

# Ordinal citizenship

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## Abstract

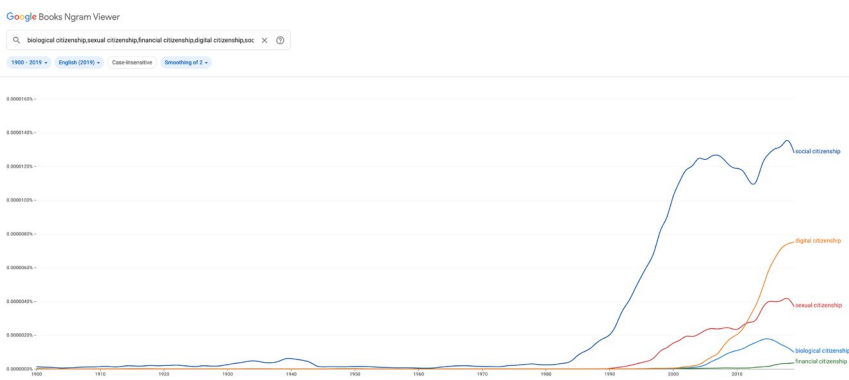
The expansion of social citizenship in the 20th century mitigated the brute effects of economic inequality in people's lives. The new rights also created new social divisions, however, separating citizens according to their ability to do well through them. In the 21st century the conceptual matrix of citizenship has developed further, powered by new technologies that have promised new freedoms and opportunities in every aspect of people's lives. As the scope of economic and social incorporation has broadened, the possibilities for classifying, sorting, slotting, and scaling people have also grown and diversified. Echoing the earlier rise of the meritocracy, this new matrix produces its own winners and losers, partly recycling old inequalities, and partly creating new ones. Demands for self-care and individual fitness pile up, eroding the universal and solidaristic basis upon which the expansion of citizenship historically thrived. In its place stands what I call "ordinal citizenship," a form of social inclusion that thrives on social measurement, differentiation, and hierarchy.

The expansion of social citizenship in the 20th century mitigated the brute effects of economic inequality in people's lives. The institutionalization of social rights and entitlement programs recognized that access to "the life of a civilized being" (to use TH Marshall's (1950, p. 11) quaint phrase) should not depend on wealth only. To be sure, the process was incomplete, stigmatizing, and often brutal, particularly for the poor and for minorities of various kinds.<sup>1</sup> Still, the reliable provision of education, healthcare, housing, and social insurance turned into one of the main *raison d'être* and functions of governments throughout the world, while also strengthening their claims to demand sacrifices (e.g., military conscription) and duties (e.g., income taxes) from the newly constituted citizenry in return. These very facts, however, also made social rights suspect. Unlike civil and political rights,

socioeconomic rights entertained a tortuous relationship to liberal political theory (Somers & Roberts, 2008). For many, liberalism's emphasis on contractual relations, possessive individualism (MacPherson, 1974), and negative freedoms left little room for anything but residual forms of solidarity. For others, freedom meant nothing if it boiled down to the freedom to live a wretched, inhuman life. To the extent that human autonomy, the capability to function as a full member of one's society and participate in its politics are concrete, practical achievements, social rights are essential to them (Sen, 1999).<sup>2</sup>

As long as the state was taken to be the primary provider of social rights, these two positions (contractualism and inclusive solidarity) seemed irreconcilable (Fraser & Gordon, 1993). However the erosion of this core assumption, and the shifting of the politics of solidarity from distributive justice toward recognition and identity (Fraser, 1995; Joppke, 2007) have brought them closer together. The semantic halo of citizenship has diffused far and wide, shoring up a broad range of social demands in the economic, political and cultural domain. What is at stake here is the equal ability to participate in all activities that may be seen as essential to one's functioning as a social being. But what is and isn't essential? On this question liberalism is mute and uncomfortable. The deep reason, perhaps, is that any universal or a priori definition of "the life of a civilized being" might force liberalism to confront its long history of exclusionary practices (Glenn, 2000; Mehta, 1990). The more serviceable excuse is that liberal theory *does not have to* concern itself with the problem. It seems far more satisfactory to let people define by themselves—via collective struggles or private pursuits—what it is that they see as essential *for themselves*. And thus, citizenship claims have proliferated, targeting nearly every institution and almost every aspect of people's lives. The language that surrounds these claims is a strange melding of self-sufficiency and rights, autonomy and inclusion, social difference and social belonging.

Citizenship, this "weighty, monumental, humanist word" (Fraser & Gordon, 1993, p. 45) now comes in many different flavors, depending on the adjective that precedes it. Citizenship discourse is mushrooming, colonizing the domains of economy, medicine, biology, culture, ecology, and sexuality, among others (see Figure 1).<sup>3</sup> Right-claims have multiplied and diversified, promising new freedoms and opportunities. For instance, grassroots organizations, international financial institutions, central banks, and hedge funds peddle "financial citizenship" (or the extension of credit to populations that were previously excluded from it)<sup>4</sup> as both a social justice imperative and a growth-oriented economic project. Likewise, early internet evangelists, education specialists, and tech companies have all pitched the economic, political, and social benefits of internet access, and argued that bridging the digital divide is an essential component of citizenship in the information age.<sup>5</sup> Indeed, "being a digital citizen" demands a new kind of political subjectivity and enactment of rights (Isin & Ruppert, 2015). Similarly, the idea of bio-citizenship—and associated struggles for the incorporation and recognition of marginal bodies into the medical polity and the state—has morphed from a grassroots movement to democratize treatment and expertise into a direct-to-consumer enterprise peddling citizens' right to biomedical self-knowledge and their duty to self-care.<sup>6</sup> The model



**FIGURE 1** Frequencies of selected phrases in Google's text corpora in English (ngrams). [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

citizen of yesteryear had to be educated and informed, but in a general kind of way. Today that knowledge must be turned inward and made productive. She must be active—entrepreneurial even—, transparent to herself, and, as Michel Feher (2018) put it, “work toward her own appreciation.”<sup>7</sup> And, the market offers her a wide menu of choices to do so.

These new iterations of citizenship talk—of “citizenship-as-desirable-activity” (Kymlicka & Norman, 1994), or “citizenship as claims-making” (Bloemraad, 2018; Stewart, 1995)—differ from older conceptions in four crucial ways. First, the new citizenship dwells in a *multipolar* world. Rather than an all-absorbing social state that supports generic entitlements and protections (in principle if not in practice), it defines multiple dimensions of obligations and rights between people and institutions. Second, the question of positionality within each world, rather than simply access, becomes a central preoccupation (Bloemraad, 2018; Fourcade & Healy, 2013). The new citizenship is *actuarial and quantitative*. It cares about statistical fairness, rather than social fairness. Consequently (and third) it depends on the *individualized* biopolitical enrollment of its subjects to provide the fuel for these calculations, and often demands an *agentic* orientation from them (Joppke, 2010). Fourth, the meaning of citizenship, from striving toward universalism and solidarity, has become more *transactional*.<sup>8</sup> Corporations, rather than the state, control many of the domains where the new rights-claims are being formulated and the figure of the citizen is semantically morphing into that of the customer, the client or the digital user. (Stewart, 1995, p. 71)<sup>9</sup> This lecture is a meditation, perhaps still a bit inchoate, on the social implications of this evolving understanding.

## 1 | INCLUSION

Marshall famously described modern citizenship as a historical process of rights unfolding, which he disaggregated into three major temporal stages (civil rights in the 18th century, political rights in the 19th and social rights in the 20th). None of these stages, however, was ever fully settled. Social rights, in particular, were always going to be in movement. To the extent that the standards for social rights—for economic security, and for supporting the “life of a civilized being”—are always evolving, we should expect societies to exhibit a continual and dynamic process of claims-making, rights-granting, and institutional transformation. Marshall imagined that public provision was the only truly universal basis for such expansions, but history has shown that this is not always the case: private institutions, too, have been pressed to enroll and service everyone, in the name of the expansion citizenship.

The changing meaning of personal finance in American society offers a good illustration of this intertwining between lifestyle change and rights emergence. From the 1790s onwards federal and state governments in the United States supported the expansion of credit markets to manage economic opportunity in a large and deeply divided land (Prasad, 2012; Quinn, 2019). By the 1920s, progressive foundations and unions promoted credit as socially beneficial and empowering (Anderson, 2008; Trumbull, 2012). Still, large swaths of the population were excluded, or left at the mercy of predatory lenders. By the mid-1960s, Hyman writes, “to be denied credit went beyond an economic inconvenience; credit access cut to the core of what it meant to be an affluent, responsible adult in postwar America” (2011, p. 201). It took fierce popular struggles by racial minorities (fighting against usurious exploitation) and by feminist organizations (fighting against marital dependency) for credit to finally overflow the boundaries of the white, male population (Hyman, 2011, Thurston, 2018). The legal battle that won the argument revolved around equality of treatment and the ability to participate fully in economic life (Krippner, 2017).

In other words, anyone looking at the expansion of credit in postwar America would conclude that it had many of the hallmarks of a hard-fought social right. Today, the ubiquity of credit cards and mobile payment systems indexes the natural and open-ended relationship that people around the world have with the financial system. The ordinary person is incorporated in quite mundane and concrete ways. Offers of private credit (at variable rates!) arrive unsolicited in the mail and on the web, as financial service providers prequalify potential targets in increasingly precise ways.<sup>10</sup> Meanwhile, credit utilization has become essential not simply to the realization of people's social identity as consumers but also to their status as full members of society (Fourcade & Healy, 2013;

Marron, 2015). Having no credit history, even for reasons of age or nationality, is awkward enough. But in the United States (and increasingly elsewhere) a bad credit check affects one's ability to participate in a whole range of normal activities, such as renting an apartment, applying for a job (Kiviat, 2019a), or obtaining insurance (Kiviat, 2019b; Rona-Tas, 2017).

Far from protecting people from the vagaries of the market, status as an ordinary citizen actively enrolls them into it. Rather than de-commodifying their lives, it inserts them into new kinds of commercial circuits. The experience of this form of "inclusion" goes hand in hand with a politics of financial education, so that the new subjects may dutifully face their responsibilities (James, 2013).<sup>11</sup> As of February 2020, 45 U.S. states included personal finance education in their K through 12 curriculum standards, sometimes requiring such courses as early as middle school. Cheered by the business press and often involving partnerships with financial institutions, financial literacy programs train children in the basics of budgeting, stock market finance, insurance, and debt, including how to build "good credit." Responsible debt management is publicized both as a means of access to a normatively middle-class life and as a protection against precisely those financial emergencies that Marshall thought called for the institutionalization of public forms of solidarity. (Because finance is more private, it is also thought to be less stigmatizing than they were).

In practice, however, welfare and private debt are deeply entangled. The dependability of cash subsidies from the state (in the form of welfare payments or pensions) offers lucrative perspectives for the financial sector. For instance, the introduction of basic income supports in Latin America, South Africa, and India, has been accompanied by a rapid expansion of financialization—and the re-commodification of previously public services. As governments replace social provisions by cash disbursements and physical services are transformed by the introduction of virtuality, social policy becomes just another "collateral," ripe for extraction by the financial system, either as interest money or, increasingly, as data.<sup>12</sup>

Like personal finance, digitality has become another dimension of modern citizenship. In the same way that living without easily accessible credit is increasingly inconceivable, is it possible today to live one's life outside of the reach of Google, or LinkedIn, or Facebook? Or without a laptop, tablet, or smartphone within one's own reach? Or to have no digital existence whatsoever? To the extent that all essential social activities have moved partially online, being a full member of society implies one's bit by bit incorporation into the networked infrastructure of the internet. Many digital services, whether publicly or privately run, look like basic social infrastructures, much like electricity or water. As these technologies have normalized, they have become endowed with a quasi-public good feel. National governments and international organizations, such as the OECD (2019), anxiously track various measures of digital access and usage as essential dimensions of overall citizen welfare. In some countries, digital citizenship has been formalized. As of January 2020, at least seven countries (Costa Rica, Estonia, Finland, France, Greece, India, and Spain) have explicit institutional provisions to treat internet access as a basic social right.<sup>13</sup> A recent French survey compares the struggle against "illectronisme" (or digital illiteracy) to the historical mission, emblematic of modern French Republicanism, to eradicate (analog) illiteracy (Legleye & Rolland, 2019).

The private side, too, participates in that perception. Many of the core products of the digital economy—from search to social media, from mail to office tools, from games to self-tracking applications—came into people's lives in the form of handsome handouts, free of charge (or nearly so), and open to anyone with an internet or cellular connection (Fourcade & Klutetz, 2020). Even Wi-Fi—or hardware—sometimes comes free, supplied by some tech giant to a city or a school district. This quasi-public logic is also common in the Global South, where it is often powered by Western philanthropy. As Morgan Ames shows in *The Charisma Machine* (2019), a utopian vision of expanded educational opportunities inspired the project, originating at the MIT media lab, to outfit every child in the developing world with a small, sturdy and cheap laptop. The project failed miserably, but the vision survives. In 2013 for instance, Facebook unveiled what would become the Free Basics experiment, designed to deliver basic internet service to populations in developing countries. The ultimately fraught (Hempel 2018) project was launched in the name of a right of individuals to connectivity, understood as an essential social ingredient of a "dignified and fulfilling life" (Alloa, 2019, p. 55).

The tech industry draws its legitimacy from the idea of citizenship perhaps more than from any other institution, but it is a form of citizenship that bypasses the state, and even transcends national boundaries. Politically, the modern tech industry was born out of the promise to close the exclusion gap through the expansion of broadband and associated services, and to do so in multiple domains at the same time. Its vision of the digital future was that of a gigantic inclusionary machine. The politically marginal would be incorporated into the polity; the uneducated would discover opportunities to train themselves; the financially excluded would muster credit, or funding; the jobless would find work; the entrepreneurial would innovate; the geographically and socially isolated would connect to the rest of the world; minorities of all kinds would finally feel empowered; those in need of temporary assistance would be served by crowdfunded campaigns of support; unknown artists and innovators would suddenly have a platform to showcase their creativity. Last but not least, the state itself would be reorganized as a digital platform, a Government 2.0—nimble, more efficient, and better able to reach underserved populations (Arora, 2016; O'Reilly, 2009). Many of these interventions aim to replace top-down forms of government action and to deliver instead flexible services adapted to each person's needs (Fourcade & Gordon, 2020).<sup>14</sup> International organizations, for instance the United Nations with its Global Pulse project, look at big data as the next frontier for the realization of sustainable development or humanitarian goals (Isin & Ruppert, 2019; Johns, 2017, 2019).

Even critics of these optimistic claims (which are legion in the social sciences) find it hard to downplay the real satisfactions that come with digital incorporation, from seamless and convenient life to expanded capabilities, from the right to participate to the extension of solidarity, from the irresistible allure of self-exposure to that of voyeurism (Harcourt, 2015a). Let us not forget that this regime of hypervisibility arose with little resistance. We were guided instead by the fear of missing out on the common experience and by the affirmative pleasures of individuation, of feeling as “one of a kind,” as a recent Tube ad by the U.S. data broker Experian proudly proclaims (Figure 2). Nearly every internet-based service promises to realize two fundamental dimensions of citizenship—equal status and the freedom to be whoever we want—at once.

Let me summarize the argument so far. I have suggested that demands for citizenship have been reoriented toward socio-technical systems that are most visibly dominated by private institutions. In particular, financialization and digitization have been construed as solutions to problems of opportunity, fairness, and (occasionally) solidarity in domains as varied as credit, education, jobs, politics, or healthcare. One reason to treat these two processes in tandem, rather than sequentially, is that they are increasingly collapsing into one another. First, “the ‘datafication of everything’ is [arguably] an extension of the much broader phenomenon of the financialization of everyday life” (Morozov, 2015): every aspect of experience, properly categorized through digital means, can be commodified, assetized, bundled, and traded (Birch & Muniesa, 2020). Second, financialization and digitization converge technologically through the development of fintech, particularly in poor countries without an existing banking infrastructure (Gabor & Brooks, 2017; Donovan & Park, 2019).<sup>15</sup>

In the second part of my exposé, I will show that these new ways of thinking about inclusion have both changed the moral economy of citizenship and the pattern of economic inequality. The reasons are twofold. First, the expansion of citizenship (the equalization of status vis-à-vis some social good or activity) always precipitates some form of biopolitical regulation. Rights beget duties. Children are required to attend school. The unemployed must “look for work.” And so on... Likewise, we must analyze the specific moral injunctions that accompany the new citizenship claims. Second and relatedly, any expansionary and equalizing process always prompts efforts at differentiation (Simmel, 1972).<sup>16</sup> Just as the development of social rights created new and consequential forms of stratification around welfare and education, or the opening of legal citizenship prompted a redrawing of lines through citizenship tests (Joppke, 2019), the move toward financial and digital inclusiveness is producing newly actionable social divisions, social duties and forms of capital that shape people's life trajectories in multiple ways (Fourcade & Healy, 2013, 2017). In other words, the equalization of status that was so important to Marshall is generating newly meaningful differences.



**FIGURE 2** Experian advertisement, London Tube, October 2019. (author's picture) [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

## 2 | MERITOCRACY

The politics of citizenship in a liberal society is perennially a problem of overcoming exclusion and sustaining substantive solidarity (Somers, 2008). If we want to think clearly about the current transformation, it may be useful to go back in history, to those earlier inclusionary episodes that sought to mitigate deeply entrenched forms of social disadvantage. Just as the extension of financial or digital citizenship is today brandished as a liberal panacea that

will help people help themselves (and possibly reshuffle social hierarchies by freeing up energies and innovation), the extension of social rights once affirmed that all lives should be guaranteed “a modicum of economic welfare and security.” The expansion of education, most characteristically, supported the notion that everyone should have “the right to share to the full in the social heritage,” to quote T.H. Marshall again (1950, p. 11).<sup>17</sup>

But as Marshall was quick to point out, this major institutional transformation also had a profound effect on the social structure. The new rights created their own special divisions, separating citizens *according to their ability to do well through them*. Postwar sociologists confirmed these insights over and over again in empirical studies. Those who rely on social assistance to survive suffered “psychological class discrimination” (Marshall, 1950, p. 55). Presumed to be lacking in grit and motivation, they were treated as a morally inferior group, subjected to enhanced surveillance and often forced to work (Somers, 2008; Somers & Block, 2005). Likewise, the expansion of the right to education created a new axis of social stratification. Daniel Bell wrote about “the codification of a new social order based, in principle, on the priority of educated talent.” (1972, p. 41) Randall Collins (1979) announced the advent of the “credential society.”

And, yet it was soon clear that these movements benefited the existing elite much more than the common mass. Education was both an effective social ladder *and* a particularly devious conduit for the recycling of old inequalities across groups. In the United States, James Coleman concluded in 1964 that public schools were ineffective in reducing racial achievement gaps. In France, Pierre Bourdieu (1974) observed the institutionalization of a new form of capital (“cultural capital”), through which the educated tended to reproduce themselves. The children of the bourgeoisie (as it was then called) were not only the ones getting the bulk of the new degrees and the better grades, but they also disproportionately got those degrees that paid the most (Bourdieu & Passeron, 1977). The ideological consequences were profound. Rather than disappearing, economic and social differences could now legitimate themselves via the morally impeccable seal of a college diploma. Marshall had anticipated all of this, when he couched the fundamental dilemma of liberalism in the following terms:

“The right of the citizen in this process of selection and mobility is the right to equality of opportunity. Its aim is to eliminate hereditary privilege. In essence it is the equal right to display and develop differences, or inequalities; the equal right to be recognised as unequal.”

(Marshall, 1950, p. 65)

No one, perhaps, was as biting as British sociologist and Labor leader Michael Young, who in a futuristic satire first published in 1958 coined the term meritocracy and described its rise as a cruel liberal fantasy. No matter how deep and how detailed the quantification of merit might become, Young (2017) predicted, those who dominate the game will soon hoard resources, concentrate political power, and project onto those excluded from their ranks the belief that only they are to blame for their lack of success. In a later text that anticipates on a host of future developments—from the rise of the 1%, caught, like everyone else, in an endless race for social esteem to the anti-democratic consequences of philanthropy—<sup>18</sup> Young blasted the sense of entitlement that a meritocratic system produces, and predicted a populist revolt against it, born out of resentment.<sup>19</sup> Today, the sociologists’ verdict on the meritocracy is more widely shared than ever: in the United States especially, statistics about stalled intergenerational mobility (Chetty et al., 2017) or widening health gaps between income groups (Zimmermann & Anderson, 2019) show that the social elevators do not work anymore. Tales of social closure, moral bankruptcy, and unfair advantage populate the radio podcasts, the columns of newspapers, and the shelves of booksellers. Bearing out Michael Young’s prophecy, education has arguably become the core variable organizing political conflict in the Global North, partially displacing income (Piketty, 2020).<sup>20</sup>

And yet the institutions are resilient, even as the moral justifications are crumbling. If the system has caught a fever, it’s the thermometer that must be broken. Universities and corporations alike still claim their commitment to raising the most deserving of the overlooked, whatever their disadvantage may be, in an effort to rekindle a broken “egalitarian pact” (Zelizer & Gaydosch, 2020). Merit, after all, is the most obvious justification for



inequality that liberalism knows, so it digs its heels deeper and deeper—however, its nature changes in the process (Markovits, 2019).

The inability of meritocratic institutions to deliver “equality of result” (Bell, 1972, p. 40) has sparked two main corrective strategies. The first is a compensation for historical disadvantage, institutionalized through diversity and inclusion programs, which identify people through their membership in underprivileged groups (such as underrepresented minorities, first generation, or low-income students). For reasons that sociologists understand all too well, however, these strategies do not interact peacefully with ordinal technologies of sorting *individuals*, like grades and tests, which continue to *appear* more objective. This tension runs especially high when corrections for social disadvantage touch ordinal technologies directly: higher education, for instance, is full of examples of the “failed quantification” of race or social hardship (Barnard & Fourcade, 2020).<sup>21</sup> A second solution has been to double down on the more clearly quantifiable aspects of merit, to push the frontier of commensuration outward further and further. The old meritocracy is moribund, long live the next one! For the first time in a long time, new prospects are on the horizon. Digital technologies have both enabled a broadening of economic and social incorporation *and* expanded the possibilities for classifying, sorting, slotting, and scaling people.<sup>22</sup> New ways of measuring merit have sprung out of these systems, from financial responsibility to social influence, from friendliness to punctuality, from physical fitness to reliability. Both markets and states find themselves compelled to build up and exploit this efficient, proliferating, fine-grained knowledge in order to manage individual claims on resources and opportunities. Social inclusion seems to depend not only on being incorporated into these systems, but on behaving and performing according to their rules, on *demonstrating merit within them*.

### 3 | ORDINALITY

As formal citizenship in finance and especially digitality expands, exclusions become more visible. Industrial capitalism has its industrial reserve army and its Lumpenproletariat (Marx, 1990). Financial capitalism has its stubborn cash economy and its *Lumpenscoretariat* (Fourcade & Healy, 2013). Digitality, too, has its expansive no man's lands<sup>23</sup> and its savvy loci of resistance (Vertesi, 2014). But inclusion into the digital infrastructure also bears social and individual costs. Collectively, it depends on an underbelly of underpaid “ghost workers” who toil in the bowels of the system. They are the millions of click laborers who clean the data flows on digital platforms and make the digital myths come true on a second by second basis. They are the digital precariat who executes the myriad of microtasks that power “artificially intelligent” systems, while awaiting the robots that will make them irrelevant (Casilli, 2019; Gray & Suri, 2019).

Personally, the citizens of public and private digital systems (including the invisible precariat itself) must render themselves legible through obligatory onboarding, frequent interactions, and passive surveillance—most of the time not chosen or consented to. The technological argument for this kind of “engagement,” as tech firms put it, is familiar enough. It goes something like this: Computers have magnified the ability of organizations to process large numbers of things and people in a short amount of time (Beniger, 1986; Gandy, 1993). However, these systems often perform quite poorly, especially when dealing with human behavior. More data is needed to increase the accuracy of predictions and the efficiency of the sorting process. Convenience, faster service, and enhanced mobility within and across systems will ensue.

As a result, close-up exposure has become a non-negotiable prerequisite of social integration across a wide range of private, but also public domains. Surveillance inheres in the condition of digital citizenship. Digital government, like digital capitalism, demands that everyone be under observation.<sup>24</sup> But the moral threshold of surveillance, the coercive pressure to participate, and the potentially harmful effects are higher for those populations whose lives depend on the extension of public or private services (Benjamin, 2019). Algorithmically managed social policies typically require intrusive pre-qualifying information, obligate claimants to frequent checks into the



system, and are monitored by opaque fraud-detecting systems that inevitably end up targeting the most vulnerable (Eubanks, 2017, Henley & Booth, 2020).<sup>25</sup>

Second, digital citizenship (including financial citizenship) dwells in ordinality. Computers are by nature oriented to sorting: they “order” the world by spewing out priorities and queues.<sup>26</sup> They rank, score, and use reward functions that operate through cybernetic feedback loops (Yeung, 2017). Implemented out there in the world, user-facing algorithms, both private and public, organize important aspects of social, economic, and political life. They redefine the relevant categories by which *the social process itself* operates, the hierarchies that organize it, and the valuations that stand behind these hierarchies. The nature of citizenship, and the rights associated with it—that is, the ability to participate in various activities and *the terms under which such participation takes place*—become increasingly defined by one's position on some sort of ordinal scale, a process I have called elsewhere “ordinalization” (Fourcade, 2016). For instance, Australia's welfare recipients who “fail to meet their required activities” receive “demerit points” that put them at risk of income support suspension (Henrique-Gomes, 2019). In the market, credit card companies favor customers with long histories, high and varied usage of different credit types, rather than prudent spenders who tend to be invisible.<sup>27</sup> TaskRabbit privileges workers who complete more tasks—not simply those who complete well the tasks they take on. And social media companies care little for someone who does not post, comment, message, and otherwise interacts with others. Her rare or irrelevant contribution will disappear into the algorithmic vortex, making her invisible to her social world, and curtailing her access to a full online social life (Bucher, 2018; Duffy & Pooley, 2019).<sup>28</sup>

#### 4 | INDIVIDUALIZATION

Historically, the development of citizenship is often associated with the decline of criteria of gender, race, property, religion, ethnicity, caste (and more) as core markers of the deservingness to vote, rule, or hold office. In the United States for instance, citizenship was independent of personal virtue because nominal categories—color, labor status, or gender—already supplied the relevant markers of worth. The unfolding of citizenship in this country—as elsewhere—displays a never-ending “quest for inclusion,” a gradual extension of dignity and rights once reserved to wealthy white males only (Shklar, 1989). But as formal equality progressed and the boundaries around citizenship faded, differences *among* citizens were thrown into sharper relief. As Yasemin Soysal (2012) pointed out in this very spot and journal some 8 years ago, the liberal elaboration of personal autonomy and rights increasingly demanded that moral distinctions be drawn at the individual level. For instance, in both the European social project and its immigrant integration agenda, the burden of solidarity has shifted from the state to the person: the duty to realize one's full potential *as an individual* implies productive work engagement, skill upgrading, knowledge of laws and values, and civic participation.<sup>29</sup> Margaret Somers' (2008) description of the transformation of welfare in the United States—from an unconditional status motivated by shared fate to a contingent privilege dependent on personal worth and economic value—is consonant with this description.

Does the precise tracking, aggregation, and reification of people's behavior across multiple domains represent just another iteration of the individualization of citizenship? Perhaps. It is, indeed, important to go back to individualization to understand ordinalization's revolutionary appeal. The focus on behavior, and behavior only, contributes to destabilize ossified advantages associated with categorical distinctions between people. As mentioned earlier, the diffusion of ordinalizing technologies, such as the credit score, in the United States is very much tied to the history of anti-discrimination legislation (Krippner, 2017; Poon, 2013). Ordinalization undergirds a democratic promise to judge individuals in a nominally egalitarian manner that will reveal the truth of personal desert. At the same time, Young's warning against the demoralizing effects of such schemes remains valid. The notion that inequalities can ever be “just” or “deserved” remains very much a mirage, and a particularly pernicious one at that.

The first problem is that ordinalization is fundamentally a-sociological in theory, if not in practice. Because behavior (including financial behavior) is often patterned *and classified* precisely along those categorical dimensions

that the system pretends to ignore (this is, after all, what a social structure is!), ordinal citizenship often reproduces those very categorical inequalities that it was meant to circumvent, albeit through different means.<sup>30</sup> The politics of ordinality is famously articulated around notions of data justice, statistical profiling, disparate impact, and algorithmic bias rather than outright prejudice (Barocas & Selbst, 2016; Harcourt, 2015b). But because “statistical discrimination” looks fairer, and because the collectives that actuarial technologies delineate are fluid and aggregative rather than categorically or tangibly grounded, solidarity may be more difficult to achieve. At a minimum, it requires a fundamental rethinking of the social basis of mobilization (Krippner, 2019; Simon, 1988).

The second problem, going back to Young’s critique, is that ordinalization is inherently moralizing. Whatever their actual purpose, technologies of social commensuration and social sorting are hierarchical in nature. They always end up producing standards of moral deservingness and social desirability. In human society, any priority order, any queue or ranking system is also a moral order—or, as Barry Schwartz (1978, p. 7) put it, an “order of moral demand.” Nowhere, perhaps, is this truer than in the domain of credit and debt, which—as Friedrich Nietzsche (2013) remarked long ago—is one of the most potent sites for the social distribution of feelings of superiority, moral desert, shame, and guilt. And, thus—as we increasingly invite the logic of ratings and scores into our lives via dreams of inclusion and expanded citizenship—we lend ourselves to the belief that the scores we fetch, and the outcomes they determine, represent something intrinsic about ourselves. Experimental evidence, for instance, shows that reified measures tend to reinforce beliefs that social positions are somehow deserved (Accominotti & Tadmon, 2020). As such, they often become causes of intense personal concern and strategizing,<sup>31</sup> and contribute to the broader legitimation of inequalities (McCall, 2013; Mijis, 2019).

The third problem is that such beliefs conceal the real nature of ordinal meritocracies. As I have suggested above, the logic of algorithmic engines, especially private ones, is fundamentally actuarial (Bouk, 2015; Gandy, 1993; Lauer, 2017). They are designed to extract value, rather than to create standards of merit. Sometimes the two goals are aligned, but not always (Fourcade, 2017). The distinction is important analytically. In *The Constitution of Liberty*, Friedrich Hayek explains it rather matter-of-factly: “[We] expect in our dealings with others to be remunerated not according to our subjective merit but according to what our services are worth to them,” in other words their market value (2011, p. 161).<sup>32</sup> Algorithmic sorting is primarily oriented to the needs of specific extractive projects (Fourcade & Healy, 2017, p. 24). This is why, for instance, there is not one credit score, but thousands—each precisely tailored to the particular economic purpose it is meant to serve. Or why the company Fitbit recently released a tracker for employees and health insurance members only. How these devices treat their subjects depends (at least in part, if not primarily) on the latter’s ability to generate capital—in the form of profits, data, savings, or (in some cases) political advantage. This means that people’s movements up and down the ordinal scale may have little to do with their own actions, and everything to do with changing system rules. Ordinal stratifications are culturally powered and *naturalized* by ideologies of merit, but materially anchored by inequalities of value.

## 5 | HIGH DIMENSIONALITY

A world regulated by algorithms overwhelms its subjects with ethical injunctions toward self-optimization (Ziewitz, 2019) and self-appreciation (Feher, 2018). But how this work on the self must be carried out is increasingly obscure. The data “sensing” practices (Johns, 2017) that support computational sorting have become tremendously complicated. Digitally-savvy organizations, unlike analog ones, are driven by the ambition to work with high dimensional data, sifting through a heterogeneous patchwork of sources—geolocation, photographs, public records, workplaces, grocery stores, courthouses, social services, fitbits, social networks, web browsers, and much more.<sup>33</sup> The domain of credit scoring, particularly in the Global South where personal credit files are notoriously “thin,” is teeming with fintech start-ups that promise to produce risk predictions with creatively sourced data.<sup>34</sup> Rather than demanding specific kinds of inputs, new computing techniques have the ability to discover patterns

and correlations with “virtually no pre-established conceptions” about data structure (Boelaert & Ollion, 2018, also see Anderson, 2008). Everything potentially bleeds into everything else. In a world of “almost anything goes,” where, to quote Louise Amoore (2009, p. 24), “every minute and prosaic ‘behaviour’, every aspect of a way of life potentially becoming a part of the classification,” what the algorithms “sees” in the end, and especially *how* it sees, is impossible to fathom. Since the outcomes of machine learning computation are by nature opaque even to their own designers (Burrell, 2016), populations have found that they are poorly equipped to game the actuarial systems that rule their lives, let alone contest their decisions.

Institutions are developing a new way of apprehending the social world, anchored in prospectively feeling the reality *on the ground*,<sup>35</sup> identifying needs inductively and governing opportunistically, using whatever data are available.<sup>36</sup> Such a regime develops knowledge from the bottom up, by “paying attention” rather than implementing its vision from the top down. It works probabilistically, by identifying patterns and deviations from the norm in large datasets, working through what Amoore (2013) calls a “politics of possibility” that visualizes unknown futures, to be either feared or desired.<sup>37</sup> In practice, the subject of government is not the person anymore but the personal fragment, the “measurable type” (Cheney-Lippold, 2017), who must be positioned along the path to individual and collective “preparedness” by an eclectic array of algorithmic vectors.<sup>38</sup>

Identities are no longer just claimed or granted, they are inferred from behavior and theorized by data engines—even categories such as race, ethnicity, gender, or sexuality may be reframed as statistical probabilities. The way algorithms see and classify me may differ starkly from the way I see and classify myself—but that “algorithmic truth” about myself is increasingly consequential economically, socially, and politically. It propels what Cheney-Lippold calls *Jus algorithmi* or “right of the algorithm.” Take national citizenship, for instance. As we move from physical to digital space, algorithms discern where people belong culturally from everyday online behavior—and decide where to direct them (Bridle, 2016). This virtual citizenship, co-constructed with private parties and dependent on the infrastructure of the internet, has already taken a life of its own in the bowels of the U.S. government machine. The files leaked by Edward Snowden in 2013 revealed secretive NSA monitoring of digital communications. One algorithm was tasked with assessing the concrete (rather than formal) state belonging of internet users. Anyone whose algorithmically inferred foreignness fell below 50% could be treated as a foreigner. In practice, this meant they could be legally surveilled (Cheney-Lippold, 2016)—and lose the protections of formal citizenship even when they held a U.S. passport.

We have seen that—for all practical purposes—credit scores in the United States regulate the conditions of “financial citizenship,” as well as the terms of institutional incorporation in many nonfinancial domains. Increasingly, this includes traditional sites of “citizenship,” such as national affiliation and social rights. On February 24, 2020, the U.S. Department of Homeland Security started implementing its new “public charge” rule that proposed using credit scores and reports to help determine the eligibility of immigrants applying for a green card or U.S. citizenship.<sup>39</sup> The rationale behind the new policy is that a low credit score signals a risk of using public supports in the future, but it also evokes the broader role that credit scores have come to play as markers of social fitness and reputation. Financial status, however narrowly measured, thus bleeds into citizenship rights (both national and social) in a very direct way.<sup>40</sup> The other example—coming from a very different political tradition—is China, where digitization, financialization, measured worth, and social citizenship are entangled in an even more formal and public manner. In the Chinese government’s plan to implement a “social credit score” for every citizen, data shared through public-private MoUs will serve to regulate people’s ability to access a wide range of public and private services—things like broadband speed, public transportation, foreign travel visas, social benefits, access to elite restaurants, and the quality of schooling offered to a person’s children. This score will be primarily anchored in one’s history of payments and record of legal compliance, although any digital system connected to it will presumably loop back into the scoring engine (see Loubère & Brehm, 2019; Matsakis, 2019).

The project builds on a series of similar ventures by corporations and a myriad of pilot experiments by provincial and local authorities receiving credit information from dozens, sometimes hundreds of subunits, with varying degrees of tech sophistication (Liu, 2019). These efforts have produced a cacophony of “blacklists” and “red

lists," deployed to shame and punish those citizens deemed "untrustworthy" while granting small benefits and public recognition to those who follow rules and complete their financial and legal obligations in a timely fashion (Ahmed, 2019). But a broader ambition, for both private and public actors, is to tie pervasive digital data collection and linking across platforms to the development of and widespread deployment of AI systems (Lewis, 2020). These create the possibility of more fine-grained, but also more opaque, measures of worth, tailored not only to bring various aspects of the individualized self into sharp relief but also to distribute rights and privileges accordingly, and thereby reprogram individual behavior in the name of collective "harmony."

## 6 | THE LIFE OF A CIVILIZED BEING

So where are the means to the "life of a civilized being" to be found today? If digital systems only know and manage fragments of ourselves, they still maintain the cultural fiction of a knowable, purposeful, and agentic individual who can be measured, classified and "civilized." Ordinal citizenship thus depends, first and foremost, on the *willingness to cultivate* a digitally mediated, dividualy managed and technologically assisted self. In practice, the political project to produce this fiction has taken many different forms. One solution rests on straightforward coercion—both normative (through social pressure) and physical (through restricted mobility). In the city of Rongcheng, China, a civil servant tells a journalist from *Süddeutsche Zeitung*, who has come to inquire about his city's pioneering role in social credit: "We want to civilize people." He proudly cites the founding document of the Office of Honesty of the City of Rongchen: "Allow the trustworthy to roam everywhere under heaven while making it hard for the discredited to take a single step" (Strittmatter, 2017). While there is some evidence that early (and mostly corporate) projects in this domain were quite popular, their growing inscription in one of the most authoritarian states in the world has given supporters a reason to pause.

Another path, powered by behavioral economics and market design, rests on the use of choice architectures and incentives to govern individual and collective behavior (Agamben, 2014; Rose, 1999). Good citizenship rests, primarily, on institutions' efforts to instill new dispositions. This may include reporting suspicious threats through a website or feeding pictures of uneven pavement to city officials. But it mostly implies unfolding ourselves as financial, digital, and biological projects that will be nudged toward some institutionally desirable state, by means of cybernetic feedback or behavioral modification (Schüll, 2016; Zuboff, 2019). Importantly, the price system looms large in this loop. The ordinal citizen's duties might include walking a certain number of daily steps, hydrating regularly, or simply wearing a fitbit, so her insurance risk may be assessed or priced precisely. As a worker, she may be relentlessly rated by everyone. Her salary may depend on obscure algorithms deeply embedded in her computer that break down her workflow, her emotional state of mind, her communicative ability, or her connections to others. Relevant measures may include her likelihood of quitting her job or her cultural fit with the company, pricing her not only according to performance but also "willingness to accept." As a financial citizen, she must use credit quite a lot, but responsibly—or face the market consequences. And, last but not least, she possibly finds it necessary to rely on paid services and derivative apps to optimize herself on multiple digital scales. This regime has already generated its own discontents, legal challenges, and organized resistance, particularly in the domain of work (e.g., see Feher, 2018; Irani & Silberman, 2013; O'Neil, 2016), but again the sheer multiplication of ad-hoc ordinal logics across multiple domains of life makes a unified challenge difficult to envision, let alone implement. When algorithms determine the value of each and everyone, how do we sustain beliefs in equality? When outcomes look like the result of individual actions (people get what they deserve), how do we maintain meaningful forms of solidarity?

Finally, it is possible that even with sophisticated props this ordinally managed citizen never fully comes into view to herself.<sup>41</sup> As new streams of data come along, the machinery that could sustain such an effort has become impenetrable, amorphous, and unsettled.<sup>42</sup> The rules of ordinality change often—perhaps in an effort to circumvent "Goodhardt's law,"<sup>43</sup> or as part of ongoing power plays in algorithmic systems (Ziewitz 2019). This

makes scored positions “algorithmically precarious” (Duffy et al., 2020) and creates uncertainty about both the government of subjects and the legitimate direction of self-conduct. As the game of ordinal citizenship becomes increasingly hard to play, tech hammers one last nail in the coffin of liberal ideology. Why not give up on freedom altogether and outsource every action to a machine that strives to know you better than you know yourself? (Harari, 2015) In a speculative video leaked to the online tech magazine *The Verge*, the head of design at Google’s moonshot unit, Nick Foster, envisions a world where people farm out all decision making to digital devices. Google seamlessly takes over, organizing your life and designing products “just for you” from a ledger of your past “actions, decisions, preferences, movement, and relationships.” As the process goes on to include everyone across multiple generations, the algorithm scans other people’s ledgers to detect gaps in your data, produce the means to fill those gaps, thereby making your ledger “richer.” In the final step, the ledger—a digital version of our social DNA—is given purpose as the algorithm works to reinforce those behavioral traits that it finds desirable at the level of the species, so that future generations, properly nudged by their own digital assistants, can benefit from the algorithmically-processed wisdom of their predecessors. This is probably not what “sharing to the full in the social heritage” was meant to be. But it may be the political horizon that frames how we will think about it in the future.

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## DATA AVAILABILITY STATEMENT

Data derived from public domain resources.

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## ENDNOTES

- <sup>1</sup> As Goldberg shows for the United States, the centuries-long expansion of rights that Marshall describes was never linear. For instance, social rights were treated “as an alternative to civil and political rights rather than as a foundation for them” (2008, p. 109) well into the twentieth century (also see Fischer, 2008; Fox, 2012; Somers, 2008).
- <sup>2</sup> As Glenn (2000, p. 4) writes, “In Marshall’s vision, social citizenship was important, not only for its own sake, but because it ‘filled out’ what Marx considered the hollow rights of liberal citizenship.”
- <sup>3</sup> See Kymlicka (1995), Rose and Novas (2005), Epstein (2007), Lakhani and Timmermans (2014), Dumbrava (2017), Bloemraad et al. (2019), Hirsch and Khan (2020).
- <sup>4</sup> Typically, marginalized racial groups, women, and the poor (James, 2013; Riles, 2018; Wherry et al., 2019).
- <sup>5</sup> Mossberger et al. (2008), Hintz et al. (2018).
- <sup>6</sup> Rose and Novas (2005), Epstein (2007), Nelson (2016), Lee (2017).
- <sup>7</sup> Also see Rose and Novas (2005), Fourcade (2016).
- <sup>8</sup> The trend described here parallels the “instrumental turn” pertaining to national citizenship identified by Joppke (2019) and others.
- <sup>9</sup> This shift toward the market has been appealing politically because it satisfies—at least nominally—liberalism’s embrace of the sovereign, empowered individual, as expressed in two key cultural idioms of democracy: *equality* of opportunity, on the one hand, and the *freedom* to live one’s life as one sees fit, on the other hand (Friedman, 1982; Lerner, 1972; Rose, 1999).

- <sup>10</sup> In the ambitious world of fintech where “every tech company wants to be a bank—someday, at least,” (Barber, 2019) everything is game to predict credit risk: phone call history, GPS data, friends’ lists, political campaign donations, social media postings, and personal photographs.
- <sup>11</sup> The state’s role is reduced to designing weakly enforced institutional safeguards such as literacy standards and programs, informed consent, safety, and security rules. (Lazarus, 2013).
- <sup>12</sup> See Soederberg (2014), Lavinias (2018), Fourcade and Gordon (2020). For instance in India today the adoption of welfare e-payments (supported by a biometric identification infrastructure known as Aadhaar) in the name of financial inclusion, government effectiveness and anti-corruption efforts, is helping build the scoring infrastructure that now fuels the expansion of credit.
- <sup>13</sup> In a 2009 decision striking the anti-file sharing law HADOPI, the French Constitutional Council ruled that “free access” to online communications services is a human right that cannot be withheld without a judge’s intervention.
- <sup>14</sup> Digital industries more generally are very much entangled with the state everywhere, in the form of crucial seed funding (O’Mara, 2019), infrastructural investments, a favorable legal-regulatory environment (Cohen, 2019), and sometimes even revenue sources (digital finance, e.g., benefits from the generalization of income supports and retrenchment in basic public services that force people to go into debt).
- <sup>15</sup> In 2015 the Brookings Institution, an influential Washington-based think tank, unveiled a vast international project to promote financial *and* digital inclusion. The twin mentions in the project title (financial/digital) indexed the organization’s claims that, in the words of the authors of the 2017 report on the subject, “(1) financial inclusion is a key ingredient for sustainable development; (2) ‘Fintech,’ the intersection of technological innovation and the financial sector, possesses tremendous potential to accelerate progress toward financial inclusion” (Lewis et al., 2017, p. 2). This hyperbolic language reaffirms the centrality of microfinance to the development project and to the empowerment of women, but—after it arguably failed to deliver either—reinvigorates its promise through the synergy with digital and mobile technology (Kusimba, 2018). The convergence between financialization and digitization “is at the center of narratives of ‘Africa rising’” (Donovan & Park, 2019). Kenya, where international and state organizations have enthusiastically supported the rapid expansion of the mobile money system M-Pesa, is often praised as the poster child for this new wave of financial inclusion. But predatory lending and data collection practices are wreaking havoc on financially insecure populations, and there is little evidence of redistributive effects (Natile, 2020).
- <sup>16</sup> Michel Foucault put it well:

*The power of normalization imposes homogeneity; but it individualizes by making it possible to measure gaps, to determine levels, to fix specialties and to render the differences useful by fitting them one to another. It is easy to understand how power of the norm functions within a system of formal equality, since within a homogeneity that is the rule, the norm introduces, as a useful imperative and as a result of measurement, all the shading of individual differences. (Foucault, 1995, p. 184)*

- <sup>17</sup> An educated citizenry was deemed essential to supporting political and civil rights, too.
- <sup>18</sup> Piketty (2014), Markovits (2019), Giridharadas (2018).
- <sup>19</sup> “If the rich and powerful were encouraged by the general culture to believe that they fully deserved all they had, how arrogant they could become, and, if they were convinced it was all for the common good, how ruthless in pursuing their own advantage.” (Young, 1994, p. 89) Ironically, the career of Young’s own son, Toby, both at university and afterwards, bore out his father’s predictions with a vengeance—as, indeed, did Michael Young’s own efforts to get him into Oxford. I thank Kieran Healy for pointing out this fact.
- <sup>20</sup> Comparing the 1950–1970 period to the 1980–2000 period in the United States and France, Thomas Piketty (2020, p. 56) shows that the 10% most educated have moved from voting Republican/for the right to voting Democrat/for the left, while the 90% least educated have experienced a movement in the inverse direction.
- <sup>21</sup> In a famous case involving the University of Michigan, the U.S. Supreme Court in 2003 rejected the use of quantified measures to account for race in college admissions, while allowing race to be taken into consideration as part of a holistic evaluation process. (Hirschman et al., 2016) The U.S. College Board’s recent proposal to add points for “adversity” to its flagship product, the SAT reasoning test, caused such a stir that it was pulled shortly after its unveiling and replaced with a variable providing information on the student’s “environmental context.” In New York City, a 2019 proposal to scrape the entrance exam into elite high schools—widely seen as leading to racially unfair outcomes—died in the legislature. (Shapiro & Wang, 2019) And, the same fate seems to be awaiting a recent proposal by the French

government to award bonus points to disadvantaged (scholarship or *boursier*) students taking the famously difficult examination into the *grandes écoles*. These conflicts pit two different (and incompatible) understandings of fairness against one another: as blindness to social difference, or, instead, as awareness of that difference.

- <sup>22</sup> These two trends might be very much connected: In a classic article, sociologist Georg Simmel argued that as groups expand, they have a tendency to differentiate internally.
- <sup>23</sup> As of 2019, nearly half of the world's population was not using the internet. Most of the offline population was located in poor countries in Africa and South Asia, where the gender gap in internet usage was also largest and growing fastest (data from itu.int).
- <sup>24</sup> Estonia's model e-government, for instance, "calls for active, informed subjects who are willing to constantly interact with authorities" (Björklund, 2016).
- <sup>25</sup> Consider, for instance, this media report about the management of the unemployed in Australia:

*Once deemed deserving, unemployed workers are referred to one of the 1,600-plus private employment service providers to undertake activity-testing. Unemployed workers are responsible for managing and submitting records of their activities online. This can include entering a daily code confirming attendance at job service providers, recording details of jobs applied for (regardless of whether they are available or appropriate), and reporting fortnightly income. Thus, the administrative burden of work testing is shifted to the unemployed. (North, 2020)*

- <sup>26</sup> Indeed the French call them *ordinateurs*, in reference to the creation of order out of chaos. (Incidentally the original proposal for translating "computer" in French was feminine, "l'ordinateuse électronique.")
- <sup>27</sup> That is, someone who never uses their credit card (even when managing their finances conservatively) may find that their credit score is low.
- <sup>28</sup> Similarly, your Uber driver ranks you on punctuality and friendliness, but Uber (the company) ranks you on your behavior within the system, from canceling too many rides to failing to provide feedback. Uber states on its website: "The rating system is designed to give mutual feedback. *If you never rate your drivers, you may see your own rating fall.*" In extreme cases, unfitting behavior *as rated within the app* may lead to exclusion from the platform, for both drivers and passengers. But ratings' most likely effect is differentiated service, such as reducing or lengthening the waiting time for an available car (or a customer), or matching driver and user according to rating. Finally, there is always the possibility of using the price system to reward (or punish) the well (or poorly) rated—although there is no evidence that this solution has been implemented.
- <sup>29</sup> On this point, also see Ong (2006).
- <sup>30</sup> This is what I have called elsewhere (Fourcade, 2016) "phantom de-categorization."
- <sup>31</sup> See Strathern (1997), Espeland and Stevens (1998), Fourcade (2016), Christin (2020).
- <sup>32</sup> This is what Leslie McCall (2013, p. 143) calls the "Just deserts" model. Also see Sen (2000) for a clear distinction between merit arising from incentives (what Hayek calls "value"), and merit arising from appropriate action.
- <sup>33</sup> As a recent series of articles on "Automating Poverty" in *The Guardian* showed, this is also true of public sector organizations. Efficiency-seeking governments throughout the world are implementing new computational tools that mine voluminous amounts of public and private data to identify patterns of risk (of fraud, of harm) and allocate benefits, surveillance, and resources accordingly.
- <sup>34</sup> In India, for instance, the credit-checking startup CreditVidya "identifies clients using their biometric ID in combination with their internet browsing history and other data, to assign credit scores for users who have no record of loan repayments." (Doshi, 2017).
- <sup>35</sup> That reality is profoundly mediated by the digital apparatus, however.
- <sup>36</sup> For instance, Evgeny Morozov (2013) reported that "a 2013 report by Westminster council and the Local Government Information Unit, a thinktank, calling for the linking of housing and council benefits to claimants' visits to the gym—with the help of smartcards."
- <sup>37</sup> "Algorithms precisely function as a means of directing and disciplining attention, focusing on specific points and cancelling out all other data, appearing to make it possible to translate *probable* associations between people or objects into *actionable* security decisions." (Amoore 2009, p. 22).



- <sup>38</sup> In joint work with Kieran Healy (2017), I have suggested that a new form of capital, call it Übercapital, or Eigencapital, arises from one's position and trajectory according to various digital scoring, grading, and ranking methods. Also see Rouvroy and Berns (2013), Gerlitz and Lury (2014), Lakoff (2017).
- <sup>39</sup> The United Kingdom also uses information about debt and bankruptcy in its decisions on citizenship applications.
- <sup>40</sup> Investor citizenship, a form of citizenship that is fully fungible in money, arguably represents an extreme form of this financialization of rights (see, e.g., Joppke, 2019).
- <sup>41</sup> As Rouvroy and Berns put it, "algorithmic governance, however, neither produces nor provides an affordance for any active, consistent and reflexive statistical subject likely to lend it legitimacy or resist it." (2013, xvii).
- <sup>42</sup> This opacity makes one thing clear: none of this was ever really about merit. If it were, the rules would be clear—and they could be followed (Hayek, 2011). The *idea* of merit was nothing but an efficient psychological vehicle, blowing the fog of legitimacy—and the score was its material incarnation, its instrument.
- <sup>43</sup> Originally formulated by British economist Charles Goodhardt in the context of monetary policy and generalized by Marilyn Strathern (1997) as "Goodhardt's law," the adage states that "When a measure becomes a target, it ceases to be a good measure." Also see Espeland and Sauder (2007).

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