Digital Freedom – Opening up the Debate

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Contribution for Morals & Machines (forthcoming 2022)

Abstract

This paper contributes to the normative analysis of digital technologies and data-driven practices by broadening the analytical perspective on freedom. Many contemporary discussions of the digital context tend to operate with a relatively narrow conception of freedom, which center on the absence of interference. While this approach is in line with liberalism's on-going paradigmatic standing in much of the Western world, we argue that digital theorists have much to gain from opening their discussions to social and positive conceptions of freedom. Drawing on the work of Axel Honneth and John Christman, we show how such a change in perspective gives rise to new considerations for freedom in the digital context, such as collective self-determination, capabilities, and mutual recognition. Building on these ideas, we sketch three demands that follow from such an inclusive conception of freedom: empowering people via new forms of political participation, increasing diversity and collective awareness in the digital industry, as well as using progressive political regulation to unleash digital technology's social potential.

Keywords: *Digital Technologies, Ethics, Political Theory, Positive Freedom, Social Freedom*

1. Introduction

The emergence of digital technologies, data-driven practices, and informational capitalism as an economic imperative[2], has introduced a variety of social and ethical concerns for digital theorists, policymakers, and activists alike. They include questions such as: How can we unleash digital technology's potential without undermining our privacy? Who should own our personal data? Can surveillance ever be desirable? While these issues are lively debated in societal practices, their specific ethical component is often undertheorized. In this paper, we contribute to these debates by offering a more fine-grained theoretical perspective on freedom in the digital context.

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[2] We follow Manuel Castells (2010) and Julie E. Cohen (2019) in defining 'informational capitalism' in terms of informationalism as a mode of development and capitalism as a mode of economic production.

Our contribution is informed by the observation that many scholarly fields interested in digital technologies and informational capitalism, such as media and communication studies (e.g., Andrejevic 2019; Van Dijck 2014), but also newer fields such as critical data studies (Beer 2019; Kitchin and Laurialt 2014), tend to discuss the nexus of freedom and data-driven practices with a relatively narrow set of terms, including the expansion or reduction of choice, the potential of monitoring and control, and, looming over all of them, the danger of ubiquitous surveillance. As these scholars have shown, there is indeed much evidence that technological developments and new forms of (algorithmic) governance have given rise to a particular form of 'imprisonment' in modern times (e.g., Berns 2018; Rouvroy 2016). In other words, Jeremy Bentham's panopticon has become a 'synopticon' 'where the many saw the few, to modern surveillance activities where the few see the many' (Mathiesen 1997: 215).

The relevance of these insights notwithstanding, this paper suggests extending the conceptual frame by broadening the debate on digital freedom. We do so in three steps. First, we theorize the implicit assumptions made about freedom in current normative discussions of data and digital technologies. Second, drawing on the work of Alex Honneth and John Christman, we extend the theoretical frame to include social and positive conceptions of freedom, and discuss how such a change in perspective can open up the debate about freedom in the digital economy[3]. Third, we sketch three demands that follow from such an inclusive conception of digital freedom: empowering people via new forms of political participation, increasing diversity and collective awareness in the industry, as well as using progressive political regulation to unleash digital technology's social potential.

Finally, even though we emphasize the relevance of positive and social conceptions of freedom for the digital context, we don't dismiss or dispute negative freedom as a valuable normative perspective or an intellectual tool. We merely argue – in line with many defenders of positive freedom - that its requirements are insufficient without the capacities for free agency being present.

[3] We define digital economy as 'a set of actors, products, business practices, and imperatives that depend on the ability to produce economic value (and political effects) through processes of data capture, transfer, and analysis. (Cohen 2019; Viljoen 2021)

2. Conceptions of Freedom and the Digital Realm

In the early 1970s, cyber-enthusiasts promised that we would become freer and happier people with the help of digital technologies. Flash forward to 2022, and digital technology's potential for societal progress has received more than a few pushbacks. From election scandals that involved data-driven manipulation attempts to biased police software and harmful algorithms, digital technologies' ability to move society towards a more fair, free, and equitable future has been seriously called into question.

Interestingly, many of those critical discussions are informed by a distinct set of assumptions of what it means to be free. This is due to the strong influence of a liberal paradigm (Benthall and Goldenfein 2020; Cohen 2012) that centers on individuality, non-interference, and the absence of constraints. An exemplary account is found in Friedrich Hayek, who argued that freedom describes the absence of coercion, and 'presupposes that the individual has some assured private sphere, that there is some set of circumstances in his environment with which others cannot interfere' (Hayek 1996: 61, 70).

2.1 Negative Freedom: Non-Interference and the Absence of Constraints

In more philosophical terms, this focus belongs to a distinct conception of what the philosopher Isaiah Berlin (1969) called 'negative freedom'. Negative freedom, according to Berlin, asks: What is the area within which the subject – a person or group of persons – is or should be left to do or be what he is able to do or be, without interference by other persons? Its focus is interpersonal; that is, coercion always implies the deliberate interference of other persons within an area in which one could otherwise act (Berlin 1969). In the context of digital technologies, a negative conception of freedom gives rise to questions such as: How does the use of digital technologies affect our freedom of choice? What areas of our digital life should be shielded from the preying eyes of the state? How should technological systems be governed to ensure individual autonomy and privacy?

A continuously growing number of works have started to take up some of these questions. For example, we now have a vast literature investigating new forms of surveillance and control (Zuboff 2019; Andrejevic 2019), behavioral modification and profiling in data-driven environments (Gräf 2017; Harcourt 2006), or algorithmic discrimination (Raji and Buolamwini 2019; Eubanks 2018; O'Neil 2016). While exact arguments and conclusions might differ, their normative component is often (implicitly) informed by a negative conception of freedom. This

is reflected in the normative arguments they make, as well as the ethical concerns they raise. Examples include critiques of overly powerful corporations' ability to intrude in our private space (Weise 2019), the implications of data-driven surveillance for individual and collective agency (Büchi et al. 2019), or the looming danger of profiling activities concerning privacy and autonomy (Cevolini and Esposito 2020). [4]

Unsurprisingly, many of the proposed solutions to the diagnosed problems draw on instruments from the liberal toolbox, such as better regulation and platform governance (Gorwa 2019; Moses 2017), strengthening digital privacy, or introducing new property rights in personal data (Cheneval 2021). Where suggestions depart from classic liberal perspectives, they often continue to adopt a negative perspective of freedom. The recent republican revival and its attested potential for theorizing the digital realm are a case in point (Thiel 2017; Muldoon and Raekstad 2022; Fischli 2022). Neo-republicans conceptualize freedom as non-domination, which requires not just the absence of interference, but also the ability to do so (Pettit 1997, 2012; Hoye and Monaghan 2018). Nevertheless, republicans continue to work in the negative tradition; they focus on how to identify and reduce domination in the digital realm (Gräf 2017), or how to improve privacy protection online (Roberts 2015).

The usefulness of this approach notwithstanding, we argue that digital theorists have a lot to gain from broadening their perspective towards other conceptions of freedom that emphasize different values, and in turn raise different kinds of questions and challenges. In the next section, we discuss the potentials and limits of positive and social conceptions of freedom for the critical engagement with digital technologies.

2.2 Positive Freedom: Self-Determination, Effective Agency, and the Question of the 'Good'

The first alternative approach we'd like to highlight is one that can broadly be called 'positive' freedom. Following Berlin, the essence of positive freedom is involved in the answer to a specific question, namely: What, or who, is the source of control or interference that can determine someone to do, or be, this rather than that? (Berlin 1969). This account has been challenged by many theorists in the positive tradition, who argue that Berlin is not distinguishing between two concepts of freedom, but between a concept and a 'menagerie'

[4]The boundaries are not always clear cut, of course. In her book 'Surveillance Capitalism', for example, Shoshanna Zuboff (2019) argues for a 'Right to the Future Tense', a claim that combines a classic liberal 'rights-based approach' with a 'positive' emphasis on self-realization and self-determination.

(Arneson 1985: 435). Others have pointed out that Berlin's negative account, on which freedom is constructed as an absence of external constraints, can easily be transformed into a positive one by expanding on what exactly is meant by 'constraints' (Garnett 2022: 24; MacCallum 1967).

A more useful approach to positive freedom is to conceive of it as an intellectual tradition concerned with a few identifiable conditions conducive to freedom, such as capabilities, internal factors of an agent, the social relations in which an agent is enmeshed, and the connection between freedom and moral value and/or reason (Christman 2022; Sen 1992). Therefore, many advocates of positive freedom concern themselves with questions of self-determination or self-mastery, self-government, as well as the pursuit of rightful or virtuous aims.

Historically, the positive approach to freedom has been criticized for its potential abuse of power associated with the ideal of self-realization and its – assumed – ingrained idea of the 'good'. Under the guise of promoting an ideal of justice, so the argument goes, powerful leaders can 'force' people to commit actions or embark on a path they would not choose themselves (Berlin 1969, also Hayek 1960: 65-66). But, as Christman (2005) points out, there is a priori value in enabling collective self-determination and the pursuit of one's idea of the good, independently of what these ideals concretely embody.

Accordingly, we argue that positive freedom as an intellectual tradition offers at least two important contributions to current debates in the digital context that deserve closer attention. The first revolves around positive freedom as an exercise concept (Taylor 1985; Christman 2005). In this view, doctrines of positive freedom are concerned with a view of freedom which involves the exercising of control over one's life. One is free only to the extent that one has 'effectively determined oneself and the shape of one's life' (Taylor 1985: 141-142).

As Christman points out, this emphasis on self-determination and effective agency can itself be 'value neutral'. Thus, we are invited to change our perspective and concern ourselves with the quality of agency and its enabling conditions, instead of focusing on a mere 'opportunity'

to act (Christman 2005: 79).[5] Christman draws on Amartya Sen, to argue that freedom must be seen 'as involving capabilities to achieve valued 'functionings', understood as beings and doings seen as worthwhile to the agent (Christman 2022: 4; citing Sen 1992). Importantly, however, the capabilities in question are specified without conditions of success; they are the requirements to pursue valued paths of action, not the successful pursuit of them (Christman 2022: 135).

The second point of interest relates to the close connection of 'positive' freedom and ideas of the 'good'. In the digital context, the very fact that positive freedom warrants an idea of the good should be seen as a benefit, rather than a caveat. After all, ideals played a central role in early conversations about the Internet among cyber utopians (Rheingold 1993; Matei 2006). And even though a revival of utopian fantasies about cyberspace may not be desirable, positive freedom's emphasis on self-determination and self-realization still has a lot to offer. Especially at a time when there is no consensus about what social goals regulatory efforts of digital technologies should pursue (Cornils 2020), positive aspects of freedom can be seen as an invitation for public deliberation about what values and ideals we want our society to foster and protect (Mazzucato 2021).

Taken together, positive freedom invites us to think about two aspects that deserve our attention in the digital context. Firstly, if we conceive of freedom as an exercise concept, we are interested in how we can ensure effective agency and self-determination in the digital realm. Secondly, we are invited to think about which values we would like to see protected and fostered in it, and who gets to decide what these values look like.

This is in line with a more general observation about the radical potential of positive conceptions of freedom, which posits that whereas negative conceptions of freedom often take the overall context as given and call for ways to improve it, positive conceptions of freedom invite us to re-think the status quo, instead of tinkering with it (Muldoon 2020; 2022). For our present purpose, this might translate into questions such as: What does effective digital self-determination look like? Which digital resources are required for people to engage in effective

[5] This echoes a prominent criticism of negative freedom, which posits that its advocates are content with the mere opportunity to act, even if real-life circumstances may prevent us from doing so (on this debate, see also Macpherson 1977, Taylor 1985).

agency and achieve the social goods that they value? And, perhaps most importantly: what does a desirable digital future look like?

2.3 Social Freedom: Social Interconnectedness and Mutual Recognition

After having discussed negative and positive conceptions of freedom, we turn to a third form of freedom concerned with the social quality of human beings. To do so, we primarily draw on the work of Axel Honneth, who – drawing on Hegel – discusses the limits of the concepts of negative and positive (or 'reflexive') freedom and then presents a third, social conception of freedom. In his work 'Freedom's Right', Honneth (2014) argues that both negative and positive conceptions of freedom are too 'monological' and atomistic, and, in consequence, neglect the social dimensions of life. Negative freedom, he argues, puts an emphasis on institutional structures and adopts a rather reductionist view of the human mind. Conceptions of positive freedom, on the other hand, place a strong focus on the person – particularly on the free will and 'the moral law' within her or him, but fail to consider the social conditions of its realization. What both conceptions neglect, Honneth concludes, is the idea that humans are deeply and socially connected to others.

Consequently, the idea of social freedom is informed by the observation that we are not decontextualized rational loners, but rather social creatures who regularly interact with others in different contexts. These interactions are guided by formal and informal rules, or 'institutions', which are simultaneously reproduced or modified through individual actions and interactions – what Giddens (1993) calls the 'duality of structure'. Modern societies are organized into different subsystems (Luhmann 1984, 1987) or value spheres (Weber 1948), such as the economic system, the political system, or the system of science, that are functioning according to particular and distinct logics. In his analysis, Honneth focuses on three areas of social life: the personal sphere, the economic sphere, and the democratic sphere.

Given that these and similar ideas are treated as 'common sense' in sociology and other social sciences and acknowledging the relevance of 'the social' for the (self-)understanding of humans, it is quite remarkable that social aspects have only recently started to receive attention in modern philosophy. That this debate has finally picked up is largely due to the discourse ethics proposed by Jürgen Habermas and Karl-Otto Apel, who stressed that the intersubjective and communicative coaction is in fact the key component for rational self-control (Honneth 2014: 42). What deserves even more attention, Honneth argues, is the social aspect in discourse

theory, in the sense that it regards 'social reality no longer as a mere addition to freedom, but as its medium and condition. On this account individual subjects can perform the reflexive acts required for self-determination only if they interact socially with others who do the same' (Honneth, 2014: 42).

It is this idea which Honneth uses – drawing on Hegel – to further develop a concept of 'social freedom'. First, he insists on the internal social quality of human beings. In other words, 'the social' is nothing external to the individuum, but deeply rooted within one's character. This is the case, Honneth (and Hegel) argue, because we as human beings are strongly connected and intertwined with others; partly cognitively, partly emotionally. While Hegel (1991) uses the formulation 'Bei-sich-selbst-sein-im-Anderen', ('Being-with-oneself-in-the-other'), Honneth (2012) describes his complementary view as 'The I in We'[6].

The second aspect of social freedom worth considering is the principle of mutual recognition. Given Honneth's emphasis on the socially interconnectedness as a defining condition of human existence, it is no surprise that his understanding of morality has an inter-relational character, where the crucial question is what kind of standing one has vis-à-vis others, and vice versa. Honneth emphasizes the intersubjective structure of social freedom by linking the realization of freedom to accommodating subjects confirming each other's' aims. Put differently, mediating institutions are necessary to inform subjects in advance about the interdependence of their aims (Honneth 2014: 65). Therefore, the central task for realizing social freedom is connected to the idea of equipping the 'generalized other' with a 'common good' that puts everyone in the same position to understand his or her value for the community without thereby restricting the autonomous realization of his or her self. For only this sort of democratized form of ethical life opens up the horizon within which subjects with equal rights can mutually recognize their individual particularity by contributing, in their own ways, to the reproduction of the community's identity (Honneth 1995: 90).

A social conception of freedom raises an interesting point regarding the constitution of the 'other' in the digital context, which stands in stark contrast with the social fragmentation produced by private platforms and an economic imperative that centers around data extraction,

[6] Note that both Hegel and Honneth do not use the term 'through' but 'in' to emphasize the non-separability between the 'I' and the various others.

analysis, and commodification (Cohen 2019). That said, recent research has started to recognize and emphasize the relational quality of data governance (e.g., Viljoen 2021).

Moreover, Honneth's emphasis on mutual recognition's role in realizing freedom also translates into another set of interesting questions: How do digital technologies shape our social interactions? Which rules, norms and institutions are produced and reproduced in the digital space, and how do they shape how we connect with, and relate to, others? And what would a digital economy geared towards mutual recognition and cooperation look like?

3. Positive and Social Freedom in the Digital Context

After considering different conceptions of freedom, we now discuss their potential contribution to the digital context more closely. As indicated before, we do not consider negative conceptions of freedom to be less valuable than their positive and social counterparts. Rather, we insist that normative analysis of the digital realm would benefit from opening the debate to other, complementary approaches. In this section, we draw on the discussed aspects of positive and social freedom to problematize some developments in the context of data-driven technologies. To do so, we focus on two aspects of the digital economy that deserve particular attention: the use of algorithms as instances of automated decision-making, as well as how digitally mediated spaces change how we see, and recognize, others. In section 4, we then discuss three potential ways to address these issues.

3.1 Digital Positive Freedom and the Question of Self-Determination

Today's digital economy is chiefly organized around an imperative to extract, analyze, and commodify all different kinds of data, and organization on that level requires automation (Andrejevic 2019). In many instances, these tasks are done by algorithms; encoded procedures which transform input data into a desired output, based on specified calculations. As Gillespie (2014: 167) puts it, algorithms are procedures which name both a problem and the steps by which it should be solved. A growing body of work has noted the number of problems associated with this increased algorithmic deployment. Examples range from unfair hiring algorithms (O'Neil 2016) to racial discrimination in law enforcement (Angwin et al. 2019) or algorithmic bias in the provision of health services (Obermeyer et al. 2019).

In line with classic (negative) concerns of liberal theory, a standard response to such issues of algorithmic bias and discrimination has been to call for increased transparency and a constraint

on algorithmic decision-making, for example by putting a 'human in the loop'. In the algorithmic context, this refers to human oversight of algorithmic decisions. Art. 22 of the European Union's General Data Protection Regulation (GDPR), for example, posits that data subjects 'shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her' (GDPR 2016/576).

But despite its intuitive appeal, the 'human in the loop' rationale might not be as effective as theory would have it. As Green argues, people are unable to perform such a desired oversight function in most cases. This, in turn, legitimizes the use of flawed and controversial algorithms without addressing the more fundamental issues at the heart of the technology. Constraining algorithmic decision-making by putting a human in the loop can be even counterproductive, as a human 'overseer' might provide a false sense of security against algorithmic harm, and simultaneously allow vendors and agencies dealing with them to shirk accountability (Green 2022).

Drawing on the insights offered by positive freedom shifts the focus away from questions of constraints and choice, and towards questions of participation, capabilities, and empowerment. Positive conceptions of freedom emphasize effective digital agency and are interested in what a digital economy built around self-realization and self-determination would look like. Consequently, if one takes the concern of effective agency and self-determination seriously, one might start to ponder not just how current algorithmic harms can be prevented, but what a digital economy geared towards effective agency and self-determination would look like, and what social futures we would like to see unravel.

3.2 Digital Social Freedom and (a lack of) Mutual Recognition

Social conceptions of freedom place their emphasis on people's social interconnectedness, as well as their need for mutual recognition to realize – or approximate - freedom. These concerns become useful when we consider the current fragmentation of the digital public sphere, considering the importance of mutual recognition as a precondition for realizing social freedom. Following Honneth's conception of social freedom and the idea of non-separability between the 'I' and 'the other', we are invited to ask: How do digital technologies constitute 'the other'? Who is 'the other' in modern times? And how does an algorithmically 'other' change, shape or even challenge our social fabric?

The answer to these questions is ambivalent; on the one hand, the Internet has clearly extended the scope of people we are able to interact with; physical space has become less relevant - at least for interpersonal communication - due to technological developments and, thus, has extended ‘the others’ for us and vice versa. On the other hand, social media providers and virtual community groups also create new (virtual) territories which limit and exclude who we see and interact with.

On social media, for example, algorithmic logics of engagement and continuous interaction result in a well-documented creation of filter bubbles and echo chambers; new virtual territories which can fuel a new and unprecedented tribalism among opposing groups. While such digital re-structuring of human interactions might enable shared understanding within specific ‘digital’ tribes, it pre-empts mutual recognition across different, or even opposing, communities. In such cases, 'the other’ becomes not just unrecognizable - their existence might be actively negated for the sake of identity building.

Similar dividing tendencies also play out *within* the industries that power the digital economy. Veena Dubal (2021), for example, details how many precarious jobs of today’s digital economy are done by people of color, who have historically suffered considerably under unjust working conditions and insufficient worker protections. Focusing on on-demand platform workers, she shows how unfavorable contracts and working conditions continue to exert disproportionate pressure on minorities, which, in this context, are predominantly people of color. At the same time, most programmers and software developers – those workers with more favorable working conditions and job security - continue to be a rather homogenous demographic group, consisting largely of white, well-educated men (Crawford 2016).

These societal and racialized divisions within the industry have implications that go beyond workplace discrimination and translate into the ’future tense’ (Zuboff 2019). As science and technology scholars have shown, technologies tend to reflect the values of those who built them (e.g., Winner 1980; Scheuermann, Denton and Hanna 2021). Coupled with the ‘structural conservatism’ (Krause & Beschorner 2022) engrained into algorithms trained with data from the past, this lack of diversity and inclusion makes mutual recognition and social freedom much harder to achieve.

4. Towards Positive and Social Digital Freedom

Based on the analysis in the past section, we now sketch three demands that follow from adopting a more inclusive understanding of freedom for the digital context. To do so, we embed our discussion into a framework proposed by Karl Polanyi, who studied the 'Great Transformation' from a feudal to the market society in the 19th and 20th century. His historical account reveals that all discussed conceptions of freedom – negative, positive, and social - played a central role in enabling the rise of the democratic modern state in Western society. From the end of the 18th century on, new democratic nation-states created a variety of institutions, such as courts, legislations, as well as other forms of rational law to ensure their people 'negative freedom.' The installment of schools, the free press, or welfare protections, reflect classic 'positive' notions of freedom, such as enabling self-determination and self-realization. Finally, social aspects of freedom are mirrored in efforts to create different forms of civic engagement and participation, for example, via associations, unions, or clubs, which ultimately evolved into 'civil society' (Alexander 2006).

Importantly, these 'freedom-enabling' developments were neither designed at the drawing board nor were they free of conflicts and struggles. Rather, they emerged over time. They were also closely related to the development of another big societal system at about the same time: the market economy. While the *citoyen* and the *bourgeoise* partly went hand in hand to overcome the limiting institutions of the feudal society, they turned out to be less and less complementary but rather contrasting to, and conflicting with, each other. Similarly troubled, history shows, is the relationship between democracy and capitalism. Karl Polanyi describes the historical *enjeu* between democratic ideas and capitalistic interests in terms of a 'double movement', characterized by the continuous expansion of the market, which was met by a 'countermovement', protective and spontaneous efforts by politics, citizens, and civil society to check the expansion of the economy in definite directions, and to ensure that the economy is embedded into society (Polanyi 1944: xxviii, 136).

For the present discussion, we draw on Polanyi's concept of countermovements to sketch three demands emerge from such an inclusive conception of digital freedom, and discuss how these demands in turn could help in turn foster positive and social aspects of digital freedom: empowering people via new forms of political participation, increasing diversity and collective awareness in the digital workspace, as well as using progressive political regulation to unleash digital technology's social potential.

4.1 Empowering People via New Forms of Political Participation

A first demand that follows from an inclusive conception of digital freedom is to ensure digital self-determination and effective agency, for example by digital empowerment and participatory initiatives to ensure people's voices are heard. There is an increasing number of initiatives that seek to re-align the digital economy and societal well-being. Examples range from public data infrastructures and data commons in Barcelona to participatory budgeting platforms in Iceland. Moreover, a growing number of scholars have started to put forth proposals to restructure the digital economy towards collective wellbeing and participation (e.g., Muldoon 2022).

One example worth discussing in this context is the digital citizen platforms 'Better Reykjavik', which invites citizens to propose projects for their communities and neighborhoods, suggest new policies, and even let them allocate budget resources in a participatory manner (Simon et al. 2017). Originally built by the Citizen Foundation, a non-profit foundation in Iceland, 'Better Reykjavik' and the incorporated participatory budgeting platform 'My Neighborhood' are now officially adopted by the City Government, which uses the platform to get citizens' insights and ideas. In this way, digital tools are used in ways to empower people by letting them decide how they want their neighborhoods to look like, what a new education agenda should look like, or which local projects the City Council should prioritize over others.

A second example is 'Decidim', a free and open-source software built to enable participatory democracy for cities and organizations. Founded as an association in Barcelona in 2016 and funded by the Barcelona City Council, the software project seeks to build a participatory infrastructure that enables transparent democratic processes around the world. 'Decidim' was also at the core of the European funded 'Project Decode', a pilot project that introduced the principles of data sovereignty and data democracy to the city of Barcelona. The goal was to reconcile both 'personal and collective control over data, while at the same time maintaining transparent, accountable, and participatory governance over data' (Bass and Old 2020: 4). In practice, this means that citizens can individually decide which data they want to share with others, under what conditions, and for what purpose. As a collective, they get to debate and vote on proposals for the city and community, take part in citizen assemblies, launch proposals and initiatives, or participatory budgeting (Simon et al. 2017).

New digital infrastructures like Decidim and Better Reykjavik are great examples of what a digital realm built around positive concerns of freedom including self-determination, self-realization and effective agency can look like. Importantly, they also touch upon the core aspects of social freedom, by creating a space where people meet as fellow citizens that engage in cooperative and deliberative practices of deciding their shared aims and what they want their environment to look like. This is reflected especially in the Better Reykjavik project, where people can add comment 'for' or 'against' a proposal – a design choice that encourages civil debate at the expense of hate speech and trolling.

4.2 Increasing Diversity and Inclusion in the Digital Industry

A second demand resulting from an inclusive conception of digital freedom is to strengthen social movements and critical non-governmental organizations which promote diversity and inclusion in the digital space, thereby creating the foundation for mutual in the digital realm. In recent years, there have been several efforts to increase the diversity within the digital economy, especially among workers, activists, and public watchdogs.

Noteworthy examples include 'Black in AI', a self-organized initiative by Black researchers and activists of color which aims to increase the presence and inclusion of people of color in the field by creating a space for sharing ideas, fostering collaborations, pursue mentorship and advocacy. Another example is the Toronto-based 'Project Include' that seeks to empower young people from minority communities with technological and computer skills, or 'Black Girls CODE', an initiative that seeks to empower girls from age 7-17 with coding skills and equip them with the necessary tools for a flourishing career in the digital technology sector.

Strengthening such efforts towards inclusion and diversity are important, especially considering the fact that many of today's achievements towards creating inclusive structures were initiated by public watchdog organizations, such as the investigative news outlet the Markup (Martinez and Kirchner 2021), insightful researchers who have called out discriminatory algorithms and software (Buolamwini & Gebru 2019; Raj & Buolamwini 2019), or researchers that leave big companies to found their own independent research institutes which prioritize human well-being, inclusivity and awareness over profit, scale, and growth, such as the newly founded DAIR Institute (2022).

That said, such initiatives continue to face serious challenges when it comes to financing and sustaining their efforts, precisely because they don't operate in the commercial structures which are at the root of many contemporary problems within the digital sector. Finding ways to support and encourage civil society movements that engage in creating the social conditions for mutual recognition therefore continues to be important – also considering that it has largely been the work of such grassroot and civil society organizations to stimulate the urgent societal conversation about which technologies should be deployed in society, who gets to build them, what social values they foster, and for what purpose.

4.3 Enacting Progressive Legislation

While the previous two demands correspond with positive and social concerns of freedom, the 'classic' negative emphasis on laws and rules to ensure the absence of harm continues to be a relevant component for any strategy toward a freer and more equitable digital future. Therefore, a third demand following from our discussion would be to enact political regulations through 'hard law' for various kinds of issues, for example, by strengthening digital privacy, re-designing property rights, regulating the power of companies in the digital economy, and thus, impose obligations on digital capitalism 'by insisting on measures that tether the capitalist project to the social, preserving and sustaining life and nature' (Zuboff 2019: 326).

Classical forms of political regulations are currently discussed in both the US and the European Union. In the US, congress currently debates an 'Algorithmic Accountability Act' which would bring greater transparency and control over algorithms. In Europe, recent initiatives and proposals include the Artificial Intelligence Act from April 2021, as well as the Digital Services Act and the Digital Markets Act.

While such novel legal frameworks represent without any doubt an important milestone for regulating data-related (business) practices, we would argue that these proposals and similar 'hard law' initiatives ought to be flanked with more participatory elements. Civil society, especially in the organized form of non-governmental organizations and non-profit research institutes like DAIR are of crucial importance for truly re-designing the digital territory and moving closer to an inclusive conception of digital freedom.

5. Concluding Remarks

Many discussions about the normative implications of digital technologies tend to operate from an implicit (negative) understanding of freedom as the absence of interference and constraints. The relevance of these insights notwithstanding, we suggested extending the conceptual frame by moving away from an overly negative understanding of freedom as the absence of interference and harm, towards one that also includes positive and social aspects of freedom, such as collective self-determination, capabilities, and mutual recognition. We then discussed how positive and social conceptions of freedom can help us reframe challenges in the digital economy in new and unexpected ways and provide insight into what potential solutions might look like. Finally, drawing on historical insights and Karl Polanyi's concept of 'countermovements', we sketched three demands that would follow from a more inclusive conception of freedom: increasing diversity and collective awareness in the digital context, empowering people via new forms of political participation and collaboration, strengthening diversity efforts across the industry, as well as introducing political regulations that help unleash digital technology's social potential.

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