Finance and the Financialization of Capitalism

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Chapter in: Capitalism, Democracy, Socialism: Critical Debates, Edited by James Chamberlain and Albena Azmanova (Springer, 2022), pp. 71-97

https://link.springer.com/chapter/10.1007/978-3-031-08407-2 4

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I. Introduction

A thorough critique of contemporary capitalism must include a critique *financial* capitalism. Observers agree that, over the past 50 years, financial markets, mechanisms, and institutions have become an increasingly prevalent, and in some places hegemonic, feature of capitalist societies. Yet agreement ends when it comes to both the *causes* of financialization and its *implications* for the democratic critique of capitalism. While the question of finance came to the fore of public debates after the 2008 financial crisis, that crisis reflected deeper trends in capitalist economies: the rise of new modes of capitalist accumulation, new structures of public and private debt, new financial technologies and political rationalities, and new forms of individual subjectivity and collective futures. This chapter provides an overview of these recent debates about the financialization of capitalism with a focus on implications for critical theory, broadly construed. In addition to discussing the phenomenon of financialization itself, the following examines the ramifications of financialization in a range of domains: for the politics of race, gender, and welfare; for democracy and the state; for subjectivity and culture; and for global environmental crises.

The literature on financialization is now vast, spanning disciplines including economics, sociology, geography, political science, anthropology, cultural studies, and science and technology studies.¹ Our focus is necessarily selective. We examine debates about finance with an eye towards how they can inform thinking about emancipatory political projects today, emphasizing research that bridges the normative and empirical dimensions of the critique of capitalism. In line with the tradition of critical social theory, we conceive of capitalism as more than just an economic system, but also an internally differentiated set of social relations, cultural forms, and modes of subjectivity. We examine the relationship between different facets of financial capitalism and multiple, intersecting structures of domination.

Most broadly, finance refers to the institutions within capitalism that manage the circulation and distribution of money and credit throughout the economy according to a logic of financial profit. In the vocabulary of traditional Marxism, it is the "sphere of circulation," in contrast to the sphere of economic production. Yet in contemporary economies, finance has

¹ For an up-to-date overview of all research into financialization, readers are encouraged to consult the Routledge International Handbook of Financialization (Mader, Merten, and van der Zwan 2020).

taken on a more central, and complex, role in capitalist production. With the rise of new financial technologies like securitization that combine discrete financial agreements into re-saleable financial assets that provide continuous flows of money, a "portfolio society" (Ascher, 2016) has come into existence. Often dizzying in their arcane complexity, these new apparatuses of finance have reconfigured other central features of capitalist societies, such as the structure of class conflict and the relationship between capitalism and the state, and so the possibilities and opportunities for transformative political change.

The chapter proceeds as follows: We begin with a discussion of the financialization of capitalism, examining the debate about the nature of the phenomenon and its causes (Section II). We then turn to explore the ramifications of financialization, examining how the predominance of finance within capitalism alters social and political relationships throughout society. Section III discusses the financialization of the household and the rise of an asset-based welfare system, which reveal the disparate gendered implications of financialization. Section IV examines the historical role of race in structuring the development of finance and the racialized implications of financialization, especially in the context of the United States. Both of these discussions reveal that financialization is as much a social and cultural as an economic phenomenon. Section V examines financialization from the perspective of theories of culture and subjectivity. Sections VI and VII turn to two arenas of the political consequences of finance: first, for democracy and the state (VI) and then for ecological politics and the possibilities of averting catastrophic climate change (VII). In both cases, the financialization of capitalism accelerates the forces hollowing out contemporary democracy and generating ecological crises. We conclude with a brief discussion of political alternatives to the current organization of financialized capitalism as well as directions for future research.

II. What is Financialization?

Financialization is the general term for the increasing prevalence of finance within capitalist societies, and in particular the increasing commodification of financial risk itself through secondary markets for financial products.² It refers both to the transformed structure of the economy itself, where profit is increasingly extracted through the use of financial products and services (Krippner 2005), as well as the penetration of financial mechanisms and mentalities into society more broadly. While many of these transformations are recent, the power of finance has long been identified as a central feature of capitalism. For Marx, the democratic state is, under capitalism, primarily a vehicle for securing public debt: "The only part of the so-called national wealth that actually enters into collective possession of a modern nation," he observes, "is—the national debt." (Marx 1977, p. 919). Marx reserves some of his most scathing criticism of the leaders of the 1848 French revolution for their attitude towards public debt:

By honoring the bills drawn on the state by the old bourgeois society, the Provisional Government succumbed to the latter. It had become the hard-pressed debtor of bourgeois society instead of confronting it as the pressing creditor that

² While finance and credit systems are deeply interwoven in capitalist societies, finance refers to the peculiar commodification of the risk involved in the extension of credit to individuals, businesses, and so on, where financial markets resell risk in order to ensure the profitability of their operations.

had to collect the revolutionary debts of many years (Marx and Engels 1978, p. 62).

Moreover, for Marx, credit and finance are more than just a constraint on democratic selfdetermination. They also penetrate into the self, constituting new forms of subjectivity centered on a concern for credit-worthiness:

Money has not been transcended in man within the credit system, but man himself is transformed into *money*, money is *incarnate* in him. Human individuality, human *morality*, have become both articles of commerce and the *material* which money inhabits. The substance, the body clothing the *spirit of money* is not money, paper, but instead it is my personal existence, my flesh and blood, my social worth and status. Credit no longer actualizes money-values in actual money but in human flesh and human hearts (Marx, 1992, p. 264, emphasis in original).

As in Marx's time, finance today transforms how individuals view themselves and others—as vehicles of creditworthiness, laden with financial obligations that define everyday existence within capitalism. As such, it shapes our political horizons, delimiting the avenues for collective democratic politics. Any effort to grapple with the structures of contemporary capitalism must grapple with these realities. To understand how financialisation configures the power dynamics of contemporary capitalism requires recognising the routes through which finance acts as an agent of change. Natasha van der Zwan (2014, 100) provides a useful way of dividing the literature on financialization into three main means of understanding how financialization leads to overlapping and multi-scalar transformations in, (i) the emergence of a new regime of accumulation; (ii) the ascendency of the shareholder value orientation of global firms; (ii) the overlapping process of financialization of everyday life. Thus, following van der Zwan, financialised capitalism has three distinct forms of power relations that transform the normative and institutional arrangements of the macroeconomy, global firm and everyday life.

Marxist debates about finance have examined the structure of financial institutions in relation to processes of production and the labor-capital relationship, with Marxist theorists disagreeing about how central or epiphenomenal finance is as a system vis-a-vis capitalism. In *Capital Vol. III*, Marx discusses what he calls "the credit system", which he defines as "an enormous centralisation" for the circulation of currency (Marx 1991, p. 570). Marx famously refers to the credit system as the domain of "fictitious capital," distancing finance from "real" production. From the perspective of traditional Marxian economics, then, finance belongs in the sphere of "unproductive capital" (Wolff & Resnick, 165). Lending at interest is specifically categorized an unproductive, "nonclass" process in which "no labor or surplus labor is done, no new commodities are created" (ibid., 165). Although lending may be done to industrial capitalists who then use the money as capital, it is nonetheless itself unproductive of value, and therefore has an axillary status. Lending increases money, but not surplus value, which is only created through productive labor. This interpretation of moneylending is supported by Marx's designations of both usury (lending to non-capitalists, i.e. consumer lending) and banks lending to capitalists as "parasitic".

This does not mean that finance does not matter, and more revisionary Marxist scholars have seen fictitious capital and finance as much more central to capitalism. According to David

Harvey (1982), "fictitious capital is contained in the very concept of capital itself" (269). Investments in fixed capital equipment and buildings is impossible without access to credit. The credit system, Harvey argues, enables "continuity in money circulation while embracing discontinuity in production" (264). In short, fictitious capital is necessary for the development of capitalism: "The barrier fixed capital creates to future accumulation... can be overcome only by way of the credit system in general and by the creation of fictitious forms of capital in particular... Fictitious capital is as necessary to accumulation as fixed capital itself" (269).

In the 1980s and 90s, Marxist and other social theorists began to use the term "financialization" to describe "a gravitational shift toward finance in capitalism" (Foster & Magdoff 78). Indeed, many forms of what Marx termed 'fictitious capital'— those divorced from the means of production, such as interest on bank loans, dividends on stocks, and fixed returns on bonds (see Marx, 1991, p. 525-542, Hudson, 2010) — have grown tremendously over the last several decades. Recently, global debt (including that of governments, corporations, and households) has been estimated at \$215 trillion (325% of global GDP); the value of the global derivatives market even more vastly outstrips the real economy at an estimated \$544 trillion to \$1.2 quadrillion on a notional contract basis (Desjardins, 2017).

Within the financialization literature, finance is seen as central not only to capitalism but also to new forms of expropriation. In A Brief History of Neoliberalism, David Harvey argues that "the main substantive achievement of [recent decades] ... has been to redistribute, rather than to generate, wealth and income" (2005, 159). The main mechanism by which this redistribution is achieved is what Harvey calls "accumulation by dispossession" (ibid). Accumulation by dispossession is not a process of appropriating surplus value, but rather "the continuation and proliferation of accumulation practices which Marx had treated of as 'primitive' or 'original' during the rise of capitalism" (159). In addition to privatization, manipulation of crises, and state redistributions, finance is one of the main mechanisms of accumulation by dispossession. In fact, Harvey argues, financialization, and in particular the "speculative raiding carried out by hedge funds and other major institutions of finance capital" constitutes the "real cutting edge" of the process of accumulation by dispossession (162). Similarly, Costas Lapavitsas suggests profits to real production have stagnated, capitalism has only been able to continue profiting by "extracting financial profit directly out of the personal income of workers and others", something he terms "financial expropriation" (115). Financial institutions funnel worker income, through both securitized debt and individual investment, into capital markets where they can extract fees and otherwise "tilt transactions to their own benefit" (132).

These Marxist theories situate financialization in relation to the broader structure of capitalist economies, and particularly in relation to the crises of post-war class compromise of the late 1960s and early 1970s. Yet the rise of finance also required, first, shifts in the technological infrastructure of markets, and so in the nature of instrumental rationality operative within capitalism; and second, changes in the relationship between citizens, the state and capitalism, with policymakers encouraging participation in financial markets to compensate for crumbling welfare states.

Since the early years of the early 20th century, the term "finance" has come to be equated with "the market" in the popular imaginary. Yet despite robust trade on stock exchanges in major cities in the 19th century, the idea of a market that could facilitate trade in financial

securities across space only began to emerge after the successful establishment, in the latter half of the 19th century, of arbitrage operations between domestic exchanges in the US and between London and New York. Arbitrage, the exchange of the same or similar securities for different prices in different markets, is a centuries old practice, but it historically involved the physical transport of goods, specie, or bills of exchange. New communication technologies, including the telegraph and telephone, made remote arbitrage at much quicker speeds possible. What counted as "instantaneous" at that time was quite different from what it is today, where financial institutions make use of high-speed trading and algorithmic analyses to accelerate financial markets. The technological conditions of financial trade enabled many of the characteristics that today define finance in official and popular discourses as "efficient" and "rational." In 1970, Euguene Fama mathematically "proved" that financial markets were efficient." In a paper in The Journal of Finance, he explained that "the evidence in support of the efficient markets model [that market prices "fully reflect" available information] is extensive, and (somewhat uniquely in economics) contradictory evidence is sparse" (416). Since 1970, the notion of market efficiency has been challenged extensively by heterodox economists, popular commentators, and the pesky reality of recurrent financial crises, but the idea that finance refers to the system by which money is most efficiently circulated from investors to productive enterprise continues to be taught in business schools and to be the foundation of policy and regulation in the U.S. and beyond.

The last 'leg' of financialization has been the increasing use of financial mechanisms as tools of state social policy. Around the same time that finance was deregulated--from the early 1970s--states also increasingly encouraged their citizens to rely on financial markets to manage risks and smooth their income, giving rise to a new regime of consumer credit (Krippner 2011; Prasad 2012). As a result, financialization has transformed both democratic citizenship and the underlying structure of social and political coalitions. We live in an era of "financialized citizenship," in which individuals' basic rights and social services are increasingly mediated by financial institutions, where having a good credit rating is as significant for your well-being as your social security number or employment status. In the United States, facilitating access to credit has long been a substitute for direct income support or redistribution. As Sarah Quinn argues, widely available mortgages were a way to encourage western expansion and were an outlet valve for distributive conflicts in the east. More generally, as scholars like Monica Prasad and Colin Crouch have examined, the post-1970s have witnessed a turn to "privatized Keynesianism," using subsidized credit to sustain consumption in the face of stagnant wages and weakening redistribution. On the other side of the coin, Melinda Cooper (2017) argues that U.S. political conservatives promoted "asset-based welfare" by encouraging individual investment and homeownership as alternatives to government safety nets. The motive was explicitly political, aimed at renovating American subjectivity away from progressivism: "After all, why would worker-investors continue to support public services and progressive income taxes if they too had a stake in the appreciation of financial assets... (ibid., 139). Today, the financialization of retirement systems means almost everyone has a stake in financial markets.

The rise of financialized citizenship also indicates the contradictory nature of financialization. Part of the promise of financial market has been to democratize the ownership of capital - now anyone can participate in the stock market. Many of the financial devices that intensify the control of financial markets also expand access to credit away from closed, often nepotistic networks. For example, credit ratings were often presented as a way to reduce the discriminatory effects of discretionary lending and increase access to credit for marginalised

groups. While our approach here is critical, we must keep in mind this democratic appeal of finance, which helps explain the enduring appeal and popular bases of financialized economies.

III. Financialization of Everyday Life and the Household

What are the ramifications of financialization for the broader structure of social and political relations? How does financialization constitute a transformation, not just of the core features of capitalist economies, but of the larger social fabric in which they operate? We now turn to examine these questions. Most immediately, financialization marks a transformation of the household and the role of the household within capitalism--what scholars call the financialization of everyday life (e.g. Martin 2002). Insofar as financialization signifies the increasing reliance on various forms of private and consumer debt, then the gendered household becomes a key site for managing financial flows. Moreover, the household becomes a central hinge between financial markets and democratic politics, as new constituencies are formed around the politics of defending the value of (housing) assets produced by global financialization.

Exploring the transformative processes of financialization in everyday life requires a sensitivity to the structural forces within the wider global and macro-economy that configure the socio-cultural dynamics of daily life. Where political economy approaches make connections between structures and institutions to explain the patterns of change in the regime of accumulation, the firm, and the demand-side of the economy (Boyer 2000; Crouch 2009; Froud et al. 2010; Gamble 2014), cultural economy approaches connect the calculative practices of risk management to the role of finance in the mundane routines of the everyday shaped byf global financial markets (Goede 2005; Martin 2007; Langley 2008b).

The global financial architecture is mediated through cultural discourses and practices of personal and household management. The household is important in configuring the everyday acceptance or consent to financialised logics, which is necessary for the abstraction of global finance to have meaning, and thus power, in everyday life. Matthew Watson (2006, 29) uses Aristotle's distinction between *oikonomia* and *chrematistics* — the former denoting the reciprocal world of self-sufficient households and the latter the world of commerce and the market — to articulate different institutional configurations. In a similar way, but drawing on Marxist feminist political economy, LeBaron (2010) locates the household as a key site of neoliberal restructuring by transforming and re-constituting the relationships and labour within households, for example, when economic restructuring shifts care work onto households through erosion of social services like child-care and health care. From this, Elias and Roberts (2016) go on to argue that a gender lens is required to connect the routine minutiae of everyday life – such as the affective and embodied experiences of work and employment, consumption and spending habits, householding practices, and localized or individualized forms of resistance – to large-scale transformative processes of financialization.³

³ Brassett and Rethel (2015) extend this idea of *oikonomia* further to interrogate how the heteronormative gender stereotypes of the self-sufficient household underpin the political narratives of domesticating global finance after 2008.

Understanding the financialization of everyday life in terms of *oikonomia* provides a way of framing the sites where the global monetary system graphs onto the mundane routines of everyday life to produce visible power structures. Take the asset of the home itself as a prime example: residential housing plays a central role in both global financial markets and everyday life, which makes visible the overlapping connections between the state, the market, and the everyday oikonomia of households. The 'home' is confined here to a physical address of a residential property, which is a debt vehicle (through a residential mortgage, home equity loans, and/or refinancing loans) and corresponding global financial asset class. The household must manage its own cash flow (budget) and balance sheet for its own survival; at the same time, the household sector must absorb market shocks and drive macroeconomic growth (Doling and Ronald 2010; Watson 2010a; Blyth 2008). The overlapping scales of the residential mortgage, issued by a global firm, to a household, where borrower(s) reside at a fixed address, with a national growth regime in which aggregate demand requires sustained increases in house prices for homeowners to use mortgages to convert equity into cash to fuel additional consumption. Home-equity loans (HELs) demonstrate the degree to which many people use their house not only as a source of long-term savings ("my house is my pension") but also as a source of cash, which serves to shore-up aggregate demand.

Residential housing is arguably the most significant route through which the household is integrated into financial markets, as articulated in both the political economy of housing and the cultural economy of homeownership as part of the financialization of everyday life (Roberts 2012; Sassen 2008; Langley 2008a; Allon 2010). An elaborate configuration of legal, regulatory, cultural, political, and economic dynamics transformed the "the home" into a series of assets and liabilities on balance sheets that circle the globe (Robertson 2017; Schwartz and Seabrooke 2008). Discursive constructions of homeownership under conditions of financialization transfigured the home from a "safe" asset in which wealth gains are made over many decades into a long-term savings vehicle available to households ("my house is my pension") because low-interest rates and market volatility limit long-term savings options of households. Financialization also transforms residential housing into a highly leveraged asset (via residential mortgages, home-equity loans and house-price inflation) that produces highly unequal distribution of wealth gains within the household sector. These structural produce what could be called a "f cultural logics of leveraged homeownership," whereby a view of housing as a financial asset replaces other modes of relating to one's home (García-Lamarca and Kaika 2016; Aalbers 2012; Cook, Smith, and Searle 2009; Allon 2010).

Evaluating financialization through the lens of the household makes visible how everyday life constitutes what is observed as a macroeconomic regime of accumulation or global firm's balance sheet management. Households mediate the specific socio-cultural dynamics that shape which groups within society can participate in, and benefit from, financialization. In other words, stagnating incomes and easy access to debt work together with the cultural economy of entrepreneurial forms of citizenship to configure how individuals participate, or are valued as participants, in a financialized economy.

In Anglo-America, for example, residential housing is a central configuration of financialized growth. To become global firms, banks developed an "originate to distribute" business model in which residential mortgages became a major source of profit. Standardized double-entry book-keeping practices allow lenders to book loans that generate interest revenues

which, on the aggregate, creates new money reserves. The dependence of households on a secure dwelling ensures that residential mortgages are a priority debt. In turn, reliable repayment streams make mortgages an attractive fixed-income asset class. Residential mortgage markets are a means to create substantial amounts of new debt, which can be easily bundled together and resold multiple times across global financial markets (McLeay, Radia, and Thomas 2014; Pettifor 2017). Debt secured against residential property grows further when government policies encourage homeownership and the state underwrites interest revenue allowing lenders to securitize their short-term revenue streams from long-term debts claims (Bryan and Rafferty 2014; Aalbers 2012). As Mian and Sufi (2014) demonstrate, the financialised mortgage market seeks to minimise the risk to lenders by imposing losses on residential mortgage borrowers through vulnerability to foreclosure, to the detriment of the entire macro-economy. The financialization of everyday life is configured through households as they have become highly leveraged investors (Watson 2010b; Lowe, Searle, and Smith 2012) and, thus, more vulnerable to small shocks in property and mortgage markets. The cultural practices of home buying feed credit-fuelled asset appreciation in residential housing, which is harnessed as a driving force of financialization.

What makes financialization powerful is how closely market-practices graft onto households' desire for secure shelter and a long-term savings vehicle. The mutual dependence of people looking to secure housing and shelter, of banks looking to secure profit by issuing mortgage loans, and of the national government looking to privatize welfare costs has created a situation where indebtedness is the root of savings, investment, and growth, connecting the aggregate logic of debt to the everyday level. This is why property prices have become the bellwether of household financial prosperity, national economic vitality, and global financial stability. However, increasing household leverage through home equity loans means that even those households with asset holdings – those considered more financially secure than households without any assets – are also hugely vulnerable to income shocks. Just like all overleveraged investors, households risk wealth losses in a market downturn; but, unlike investors, households cannot access bailouts or unconventional monetary policy to repair their collective balance sheets.

IV. Financialization and Race

Given the important role of residential mortgages in the global financial system, the household provides a particularly powerful lens through which to study the connection between financialization and the reproduction of structures of domination in society. Indeed, a close historical affinity exists between the financialisation of the household as an asset and that of racialized bodies. These two trajectories of financialisation found their common genesis in the transatlantic slave trade -- in which black bodies were treated as household assets. This pernicious logic persisted and played itself out in the racial bias in subprime mortgage lending. Jodi Melamed argues that financial capitalism "can only accumulate by producing and moving through relations of severe inequality among human groups--capitalists with the means of production/worker without the means of subsistence, creditors/debtors, conquerors of land made property/the dispossessed and removed... [and] racism enshrines the inequalities that capitalism requires" (Melamed 2015, 77). From the birth of financial instruments in the transatlantic slave trade to racial bias in subprime mortgage lending in the run up to the financial crisis, race provides one of the most consequental vectors of inequality for such accumulation.

The connection between finance and race dates back at least to the transatlantic slave trade. Kish and Leroy (2015) explain that "slave traders bought slaves with British manufactured goods, and the merchants who produced such goods extended traders' credit" (642). As the slave trade expanded, it fuelled the emergence of the modern credit economy by greatly increasing the circulation of bills of exchange written on slave cargo, and increasing the practice of bill discounting--spending or cashing bills with banks for a lessor amount before their stated payment date--based on that cargo. This, in turn, expanded banking and financial exchange, as "the proliferation of banks in [Liverpool, London, and Bristol] in the second half of the eighteenth century was almost entirely due to bill discounting business connected to the trade in Africans" (ibid). What's more, the use of slaves as collateral in the practice of slave mortgages was "widespread" if "relatively invisible" in southern U.S. states both before and after the American Revolution (Martin 2010, 818, 820). According to Ian Baucom (2005), another financial practice associated with the slave trade, slave insurance, inaugurated the very logic of modern finance itself. This logic, which he calls "theoretical reason," is a form of thought required to understand and invest in the imaginary values contained in financial securities. The actuarial calculations involved in insuring slaves during their journey from Africa to the New World emptied them of their specificity, replacing their human lives with "averages, aggregates, and numbers" (240). For Baucom, the insurance "annuls the object, abolishes it as a bearer of value, and so frees value from the degradation of thingly existence" (95). He examines the case of the Zong, a slave ship on which, in the course of its transit and upon encountering bad weather, the captain ordered 133 slaves thrown overboard. Under the logic of slave insurance and theoretical reason, this was not, as courts would affirm, a mass murder of slaves, but rather a rational action that "hasten[ed] their transformation into money" (62). The Zong massacre reveals the atrocity of insuring human beings who were, through theoretical reason, rendered to be capital inputs to agricultural production themselves. When slave insurance emptied these capital inputs of their thingliness, it therefore emptied them of their humanity, at least in the eyes of the courts, investors, and slave traders.

This dynamic is characteristic of modern finance in a number of ways, as individuals and the places they call home are emptied of all specificity but their risk profiles in mortgage-backed securities, and companies are emptied of their social and environmental impacts leaving only their stock market performance as the single criterion for their selection by institutional investors like universities and pensions. The long history of finance reveals that the dynamic is, nonetheless, applied with differential intensity to particular raced bodies. The sharecropping relations that replaced slavery for the majority of freed slaves in the 19th century offer one historical example. When slaves were relieved of their role as capital inputs in agricultural production, they immediately became dependent debtors. Mehrsa Baradaran (2017) explains that "without wealth or land, the majority of Black southerners turned toward sharecropping arrangements to make a living... Sharecroppers paid for the land, supplies, and tools using credit, and they paid back their debts with their crop yields typically with nothing left to spare... Each plantation became its own system of banking and debt collection" (33).

The exclusion of Black borrowers from mortgage finance through practices of redlining and direct discrimination are well documented. Yet, even after the official end of redlining and discrimination against Black borrowers by the Federal Housing Authority, they were not welcomed into mainstream debt relations. Instead, according to Keeanga-Yamahtta Taylor (2019), Black borrowers were and continue to be subject to what she calls "predatory inclusion"

by which "African American homebuyers were granted access to conventional real estate practices and mortgage financing, but on more expensive and comparatively unequal terms" (5). After the Housing and Urban Development Act of 1968, the real estate industry was given a greater role in providing "affordable housing." Instead of undoing racial segregation, the HUD act promoted subsidized mortgage borrowing to Black residents for substandard urban housing. The resulting "golden ghetto" provided "profits for banks and real estate brokers... while shattered credit and ruined neighborhoods were all that remained for African Americans who lived there" (4). Thus, through the racial logic of differential treatment, "white suburban neighborhoods came to be valued as appreciating assets for the households who lived in them," while "Black urban neighborhoods were prized by the real-estate industry for their extractive value" (Taylor 2018, 27).

Some of the government officials and real estate brokers involved in these early HUD deals were arrested and charged with fraud, but the longer history of mortgage finance reveals remarkably stable differential treatment of Black borrowers, and therefore differential extraction of wealth via financial circuits. In the 1990s, so-called "reverse redlining", whereby mortgage companies targeted poor Black homeowners for high-interest home equity loans--ostensibly so they could make home repairs--stripped those homeowners of their equity through fees and multiple refinancings, significantly reducing one of the largest sources of Black wealth. In the run up to the financial crisis, Black borrowers were disproportionately represented in the infamous "subprime" mortgage securitizations that would become "toxic assets." Wells Fargo was sued for issuing more subprime loans to Black borrowers, who "were twice as likely to receive high-cost loans when compared with white borrowers with similar credit backgrounds" between 2004 and 2014 (Marte 2017). Black women were most affected: they were five times more likely to get subprime loans than white males, even controlling for creditworthiness (Servon 2017, 44). Black borrowers were also more likely to experience foreclosure and for that foreclosure to result in a disproportionate reduction of wealth as well (Rugh, Albright, Massey 2015). Subprime borrowing did not apply only to Black borrowers. Wyley et al. point out that, especially after 2001, the category of subprime lending was predominantly aimed at white borrowers. But the evidence above shows that minority borrowers experienced differential effects, and were differentially profitable for purveyors of subprime finance.

Laura Pulido explains that the decision to switch Flint residents' water source to the Flint River, thereby poisoning them with lead leached out of pipes by the corrosive water, was a financial one carried out by the city's Emergency Financial Manager (EFM). When the financial crisis hit in 2008, Flint had already suffered depopulation and fiscal crises because of deindustrialization. White residents fled and the remaining poor and mostly Black population was neglected. As Pulido (2016) put it, "racism is a process that shapes places, and in this case, produces a racially devalued place" (8). The EFM took over in 2011 and was tasked with righting the financial ship. Pulido claims that the decision to switch to the Flint River and then not invest the "\$100 per day" (Pulido 2016, 5) it would have cost to treat the water with anti-corrosive agents was a form of "organized abandonment" (Harvey 1989 qtd. in Pulido 2016, 9). But it was also, as Pulido shows, a financial process. Before the crisis, Flint chose to issue bonds rather than raise taxes on the wealthy or corporations. When it defaulted on these obligations, EFM was invoked. Pulido explains:

"Under Michigan Public Law 436 EFMs have enormous latitude and decision-making power: they can sell assets, void union contracts, enter into new contracts, and even switch water sources, but the one thing they cannot do is void a contract with bond-holders. Why bond-holders are sacred is significant. Their status is not only a profound testament to the values of the US economy and culture, but must be seen as a form of violence. The relationship between bond-holders and Flint residents is an exploitive social relationship – it is a taking of both money and life (Pulido 2015). According to EFM logic, the well-being and basic needs of devalued human beings are secondary to repaying bond-holders." (9)

The organized abandonment of Flint as a "racially devalued place" was redoubled through the logic of finance. Finance operates by transforming complex "thingly" objects into imaginary values to facilitate the appropriation of that value. When this logic applies to raced bodies it is redoubled, transforming race itself into a category that marks those imaginary values for extra exploitation.

V. Finance, Subjectivity, and Culture

When Marx wrote that credit makes money incarnate "in human flesh and human hearts" (Marx, 2005, p. 264), he could not have known how prescient his pronouncement would be, given the massive expansion of private credit long after his death (notably in the Reagan-Thatcher 1980s) – and, with it, the myriad ways in which "human flesh and human hearts" have come to be conscripted by finance. These techniques constitute a "cultural logic" of credit, debt, and investment, by which we mean how cultural practices and modes of self-expression inflect our experience of financialization and are, in turn, reshaped by the penetration of financial mechanisms and practices into cultural domains such as social media. We have examined how the process of financialization ramifies through the everyday and reinforces structures of racial hierarchy. We now turn to the effects of financialization on the broader cultural forms and modes of subjectivity characteristic of contemporary capitalism--the forms and modes that shape and delineate the possibilities for critical resistance to the process of financialization. Given the vast expansion of 'fictitious capital' we have been examining, how might we extend Marx's observations on how credit attaches itself to flesh, individuality, morality, and status?

To begin to answer this, let us look to some of the key twenty-first-century thinkers who have considered how financialization reshapes subjectivity and culture. The anthropologist Arjun Appadurai has argued that financial derivatives involve "slicing and dicing" assets and individuals into composite objects of investment (Appadurai, 2016, p. 65, 68, 110, 117, 145, 151). For Appadurai, "[t]his feature of infinite divisibility and recombinability is at the very heart of the reconstitution of the modern financial subject" (Appadurai, 2016, p. 65). Just as a complex financial product such as a collateralized debt obligation (CDO), might be comprised of minute investments in hundreds of thousands of mortgages, so a similar sense of recombinability typifies subjectivity. The "sliced and diced" financial subject is, for Appadurai, a fragmented and atomized subject, recombined for others' profit, without the means for moral or social cohesion (Appadurai, 2016, p. 68).

What might this 'sliced and diced' financial subject look like? The scholar of dance and finance Randy Martin writes on how online surveillance apparatuses transform personal

qualities, tendencies, and traits into packaged, bundled and managed assets and risks – transforming identity itself into something akin to a financial derivative:

Scanning for attributes, known as profiling, was not only key to surveillance technologies but also constitutive of Internet-based self-appreciation protocols[...] Conventionally seen as the other to structurally determinate political economy, identity, the key term of cultural politics in the eighties, can now perhaps be fruitfully understood as a kind of derivative, for we were taken to be the sum of all our myriad identity attributes, even as they traded separately or were attacked in their respective singularities...(Martin, 2010, p. 360).

The ability to scan for attributes – which come to seem separable from the subjects who 'express' them – is baked into the online platforms through which today's financialized subjects present themselves as bearing status and value. For example, online dating sites such as OkCupid invite users to present themselves as bundles of attributes and traits (from having red hair, to running marathons, to loving horror movies). The platform frames these traits as *assets*, expressive of their owners' worth as "datable subjects" (see Rosamond, 2018) – i.e. attributes that make these subjectivities marketable. Drawing on Martin, we can say that the online dater is financialized insofar as their (self)-worth has been expressed through a "slicing and dicing" of personal traits as assets, which transforms them into scannable attributes. At the same time as online daters invest (or decline to invest) time in one another via messaging, these interactions generate value for platform-capitalist companies (Srnicek, 2016) such as OkCupid, which offer free platform services to online users by using these to gain revenue from targeted advertising. As Shoshana Zuboff puts it, "surveillance capitalist" companies scan for attributes (for instance, by listening in on household conversations via smart TVs), and trade on "behavioural futures markets" (2019, p. 96), surveilling, analysing, and intervening in behaviour in real time.

Taking a slightly different approach to the relationship between subjectivity and financialized value, Alison Hearn has written of a recent turn toward the "anticipatory, speculative self" (2017, p. 74), as social media users' attention become increasingly oriented toward status symbols and "processes of self-valorization" that platforms feature (such as the Twitter verification checkmark that accompanies the accounts of high-profile public figures):

their actual intent, content or outcome matter little – what matters is that they are pursued, and ceaselessly, relentlessly so. [...] Mirroring the speculative logics of finance capitalism, the speculative self's value is predicated entirely on externally generated predictions about our future potential "optimization" (Hearn, 2017, p. 74).

Each of these theorists help to specify the differences between the neoliberal subject, and the *financialized subject*. Debates on the neoliberal subject abound. Perhaps most influentially, Michel Foucault theorized neoliberal subjects as "entrepreneurs of the self" (2004), who seek to maximize their 'human capital' (in other words, the total economic value of their knowledge, experience, and attributes) by treating every aspect of their lives and selves as if it were a business. Human capital theory, constituted by the work of Gary Becker, Theodore Schultz, and critiqued by Foucault has remained an important touchstone for many theorists of the neoliberal subject – even though how, exactly, it should be understood within this field has been much

debated. As Michel Feher points out, under neoliberalism, human capital theory's aspirations have expanded considerably. While its initial ambition might have been simply to measure, for instance, the rates of return on investment in education (Feher 2009, p. 25), it now includes innate, contextual and collateral aspects – in short: "the things that I inherit, the things that happen to me and the things I do" (Feher 2009, p. 26). Given the predominance of credit over profit as a neoliberal-era market logic, Feher argues, it makes more sense to speak of an 'invested self' rather than Foucault's entrepreneurial self: one who acts as a portfolio manager, of sorts, seeking to increase the *stock* value of their monetary and psychic investments, rather than their entrepreneurial *profitability* as such (2009, p. 27).

Departing from Foucault and Feher, Annie McClanahan (2019) highlights the futility of both human capital and investment as bases for a theory of that subject, given the increasing predominance of subprime and surplus subjects: those deemed largely, or entirely, unworthy of capital's investment. Instead, Martin, Appadurai, and Hearn's works above, delineate the contours of a financialized subject constituted out of the relationship between financial activities and *representations* of finance. Like Marx's 'counterfeit' selves, the financialized subject draws attention to the recursion between subjectivity and representation – the senses in which fictitious capital blurs the boundary between lived experience and virtual representations of selfworth and value. But financialized subjects are not necessarily financial subjects, as credit – often shrouded in the vaguely meritocratic language of personal responsibility – can exacerbate class disparities, excluding subaltern and "subprime' subjects" (Kish and Leroy, 2015, p. 633) barred access to these markers of financialized self-worth.

Given how financialization can exacerbate class disparities – and given Martin's account of the disparate ways in which financialization and cultural expression share qualities and characteristics – there is certainly no simple answer to the question: how might financialized subjectivity be expressed within contemporary art and culture – and what might such expressions do? Since there are myriad inflections of financialized subjectivity, there may be as many answers to this question as there are participants in financialized culture. We might consider those artists who have aimed to give voice to the 'subprime' or 'surplus' subjects of finance: those deemed barely worthy (or completely unworthy) of capital's investment. This category might include South African director Nophiso Dumisa's film Nommer 37 (2018), a gritty remake of Alfred Hitchcock's Rear Window (1954), set in the impoverished suburbs of Cape Town. The film focuses on those shut out from dreams of the good life: a young couple marred by 'bad debt,' which ties them to gangs and loan sharks – who risk paying back their loans with their lives. We might also think, here, of American artist Cameron Rowland's exploration of the linkages between financial speculation and racialized prison labour, from the slave trade right up to the present day.⁵

Randy Martin also argues that cultural expression might *share* similar tendencies with finance, without necessarily sharing in financialization's exploitative tendencies. Martin argues that contemporary dance practices, such as hip hop, and activities like skateboarding, explore the redistribution of risk between bodies and environments, in a way that shares much with

⁴ As has been widely discussed in debates on the financial subject within literary studies. For instance: Sherman, 1996; LaBerge, 2015; Roxburgh, 2016; McClanahan, 2017.

 $^{^5}$ See Wang (2018a) and Vishmidt (2020).

derivative markets as they both reimagine and redistribute risk – even though the connections between these spheres remain indirect (Martin, 2012). With this in mind, it seems fitting to end this section with American artist Jacolby Satterwhite's six-part animated video series Reifying Desire (2014). Satterwhite's hallucinatory, hugely elaborate videos are partly based on his mother's obsessive drawings – which she produced by the hundreds-- of ideas for products she could sell on The Shopping Channel. Satterwhite takes these relics of entrepreneurial subjectivity, and transforms them into building blocks for outlandish queer animated heterotopias. Voguing in elaborate costumes, he inserts his body into a fantasy, outerspace/shopping mall world, where drawings for imagined shopping channel products like 'slicing trays' and water tub seats commingle with surreal groups of vaguely pornographic, statuesque animated figures and unimaginable architectures. Satterwhite 'detournes' financialized desire, making it into something altogether strange, and liberating it from the strictures of sanctioned 'straight' forms of self-expression. In doing so, he provides a similar hope to the one that Martin's writing expressed: that the synergies art and culture share with finance might have altogether unfamiliar allegiances, alien to exploitation - or that they might, indeed, reimagine 'sliced and diced' subjectivity as a site of resistance.

VI. Financialization and Democracy

Far from just an economic phenomenon, financialization moves through the everyday, reproducing class, gendered, and racial social relationships. It further has a cultural logic, one that mediates our experiences of financialization and so the modes of subjectivity and political resistance available to us. Here, we turn to the more "directly" political ramifications . What is the relationship between finance, financialization, and the state? How does financialization transform the nature of democracy?

The modern ideal of the democratic state has always stood in a contradictory relationship to finance. On the one hand, financial markets are often figured as the rapacious opponent of democracy. Countries' entire fates today depends on the whims of international bond markets and inflows of capital through foreign direct investment. The era of financialization has thus been one in which states are increasingly constrained by global movements of capital. Insofar a political sovereignty is a precondition for democratic self-determination, then finance is a constant threat. Thus, contemporary critics like Wolfgang Streeck (2016) draw oppositions between national sovereign people and the "market people" of financial institutions who subvert democracy in the defense of their financial interests.

Yet the idea of the sovereign state is as much a product of finance as its opponent. Historically, representative electoral institutions enhanced the state's capacity to access financial markets, providing a responsible body who would be bound to repay the loan. Monarchical rulers were famously fickle; financial markets were reluctant to loan to a sovereign individual who would default without much thought. Representative bodies were much more reliable partners for financiers, especially as their members were often the providers of capital (Stasavage 2011). But more fundamental was the fact that the ideal of sovereignty made all members of the political community implicitly responsible for the loan, to be paid out of their future taxes. Like Marx, Karl Polanyi observes how powerful creditor countries, and most centrally Great Britain, spread the idea of representative democracy precisely to secure the subordinate position of debtor countries. In the nineteenth century, the centers of global finance "pressed for the

establishment of representative government in less-advanced countries...as a check on the finances and currencies of debtor countries...such as only responsible bodies can provide" (Polanyi 2001, 261). The fiction of national sovereignty, far from being tied to an emancipatory ideal of self-determination, created a new form of subordination through collective responsibility—the supposed legitimacy of electoral democracy was sufficient to make all members of a polity accountable for national debt.

Thus, the financialization of the state is not just a story about how financial markets and institutions *constrain* democracy. It is also, and perhaps even more so, a story about how financialization *shapes* democracy and democratic institutions. Financialization alters both the mechanisms of state power and the institutional matrix of democracy, promoting, for example, ideals of collective sovereignty *as* responsibility for national debts. Here, then, we suggest we should analyze the relationship between the state, democracy, and financialization on three levels. 1) As an *external constraint on democratic states* by financial institutions and centers of power--the dominant framework in current public debates on these issues. 2) As a transformation in the *mechanisms of governance* available to democratic states, whereby states are increasingly bound to governing through the market. And 3) as a transformation in the *internal structure of democratic political mobilization*, as different social groups and classes are integrated into financial markets in their everyday lives. Each of these facets of the financialization of the state poses a challenge for the emancipatory ideal of democracy.

Most commonly, financialization is taken to limit democracy insofar as financial institutions and markets gain independent power and so can constrain democratic decisionmaking. These external constraints are two-fold: first, as the financial sector of the economy grows, financial corporations become powerful political actors, lobbying for lighter regulation and a favorable political context. But second, financialization makes states increasingly dependent on international bond markets for their ongoing functioning. The decline of the Bretton Woods system of fixed exchange rates forced states to open up to global capital flows, as they no longer had the capacity to impose capital controls, creating deeper transnational markets for financial goods like government bonds. At the same time, declining tax revenues forced governments to increasingly rely on issuing bonds to finance their core operations. All of this gave bond-holders, and financial institutions that evaluated the "credit-worthiness" of states' public finances, an effectively instantaneous veto over government policies. Governments came to fear bond vigilantes more than their own voters. While this is not in and of itself a new phenomenon--there is extensive evidence that bond markets priced in the risk that governments may choose the "wrong" policies and that those governing reacted accordingly--the post-1970s period saw a new political fixation on the reactions of bond markets, a fixation that was in part created by new political elites whose ideology focused on governing through markets. In this era, finance constrained the "policy space" of political actors--for example, Dani Rodrik (2011) famously argues that in the post-Bretton Woods world, states are constrained by a policy trilemma: they can only pursue two out of the three objectives of global economic integration, national sovereignty, and democratic self-determination. If sovereign states want to pursue economic integration they have to sacrifice their democratic self-determination by enshrining the rights of capital and finance

Not just a constraint, financialization also transforms the state itself, and in an era of finance states increasingly try to govern *through* markets, abandoning older policy tools in favor

of mechanisms that reinforce financialization. Part of this is embodied in the shifting balance of power amongst different institutional arms of the state, with central banks becoming the most important node of interaction between the state and the economy. As central banks fought for their independence in response to the early 1970s inflationary pressures produced by the strength of labour, they also turned to fostering the development of the sort of markets that are necessary for their governance mechanisms to function. Benjamin Braun (2018), in his insightful study of the European Central Bank, shows how central banks exercise an "infrastructural power" via financial markets. Far from being reactive, central banks actively create the sort of financial markets necessary for their policy tools to function. At the same time, the financialization of the state means that the state's own governance mechanisms increasingly rely on financial tools and markets (Karwoski 2019). Most obviously, states increasingly rely on financial institutions for their own financing, but this has also transformed sub-state institutions like municipalities, who have turned more and more to bond markets to finance projects--with disastrous consequences for cities like Flint, Michigan.

These processes operate through and intersect with financialization of everyday life and the household, thereby changing the structure of political mobilization within financialized capitalism. Relationships to financial markets and financial risk have become a new social cleavage, one that reconfigures the nature of the class mobilization that has been historically central to the expansion and consolidation of democracy.

The result has been a shift in the structure of democratic political conflict. Financialization opens up new cleavages, not just between the winners in financial winner-takes-all markets, and other members of the super-wealthy, but also between asset-owners and non-asset-owners. The spread of homeownership has fundamentally transformed democratic politics, as political elites are strongly incentivized to sustain the inflated values of those assets (Chiewroth and Walter 2019). Debtors vs creditors, renters vs homeowners and even worker-investors vs. just workers become new fronts in democratic politics, restructuring distributive politics and undermining the forms of solidarity that sustained the mid-century welfare state. And this transformation of solidarity occurs at a deeper level. The credit ratings that determine access to financial markets are inherently individualizing, cloaking collective political institutions with a facade of individual merit and accomplishment. Even as financial citizenship is constituted through the state and political institutions, it appears as a matter of individual creditworthiness, withering democratic solidarity.

VII. Capitalism and Climate Change

In this last section, we turn to the interaction between the two evident realities that are capitalism and climate change. In particular, we interrogate the idea that financial markets could become sites of resistance to ecological crisis. Given that our ecological future is both increasingly uncertain and increasingly worrisome, what are the consequences of the financialization processes we have described above? Or, to put the question differently, if capitalism's relation to the future is indeed mediated by financial markets, what hope is there for a genuine ecological transition? Can we count on the ingenuity of Wall Street financiers to compensate for the extractive tendencies of industrial capitalism, as is promised by so-called "green finance"? Or, as seems more likely, does the apparent de-materialization of capitalist

relations achieved by financial markets only make it much more difficult to recognize and correct the consequences of this mode of production (Knox-Hayes, 2013).

To advocates of "neoliberal" policy paradigms that seek market-based solutions to collective political challenges, it would seem that today's financial markets are particularly wellsuited to managing emerging risks, including those created by anthropogenic climate change. After all, much of modern finance developed as an effort to calculate and price the myriad risks associated with new commercial activities, and there certainly exist derivative contracts to protect investors against, say, the consequences of an unexpected flood or a devastating heat wave. But while it may be possible to protect aspects of the capitalist value chain from the economic consequences of climate change through the use of such insurance contracts, the contracts in themselves are powerless when it comes to actually stopping the flood or cooling the air. Not only that, but the mere fact that such financial mechanisms exist could even encourage environmentally deleterious behaviors. As we noted earlier, it was once considered reasonable in the 18th century for ship captains to throw their human cargo overboard, so long as they had purchased insurance. One can well imagine that an energy company today, equipped with proper flood insurance, would likewise feel emboldened to build a coal-fired power plant along a river bank, despite the knowledge that its CO2 emissions would only increase the risk of floods around the world in the long run.

It seems clear, therefore, that derivative contracts alone can do little to mitigate the consequences of climate change. But does this mean that financial markets cannot be relied on to propel the necessary ecological transition? According the neoliberal paradigm, at least, there is no reason green finance is incompatible with a market economy. On this view, in fact, the ecological threat posed by capitalism may in fact be soluble in capitalism, so long as we continue to place our faith in the market and its price system as the single best way to coordinate human behavior. The problem is one of market failure and externalities--once those externalities are appropriately incorporated through taxation, then market actors will adjust accordingly. If one is trying to reduce greenhouse gas emissions or mitigate their effects, for instance, the best strategy is not to compel new behavior through governmental regulation but rather to create incentives and deterrents through carbon pricing or the transformation of nature into financialized assets more generally. With the right corrections of market failures, the price system serves as an effective indicator of the state of the planet and may be relied on to incentivize the necessary behavioral changes on the part of economic actors. If a given resource becomes too expensive as it becomes depleted, one can hope, producers and consumers will naturally be moved to seek cheaper, more abundant alternatives.

Take carbon markets, first. The logic behind these, in a nutshell, is to incentivize and coordinate the reduction of CO₂ emissions without the state having to impose taxes on carbon emissions or having to regulate them outright. In this scenario, states are given a crucial but limited role, which is to determine the appropriate level at which emissions should be capped for a given sector. The relevant agents are then issued a proportionate number of emissions allowances, which they can then trade amongst themselves without the state having to organize the process (hence the expression "cap and trade"). A number of such markets have been established since the enactment of the Kyoto protocol in 2004, making it possible also to buy so-called carbon offsets or reduction credits.

While these systems were originally devised for carbon, the principle can be applied to the management of any other environmental externality, positive or negative. Similarly, other market-friendly systems have been devised to put a price tag not only on the negative externalities we may want to avoid (like carbon emissions), but on those non-renewable resources we may want to protect (such as forests). The reasoning being that if the destruction of natural resources is sufficiently costly, economic actors will seek cheaper alternatives without having to be told.

In both of these scenarios, whether in the establishment of carbon markets or the financialization of nature more generally, advocates of green finance solutions tend to put their trust in the efficacy of the price signal. If the price of goods and services could be made to include the cost of environmental degradation, they reason, economic actors will naturally shy away from producing and consuming polluting goods and would choose alternatives that are both more economical and ecological. As Adam Smith famously put it, "it is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest." Why then should we expect the environmentalism of Chevron or General Motors to help us save the planet, when we can appeal to their profit motive instead?

While undoubtedly seductive, such strategies are flawed. In particular, some critics have argued, they overlook the fact that today's financial markets are profoundly different from those familiar to Adam Smith. Indeed, if one considers the kind of marketplace Smith might have encountered in the eighteenth century, or even the so-called "labor-market" imagined by later economists, one can picture buyers and sellers meeting in a particular place and haggling over the price of a particular commodity – whether it be a bushel of wheat, a basket of apples, or a day's worth of work. If one considers today's financial markets, by contrast, and what one encounters are increasingly "virtual" spaces – electronic exchanges, that is – where individuals anywhere in the world can exchange highly standardized commodities at prices that are quoted automatically and instantaneously. Not only that, but thanks to the rise of futures, options and other derivative contracts over the last several decades, it is now possible for buyers and sellers to commit to specific exchanges in the future. Presumably, this allows them to face a necessarily uncertain future with a degree of confidence; but it also means that their competing visions of this future affect the price of commodities in the present, causing them to fluctuate. As a result of this distinctive architecture, then, there is considerable volatility on financial markets, with inevitable repercussions on markets more generally.

There are several consequences to this volatility.

First, contrary to what was suggested above, it is in fact impossible to infer the potential depletion of natural resources simply from looking at short-term changes in price. In fact, the greater the uncertainty there is about the availability of a given resource, the more its price is likely to fluctuate, thereby only compounding the difficulty of reading the price signal. As the French mathematician Nicolas Bouleau (2018) points out, it is basically impossible for market prices to reveal anything about future trends. After all, as per the efficient market hypothesis described above, if economic actors *were* able to infer anything about the future merely from the evolution of prices in the present, they would use the resulting knowledge to make a riskless profit (by buying this or that category of assets). This would in turn cause prices to change instantaneously, rendering the underlying trend invisible.

Secondly, though it may be possible in principle to put a price on precious but non-marketable resources—like the Boreal forest, say, or its capacity to absorb atmospheric CO₂—the price fluctuations for those resources that *can* be traded make such a conservation strategy untenable in the long run. At some point (and it need only happen once), the cost of protecting a resource will exceed the economic benefits that come from destroying it, and trees will be felled to make way for fracking. As Justin Trudeau himself declared at an energy conference in Texas in 2017, "no country would find 173 billion barrels of oil in the ground and just leave them" (Berke 2017).

The fact that prices on financial markets are so volatile exacerbates the coordination problem and makes it highly unlikely – if not nearly impossible – that individual actors would take necessary steps to reduce their greenhouse gas emissions. Financial markets indirectly set the prices for countless commodities, which makes it difficult for either industrial or agricultural producers to measure the risks associated with new strategies. It becomes economically difficult for any one individual to justify a new business model, even if they know full well that "business as usual" is environmentally disastrous. In fact, according to Bouleau, the volatility of financial markets stands as an obstacle to negotiating environmental agreements more generally, as it creates disproportionate opportunities for anyone willing to exploit nonrenewable resources (Bouleau 2018).

As Janelle Knox-Hayes puts it (Knox-Hayes 2016), "market volatility is ill suited to environmental cycles. Economic systems recover from market turmoil in time. Environmental systems do not have the same luxury; their cycles of reproduction are inflexible." In the end, therefore, it seems financial volatility is not unlike a superstorm on an already warming planet: not only does it make it impossible to see what lies ahead; it is itself a force of environmental devastation, leaving irreparable damage in its wake.

VIII. Conclusion

As we noted at the outset, any attempt to delineate the structure of contemporary capitalism and the possibilities for democratic transformation must attend to the problem of finance. We have discussed how financialization resides behind many of the most consequential transformations of contemporary capitalism, as well pointed to the diverse methods and approaches necessary to take stock of these transformations. As we have argued, financialization has ramifications for the structure of inequality and class in capitalism, for the relationship between capitalism and the family, for culture and subjectivity, for race, for democracy and the state, and for ecological crisis. Yet we have only scratched the surface: for example, financialization has also transformed the structure of global capitalism, as the Global South increasingly depends on inflows of capital (FDI) and a new paradigm of finance-oriented global development.

Finally, perhaps the most pressing question is: what could a future beyond financialized capitalism look like? Our discussion has sought to reveal the full breadth of financialization, a process that increasingly penetrates throughout society. Yet that process has always been contradictory and uneven, with significant forms of resistance and contestation to the process of financialization. Today there are signs, however inchoate, of collective demands for a different society. These range from political struggles over debt relief and debt forgiveness to calls for a

democratization of financial governance institutions like central banks to challenges to the global architecture of state indebtedness and financialized dependency. These demands are born from the immediate crises of economic instability and precarity that financializion has wrought. They do not all point in a progressive or emancipatory direction. But we can nonetheless discern in them the shape of potential alternatives to financialized capitalism.

These diverse challenges to financialized capitalism reveal multiple possibilities. For some, the central drama is one of re-asserting the authority of democratic institutions vis-a-vis finance, with the possibility that the democratization of financial institutions could ensure that they fulfil their function--direct social resources towards economically useful activities--without undermining political and social equality. Such proposals to "democratize finance" typically go together with calls to curb the speculative and so unproductive facets of finance. For others, such arguments fail to appreciate the speculative core of all economic activities (Konings 2018). Rather than rolling back the clock on finance, they argue for the mobilization of financialized subjectivities against financialized capitalism. For example, Michael Feher (2018) calls for "investee activism," one that operates within the logic of speculative finance but seeks to build counter-institutions within financial spaces. Others see in the rise of finance-driven precarity a more fundamental challenge to the underlying logic of capitalism, and in particular the need to organize production around profit, and so the possibility of a more fundamental rupture with the logic of capitalism (Azmanova 2020).

References

Appadurai, A. (2016) Banking on Words: The Failure of Language in the Age of Derivative Finance. University of Chicago Press, Chicago.

Ascher, I. (2016) Portfolio Society: On the Capitalist Mode of Prediction. Zone Books, New York.

Azmanova. Albena. 2020. Capitalism on Edge: How Fighting Precarity Can Achieve Radical Change Without Crisis or Utopia. New York: Columbia University Press.

Baucom, Ian. 2005. Specters of the Atlantic: Finance Capital, Slavery, and the Philosophy of History. Durham, NC: Duke University Press.

Becker, G., 1964 Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education. Chicago: University of Chicago Press.

Berke, Jeremy. 2017. "No country would find 173 billion barrels of oil in the ground and just leave them': Justin Trudeau gets a standing ovation at an energy conference in Texas." *Business Insider*. March 10, 2017.

Berlant, L. (2011) Cruel Optimism. Duke University Press, Durham.

Blyth, Mark. 2008. 'The Politics of Compounding Bubbles: The Global Housing Bubble in Comparative Perspective'. *Comparative European Politics* 6 (2): 387–406.

- Bouleau, Nicolas. 2018. Le mensonge de la finance : Les mathématiques, le signal-prix et la planète (Éditions de l'Atelier).
- Baradaran, Mehrsa. 2017. *The Color of Money: Black Banks and the Racial Wealth Gap.* Cambridge, MA: Harvard University Press.
- Boyer, R. 2000. 'Is a Finance-Led Growth Regime a Viable Alternative to Fordism? A Preliminary Analysis'. *Economy and Society* 29 (1): 111–45.
- Brassett, James, and Lena Rethel. 2015. 'Sexy Money: The Hetero-Normative Politics of Global Finance'. *Review of International Studies* 41 (3): 429–49. https://doi.org/10.1017/S0260210514000461.
- Braun, Benjamin. 2020. "Central banking and the infrastructural power of finance: the case of ECB support for repo and securitization markets," *Socio-Economic Review*, Volume 18, Issue 2, April 2020, Pages 395–418, https://doi.org/10.1093/ser/mwy008
- Brown, W. (2015) *Undoing the Demos: Neoliberalism's Stealth Revolution*. Zone Books, New York.
- Brown, W. (2019) *In the Ruins of Neoliberalism: The Rise of Antidemocratic Politics in the West.* Columbia University Press, New York.
- Bryan, Dick, and Mike Rafferty. 2014. 'Political Economy and Housing in the Twenty-First Century From Mobile Homes to Liquid Housing?' *Housing, Theory and Society* 31 (4): 404–12. https://doi.org/10.1080/14036096.2014.947080.
- Chwieroth, Jeffery M., and Andrew Walter. 2019. *The Wealth Effect: How the Great Expectations of the Middle Class Have Changed the Politics of Banking Crises*. Cambridge: Cambridge University Press.
- Cook, Nicole, Susan J. Smith, and Beverley A. Searle. 2009. 'Mortgage Markets and Cultures of Consumption'. *Consumption Markets & Culture* 12 (2): 133–54. https://doi.org/10.1080/10253860902840958.
- Cooper, Melinda. 2017. Family Values: Between Neoliberalism and the New Social Conservatism. New York: Zone Books.
- Crouch, Colin. 2009. 'Privatised Keynesianism: An Unacknowledged Policy Regime'. *British Journal of Politics and International Relations* 11 (2): 382–99.
- Desjardins, J. (2017) "All of the World's Money and Markets in One Visualization." *The Money Project*, 26 October. https://money.visualcapitalist.com/worlds-money-markets-one-visualization-2017/, Accessed 24 January 2020.
- Doling, John, and Richard Ronald. 2010. 'Home Ownership and Asset-Based Welfare'. *Journal of Housing and the Built Environment* 25 (2): 165–173.

- Dowling, E. (2017) "In the Wake of Austerity: Social Impact Bonds and the Financialization of the Welfare State in Britain." *New Political Economy* 22(3): 294-310.
- Elias, Juanita, and Adrienne Roberts. 2016. 'Feminist Global Political Economies of the Everyday: From Bananas to Bingo'. *Globalizations* 0 (0): 1–14. https://doi.org/10.1080/14747731.2016.1155797.
- Emery, Henry Crosby. 1896. *Speculation on the Stock and Produce Exchange of the United States*. New York: Columbia University.
- Fama, Eugene. 1970. "Efficient Capital Markets: A Review of Theory and Empirical Work." *The Journal of Finance* 25.2: 383-417.
- Feher, M. (2009) "Self-Appreciation; or, The Aspirations of Human Capital." Translated by Ivan Ascher. *Public Culture* 21(1): 21-41.
- Feher, M. (2018) Rated Agency: Investee Politics in a Speculative Age. Zone Books, New York.
- Foster, John Bellamy and Fred Magdoff. 2009. *The Great Financial Crisis: Causes and Consequences*. New York: Monthly Review Press.
- Foucault, M. (2004) *The Birth of Biopolitics: Lectures at the Collège de France, 1978-1979.* Ed. Michel Senellart, trans. Graham Burchell. Palgrave Macmillan, New York.
- Froud, J., Sukhdev Johal, Johnna Montgomerie, and K. Williams. 2010. 'Escaping the Tyranny of Earned Income? The Failure of Finance as Social Innovation'. *New Political Economy* 15 (1): 147–64.
- Gamble, Andrew. 2014. Crisis Without End?: The Unravelling of Western Prosperity. Palgrave Macmillan.
- García-Lamarca, Melissa, and Maria Kaika. 2016. "Mortgaged Lives": The Biopolitics of Debt and Housing Financialisation'. *Transactions of the Institute of British Geographers* 41 (3): 313–27. https://doi.org/10.1111/tran.12126.
- Goede, Marieke de. 2005. *Virtue, Fortune, and Faith : A Genealogy of Finance*. Minneapolis, Minn.: University of Minnesota Press ; [Bristol : University Presses Marketing, distributor].
- Harvey, David. 1982. The Limits to Capital. Chicago: University of Chicago Press.
- Harvey, David. 2005. A Brief History of Neoliberalism. New York: Oxford University Press.
- Hayek, F. A. 1945. "The Use of Knowledge in Society." *American Economic Review* 35.4: 519-530.

Hearn, A. (2010) "Structuring Feeling: Web 2.0, Online Ranking and Rating, and the Digital 'Reputation' Economy. *ephemera* 10(3/4): 421-438.

Hearn, A. (2017) 'Verified: Self-Presentation, Identity Management, and Selfhood in the Age of Big Data'. *Popular Communication*, 15(2): 62-77.

Hudson, M. (2010) "From Marx to Goldman Sachs: The Fictions of Fictitious Capital, and the Financialization of Industry." *Critique* 38(3): 419-444.

Joseph, M. et. al (2015) "Movement after Randy Martin." Social Text 124 33(3): 117-145.

Karwowski, E. (2019), How Financialization Undermines Democracy." *Development and Change*, 50: 1466-1481. https://doi.org/10.1111/dech.12537

Kish, Z. and Leroy, J. (2015) "Bonded Life: Technologies of Racial Finance from Slave Insurance to Philanthrocapital." *Cultural Studies* 29(5/6): 630-651.

Knox-Hayes, Janelle. 2013. "The spatial and temporal dynamics of value in financialization: Analysis of the infrastructure of carbon markets," *Geoforum* Vol. 50 pp. 117–128.

Knox-Hayes, Janelle. 2016. *The Cultures of Markets: The Political Economy of Climate Governance*, Oxford: Oxford University Press.

Konings, Martijn. 2018. *Capital and Time: For a New Critique of Neoliberal Reason*. Palo Alto: Stanford University Press.

Krippner, Greta R. . 2005. "The Financialization of the American Economy." *Socio-Economic Review* 3: 173-208.

Krippner, Greta R.. 2011. *Capitalizing on Crisis: The Political Origins of the Rise of Finance*. Cambridge, MA: Harvard University Press.

Lapavitsas, Costas. 2009. "Financialised Capitalism: Crisis and Financial Expropriation." Historical Materialism 17.2.

Langley, P. 2008a. 'Sub-Prime Mortgage Lending: A Cultural Economy'. *Economy and Society* 37 (4): 469–94.

——. 2008b. *The Everyday Life of Global Finance: Saving and Borrowing in America*. Oxford: Oxford University Press.

LeBaron, Genevieve. 2010. 'The Political Economy of the Household: Neoliberal Restructuring, Enclosures, and Daily Life'. *Review of International Political Economy* 17 (5): 889–912.

LaBerge, L. C. (2015) Scandals and Abstraction: Financial Fiction in the Long 1980s. Oxford University Press, Oxford.

Lowe, Stuart G., Beverley A. Searle, and Susan J. Smith. 2012. 'From Housing Wealth to Mortgage Debt: The Emergence of Britain's Asset-Shaped Welfare State'. *Social Policy and Society* 11 (01): 105–16. https://doi.org/10.1017/S1474746411000455.

Marte, Jonelle. 2017. "Wells Fargo steered blacks and Latinos toward costlier mortgages, Philadelphia lawsuit alleges." *The Washington Post*. May 16, 2017.

Martin, R. (2002) Financialization of Daily Life. Temple University Press, Philadelphia.

Martin, R. 2007. *An Empire of Indifference: American War and the Financial Logic of Risk Management*. Durham and London: Duke University Press.

Martin, Randy. (2010) "Specters of Finance: Limits of Knowledge and the Politics of Crisis." *Journal of Communication Inquiry* 34 (4): 355–365. doi:10.1177/0196859910382139.

Martin, R. (2012) "A Precarious Dance, A Derivative Sociality." *TDR: The Drama Review* 56:4: 64-79.

Martin, R. (2015) *Knowledge LTD: Toward a Social Logic of the Derivative*. Philadelphia: Temple University Press.

Marx, Karl. (1977). Capital: Volume I. Trans. Ben Fowkes. New York: Vintage.

Marx, K. (1992) Karl Marx: Early Writings. Trans. R. Livingstone and G. Benton. Penguin, London.

Marx, K. (1991) Capital: Volume III. Trans. D. Fernbach. Penguin, London.

Marx, Karl, and Frederick Engels (1978) Collected Works Vol. 10 London: Lawrence & Wishart.

Melamed, Jodi. 2015. "Racial Capitalism." Critical Ethnic Studies, Vol. 1, No. 1 (Spring 2015), pp. 76-85

Mian, Atif, and Amir Sufi. 2014. *House of Debt: How They (and You) Caused the Great Recession, and How We Can Prevent It from Happening Again*. Chicago: University Of Chicago Press.

McLeay, Michael, Amar Radia, and Ryland Thomas. 2014. 'Money in the Modern Economy'. Q1. Quarterly Bulletin. London: Bank of England.

http://www.bankofengland.co.uk/publications/Pages/quarterlybulletin/2014/qb14q1.aspx

McClanahan, A. (2017) *Dead Pledges: Debt, Crisis, and Twenty-First-Century Culture*. Stanford University Press, Stanford.

McClanahan, A. (2019) "Serious Crises: Rethinking the Neoliberal Subject." *boundary 2* 46(1): 103-132.

Nitzan, J. and Bichler, S. (2009) *Capital as Power: A Study of Order and reorder*. Routledge, London.

Pettifor, Ann. 2017. The Production of Money: How to Break the Power of the Banks. Verso.

Polanyi, Karl. 2001. The Great Transformation (2nd ed.). Boston: Beacon Press.

Poovey, M. (2008) Genres of the Credit Economy: Mediating Value in Eighteenth- and Nineteenth-Century Britain. University of Chicago Press, Chicago.

Prasad, Monica. 2012. *The Land of Too Much: American Abundance and the Paradox of Poverty*. Cambridge, MA: Harvard University Press.

Pulido, Laura. 2016. "Flint, Environmental Racism, and Racial Capitalism." *Capitalism Nature Socialism*, 27.3: 1-16.

Ramey, J. (2016) *Politics of Divination: Neoliberal Endgame and the Religion of Contingency*. London: Rowan & Littlefield International.

Roberts, Adrienne. 2012. 'Financing Social Reproduction: The Gendered Relations of Debt and Mortgage Finance in Twenty-First-Century America'. *New Political Economy*, 1–22. https://doi.org/10.1080/13563467.2012.662951.

Robertson, Mary. 2017. '(De)Constructing the Financialised Culture of Owner-Occupation in the UK, with the Aid of the 10Cs'. *New Political Economy* 22 (4): 398–409. https://doi.org/10.1080/13563467.2017.1259303.

Rodrik, Dani. 2011. *The Globalization Paradox: Democracy and the Future of the World Economy*. New York and London: W. W. Norton.

Rosamond, E. (2018) "To Sort, to Match and to Share: Addressivity in Online Dating Platforms." *Journal of Aesthetics and Culture* 10(3): 32-42.

Roxburgh, N. (2016) Representing Public Credit: Credible Commitment, Fiction, and the Rise of the Financial Subject. Routledge, London.

Rough, Jacob S., Len Albright, Douglas S. Massey, "Race, Space, and Cumulative Disadvantage: A Case Study of the Subprime Lending Collapse," *Social Problems*, Volume 62, Issue 2, May 2015, Pages 186–218, https://doi.org/10.1093/socpro/spv002

Sassen, Saskia. 2008. 'Mortgage Capital and Its Particularities: A New Frontier for Global Finance'. *Journal of International Affairs* 62 (1): 187–114.

Schultz, T., 1961. "Investment in Human Capital." The American Economic Review, 51(1), 1-17.

Schwartz, Herman, and Leonard Seabrooke. 2008. 'Varieties of Residential Capitalism in the International Political Economy: Old Welfare States and the New Politics of Housing'. *Comparative European Politics* 6 (2): 237–261.

Servon, Lisa. 2017. *The Unbanking of America: How the New Middle Class Survives*. New York: Houton Mifflin Harcourt.

Sherman, S. (1996) *Finance and Fictionality in the Eighteenth Century: Accounting for Defoe.* Cambridge University Press, Cambridge.

Srnicek, N. (2016) *Platform Capitalism*. Polity, Cambridge.

Streeck, Wolfgang. 2016. How Will Capitalism End? Verso.

- Taylor, Keeanga-Yamahtta. 2018. "How Real Estate Segregated America." *Dissent Magazine*. housing-act-race
- Taylor, Keeanga-Yamahtta. 2019. *Race for Profit: How Banks and the Real Estate Industry Undermined Black Homeownership*. Chapel Hill, N.C.: The University of North Carolina Press.

Thaler, R. and Sunstein, C. (2008) *Nudge: Improving Decisions about Health, Wealth and Happiness.* London: Penguin.

Vishmidt, M. (2020) 'Cameron Rowland, ICA - Institute of Contemporary Arts, London.' *Artforum*, accessed December 16, 2020, https://www.artforum.com/print/reviews/202004/cameron-rowland-82464.

Wang, J. (2018) Carceral Capitalism. Semiotext(e), Pasadena.

- ———. (2018a) 'Cameron Rowland and the Carceral Laboratory: The Spectral Presence of Prisoners in Everyday Commodities.' *Frieze*, October 29, accessed December 16, 2020, https://www.frieze.com/article/cameron-rowland-and-carceral-laboratory.
- Watson, Matthew. 2006. Foundations of International Political Economy. London: Palgrave.
- 2010a. 'House Price Keynesianism and the Contradictions of the Modern Investor Subject'. *Housing Studies* 25 (3): 413–26. https://doi.org/10.1080/02673031003711550.
- Wolff, Richard D. and Stephen A. Resnick. 1987. *Economics: Marxian versus Neoclassical*. Baltimore: Johns Hopkins University Press.
- Zwan, Natascha van der. 2014. 'Making Sense of Financialization'. *Socio-Economic Review* 12 (1): 99–129. https://doi.org/10.1093/ser/mwt020.