loss, limitation or erosion of this ability. In the German original of his seminal text ‘Was ist Aufklärung?’, Kant uses for immaturity the term *Unmündigkeit*, and not *Unreife* (which is connected to age and aging). Thus, following Kant, we understand immaturity not as a biological development stage but as a state of mind, ‘a lack of understanding’ that does not simply go away by aging but results ‘from the lack of resolve and courage to use one’s reason without the guidance of another’ (Kant, 1784, p. 481, translation by the authors),¹ where this independent reasoning refers precisely to the notion of unprejudiced thought, as previously defined.

Yet, given current socio-technical contexts of surveillance capitalism and its three maturity eroding patterns as described above, the three Kantian principles are gradually replaced by unenlightened behaviours and patterns (see above), e.g. (1) letting authorities (what Kant

[1784, p. 481, translation by the authors] called ‘guardians’), such as algorithms and artificial intelligence, think and decide on behalf of oneself (which leads to *infantilization*), (2) applying narrow and mono-dimensional thinking derived from the economic logics of surveillance capitalism (which gives way to *reductionism*), and (3) submitting one’s whole self to absolute standpoints that distort human consciousness in ways that feed the logics of the system (which in turn fosters *totalization*). Together, these three patterns lead to the erosion of autonomous thinking and, as a consequence, facilitate immaturity in humans. Here we are concerned, like Kant when exploring the unenlightened status of his fellow citizens, with the propensity of humans to embrace intellectual immaturity *voluntarily*. Kant describes this kind of ‘immaturity’ as being ‘self-inflicted’ (Kant, 1784, p. 481, translation by the authors).

While informative with regard to the exigences of a mature mind, these Kantian maxims are not sufficient to address the social-interactive requirements for public reason. Even though Kant demands reflection on one’s own judgements through the eyes of others (see the principle of *enlarged thinking* as mentioned above), this reflection is an entirely introspective and monological cognitive process. The Kantian subject does not speak or interact with others but simply imagines what others may say and takes this as a benchmark for her own judgements. Thus, Kant’s approach is largely based on what has been referred to as a ‘mental-ist’ conception of the knowing subject and the knowledge generation process (Habermas, 2003, p. 175 ff., here p. 176).

According to Kant, the rational individual can, through a process of ‘awakening’, recognize her own state of immaturity and, therefore, deliberately shake off autonomy-eroding forces in order to reason freely about her condition and role in society (Fleischacker, 2013). As the power to resist immaturity lies within the individual, so does the responsibility to initiate any project for emancipation and/or social change, even though the state may in Kantian view have a co-responsibility not to prevent such

maturization (see Fleischacker, 2013). Kantian solutions, if they are set into motion at all, are therefore likely to be local and individual-centric, so they will be inadequate for the challenges of surveillance capitalism and the fourth industrial revolution.

Hegelian historicism: (Im)maturity as a product of socio-cultural context

In his critique of Kant, Hegel (1807/2018) argues that, far from reasoning independently, the individual is from the very beginning embedded in a social and cultural world that shapes her consciousness (Hegel, 1807/2018; see Brandom, 2019; Habermas, 2003). Furthermore, while Kant assumes language to be readily available and thus unproblematic, Hegel (1807/2018) conceives of language, labour and social interaction as *media* through which the subject is (trans)formed and learns how to cope with the world. From a Hegelian perspective, there is no need ‘to bridge an original gap’ (Habermas, 2003, p. 182) between the self and the ‘other’, between the internal and the external world, between subjective consciousness and objective reality. Rather, the individual is connected with the world from the very beginning and is functioning as part of it by learning language to signify objects and to communicate with others, and by using tools to create artefacts that ‘work’ in the world. Hegel’s historicism enables us to observe and explain how the immaturity induced by surveillance capitalism is not inflicted upon individuals directly and explicitly but operates subliminally, throughout the social context in which individuals are embedded, via the cultural instruments of language and labour, through the very media by which socialized individuals speak and act.

Yet, nowadays, ‘[s]urveillance and control is something far more immanent to and embedded within our everyday social interactions’ (de Vaujany et al., 2021, p. 677). This also explains why and how immaturity is ‘organized’ through the social institutions of language and labour – through systems that: (a) are infantilizing,

namely produce insecure, dependent, infantilized (and infantilizing) discourse-making processes – see Zuboff (2019) on the psychological needs of ‘homing to the herd’ (p. 467) and the ‘hive mind’ (p. 397); (b) are reductionist, in that they convert human beings into non-autonomous cogs in a (seemingly) deterministic socio-technological structure – see Zuboff (2019) on inevitabilism and instrumentarian power (pp. 195, 395); and (c) are totalizing, as they overtake all aspects of individual human life, including all spaces once consecrated to individual autonomy, and human society as a whole – see Zuboff (2019, 2022) on manifestations of instrumentarianism’s pursuit of totality (Zuboff, 2019, pp. 400–404).

However, despite clear progress from Kantian mentalism, the Hegelian conception can also be critiqued for ‘abandoning’ the subject to the contingency of socio-cultural and historical conditions and for being unable to defend universal reason against the forces of a culture’s embedded distributions of power, rules, values and lifestyles. Accordingly, the individual becomes socialized and develops her subjectivity and self-consciousness (including her maturity) only within the confines of a particular community and its given networks of mutual recognition. Hence, Hegel’s perspective may still not effectively account for resisting organized immaturity – be it in an awakening pre-Enlightenment society (as in Hegel, 1807/2018), the divided society of post-World War I Germany (Popper, 1945), or surveillance capitalist society (Zuboff, 2019, 2022). Critics of Hegelian historicism (see Kieseewetter, 1974; Popper, 1945) have described this position as cultural relativist, able to only embrace and affirm the status quo rather than develop a universal concept of reason and, therefore, lacking a basis for taking critical distance from the received conditions. But Hegel’s lack of confidence in the ability of individuals to drive emancipation is compensated by his ‘conviction that history as a whole follows the path of reason’ (Habermas, 2003, p. 208). In asserting that the development of world history is channelled by the ‘*cunning of reason*’ (Hegel,

1822-1831/2001, p. 47), he imagines a world where all individual goals and actions converge toward the higher end of history, which is realizing reason and individual freedom. Achieving this higher end does not depend on individuals consciously acting toward it.

Against Hegelian premises, Zuboff's (2019, 2022) critical analysis suggests that the emergence of surveillance capitalism, far from being inevitable, can be counteracted and reversed by deliberate, concerted actions of organized citizens who can establish alternative institutions to protect their democracy. It is this documented optimism that encourages us to consider Habermas's approach to deliberative democracy as the most productive theoretical basis for exploring how society's communicative conditions could and should be changed, by purposefully organized collectives of citizens, in order to curb the effects of organized immaturity.

Habermas's communicative conditions for effective exercise of maturity in public affairs

In his conceptions of communicative action, discourse ethics and deliberative democracy, Habermas (1984, 1998, 2021, 2022) has explored the communicative conditions of modern democratic society and their role in individual decision-making and collective will formation in the public sphere. Habermas identifies two conditions as crucial for legitimizing decision-making processes, as well as social and moral norms. He formulates these as normative principles – namely, *universalization* (which requires that all those affected by collective decisions and social and moral norms be included in the communicative processes) and *discourse* (which requires that decisions are based on rational argumentation) (Habermas, 1990, pp. 65–66).² Whenever the comprehensibility, truth, rightness or sincerity of claims made in social interactions are challenged, individuals can check the validity of claims in discourses where arguments for and against are jointly assessed. Rational decisions can then be made based on the provisionally

better argument (Habermas, 1990). While the discourse principle applies to claims made in both private and public affairs, the legitimation of collective decisions demands the application of the universalization principle, i.e. the inclusion of all concerned. These two principles are the main pillars of Habermas's theory of communicative action (see, Habermas, 2022, p. 150, on inclusion and argumentation).

Although real communication situations tend to be distorted, power-laden and non-inclusive (and thus regularly fall short of these strict normative ideals), individuals tend to make a 'counter-factual assumption' and behave *as if* attaining these ideals were in principle possible, through open and rational discourses characterized by freedom to enter the debate, participation with equal rights, absence of coercion, and truthfulness on the part of participants (Habermas, 1995). In post-traditional societies, competent individuals regularly make this counter-factual assumption, having learned through experience that decisions based on reflection, reason and argumentation tend to have (overall) better outcomes than those made impulsively, arbitrarily or solely based on power and authority (Lorenzen, 1995; see also Gethmann, 2022; Habermas, 2003; Scherer, 2015; Wohlrapp, 2014 on constructive ethics).

Furthermore, in democratic societies the normative powers of religious values and feudalistic world views have gradually been replaced by the legitimating force of democratic procedures in which social and legal norms of the prevailing order are contested and advanced on a continuous basis by an exchange of arguments in the public sphere, where citizens deliberate on the validity of social norms, public policies, and other issues of public concern (see Habermas, 2022, pp. 150–151). In such conditions, individuals *presuppose* that the claims they advance can be checked, assessed and verified or falsified, in an inclusive and rational discourse that aims to reach a consensus on what is right or wrong, true or false, sincere or insincere. This occurs even when realizing that actual discourses fail to reach a consensus but arrive at a compromise at best.

Thus, it is the discursive character of the argumentative exchange, and *not* the aim of a consensus (which normally will not be achieved), that secures the quality of the deliberations and contributions (see Habermas, 2022, p. 152).

Accordingly, in order to engage in public reason, citizens need no longer rely purely on a Kantian introspection into their ‘subjective certainties’, nor do they need to accept and obey contingent ‘socio-cultural circumstances’, in Hegelian fashion. Building on Kantian reflective thinking skills, they can engage in democratic procedures that are (more or less) inclusive and (more or less) discursive so that the legitimacy and effectiveness of collective decisions can be checked on a regular basis. *Learning from each other* in critical argumentative exchange ‘enables us to *improve* our beliefs through political disputes and get *closer* to correct solutions to problems’ (Habermas, 2022, p. 152).

The socio-technological conditions of surveillance capitalism undermine the communicative conditions of democratic institutions in various ways (see Habermas, 2022; Lanier, 2018; Zuboff, 2019). In particular, Zuboff (2022) discusses the ‘economic operations’ by which institutions and practices of surveillance capitalism undermine the ‘information integrity’ that is essential to any democracy. As a result, Habermasian rational discourse becomes even less likely, and the communications and results tend to be even more distorted. In technology-mediated communication such as social media, where individuals are targeted by algorithms that aim to predict and control their behaviour to serve the interests of opaque authorities, the ‘targets’ are confronted with fake news and ‘alternative truths’ (Knight & Tsoukas, 2019) but are unable to verify the claims. They find themselves in ‘echo chambers’ together with fellow citizens that think alike and exclude those who think differently – thus violating the universalization principle (which aims for inclusion, even of opposing views, in argumentative exchange). They are also attracted by stimuli that appeal to desires and emotions and largely limit the space for rational discourse as

exchange of arguments – which dilutes the discourse principle. Nevertheless, the theory of communicative action still provides a useful normative framework to critically analyse and eventually change the socio-technological conditions of surveillance capitalism in order to improve communications in public and private realms, guided by discourse-ethical ideals (Habermas, 2022).

The rules of rational argumentation, as advanced in the Habermasian conception, are a *reconstruction* of the pragmatics of those experiences acquired by individuals when they are socialized in, and cope with, challenges in post-traditional societies (Habermas, 2003, 2022; Scherer, 2015). Yet, this social learning process in democratic societies is a precarious project, which can easily fail. This justifies the need to explore the essential communicative conditions that can nurture mature individuals, and to establish whether and to what extent they offer a favourable environment for socialization.

Habermas (1990) engages in this exploration by reconstructing Kohlberg’s (1981) theory of the development of moral consciousness from the perspective of taking communicative action. Kohlberg’s theory, which explains the genesis of mature autonomous subjects along three levels (comprising six stages) of development, while adaptable to different socio-cultural contexts with respect to the ‘content’ of moral rules, claims universality with respect to the ‘form’ of moral judgements (see Habermas, 1990, p. 117). The first two levels of development (pre-conventional and conventional) refer to premature motivations for verifying the rightness of actions – from avoiding punishment to upholding the prevailing social order or the welfare of a particular social group. In contrast, it is only at the third (post-conventional) level that humans exercise maturity – by reflecting on the implications of social conventions, on reasonable foundations for agreement, or on underlying moral principles that may or should be treated as universal. The normative principles of Habermasian communicative action, universalization and discourse (rational argumentation), can only be met at this level.

As individuals gradually develop mature competences for moral judgement and decision-making, they become members of society who can contribute to society not just by complying with the status quo but by reassessing and changing social rules on a continuous basis. For the purposes of communicative action, moral judgements at post-conventional level can effectively apply three principles (see Habermas, 1990, pp. 122 ff.): (H1) reversibility of standpoints, i.e. the potential for ‘changing one’s mind’ and adopting a different position; (H2) inclusion, in the sense of including all concerned in the deliberation and agreement processes; and (H3) reciprocity, i.e. mutual recognition of all participants as individuals who are competent in (and entitled to) reasoning on private and public affairs. The post-conventional judgement abilities characterize what, in contrast with Kantian introspection, may be called *socialized maturity*.

Unfortunately, as illustrated by Habermas (2022, pp. 157 ff.), the socio-technological conditions of surveillance capitalism work against the three principles (H1, H2, H3). Communications are distorted in such a way that: (1) individuals tend to receive news and incentives via social media and embedded algorithms that constrain them to affirm (rather than reverse) their standpoints; (2) these media create communicative barriers between social groups with different identities, thus facilitating exclusion and fragmentation of communicative spaces; and (3) reciprocity is strengthened only in-group, among those who think alike, while the prevailing, subliminally encouraged attitudes vis-a-vis those outside the group (who think differently) is leading to animosity. Together, these distortions lead to ever more divided societal conditions that significantly undermine the mature exercise of public reason. As more and more individuals apprehend fellow citizens with opposing views as enemies and not as equals with valid concerns, communicative action is rendered practically impossible. Thus, open public discourse is under serious threat, not just because the current socio-technological system undermines it – but because individuals

themselves are no longer able to develop the moral and communicative competences needed to become mature members of the communicative community who can actively work to establish (and recurrently re-establish) the communicative conditions required to keep open public discourse alive.

Habermas’s (2022) analysis helps us understand why, in surveillance capitalism, focus on individual resistance strategies (as illustrated by Zuboff, 2019 but critiqued in Zuboff, 2022) is not likely to be effective enough. The communicative approach we discuss here offers guidelines not only for taking critical distance from surveillance capitalism but also for creating and maintaining conditions that allow for more inclusive and argumentation-based opportunities for public deliberation. The challenge we are up against is significant, especially considering the increasing potential of new technologies to take control of human consciousness in such profound ways that humans are not even aware of it (see Zizek, 2020).

To summarize our historical examination of (im)maturity, we started from Kant’s definition of maturity in terms of unprejudiced, enlarged and consecutive thought – in order to account for an individual’s capacity for public use of reason, which is essential for citizens who can assemble into rule-of-law democracies to govern themselves. We infer that, conversely, individual immaturity is characterized by the absence of these three features and (consequently) of such self-governing capacity. However, an effective understanding of organized immaturity (as induced by socio-technological systems) has to be divorced from Kantian mentalism, which assumes the individual as existing somehow separately from her socio-cultural and historical contexts and, therefore, fully capable of achieving maturity by herself and fully responsible for it. Based on the examined evidence of surveillance capitalism patterns, we find ourselves unable to fully subscribe to the narrow premise that the source of immaturity resides entirely within the individual, and that this unenlightened condition is ultimately ‘self-inflicted’ due to nothing else

than a lack of courage to think independently and to act as an autonomous self. We simply cannot ignore either the role of socio-cultural and historical context in the formation of the subject or the hegemonic influences of socio-technological systems on individuals' thinking and behaviour. In other words, a purely Kantian perspective cannot explain how immaturity is *actually organized* – for example, based on the patterns observed to emerge in surveillance capitalism (namely, infantilization, reductionism and totalization).

While Hegel's approach overcomes this limitation, it also assumes that the socio-cultural and historical context is itself totalizing, leaving no room for the individual to distance herself critically from it and to exercise autonomy by resisting and changing it. The Hegelian individual seems to have no choice but to accept the socio-technological status quo as inevitable and immovable. It is this kind of individual that informs, for example, Marx's political economy: 'It is not the consciousness of men that determines their existence, but rather their social existence that determines their consciousness' (Marx, 1859/1904, pp. 11–12). As the individual is therefore unaware of her autonomy to rationally change things, it is rather the capitalist system behind all individuals that steers societal evolution. However, while Hegel (1822-1831/2001) appraises this overall evolution as progress, Marx (1859/1904) regards it as regress. It is therefore not surprising that Marx's approach to addressing this problem is system-level social revolution.

Marxist critiques of technology-supported communication (see Mumby, 2020) emphasize how the resulting social order (defined as communicative capitalism in Dean, 2009) falls short of authentic Habermasian political and institutional conditions for deliberative democracy. Unlike surveillance capitalism, which controls citizens via digitalized observation, communicative capitalism achieves such control by creating the illusion of ultra-democratized communication (via digital technologies), by

fuelling three fantasies (of abundance, of participation, and of wholeness). In contrast with Mumby (2020), who uses a Marxist critique of technology-supported communication to emphasize how communicative capitalism (Dean, 2009) undermines deliberative principles and democratic institutions of collective decision making, we question the possibility of revolutionary forms of Marxist resistance from within a technologically totalizing social order. We find that Marx's system-level revolution approach is not acceptable either, as it does not explain how conceiving of such a revolution at the level of individual subjects is possible in the first place (Hollis, 1991): individuals are captured in false consciousness and unable to enact social change.

Taking distance from both Hegel and Kant, Habermas (1984, 1998, 2003, 2022) abandons the totalizing assumption altogether, and maintains the emancipation of the individual as a feasible project, via rational argument and public discourse. Accordingly, the 'third-way' approach we propose here is one that combines individual resistance with organizational and societal measures to counteract immaturity.

As illustrated in the previous section, Habermas offers a perspective that acknowledges the role of socio-cultural and historical contexts in the formation of the subject, while at the same time formulating principles for autonomous and critical distancing from these contexts, through public discourse, so that social change becomes possible. Consequently, this perspective can both account for organized immaturity, as observed through our critical analysis of surveillance capitalism and its specific forms of organization (namely, infantilization, reductionism and totalization), and provide a normative framework that establishes ideal-type communicative conditions needed to achieve (individual and collective) maturity. We will elaborate on how these conditions can be achieved in contemporary society, especially in the context of (and as an antidote to) governance by impersonal systems in surveillance capitalism.

Counteracting Organized Immaturity

When discussing Habermas's communicative conditions required for democratic governance – namely reversibility of standpoints, inclusion, and reciprocity – we also indicated how surveillance capitalism undermines each of these conditions. Not surprisingly, there is increasing evidence that democratic governance itself is subliminally undermined by a new form of governance, centered on technocratic rationality, and which we label governance by impersonal systems (see, e.g., Beyes et al., 2022; Hayles, 2017). Early symptoms of technocratic rationality understood as prioritizing efficiency of means-ends relationships (Habermas, 1984, 1985) have been signaled in the shift from self-governance by citizens to societal governance by technocrats (Crouch, 2004), and in a proliferation of autocratic leaders capturing democratic spaces via populist and nationalist discourse (Eatwell & Goodwin, 2018; Müller, 2017). But the rise of algorithms and intelligent machines in the governance space takes challenges to democracy and individual autonomy as we know it to a new level ('technological paternalism', see Gigerenzer, 2022). The resulting socio-technological system organizes both undemocratic governance and immaturity in individuals, leaving the latter ill-prepared to challenge the governance shift and, furthermore, priming them to subliminally accept it (Hari, 2022; Lanier, 2018). As a result, '[t]he informed individual is being formed by machine computation' and only 'seemingly sovereign' (Holt & Wiedner, 2023, p. 536, with reference to Chun, 2011). The task of citizenship thus becomes one of finding or creating new resources for maturity, to counteract these effects and to protect and uphold democratic governance.

From a Habermasian perspective, governance by impersonal systems is unacceptable to mature citizens because no open public discourse can be developed in the interactions between (human) citizens and these systems. The control exercised by the latter is not only an

illegitimate form of authority but also an elusive interlocutor, with ill-defined responsibilities and unclear public accountability, against whom voicing objections appears futile. An important reason for this elusiveness is the de-centralized, loosely networked character of these systems – operated by a vast array of business, governmental and other actors, not a single one in control of the full picture. In this context, finding and targeting the opponent becomes extremely difficult (Müller-Mall, 2020).

But the lack of a unique locus of control also means fragmentation, which inevitably creates spaces in between established powers. It is in these spaces that citizens can insert acts of open public discourse not only to engage in mature public reasoning (for example, to re-claim the explicit pursuit of personalized democratic governance) but also to create and maintain the communicative conditions needed to make public reason possible in the first place (Habermas, 2022). An appropriate response to organized immaturity and impersonal governance may then be citizens organizing to produce counteracting, personalized alternatives to technocratic rationality. Let us take a closer look at what it would take to achieve this.

To establish the communicative conditions for democracy in a 'flourishing information civilization' (Zuboff, 2022, p. 53), we argue for the need to foster the three Habermasian principles of *socialized maturity* – namely reversibility of standpoints (H1), inclusion (H2), and reciprocity (H3) – as defined in Habermas (1990). Furthermore, these principles must be supported by the three Kantian principles of *introspective maturity* – namely unprejudiced thought (K1), enlarged thought (K2), and consecutive thought (K3), as previously discussed.

We have already mentioned that the exercise of Habermasian principles of socialized maturity cannot be effective in a democratic state-of-law in the absence of Kantian introspective abilities to think autonomously (in the sense of performing one's own inferences instead of uncritically adopting the conclusions of an external authority), to think from the standpoint(s) of others

(therefore be aware of a plurality of different legitimate standpoints), and to reconcile all their thinking within logically consistent argumentation (therefore avoid self-contradiction). These principles function as indicators or standards of the thinking quality required for effective public use of reason by citizens who are capable of governing themselves through democratic institutions and processes. Without this level of thinking quality, individuals can easily succumb to the rhetorical or psychological dominance of the more powerful, even as Habermasian processes are followed in democratic deliberation. But equally, without the support of Habermasian communicative conditions, the Kantian efforts of individuals may go unrecognized and even punished. Both categories of conditions are needed, working in tandem, to counteract infantilization, reductionism and totalization. Below we provide brief accounts of how socialized and introspective maturity can counteract the infantilization, reductionism and totalization induced by surveillance capitalism. We also mention individual and collective actions that can be recommended to use H1-H3 and K1-K3 as guiding principles for political practice, and also to educate social movement and institutional change leaders who can organize the abolition of surveillance capitalism's current institutions and the creation of new democratic institutions for a flourishing information civilization (as suggested by Zuboff, 2022).

Counteracting infantilization

The genuine exercise of Kantian introspective maturity in the context of Habermasian socialized maturity involves the individual's ability to do the hard work of citizenship thinking on her own (albeit in interaction with others through deliberation), and the courage to fully own up to all her thinking, conclusions and (revised) standpoints. Affirming one's autonomous thinking (K1) in public goes hand in hand with feeling comfortable about having a different standpoint while being included (H2) and acknowledged as a fully, equally legitimate partner in deliberation (H3). This courage is the attribute of citizens

who value their freedom as an existential human condition instead of regarding it as a burden that leaves them unprotected in a world of uncertainty and contestation (see Fromm, 1941/1969). Such citizens are able to resist fears of missing out or urges of homing to the herd (Zuboff, 2019), to recognize infantilization pressures when they feel them, even when the pressures are exercised via impersonal systems (such as digital infrastructures), and to (re)act in order to protect their maturity and have it acknowledged and respected by the governance systems. In an information civilization as defined by Zuboff (2022), the global information and communication infrastructures engaged in public deliberation need to be purposefully modified and/or designed to protect the autonomy of individual standpoints, recognize their legitimacy, and mitigate against their exclusion. This means that the algorithm design process itself needs to be submitted to political processes whose purpose is to respect and protect citizens' rights and democratic values such as truth, common good, and civility (Cohen & Fung, 2021). Whether private actors (e.g. ICT and/or media companies) or state actors (e.g. national broadcasting corporations such as the BBC), those in charge with developing digital infrastructures should exercise this authority only subject to democratic processes of authorization and control when assuming positions of 'responsible stewardship' (Zuboff, 2022, p. 53). Such stewardship should be defined as professional commitment to apply knowledge and technology in the service of a good society governed by mature citizens. This commitment by organizations designing digital infrastructures could take the form of their representatives providing professional oaths of the Hippocratic kind. Accordingly, executive managers of private concerns would be first and foremost committed to fulfilling a public role that would override any private interests, commercial or otherwise. Perhaps it is time for the MBA oath (see Anderson, 2009) to be revisited and adjusted for the purposes of maintaining democracy in a digitalized society. The oath could be articulated specifically to include a commitment to the Habermas-Kant principles of

socialized and introspective maturity as outlined in this study.

Other actions against infantilization could involve citizens coming together to create new forms of resistance to the ‘need’ to conform, or to defer their authority, to ‘parental’ entities. An important part of this project would be the strict regulation of applications of ChatGPT/large language models, as they reinforce over-reliance on the generative powers of algorithms, thus having a negative impact on one’s critical thinking (Fuchs, 2023). A counterforce to the use of such applications is educating (one’s) children as individuals with personal skills that are independent of digital assistance. This would better support their ability to take responsibility for governing themselves and the community in reasonable dialogue with others, based on the Habermas-Kant framework proposed here. Recent studies have already signalled the need to help ‘students become aware and thoughtful about intended/unintended audiences and consequences of digital spaces (e.g., privacy, false information, etc.)’ and to teach them ‘how to practice civic dialog (a public act) when participants are anonymous entities (in private spaces)’ (Lo et al., 2022, p. 11). In response to questions such as ‘what are the norms of digital civic spaces?’, we offer the Habermas-Kant framework as a starting point for shaping digital civic behaviours.

Counteracting reductionism

The key values of diversity and plurality that inspire Habermasian communicative conditions function as essential antidotes to the reductionist effects of datafication and commodification of human behaviour. Mature individuals who come together to organize their public spaces for democratic governance can engage in mutual recognition of enlarged standpoints (H3, K2), include different (responsibly owned) standpoints in public deliberations (H2), and also reverse (change) their standpoints as a result of these deliberations (H1) while maintaining logical consistency (K3). These processes emphasize two crucial features of

Habermasian public use of reason as responsible stewardship: the identifiable, personalized responsibility for public standpoints; and the dynamic, evolving nature of such standpoints as a result of their owners’ participation in public deliberation processes. Habermasian-Kantian principles can thus prevent the radical indifference of digital technology from creeping into public deliberation and governance spaces, in particular, by empowering citizens themselves to recognize socio-technological reductionism when it occurs – be it through assignments of virtual identity as disembodied and artificial constructions of the self, instrumental construction of the digital user as consumer, or illicit extraction of free labour from users. We see our approach as an antidote to cyborgization as a reductive tendency inherent to digitization-assisted organizing, and agree that the ‘cyborg is no longer an exotic metaphor [but] names the fragility of our deepest presumptions of reflexivity’ (Power, 2022, p. 14).

In terms of practical actions, more ‘personalized’ forms of governance should be predicated on recognizing the interdependent complexity of plural roles played by individuals in society and treating this role diversity as open and indefinite. Since the capabilities of technological systems for processing open and indefinite sets are inherently limited, it means that fair governance of such human complexity often can only be performed outside and in-between these systems. Citizens could grassroots-organize public spaces for datafication-free discourse and interactions where multiple roles could be acknowledged (Dryzek et al., 2019; Fast, 2013; Lidskog & Elander, 2010), or engage with experts in Hackathons that, under ideal conditions, can transform citizenship, development and education in a positive way (Endrissat & Islam, 2022; Irani, 2015).

Counteracting totalization

We note that the most entrenched and destructive feature of totalization is the absolute control claimed by surveillance capitalism over individuals’ public, private and inner lives. The

determinacy of choice architectures induced by digitalization and subordinated to commodification logics incapable of acknowledging and tolerating alternatives is what needs to be countered by mature citizens who are capable of creating and maintaining their public deliberation and governance spaces open to autonomous, pluralistic and diverse decision-making on choice architectures prior to any digitalization of such decisions. This would ensure explicit accountability of all responsible factors (Binns, 2018; Brauneis & Goodman, 2018; Danaher, 2016; O’Neil, 2016), made visible by requirements to submit algorithm design to public, democratically legitimized political and legislative processes and institutions (such as Parliaments). Decisions on choice architectures would consider all standpoints, no matter how diverse (H2), as long as they are responsibly owned and promoted by introspectively mature citizens who can reason independently (K1), consistently (K3) and in other-serving (not self-serving) ways (K2). Reciprocal acknowledgment of standpoint legitimacy (H3) would be the ongoing test for accepting evolved standpoints resulting from the deliberations of responsible citizenry (H1). We appreciate that achieving favourable communicative conditions for organized maturity against totalization is not easy – and it is likely to become even harder as surveillance capitalism shapes different ‘consciousnesses’ across generations, thus creating new challenges to public deliberation in open, balanced and civic ways. The culture wars facilitated by the social media in contemporary public life (Boehm, 2022) are early examples of such challenges.

To counteract these effects, citizens can create and engage in ‘sites of listening and reflection’ (Dryzek et al., 2019, p. 1146) based on mutual respect, in an effort to avoid or sidestep the monopolization of the public sphere by surveillance capitalism, and to enact alternative socio-technological systems (such as open governance systems). Against the grand challenge posed by corporate power controlling society, citizens could also apply ‘open strategy’ practices such as ‘collective subpolitics and individualist whistleblowing’ supported by ‘globally networked

professionals’ who could exercise normative pressures on corporations where markets and governments have failed to do so (Whittington & Yakis-Douglas, 2020, p. 1).

Here, effectiveness criteria are informed by deliberative ideals and a focus on the public interest rather than economic rationality or ideologies: transparency, citizen participation, open governance, and personalization of public accountability are key (Cohen & Fung, 2021; Fung, 2013). Since the recognition of pluralism is implicit in the Habermasian communicative approach, these criteria should be applied in the very process of initiating new socio-technological systems, and should also be established as constitutive of these systems – thus allowing a culture of mutual reinforcement to emerge (see, e.g., Fung, 2015).

Making Zuboff’s Project Possible

Zuboff (2022) calls for the de-institutionalization of surveillance capitalism by abolishing the ‘secret massive-scale extraction’ of personal data and surveillance advertising, which she considers to be the core source of illegitimate ‘economic operations, governance takeovers and social harms’ in today’s digitalized society (p. 54). Her radical approach emphasizes the need to create ‘new institutional forms’ and ‘new zones of public governance’ where the principles and values of democratic state-of-law endure and flourish, holding everyone accountable, including governments and markets (p. 54). We support this call and argue that these new zones of public governance should be shaped by the Habermasian communicative conditions we have identified above, in order to avoid ‘the artificial construction of the public square’ (Zuboff, 2022, p. 54). Acknowledging that content moderation within the existing socio-techno-legal structures of digitalized platforms and practices is not sufficient, we are showing how socialized and introspective maturity can ‘produce the conditions in which genuine freedom of expression, social solidarity, common sense, and the integrity of social communications are restored’ (Zuboff, 2022,

p. 55). Beyond legal and technological means to configure digital infrastructures as respectful of the epistemic rights of all citizens, we explore the resources that citizens themselves can draw on, individually and collectively, to ‘stand up’ to democracy-eroding influences of surveillance capitalism and to create new democratic institutions for the information age. While Zuboff singles out journalists and lawmakers as key actors in this radical transformation, we focus on how each (ordinary) citizen can actually mobilize and organize inner and deliberative resources for public reason, to exercise maturity and to create, maintain and enhance the communicative conditions for democratic governance in a digitalized society. Our application of principles H1-H3 and K1-K3 in counteracting organized immaturity has been developed in this spirit.

In addition to individual citizens, we emphasize working organizations as sources of change and sites for learning and experimenting with social norms. Organizational ethics (which can be guided by our proposed Habermasian-Kantian framework) plays a crucial role in the democratic governance of information age society. While Zuboff’s call for the institution of appropriate laws is timely, one must not forget the significant labour typically required from ethical norms to change culture before it becomes policy before it becomes law (see, e.g., Stone, 1975). From organizations to social movements, labouring at the ethical frontier of knowledge and technology to bring about the right laws and institutions requires design and deliberate effort. Furthermore, in proposing our framework to steer and support community-wide social and political action, we are aware that most states are not rule-of-law democracies, and therefore the emergence of appropriate legislation protecting citizens’ rights is even less likely, and the struggle of organized citizens and social movements even more necessary and intense (Scherer, 2018).

New ways to act collectively for systemic change should promote public dialogue processes that are actively based on Habermas’s normative principles of universalization and

rational argumentation, thus producing discourse that allows for reversibility of standpoints, inclusion of all (and especially dissenting) voices, and reciprocity as mutual recognition of everyone’s legitimate status for participation in democratic governance. In a digital society, establishing and maintaining these principles require specific, additional effort from the state, the media, businesses and ICT firms in particular, non-governmental organizations (NGOs) and social movements – all working together as key role players in complex cross-sector governance networks (Cohen & Fung, 2021; Scherer et al., 2023).

Accordingly, in addition to Zuboff’s (2022) recommendations for new laws and institutions, we suggest that *the state* has a crucial responsibility to facilitate and protect free access for open public debate, where all communicative conditions of a democratic society (as discussed in this paper) can be applied and maintained (see, e.g., Cohen & Fung, 2021; Habermas, 2022). Habermasian-Kantian principles can also provide a normative foundation for new or reformed codes of journalism and *media* ethics, including the social media (Ward, 2019). Alternative social media platforms could be organized, for instance, to create virtual spaces that foster civic learning and public decision-making using our proposed framework, in order to provide ‘high-quality information’ (see Cohen & Fung, 2021, p. 47).

As corporate citizens, *businesses* can mobilize stakeholder dialogues based on Habermasian principles, thus engaging in public discourse to address issues of public concern, and multiplying opportunities for participants to develop individual maturity (see, e.g., Fung, 2003; Schouten et al., 2012; Whelan, 2013; Whelan et al., 2013). Furthermore, *NGOs* could initiate and lead new *social movements*, to stimulate citizens to educate themselves and each other in demanding and creating appropriate communicative conditions in all key processes of societal governance. As these conditions are inherently adverse to communication with (and within) impersonal systems, an indicator of progress toward the Habermasian

discourse is collective monitoring of how personal accountabilities for key governance processes and outcomes are assigned. Such a movement would create the resources to resist governance by impersonal systems and, instead, promote governance by mature citizens through judicious exercise of public reason (Cohen & Fung, 2021; Habermas, 2022).

According to Power (2022), Zuboff's work of 2019 could be read in the tradition of critical theory and the (early) Frankfurt School. Echoing Habermas (1984, 1985, 2022), we depart from the early critical theory of Horckheimer and Adorno to build on a critique of surveillance capitalism in order to provide a theoretical and ethical justification for reform. We argue that, without a culture of Enlightenment as common practice of maturity and resistance to organized immaturity, to produce citizens who are well-prepared to uphold the values of democratic life, Zuboff's (2022) call for an institutional revolution to abolish surveillance capitalism will remain mere utopia.

Conclusion

Building on contemporary critiques of surveillance capitalism, we have examined evidence of negative effects of surveillance capitalism on both individual human development and societal governance. Our conclusions can be integrated into a theory of organized immaturity, which asserts that, under surveillance capitalism, individuals participate voluntarily in a systematic erosion of their capabilities for public use of reason, thus leading to an erosion of democracy. Manifested through infantilization, reductionism and totalization, this effect accounts for (but is more profound than) loss or lack of autonomy. Furthermore, immaturity is organized, in that it is systematically induced in individuals through subliminally invasive technologies that take unprecedented control of personal living spaces. This large-scale organization of immaturity primes citizens to implicitly accept governance by impersonal systems as a substitute for democratic governance.

Using Habermasian principles of socialized maturity as supported by Kantian introspective maturity and Hegelian historicism, we lay the foundations for a normative theory of organized maturity that contains guiding principles for developing countermeasures to surveillance capitalism, and new, viable forms of democracy in a digitalized society. Individuals' capabilities for public use of reason can thus flourish in communities where means for withdrawing into personal spaces and dimensions, away from the digital gaze, co-exist with means for personalizing societal governance processes and outcomes, keeping them within the reach and scrutiny of its (human) citizens. Organization theory and business ethics have a crucial role to play in advancing our understanding of how individual and collective human action can be further organized to foster the communicative conditions needed for mature citizens to not only practice democratic governance but also strengthen and safeguard it against destructive effects of surveillance capitalism.

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Notes

1. All original quotes taken from Kant (1784; *Was ist Aufklärung?*) have been translated by one of the authors. Some of the historical Kant translations contain ambiguities that are potentially misleading.
2. According to Habermas, these principles represent the normative conditions for the discursive justification of social and moral norms: '[. . .] every valid norm has to fulfill the following condition: (U) All affected can accept the consequences and the side effects its *general* observance can be anticipated to have for the satisfaction of *everyone's* interests (and these consequences are preferred to those of known alternative possibilities for regulation). [. . .] (D) Only those norms can claim to be valid that meet (or could meet) with the approval of all affected in their capacity as *participants in a practical discourse*.' (Habermas, 1990, pp. 65–66, emphasis in the original)

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