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Prediction Machines

My essay has several connected histories to unravel about the construction and use of new forms of informational and mediated control by elite groups to secure new political and economic realities. It is part of a longer project on the political history of "the digital" as a modality of a specific praxis of control. "Prediction Machines" began as an experiment in writing a history of the present with "the backward-directed glance of the historian" that unraveled over time into a genealogy of the state and commercial orchestration of information, prediction, and mediation to control populations. ¹ In this short essay my focus is on the period from 2007 onwards, but the longer project from which it is drawn unravels backwards to explore the histories of information, governmentality, capital, and control across the deep histories of racialized capitalism.

Our present pivots around the years 2007-8. In 2007, for example, research efforts to explore the way information spreads online, and what this information reveals about people, began as a series of collaborative projects between scholars working in computational social sciences (and the emergent field of "psychometrics") alongside researchers from the U.S. and U.K. military and from digital information technology industries. One of the first experiments created an "Application" on the newly created Facebook platform that gave users a standardized personality test designed to "measure" five significant components of "personality."² Users taking the test could opt in to share scores and their Facebook profiles, enabling researchers to correlate "personality" and profile. Over time this meant that "personality type" could be predicted from the information given by people freely to Facebook. "Private traits and attributes are predictable from digital records of human behavior," the title of a widely cited 2013 paper written collaboratively by researchers in the academy and industry, illustrates concisely the results of the experiment.³ Corresponding research suggested that tabulating what people "Like" on Facebook (after the company introduced the feature in 2009 to gather more lucrative data about people) can accurately predict "traits and attributes." In the midst of this research, beginning in

2008, the Minerva Initiative of the U.S. Department of Defense distributed millions of dollars to support social science research exploring the ways data and influence can be leveraged to facilitate "US strategic interests globally." One of the projects aimed to "develop new dynamic statistical network techniques ... that can be leveraged ... to alter the distribution of power ... or stabilize or destabilize communities."6 In 2011, the US Defense Advanced Research Projects Agency (DARPA) began a four-year program exploring "Social Media in Strategic Communication" as part of an expansive re-tooling of "counterinsurgency" and "psychological operations" for the digital era in the ongoing "War on Terror." 9/11 in 2001 obviously played a key role in the creation of a new border-security and "data analytics" praxis. In 2012, similarly, the 15 (U.K.) Psychological Operations Group, part of the British military, imported a "Targeted Audience Analysis" methodology developed by a commercial psychological operations organization called Strategic Communication Laboratories (SCL) into its practices of "counter-terrorism" and "counter-radicalization." In 2013, the patented form of "audience analysis" gathering data to produce predictions about "insurgents" was deployed by the U.K. Defense Science and Technology Laboratory to shape communication and media directed towards young Islamic populations. 9 *Collectively*, this research and practice (henceforth *praxis*) shared out across academic, corporate, and military institutions and interests gathered pace after 2007 and the birth of "social media" (and indeed the "smartphone") and demonstrated that the information people give and leave online could reveal "personality" and be used to generate predictions to pre-emptively affect attitudes and conduct.

In the process, counterinsurgent "psychological operations" innovated to control dissident (often racialized) populations and ensure the security of "strategic interests" fused with the commercial practices of data extraction and "psychometric" modelling integral to "surveillance" and "platform capitalism" to become routine everyday practices. The "government" of conduct crisscrossed state and commercial praxis. In 2007, to continue the example and exploration of the threads of the history of the present, the commercial psychological operations company SCL was paid by a private U.S. military contractor to develop a "motivation and segmentation profile" of populations in two "lawless" provinces of Yemen. 10 Counterinsurgent control (of a state on the borders of oil-rich Saudi Arabia and the Suez Canal shipping route) proceeded through analysis of the country's communication and media system. In turn, SCL deployed its patented Targeted Audience Analysis "unique behavioral methodology" to "identify" which aspects of the "non-Desired behavior" of the population "can best be challenged." In 2011, the

company deployed this methodology to monitor "unrest" across the Middle East during the "Arab Spring," and in U.K. missions in Libya and Afghanistan. 12 In 2013, the same company, growing wealthy from lucrative military contracts in the War on Terror and the control of the "revolt of the public," was contracted by the Trinidad Ministry of National Security to find ways of predicting crime and disorder. 13 Mobilizing its "Targeted Audience Analysis" methodology, SCL operatives tapped directly into the live feeds of the Internet Service Providers in the country and began correlating this data with social media profiles and offline information such as censuses and credit data to discern "personality." It was a practice of data rendition where the ghost traces of experience were secretly extracted (and exchanged by the company with others in the frantic search for more data) to be rendered into algorithms determining personality and producing predictions about people and security. 14 Raw material (in the form of private information) was stolen, extracted, and mined to be processed into the valuable commodity of prediction. Over time, these predictions about personality and conduct were built into self-learning algorithms to trigger the automated sharing of messages and media designed specifically to influence people. 15

One other related example. In 2016, a spin-off of SCL (financed by a radical libertarian investment banker and built from Facebook data gathered during the experimental psychometric research emerging from 2007) worked directly alongside Facebook and the Republican Party in the U.S. election of that year to gather data to enable prediction and the automated sharing of media designed to dissuade Black citizens from voting. 16 In that same year, 2016, similar practices in the British referendum about membership of the European Union mobilized information to build predictive models to "flood the zone" with around 1.5 billion "dark ads" directed personally to people on Facebook in the last week of the campaign urging citizens to Take Back Control from refugees, migrants, and "globalists." In all these examples, and countless others from around 2007 onwards, information extracted principally from "digital media" produces predictions about the future interest or conduct of populations that triggers media to marshal influence. Crucially, these populations (stretching from "Yemeni terrorists" and "Trinidadian criminals" to "Young British Muslims" and "Black American citizens") are assumed to lack sovereignty, or the capacity for self-government, and to present problems of security that must be foreclosed by the deployment of information, prediction, and media.

Out of this praxis emerged a new paradigm of control. 18 It did not begin here, certainly, and one central genealogical thread of the longer project of which this essay is a part traces out connections between

imperial counterinsurgency and digital control. But it accelerated and intensified. 2007/8 is the key turning point, after the growth of social media and the research and practice demonstrating its utility for prediction, influence, and control. In the "data rush" that ensued across those two years, Facebook became a "platform"; 19 Google spent \$3.1 billion to buy a targeted-advertising company that tracked people's movements across the Internet;²⁰ and the "exceptional" and extraordinarily expansive PRISM project of the U.S. National Security Agency began collecting and analyzing "Internet communication" as a component of the global counterinsurgency project (to foster "security" and "control") that expanded after 2001 and the declaration of War on Terror. ²¹ In 2008, also, Barack Obama's "App" was one of the first integrated into the new Facebook platform, making use of the pools of data in the company's "social graph," and the success of this sparked the systematic use of the informational, predictive, and influential possibilities of "social media" by political organizations.²² It is certainly a long eight years from Obama's success in "the first Facebook election" to "Project Alamo" in 2016 using information and media to disenfranchise Black citizens. Or to the circulation of billions of media texts on the Facebook platform using behavioral data and predictive algorithms and designed specifically to mobilize affect (broadly about "security" and "control") to reorder political and economic reality.

Obama's election in 2008 coincided with the collapse of the financialized economy in the U.S. triggering a global economic crisis and the most recent episode of the "primitive accumulation" of looting, enclosure, and predation ontological to capitalism.²³ (In brief, the algorithms offsetting risk failed to discern systemic risk because of the perverse incentives of "sub-prime" mortgages "designed such that they would almost inevitably fail" targeted at poor racialized populations, who had their homes foreclosed, and in response the state bailed out financial entities and enforced austerity on populations.)²⁴ The state bailing out banks and insurance corporations while enforcing austerity on populations was one obvious example of the dictates of liberalism overriding that of democracy, and simple illustration of the reality of capital's control of government.²⁵ In the years since then, in "the ruins of neo-liberalism," a bloc of what I shall for the moment call "radical liberals" began using the new affordances of information and mediation to fashion predictive control.²⁶ One simple concrete example is the fore-mentioned spin-off company from the British psychological operations outfit SCL, called Cambridge Analytica, central to "Project Alamo" and the "Brexit" referendum, and financed by a libertarian billionaire hedge-fund CEO waging war against taxation and government.²⁷

In the U.S., and U.K., the principal agendas for a trans-Atlantic libertarian bloc have been the degradation and "deconstruction" of government broadly to foster "freedom" from regulations on capital. Often these radical liberals oppose taxation to contribute to the public good. as well as regulations designed to protect shared environments, and espouse positions opposed to the liberal-democratic paradigm that precariously balanced "liberty" with the "equality" essential to democracy and the operations of popular sovereignty. In the U.S., a radical libertarian praxis grew from the early 1970s in direct opposition to Civil Rights and school desegregation and governmental efforts to facilitate racial equality.²⁸ Put simply, the libertarians oppose the ideal of equality and its political form of democracy and work to disable government projects to foster egalitarianism (like public schooling or health care) and to "protect capitalism from government." 29 In the aftermath of 2008, and the fracturing of economic and political order, a complex transatlantic bloc of libertarian ethno-nationalists opposed to government, equality. and (often incoherently) globalization seized some of the means of informational and mediated control to degrade democracy and shape new political and economic realities. (Broadly, one can see this history as the fracturing of the "neoliberal" order established from the 1970s, which continues in sclerotic and zombie-like fashion, despite its failures and the escalating crises of economic and political order.)³⁰ In 2016, after "Project Alamo" and "Brexit," the parameters of these practices of informational and mediated control became clearer, and in the years since then journalists, government commissioners, scholars, and filmmakers have explored the myriad ways "bot networks," "astroturfing," microtargeting, disinformation, and more, were wielded by blocs of elites to fracture and re-order reality. It bears emphasizing that the battering of the idea and practice of government was a concerted effort, many years in the making, to use capital translated into control of information and media to foster the deregulation of capital in the name of "liberty" and "freedom." Put bluntly, in the interests of concision, and borrowing from the philosopher Achille Mbembe, we can describe this as a violent "necropolitical" project, part of a "political order ... reconstituting itself as a form of organization for death," that is designed to protect capital at the expense of people and shared environments.³¹ It has deep roots, of course, across histories of enslavement, imperialism, and capitalism; and it accelerates in the wake of 2008, amid also the pressing realities of climate breakdown, on the back of informational and mediated control.³²

Back now to close to the present. After 2016, too, it became clear that the Russian state had also marshaled information and media to shape

political reality.³³ Once again, these developments pivot around 2007-8. in the wake of the expropriation of the global financial crisis, when Russia trialed cyberwar in Estonia and the Russian president (the fabulously wealthy Vladimir Putin) rewrote the democratic constitution created after the collapse of the Soviet Union to inaugurate what was called a sovereign democracy. 34 It was a term invented by an influential "political technologist" to orchestrate the breakdown of democracy and the fashioning of a new autocratic state system. 35 In the wake of fraudulent elections in Russia in 2011 and 2012, political technologists fashioned a media strategy to over-write reality and degrade democracy to sustain oligarchic and kleptocratic control of government. In 2013, this praxis was unleashed in Ukraine, when Russia invaded a state on the verge of joining the European Union and practiced "cyberwar" to degrade reality and confuse and disorient dissident opposition. ³⁶ From 2014, and ongoing, the Russian state began hacking and leaking information and infiltrating social media in Europe and the U.S. with the aim to identify and augment division. Using fake accounts (about 60 million of them on Facebook) and automated bot networks (about fifty thousand on Twitter), Russian digital operatives mobilized behavioral data to circulate media orchestrated to amplify enmity, fracture reality, and degrade the possibility of democracy.³⁷ Indeed, plenty of evidence exists to suggest that the Russian state had access to the same information scraped from Facebook and elsewhere (and shared widely across 2014-16 among researchers, data scientists, as well as counterinsurgent special forces fomenting enmity) and to the new practices of psychometric profiling and prediction.³⁸ Often the media circulated using this information sought to intensify racist affects (as when the Russians boosted the media produced by the Republican Party in the U.S. together with an offshoot of the British psychological operations corporation SCL to disenfranchise Black citizens);³⁹ and purposefully destroy social links other than that of enmity.

Often, reality is now "astroturfed," jumbled together with fictions and "alternative facts" masquerading as real, and marshalled by wealthy elites, oligarchs, rogue states, and/or commercial oligopolies profiting from the circulation and "virality" of information. In the process, the "psychological operations" innovated mostly to sustain Empire and control racialized populations have become markets and everyday practices. Overall, the new digital media sphere that emerged after the U.S. military-created Internet was privatized in the mid-1990s presented new opportunities and created new markets for the orchestration of information and influence, beyond the control of established editorial gatekeepers, that accelerated from 2007 in some of the ways sketched thus far. It marked a rupture in the manufacturing of reality and consent. One information/media order (broadly that of corporate liberal mass media) began to unravel while another emerged (let us call it here for the moment digital libertarianism) and this transition catalyzed with the rupture of the globalized financialized economy and the crumbling of the liberal world system. Russia's mediatized war in Ukraine, Europe, and the U.S. is one concrete example of this fracturing of global liberal order. In the wake of these events of political, economic, and media transition, to reiterate, blocs of elites broadly (if often incoherently) opposed to "liberal democracy" and "liberal globalization" have marshaled capital, information, and media to mobilize populations to re-order political and economic reality.

As is now well-known, a virulent racial nationalism grew out of this perfect storm of economic, political, and information/media breakdown. It did not begin here, of course, given the centrality (indeed ontology) of racialization (of slavery, imperialism, of violent "accumulation by dispossession") to the deep history of capitalism and "Western civilization";40 but it intensified and grew newly visible. Online at first. on message boards and radical right-wing websites, growing from algorithmic aggregation, this violent racial nationalism metastasized after 2008 and spilled over into reality and policy. 41 Groups of elites from two of the countries made wealthy by the long histories of slavery and imperialism, tied together by the deep histories of commerce across "the black Atlantic" integral to the birth and expansion of capitalism, called for the building of new border walls and the creation of "hostile environments" to oppose and degrade refugees and migrants fleeing war and economic and climate disaster. 42 The "borderization" of the Global North accelerated after 2014, in response to migrant and refugee movement from spaces of war and climate breakdown, prompting European states to extend their borders into Africa and mobilize novel digital technologies of surveillant control. 43 (Among them "drones, heat sensors, smart borders, global positioning systems, remote sensing images, biometric passports."44) Biometric surveillance and the fashioning of a "society of security" transformed "certain spaces ... into uncrossable places for certain classes of populations, who thereby undergo a process of racialization" in order to "control and govern the modes of arrival." 45 Camps "for foreigners" reappeared on the borders of "fortress" Europe, and on the southern border of the U.S., as nodes in the expansive fashioning of a "penitentiary geography" and "carceral capitalism." 46

Amid the "crisis" of population movement, during the early months of 2016, the PR slogan "Take Back Control" was extensively A/B tested on British populations by psychological/information operatives using

psychometric profiling.⁴⁷ It was chosen because it made people angry that "control" had been taken away from them. Or, put another way, because it generated enmity. It bore little relation to historical reality (as Britain had voluntarily joined the trade union of European states formed in 1955 (to try to forestall the reemergence of European fascism), in the early 1970s, in order to replace the loss of Empire markets); but the deliberate creation of political fictions like this replaced reality with spectacle and feeling. 48 One feature of this particular spectacle was the vertiginous switch of colonizer to the position of colony, a transformation that paved the way for the topsy-turvy world of 2+2=5 where wealthy investment bankers/politicians could claim the mantle of anti-colonial resistance against the "empire" of Europe. 49 Britain (the former imperial center of the capitalist world) finally got its own "independence day." By the summer of 2016, the circulation of billions of media texts in the U.K. targeted using behavioral information was purposefully designed by libertarians with close ties to hedge funds and transatlantic libertarian networks to generate enmity, anger, and division. 50 Put simply, it was a "psychological operation," seeking to divide a population, drawing on the longer history of imperial counterinsurgency to control racialized populations that was reanimated, retooled, and turned into a market in the "digital revolution" amid the War on Terror and the turn to "sovereign democracy" in some of the ways outlined thus far. 51

On top of this, these libertarian groups intentionally broke British electoral laws about information and campaign funding to generate information and media to foster division and degrade democracy. 52 One of the groups campaigning for Britain to leave the European Union was fined, retrospectively, for its illegal actions; its infamous campaign director lied to Parliament and refused to return to answer questions; but the London police force declined to pursue criminal investigations because of "political sensitivities." 53 Oddly, the law-breaking to orchestrate information and media to lie to generate enmity and degrade democracy, not to mention the collusion of the Russian state fomenting the breakdown of Europe and inter-state unions, has been swept under the carpet by compliant political, police and media institutions, despite the fact that the referendum decision has extraordinary and lasting effects on the economy, polity, territory, and diplomacy of Britain. One could call this a form of sovereign democracy.⁵⁴ Of key importance to the libertarian political project to dissolve the political and economic union first established to combat fascism was the stripping out of social democratic regulations on capital (like those related to welfare and collective organizing) while simultaneously enforcing "controls" on the movements of people. One of the plans cooked up in the network of transatlantic libertarian "think tanks" integral to the political shifts of the present was to establish "free trade zones" in Britain where regulations, labor protections, and tax commitments get stripped out to prioritize the generation and protection of capital.⁵⁵ It is an effort to shield wealth from the reaches of government, *the* core agenda for libertarians, and key generally to the way capital is "coded" in the modern financial system to escape taxation.⁵⁶ (One of the principal forums for this globally is the network of tax havens in Britain's rump imperium.)⁵⁷ Overall, a transatlantic libertarian alliance sought to shift the U.K. away from (the remnants of) European social democracy towards closer alliance with the U.S., "the country of the fully deployed neoliberal paradigm." ⁵⁸ One of the key prizes for the U.S. in any "free trade deal" made with Britain outside the European Union is the information held about disease and illness over time by the National Health Service. It is a dizzying history, whereby the crowning achievement in Britain of social democracy – in the shape of socialized healthcare, established in 1945. after the sacrifices of populations at home and across the Empire to defeat fascism – is to be translated into *information* used to generate profit by private healthcare providers and pharmaceutical corporations.⁵⁹ Once again, all that is public must melt into the private; and, too, the control of *information* lies at the root of political power and the generation of capital.

Over the years 2016-19, the British political elite (and its journalistic hinterland) descended into crisis. It proved impossible to resolve the magical thinking of libertarian ethno-nationalists, who dreamed of an imperial sovereignty as the right to do as one pleases, with the reality of international trade agreements and diplomacy. Often the libertarians threw their toys out of the pram, particularly with respect to the complex position of Ireland, where the long history of British imperial control, stretching from the first wave of British imperialism as "primitive accumulation" in the early modern period, led to intractable problems of sovereignty. 60 One Conservative administration imploded, and in the fall-out in 2019 the leader of the libertarian Vote Leave group, who had broken laws in mobilizing information to degrade democracy and reshape geopolitical reality, was elected to the position of Prime Minister of Great Britain and its rump imperium of tax havens. ⁶¹ Only, this bloc who opposed government and geopolitical union, who had purposively broken laws to use information and media to degrade democracy, arrived in power on the eve of the global emergency of Covid-19 that required government and the balancing of "liberty" with the care for others. Amid the crisis, it turned out that the Conservative Party had refused to publish and act upon the results of a pandemic stress

test, in 2016, and in 2019 had cancelled a parliamentary inquiry into biological security because of the escalating costs of Brexit and "independence." 62 On an island, with historic wealth and socialized healthcare, the scale of devastation was exceptional. Britain really was world beating, as the libertarian ethno-nationalists had insisted all along. 63 Mostly the costs were borne by poor, often racialized, populations, often women, many of them migrants, such as those who work in the health and caring professions. On the other side, Conservative politicians and their friends and families got rich from corrupt procurement deals rushed through without public scrutiny. (Over 37 billion pounds, for example, was given to a commercial organization to establish a "track and trace" system that catastrophically failed to halt the virus, though it did produce a lot of new lucrative data to be owned and used in ways that are unclear.)⁶⁴ Put bluntly, the law-breaking and corrupt "truth twisting" elite libertarians in charge of the British state became openly necropolitical in the imperative to "secure" economy over the health of people. 65 Mostly, this failing and corrupt government is cheered on by a compliant media system, much of it owned by billionaire tax-exiles opposed to the idea and practice of government, including News. Corp., the toxic globe-spanning corporation owning the radically right-wing Fox News in the U.S.⁶⁶ Again, one could call this polity a sovereign democracy. Or, indeed, a mediated democracy. 67

Meanwhile, in this sketch of a history of our present, and in news about other law-breaking institutions and media and information entities damaging to the health of people ... In 2019, also, in the fall-out from the mediated psychological operations orchestrated by libertarian ethno-nationalists to gain power in 2016, one of the key players in our digital and "mediatized" present, Facebook, was given the largest-ever corporate fine in history. ⁶⁸ Concluding its investigation, the U.S. Federal Trade Commission fined the media corporation, whose PR tagline talks of "bringing the world closer together," \$5 billion for repeatedly allowing the data it held to be *used* by other groups interested in influencing people, for *lying* about it, and for *aggressively* covering it up. ⁶⁹ (Predictably, the British Information Commissioner brought a knife to a gun fight, and its fine of £500,000 for the corporation's role in assailing democracy and sovereignty made barely a dent in the coffers of a company that made \$70 billion in 2019 from selling predictions about you to organizations that want to influence you.)⁷⁰ But in the aftermath of these fines, levied, to reiterate, because of the central role Facebook played in degrading democracy, the media corporation's stock price went up. Why? Because its "terms of service" contract from when the company became a platform in 2007 is now "the most signed contract in human history" and Facebook has proprietary control over the biggest pool of data about humans ever assembled. 72 In the "information age," accelerating from the birth of the digital computer (in 1945), expanding because of developments in micro-electronics enabling the miniaturization of computers (in the 1970s), and because of computer networking in the form of the Internet (in the early 1990s) and the birth of platforms (in the early 2000s), data became "the new oil." 73 Or, put another way, information became as valuable as fossil fuel, the commodity so integral to the global capitalist system from the 1920s onwards that its security "required" the construction and maintenance of a far-flung global empire of costly U.S. and U.K. military bases.⁷⁴ Plus, ongoing alliances with murderous despotic necropolitical regimes, like that controlling Saudi Arabia, or Bahrain (where the U.S. Fifth Fleet is housed to protect oil supplies), or Israel.⁷⁵

In the years since Facebook became a platform, in 2007, and data became the new oil, social life has been rendered porous to capital, as an adjunct to the generation of information. Raw material mined from the intimate recesses of selfhood began to be packaged into what Shoshana Zuboff calls "behavioral futures markets." Generally, this information generating prediction is tied to fostering consumption, continuing the principal function of media in capitalist economies from the newspaper to radio to television to "social" media, but it is useful also for degrading democracy to entrench elite and authoritarian rule. Old liberal ideas about privacy have been "disrupted" to facilitate the rapid enclosure and monetization of the data-commons as a key component of the political economy of informational capitalism. It is another episode of accumulation by dispossession. One can say that after 2007, social life became a new "commodity fiction," and media colonized society. 77 It is an odd, accelerated, history, that sees a website designed by a college student in 2004 to "rate" the attractiveness of young women becoming a "platform" in 2007 (on the way to becoming the biggest media corporation in terms of "audience" in history) and integral to the degradation of democracy by 2016 and insurrections against its continuance in the U.S. in early 2021.⁷⁸ On the way, the globe-spanning media and information company attained a level of "corporate sovereignty" that enabled its CEO to refuse to answer questions in parliaments around the world. 79 Certainly, history speeds up in bewildering fashion in the 24/7 of advanced "information economies" and "digital capitalism";80 and after the translation and rendition of experience and social existence into profitable information, combined with the exaltation of enmity and division circulated as affect to generate data, prediction, influence, and control.

Our present pivots around 2007-8, then, and in the years since the "war of all against all" fostering enmity accelerates because it is

now built into the architecture and commercial practices of the globe-spanning media and communication corporations that profit from converting social life into information as prediction to generate capital. 81 Our social worlds are penetrated by media, by new modes of division and control, and the erasure of privacy to foster capital and "security" integral to the digital mediatized present has corrupted the possibility of a democratic politics dependent (as Giorgio Agamben reminds us) on the division of public from private. 82 Obviously, as many have observed, the "biometric border" extends all around us "into multiple realms of social life," creating a vast "panoptical" experiment of surveillance, prediction, and control. 83 Once again, as it did most recently after the last collapse of the capitalist system earlier in the twentieth century, the unstable balance of liberalism and democracy collapses, and in the face of the intertwined breakdown of political, economic, environmental, and media orders, fascism metastases. 84 Again, it grows out of "capitalism" and out of "liberal democracies." because (as Marx. Arendt, Franz Fanon, C.B. Macpherson among others have taught us) capitalism and its political formations as liberalism exceed democracy and produce the imperialism of accumulation by dispossession that necessitates violence, racialization, and immiseration. 85 Plus, the degradation of reality, what Arendt called "the strategic destruction of reason," that is now accelerated by libertarian fascists making use of the affordances of the digital embodied in platforms controlling information and affect to disable the "distinction between facts and fiction" and generate enmity.86 Our present "exit from democracy" comes to resemble the past, then, of the generalization of terror and control essential and integral to the long histories of racialized capitalism that spawned a new praxis of informational and affective control, of counterinsurgency and psychological operations, of datafication and psychometrics, that gets built into the operating systems of the digital world.

One outcome has been the increase of authoritarian control, visible as liberalism mutates again into forms of fascism and ethno-nationalism, but of course also practiced and intensified by authoritarian states unconstrained by the histories of resistance that generated forms of democracy. Russia is one example of that, as we have seen, but the category extends much further, and includes China (and its "total information awareness" about populations, meshing information now with new forms of facial recognition technology), repressive theocracies (like Saudi Arabia), and necropolitical settler colonial states. 87 Israel, for example, has pioneered forms of digital control, astroturfing, and cyberwar, to "secure" its control of Palestinian land, as a laboratory for techniques of control, surveillance, and separation, and (recent evidence shows) sold some of these technologies to other repressive states (like Saudi Arabia and Bahrain) to control populations.⁸⁸ Often these technologies target journalists, as an effort to police and manufacture reality. The digital technologies of control fashioned over history enable authoritarian repression and violence. Many of these root technologies and the orchestration of information and affect as power began in the military laboratories of liberal, imperial, necropolitical states, spreading through "the inner and outer wars" of colonialism before they were created as markets to deform the possibilities of democracy as political self-rule by the people.89

Obviously, the history of this imperial fashioning of new forms of informational and mediated control, is not simply an "academic" one, as is already apparent from the words above, and as Palestinian's, or, say, students in Hong Kong, or Uyghur populations in Xinjiang province in China, can vividly testify. For what it is worth, my "academic" words stand, too, in opposition to the tyranny of the predictive orders fashioned to secure the future as a copy of what went before.

Acknowledgement

For Barbara and Moyra, and a better future.

Notes

- 1 Hannah Arendt, The Origins of Totalitarianism (1951: London: Penguin, 2017), p. xxix.
- 2 See https://www.psychometrics.cam.ac.uk/productsservices/mypersonality, last accessed November 28th 2019. The App used the standard OCEAN personality test that sought to measure Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.
- 3 Michael Kosinski, David Stillwell, and Thore Graepel, "Private traits and attributes are predictable from digital records of human behavior," Proceedings of the National Academy of Sciences of the United States of America, Vol. 110, No. 15 (April 9th 2013).
- 4 Wu Youyou, Michael Kosinski, and David Stillwell, "Computer-based personality judgements are more accurate than those made by humans," Proceedings of the National Academy of Sciences of the United States of America, Vol. 112, No. 4 (January 27th 2015). "[Clomputer models," the analysis showed, "need 10, 70, 150, and 300 Likes, respectively, to outperform an average work colleague, cohabitant or friend, family member, and spouse." (p. 1037.)
- 5 U.S. Army Combat Capabilities Development Command, Army Research Laboratory, Broad Agency Announcement, No. W911NF-08-R-0007, 2008, available here http://www2.econ.iastate.edu/newsfiles/ MinervaRFP.pdf, last accessed December 13th 2020.
- 6 Minerva Initiative, "Program History & Overview," U.S. Department of Defense, 2015, http://mierva.dtic.mil, cited in John Cheney-Lippold, We

- Are Data: Algorithms and the Making of Our Digital Selves (New York: New York University, 2017), p. 263.
- 7 Rand Waltzman, "The Story Behind the DARPA Social Media in Strategic Communication (SMISC) Program," Information Professionals Association blog post, June 28th 2017, currently available here https:// information-professionals.org/the-darpa-social-media-in-strategic-communication-smisc-program/, last accessed November 22nd 2019.
- 8 See Email, redacted, dated 11th January 2012 from the UK Ministry of Defence, included in the documents released by Christopher Wylie to the Department of Media, Culture, and Sport "disinformation" committee, available here https://www.parliament.uk/documents/commonscommittees/culture-media-and-sport/Chris%20Wylie%20Background% 20papers.pdf, last accessed November 6th 2019; and Lee Richards, "The Rainbow in the Dark: Assessing a Century of British Military Information Operations," Defence Strategic Communications: The Official Journal of the NATO Strategic Communications Centre of Excellence, Vol.1. No. 1 (Winter 2015), in particular pp. 42-3.
- 9 A heavily redacted version of the Defence Science and Technology Laboratory's evaluation of the project is available because of freedom of information requests as "Project Duco: an Impartial Technical Evaluation" here https://www.whatdothevknow.com/request/389795/response/ 975478/attach/3/FOI%202017%2003434%2020170508%20Rpt.pdf, last accessed November 4th 2019. See also Open source investigations, "Cambridge Analytica and the Government next to you," last accessed November 4th 2019, https://www.opensourceinvestigations.com/conspiracy/cambridge-analytica-government-next/ In 2016 a Freedom of Information Request to the Ministry of Defence showed that the MOD had paid £150,000 for the "procurement of target audience analysis" in 2014/15, most likely directed towards domestic populations. Ministry of Defence, Defence Resources Secretariat, 26th September 2016, Reference: FO12016/08132.
- 10 SCL, "Project Titania," Phase I: Motivation and Segmentation Profile, no date (probably 2007), and "Project Titania," Phase II: Research Plan, no date (probably 2007). Both these reports have been leaked online and are available here: https://www.scribd.com/document/380435224/SCL-Cambridge-Analytica-Project-Titania-Plan-for-Yemen-Part-Two, and here https://www.scribd.com/document/380434279/SCL-Cambridge-Analytica-Project-Titania-Yemen-Plan#from_embed, last accessed November 1st 2019. See also Max Blumenthal, "Exclusive: Leaked Docs Expose Yemen-Based Counter-Insurgency Program by Cambridge Analytica Parent Company SCL," The Grayzone, May 23rd 2018.
- 11 SCL, "Project Titania," Phase I: Motivation and Segmentation Profile, p. 6, 2.
- 12 Max Blumenthal, "Internal Cambridge Analytica Documents Reveal Private Intelligence Web Behind Global Surveillance Program," The Grayzone, May 30th 2018, available here: https://thegrayzone.com/2018/ 05/30/internal-cambridge-analytica-documents-reveal-private-intelligence-links-to-mass-surveillance-program/#more-353, last accessed November 1st 2019. (See also Barret Brown, "Romas/COIN and HBGary," Project PM, June 2011, available here: https://freebarrettbrown.org/project-pm/#romas-coin-and-hbgary, last accessed November 1st 2019.) On

- SCL's work in Libva and Afghanistan, see: Email, redacted, dated 11th January 2012 from the UK Ministry of Defence, included in the documents released by Christopher Wylie to the Department of Media, Culture, and Sport "disinformation" committee, available here https:// www.parliament.uk/documents/commons-committees/culture-mediaand-sport/Chris%20Wylie%20Background%20papers.pdf, last accessed November 6th 2019.
- 13 Christopher Wylie, Mindf*ck: Inside Cambridge Analytica's Plot to Break the World (London: Profile, 2019), pp. 52-55. The contract between SCL and a related company called AIQ to develop this data was provided by Wylie to the British parliament. It lists these sources under the heading "Behavioural Data Acquisition": "Identify and obtain qualified sources of data that illustrate user behaviour and contribute to the development of psychographic profiling in the region. This data may include but is not limited to: Internet Service Provider log files ... Ad network data ... Social bookmarking ... Social media sharing ... Natural language processing or URL text and images; Reconciliation of IP and User-Agent to home address, census tract, or dissemination area." Contract between AggregateIQ Data Services Limited (Canada) and SCL Elections Limited (UK), 25th November 2013, p. 12, available here https://www.parliament.uk/documents/commons-committees/culture-media-and-sport/ Chris%20Wylie%20Background%20papers.pdf, last accessed November 28th 2019.
- 14 One glimpse into this practice of sharing lucrative private information about citizens. In 2014, SCL contracted with a company called Global Science Research Limited (spun out of the psychometric experiments at the University of Cambridge) to gather and process data about voters in the U.S., and one of the clauses in the contract reads: "In the event that GS provides SCL with two million one hundred thousand matched records ... in ... eleven States that also meet the minimum quality standards ... then SCL will additionally transfer to GS a dataset of circa one million citizens of Trinidad and Tobago." GS Data and Technology Subscription Agreement, Between Global Science Research Limited and SCL Elections Limited," June 4th 2014, clause 10.6, available https:// www.parliament.uk/documents/commons-committees/culture-mediaand-sport/Chris%20Wylie%20Background%20papers.pdf, last accessed November 28th 2019.
- 15 House of Commons, Digital, Culture, Media and Sport Committee, "Disinformation and 'fake news': Final Report," Eight Report of Session 2017-19, HC1791, 18th February 2019, accessed 29th March 2019, https://publications.parliament.uk/pa/cm201719/cmselect/cmcumeds/1791/179102. htm, pp. 45-56. Documents released by the British Parliament showed that SCL Group contracted with AIQ in November 2013 and agreed to pay up to \$200,000 for services that included "data structure and mapping" as well as a "dataset of qualified sources of data that illustrate browsing activity, online behaviour, and social contributions." Contract between AggregateIQ Data Services Limited (Canada) and SCL Elections Limited (UK), 25th November 2013, p. 8. Other materials released document the work AIQ did for SCL for a SuperPac called "For America" led by John Bolton, who has been a senior fellow at the American Enterprise Institute and more recently National Security Advisor of the United States. "For America.org," available here https://www.

parliament.uk/documents/commons-committees/culture-media-andsport/Chris%20Wylie%20Background%20papers.pdf, last accessed November 28th 2019. Controversy dogs the creation of AIQ and how it operated within SCL. It became contentious with respect to the Brexit referendum, when AIQ was used by both of the "leave" campaigns in ways that clearly implied illegal collusion. Wylie's testimony, and these documents, demonstrate that AIQ was created to service these new SCL (and then Cambridge Analytica) projects. Among those documents is an "Intellectual Property License Agreement" dated 17th September 2014 which transfers IP rights from AIQ to SCL. The confusion over ownership and obfuscation of detail is a purposeful strategy to muddy reality and create legal complexity for commercial benefit.

- 16 Joshua Green and Sasha Issenberg, "Inside the Trump Bunker, With Days to Go." Bloomberg, 27th October 2016. See also The Great Hack (dirs. Kari Amer & Jehane Noujaim, USA, 2019. (Of course, these efforts were tied together with a whole host of practices - from redistricting to ID cards to purging electoral rolls – designed to strip Black citizens in particular of their democratic rights. See, for example, David Daley, Rat F**ked: Why Your Vote Doesn't Count (New York: Liveright, 2017).) Over the summer of 2014, a psychological/data researcher affiliated with the University of Cambridge created the company called Global Science Research Limited (GSR) to develop an App. that allowed people to take an online psychological test and GSR to correlate that data with their Facebook profiles. It was a commercial spin-off from the psychometric experiments in 2007. (Universities must, after all, now be money-spinning entities.) Only (circa) 320,000 took the test but the App. and Facebook were designed to enable GSR to access the Facebook data of the "friends" of those people, meaning that somewhere between 50-87 million Facebook accounts had their data scraped in the summer of 2014 to be built into predictive models to shape political realities. Official accounts of how this process worked, drawn on here, include: Information Commissioner's Office, Investigation into the use of data analytics in political campaigns, London, November 2018, in particular pp. 28-35; Federal Trade Commission, In the Matter of Cambridge Analytica, LLC, a Corporation: Opinion of the Commission, n.d. (2019), in particular pp. 4-8, available here (last accessed December 17th 2019), https://www.ftc.gov/system/files/documents/cases/ d09389 comm final opinionpublic.pdf; and House of Commons, Digital. Culture, Media and Sport Committee, Disinformation and 'fake news': Interim Report, July 2018, pp. 26-31, https://publications.parliament. uk/pa/cm201719/cmselect/cmcumeds/363/363.pdf, (last accessed December 17th 2019). The Federal Trade Commission has shown that around \$500,000 of the \$5 million the libertarian billionaire investment banker Robert Mercer spent in establishing Cambridge Analytica as a U.S. subsidiary of SCL was spent "implementing the GSR App and analysing the resulting data, including paying US-based survey panel providers to specifically target Facebook users located in the United States." Ibid.
- 17 Dominic Cummings, the campaign director of the Vote Leave campaign in Britain, asserted that the campaign circulated circa 1.5 billion ads in the final weeks of the campaign. See Cummings, "Why Leave Won the Referendum," available here https://www.youtube.com/watch?v=

- CDbRxH9Kiv4, last accessed February 2nd 2021. And his blog on the referendum here: https://dominiccummings.com/on-the-eu-referendum/, page last accessed October 29th 2019. Likewise, the Trump campaign spent circa \$85 million in the last two months of the campaign in 2016 on Facebook adverts. House of Commons, Digital, Culture, Media and Sport Committee, "Disinformation and 'fake news': Final Report," p. 40.
- 18 The word control, "in its most general definition," represents "purposive influence towards a predetermined goal." James Beniger, The Control Revolution: Technological and Economic Origins of the Information Society (Cambridge: Harvard University Press, 1986), p.7. The concept of "control" grew specifically from the mid-twentieth century, and the development of "cybernetics," and described a set of principles concerning self-regulation in animals and machines, as well as a paradigm for technical and social organization. (See Norbert Wiener, Cybernetics: Control and Communication in the Animal and the Machine (Cambridge: The MIT Press, 1948).) I shall build in particular on Beniger's extraordinary account of "the control revolution" growing in the wake of the industrial revolution that generated a series of technological innovations that reach an apotheosis with the digital computer and the control of information. Also, on "control": the philosopher Giles Deleuze has suggestively proposed that the computer exemplified a new "control society," marking the shift from one governmental rationality (of sovereignty and discipline) to another (of control) and tied together with "the progressive and dispersed installation of a new system of domination." Giles Deleuze, "Postscript on the Societies of Control," October, Vol. 59 (Winter, 1992), p. 7. See here also Seb Franklin, Control: Digitality as Cultural Logic (Cambridge: MIT Press, 2015).
- 19 "f8 Event and Facebook Platform FAQ," 2007, included in the legal documents Six4Three v. Facebook, Superior Court of the State of California, County of San Mateo, Case No CIV 533328, April 10th 2015, that were made available by the British parliament. (Available here https://www. parliament.uk/documents/commons-committees/culture-media-andsport/Note-by-Chair-and-selected-documents-ordered-from-Six4Three. pdf, last accessed December 19th 2019.) Platforms such as Facebook are digital infrastructures that afford programmability by offering third-party developers access to platform data and functionalities to build new platform integration and extensions such as apps.
- 20 Louise Story and Miguel Helft, "Google Buys DoubleClick for \$3.1 Billion," The New York Times, April 14th 2007. The purchase was approved by the Federal Trade Commission on the proviso that Google did not combine data from DoubleClick with personally identifiable information from Google services, like Gmail. In 2016, Google announced it would henceforth combine these enormous information streams. See Shoshana Zuboff, The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power (London: Profile Books, 2019), pp. 160-1.
- 21 PRISM was the code name for a program under which the U.S. National Security Agency collected digital communications routed through companies like Google, Facebook, Microsoft, Apple, and more. See Glen Greenwald, No Place to Hide: Edward Snowden, the NSA, and the Surveillance State (New York: Macmillan, 2015). In the wake of the 2001

Patriot Act and 2002 Homeland Security Act, the NSA had authority to examine each packet of data that passes through the U.S. Internet. After 2001 also, global surveillance networks run in particular by the CIA (as well as the Department of Homeland Security) began to connect to domestic surveillance networks controlled by the FBI. See Tung-Hui Hu. A Prehistory of the Cloud (Cambridge, Mass.: MIT Press, 2016), p. 113. It was a component of a program beginning in early 2003, called initially "Total Information Awareness," that imported techniques of "predictive policing" to the War on Terror.

- 22 Six4Three v. Facebook, p. 29. Curiously, Christopher Wylie, one of the architects of SCL/Cambridge Analytica's psychographic targeting had worked briefly on the Obama campaign and wrote a report for the Liberal Party in Canada about the new practices of data extraction and analysis and modelling of data that had enabled that campaign "to translate" information "into an applied fit" to "micro-target" communication and media. Wylie continues: "it was those numbers – and the predictive algorithms they created – that separated Obama from anyone who had ever run for president before." Wylie, Mindf*ck, pp. 28-37. The report he wrote failed to convince the Liberal party in Canada to "modernise" its practices but ultimately opened up doors elsewhere to apply data-analytics to personality modelling and persuasion.
- 23 Put concisely, Karl Marx argued that "primitive accumulation" in the form of wars of conquest, predation, and enclosure (notably from the late Fifteen Century onwards) were the crucial motors in the transition from feudalism to capitalism. "These methods." Marx wrote, "depend in part on brute force, for instance the colonial system," and create new forms of public debt and credit. Karl Marx, Capital: A Critique of Political Economy (London: Penguin, 1990), p. 915, and see pp. 873-942. Marx tended to regard this as the preconditions of capital, destined to be reconfigured over time, but subsequent scholars influenced by Marx have understood it as a cyclical and permanent feature of expropriation. It is not "primitive," that is, but always also contemporary. See here, for example, Rosa Luxembourg, The Accumulation of Capital (London: Routledge and Kegan Paul, 1951); David Harvey, The New Imperialism (Oxford: Oxford University Press, 2003); and Éric Alliez and Maurizio Lazzarato, Wars and Capital, trans. Ames Hodges (South Pasadena: Semiotext(e), 2016), pp. 45-82. The financial crash of 2007-9 facilitated the transfer of public wealth into the coffers of financial and insurance entities, governed by liberal states protecting capital, and enabling (to borrow from Harvey's formulation) "accumulation by dispossession."
- 24 Jackie Wang, Carceral Capitalism (South Pasadena: Semiotext(e), 2018), p. 145. Wang's book brilliantly and generatively illuminates the ways that information and prediction come to function as carceral technologies in the U.S., tied to the long history of "racialized accumulation by dispossession."
- 25 In the U.S. after all, the Treasury Secretary bailing out banks like Goldman Sachs was formerly ... CEO of Goldman Sachs. One hardly needed the Marxist theory of state capture to explicate this reality.
- 26 Wendy Brown. In the Ruins of Neoliberalism: The Rise of Antidemocratic Politics in the West (New York: Columbia University Press, 2019).

- 27 Meet Robert Mercer, and his daughter Rebekah, who also funded libertarian conspiracy films (a number of them made by Stephen Bannon): far right news sites (notably Breitbart); and recently the "Parler Free Speech Social Network" that offers a space for libertarian and far-right conspiracy theorising. On Mercer, see, for example, Carole Cadwalladr, "Robert Mercer: the big data billionaire waging war on mainstream media," The Observer, 26th February 2017; Joshua Green, Devil's Bargain: Steve Bannon, Donald Trump, and The Storming of the Presidency (New York: Penguin, 2017), pp. 119-36; Matthew Cunningham-Cook, "Arizona GOP Chair Urged Violence at the Capital. The Mercer's Spent \$1.5 Million Supporting Her," The Intercept, 14th January 2021.
- 28 See Nancy MacLean's brilliant Democracy in Chains: The Deep History of the Radical Right's Stealth Plan for America (New York: Viking, 2017): Quinn Slobodian, "Anti-'68ers and the Racist-Libertarian Alliance: How a Schism among Austrian School Neoliberals Helped Spawn the Alt Right," Cultural Politics, Vol. 15, Issue 3 (November 2019), pp. 372-86; Brian Doherty, Radicals for Capitalism: A Freewheeling History of the Modern American Libertarian Movement. (New York: Public Affairs. 2007), particular pp. 339-87.
- 29 Dwight R. Lee, "The Calculus of Consent and the Constitution of Capitalism," Cato Journal 7 (Fall 1987), p. 332, cited in MacLean, Democracy in Chains, p. 81.
- 30 See Colin Crouch, The Strange Non-Death of Neoliberalism (Cambridge: Polity, 2013); and Colin Crouch, Post-Democracy: After the Crises (Cambridge: Polity, 2020). Broadly, neoliberals seek to foster state systems that prioritise the generation and protection of capital and insulate government from the political demands of egalitarian redistribution. On the history of this praxis, emerging in response to the Great Depression and experiments in social democracy, see (for example) David Harvey, A Brief History of Neoliberalism (Oxford: Oxford University Press, 2007); and Quinn Slobodian, Globalists: The End of Empire and the Birth of Neoliberalism (Cambridge: Harvard University Press, 2018).
- 31 Achille Mbembe, Necropolitics, trans. Steven Corcoran (Durham: Duke University Press. 2019), p. 7.
- 32 On the ties between the resurgence of fascism and climate change denial, see Andreas Malm and the Zetkin Collective. White Skin, Black Fuel: On the Dangers of Fossil Fascism (London: Verso, 2021). Charles Koch has been one of the key funders of libertarian activism, across a whole range of think-tanks, political parties, media organisations, lobbying and so on. (See Jane Mayer, Dark Money: How a Secretive Group of Billionaires is Trying to Buy Political Control in the US (London: Scribe, 2016); pp.1-59, 120-156; Lee Fang, The Machine: A Field Guide to the Resurgent Right (New York: The New Press, 2013), pp. 83-124; and Christopher Leonard, Kochland: The Secret History of Koch Industries and Corporate Power in America (London: Simon and Schuster, 2019.)) This money comes from Koch Industries, an enormous oil and chemical corporation, and is often used to deny the realities of anthropogenic climate change and to call for the deregulation of environmental protections. Greenpeace estimate that Charles and his brother David Koch spent over \$127 million funding groups denying climate change between 1997-2017. Greenpeace, "Koch Industries: Secretly Funding the Climate Denial Machine." https://www.

- greenpeace.org/usa/global-warming/climate-deniers/koch-industries/. accessed 4th April 2019. I return to the Koch ring later.
- 33 "Russian targeting of election infrastructure during the 2016 election: summary of initial findings and recommendations," US Senate Select Committee on Intelligence, May 8th 2018, accessed August 9th 2018. https://www.intelligence.senate.gov/publications/russia-inquiry; Report of the Select Committee on Intelligence, United States Senate, On Russian Active Measures Campaigns and Interference in the 2016 U.S. Election, 5 volumes, 2020, available here https://www.intelligence.senate.gov/publications/report-select-committee-intelligence-united-states-senate-russian-active-measures, last accessed 19th October 2020; "Intelligence and Security Committee of Parliament: Russia" (London: House of Commons, July 2020), last accessed February 2nd 2021, available here, http://isc.independent.gov.uk/news-archive.
- 34 Timothy Snyder, The Road to Unfreedom: Russia, Europe, America (London: Vintage, 2018), pp. 81-109. On the Russian cyber offensive in Estonia, in 2007, see Peter Pomerantsey, This Is Not Propaganda: Adventures in the War Against Reality (London: Faber and Faber, 2019). pp. 86-88.
- 35 On Vladislav Surkov, and this history, see Peter Pomerantsev, "Putin's Rasputin," London Review of Books, Vol. 33, No. 20 (20th October 2011).
- 36 Snyder, The Road to Unfreedom, pp. 51-57. Ukraine was negotiating an association agreement with the EU in 2013. (See Snyder, The Road to Unfreedom, pp. 73-78.) Pomerantsey notes that the Russian state began infiltrating pro-democracy movements in Europe from around 2012. Pomerantsev, This Is Not Propaganda, pp. 89-90.
- 37 See the 5-volume Report of the Select Committee on Intelligence, United States Senate, On Russian Active Measures Campaigns and Interference in the 2016 U.S. Election. I take these figures from Snyder's account. The Road to Unfreedom, pp. 228-235. Snyder observes that about 126 million Americans saw Russian content on Facebook. In March 2016, elements of the Russian security services and military hacked into the servers of the Democratic party in the U.S. and seeded the information into the public sphere. See Report of the Select Committee on Intelligence, United States Senate. On Russian Active Measures Campaigns and Interference in the 2016 U.S. Election, Volume 5: Counterintelligence Threats and Vulnerabilities, pp. 170-221.
- 38 E.g., the person who designed the online psychological test to scrape Facebook data for SCL/Cambridge Analytica (Alexander Kogan) worked extensively in Russia with state funding and gave lectures on the political application of social media profiling. (See Wylie, Mindf*ck, p. 138). Kogan's colleague at the University of Cambridge, Michal Kosinski, was also flown to Russia to explicate the principles of psychometric research to military and political leaders. (See Paul Lewis, "Michal Kosinski and the limits of modern surveillance," The Guardian, 7th July 2081, p. 31). Wylie's memoir of his time at SCL/Cambridge Analytica recounts an episode at the company's offices in London when a delegation from the Russian quasi-state oil company Lukoil arrived to enquire about enquiring data-assets and were pitched strategies to "undermine voters' confidence in civic institutions" and strategies to micro-target populations with persuasive media. (Wylie, *Mindf*ck*, pp. 133-136.)

- 39 The Senate "Committee found no single group of Americans was targeted by [Russian] Internet Research Agency information operatives more than African-Americans. By far, race and related issues were the preferred target of the information warfare campaigns designed to divide the country in 2016." Report of the Select Committee on Intelligence. United States Senate. On Russian Active Measures Campaigns and Interference in the 2016 U.S. Election, Volume 2: Russia's Use of Social Media, p. 6.
- 40 On those deep histories of racialized capitalism, see Eric Williams, Capitalism and Slavery (Chapel Hill: University of North Carolina Press. 1944); Walter Rodney, How Europe Underdeveloped Africa (1972; London: Verso, 2018); Cedric Robinson, Black Marxism: The Making of the Black Radical Tradition (Chapel: Hill: University of North Carolina Press, 2000).
- 41 This history is well told by Angela Nagle in her book Kill All Normies: Online Culture Wars from 4Chan and Tumblr to Trump and the Alt-Right (Winchester: Zero Books, 2017). Nagle emphasizes also the toxic misogyny of this culture, growing in particular around the "gamergate" scandal from 2014.
- 42 Paul Gilroy, The Black Atlantic: Modernity and Double Consciousness (London: Verso, 1993).
- 43 Mbembe, Necropolitics, pp. 96-104; The Gatekeepers of Europe: Outsourcing Border Controls to Africa (dir. Jan M. Schäfer and Simone Schlindwein, 2019), available here https://www.dw.com/en/outsourcingborder-controls-to-africa/av-45599271, last accessed July 21st 2021.
- 44 Reece Jones, Violent Borders: Refugees and the Right to Move (London: Verso, 2017), p. 10.
- 45 Achille Mbembe, "Futures of Life and Futures of Reason," Public Culture, 33: 1 (January 2021), p. 21.
- 46 Mbembe, Necropolitics, p. 102; Wang, Carceral Capitalism.
- 47 Wylie, Mindf*ck, pp. 157-61, 166-70; and Cummings, "Why Leave Won the Referendum," available here https://www.youtube.com/watch?v= CDbRxH9Kiy4, last accessed February 2nd 2021. A/B tests consist of randomized experiments with two variants, A and B, and typically tests a subject's response to variant A, against variant B, to determine which of the variants is more effective.
- 48 On the function of the EU in this respect, see Slobodian, Globalists. On the growth of "feeling" in contradistinction to expertise and reason see, for example, William Davies, Nervous States: How Feeling Took Over the World (London: Jonathan Cape, 2018); and Snyder, The Road to Unfreedom.
- 49 One simple example: Jacob Rees-Mogg, "the leader of the Brexit ultras in the House of Commons," is partner in a hedge fund called Somerset Capital Management. (In June 2018, it quietly launched a Dublin-based tax efficient "collected asset vehicle" investment structure to ensure alignment with EU regulations.) Rees-Mogg's father, William, wrote a libertarian "novel" called The Sovereign Individual in 1997, about a future when the nation state withers away to leave only sovereign individuals. It included an appendix explaining how to create tax trusts to avoid taxation. See Fintan O'Toole, Heroic Failure: Brexit and the Politics of Pain

- (London: Apollo, 2018), pp. 169-173 (quotation, p. 157). O'Toole observes that "the transformation of victimhood" is essential to the politics of Brexit. "In this sense," he dryly remarks, ""the far right is the white man's #MeToo movement." Ibid, p. 85.
- 50 Chloe Farand and Mat Hope, "Matthew and Sarah Elliot: How a UK Power Couple Links US Libertarians and Fossil Fuel Lobbyists to Brexit," November 18th 2018, available here https://www.desmogblog. com/2018/11/18/matthew-sarah-elliott-uk-power-couple-linking-us-libertarians-and-fossil-fuel-lobbyists-brexit, last accessed April 3rd 2019: Adam Ramsay, "The ruling class that drove Brexit," Open Democracy UK, 22nd February 2019; Nico Hines, "Inside Bannon's Plan to Hijack Europe for the Far-Right," Daily Beast, July 20th 2018; Adam Ramsay and Peter Geoghegan, "Mystery deepens over secret source of Brexit 'dark money'," Open Democracy UK, October 16th 2017; Peter Geoghegan and Jenna Corderoy, "How dark money is winning 'the Brexit influencing game'," Open Democracy UK, 21st February 2019; Peter Geoghegan. "The dark-money Brexit ads flooding social media," Open Democracy UK, 5th February 2019; Adam Ramsay and Peter Geoghegan, "How the UK's powerful right-wing think tanks and Conservative MPs work together," Open Democracy UK, 31st July 2018. On the privately funded libertarian Atlas network of libertarian think-tanks, see Felicity Lawrence, Rob Evans, David Pegg, Caelainn Barr and Pamela Duncan, "How the right's radical thinktanks reshaped the Conservative party," The Guardian, 29th November 2019.
- 51 Of course, it bears emphasising, that many of the people in Britain who voted to leave the European Union had good reasons to do so, broadly as a rejection of the reigning political classes, and of the general order of things under neoliberalism and its global re-ordering of political economy that produced poverty and immiseration for many people in the former industrial centres of Britain. See here Perry Anderson, "Ukania Perpetua?", New Left Review, 125 (Sept-Octo. 2020). Once again, the impact of 2008 and the austerity that followed is a significant factor in explaining "Brexit." Anderson quotes a study of the data of the referendum that concludes: "Remain would probably have won in the absence of austerity." Nicholas Crafts, "The Fall in UK Potential Advantage in the Global Economy," Working Paper No. 399, January 2019 (cited in Anderson, p. 93.)
- 52 Electoral Commission, UK, "Report on an Investigation in respect of the Leave.EU Group Limited," 11th May 2018, https://publications.parliament.uk/pa/cm201719/cmselect/cmcumeds/363/36302.htm, last accessed August 9th, 2018; Jessica Elgot, "Vote Leave fined and reported to police by Electoral Commission," *The Guardian*, 17th July 2017; David Pegg. "Vote Leave drops appeal against fine for electoral offences," March 29th. The Guardian, 2019.
- 53 Adam Ramsay and James Cusick, "Police still not investigating Leave campaigns, citing 'political sensitivities'," Open Democracy UK, 11th October 2018; The Electoral Commission, "Vote Leave fined and referred to the police for breaking electoral law," July 17th 2018, available here https://www.electoralcommission.org.uk/media-centre/vote-leave-finedand-referred-police-breaking-electoral-law, last accessed July 12th 2021; Parliamentary Business, "Conduct of Mr Dominic Cummings," 27th

- March 2019, available here https://publications.parliament.uk/pa/ cm201719/cmselect/cmprivi/1490/149003.htm. last accessed 9th July 2021. Cummings was "admonished" for "contempt," and the Department of Culture, Media, and Sport concluded that "the tone which Mr Cummings adopted in his dealings with the DCMS Committee ... did not serve the interests of civilised public debate."
- 54 One example: in 2019, the Conservative Party and government refused to release a report into Russian collusion in British politics until after a general election late that year. It released the report one and a half years after it was completed and heavily redacted. The report is available here https://isc.independent.gov.uk/wp-content/uploads/2021/01/ 20200721_HC632_CCS001_CCS1019402408-001_ISC_Russia_Report_ Web Accessible.pdf, last accessed July 19th 2021. The report sanitises (by redacting) information about the influence of Russian money on the Conservative Party and revealed that the U.K government failed to properly investigate Russian interference in the 2016 referendum. See Dan Sabbagh, Luke Harding, and Andrew Roth, "Russia report reveals UK government failed to investigate Kremlin interference." The Guardian, July 21st 2020.
- 55 Rishi Sunak, The Free Ports Opportunity: How Brexit could boost trade, manufacturing and the North (Surrey: Centre for Policy Studies, 2016), currently available here https://www.cps.org.uk/files/reports/original/ 161114094336-TheFreePortsOpportunity.pdf, last accessed July 19th 2021. Sunak became Chancellor of the Exchequer in the U.K. in February 2020. On the free trade zone and contemporary capitalism, see, for example, Keller Easterling, Extrastatecraft: The Power of Infrastructural Space (London: Verso, 2016), pp. 25-70.
- 56 On the parameters of this coding to protect assets and turn them into capital, see Katharina Pistor, The Code of Capital: How the Law Creates Wealth and Inequality (Princeton: Princeton University Press, 2019).
- 57 On the centrality of tax havens on British "territory" to the amassing of tax-free profit, and the circulation of criminal capital throughout the financial system, see (for example) Richard Murphy, Dirty Secrets: How Tax Havens Destroy the Economy (London: Verso, 2017). In 2016, in the midst of the revolt of the public, the leak of the Panama Papers revealed parts of this secretive offshore financial architecture enabling wealthy elites to evade taxation. Amidst the papers was information about the wealth of members of Russia's (and China's) political elite. (See Bastian Obermayer and Frederik Obermaier. The Panama Papers: Breaking the Story of How the Rich & Powerful Hide Their Money (London: Oneworld, 2017).) One can observe differing strategies, here, to control and evade government. On the one hand, government is liquidated, as much as possible, and reduced to a role principally as protector of property rights. This is the radical liberal strategy, sometimes accompanied by fanciful thinking about creating floating cities as politically autonomous islands out of the reach of government. (See note 49 above.) On the other hand, government can be directly controlled by kleptocratic elites. who then organise economic affairs to their advantage. Our example so far has been Russia, but we might also include China in this category, and, as Snyder (among others) observe, these tendencies grow,

- particularly in political systems that enable the use of capital to control the political process. The 2016 election of Donald Trump in the U.S. is an example of kleptocratic elites seizing the control of government to enrich themselves. See Snyder, The Road to Unfreedom, pp. 217-278.
- 58 Maurizio Lazzarato, Capital Hates Everyone: Fascism or Revolution (San Pasadena: Semiotext(e), 2021), p. 57. I have emphasized remnants because the EU is a complex entity, growing in part from the reaction against fascism, but also functioning as a neoliberal institution to lock-in market solutions to "inoculate capitalism against the threat of democracy" and "insulate world economic order from the political demands of social justice." Slobodian, Globalists, p. 2, 22.
- 59 See Nick Dearden, Trade Secrets: The Truth About the US Trade Deal and How We Can Stop It (London: Global Justice Now, 2020).
- 60 Jane H. Ohlmeyer, "A Laboratory for Empire? Early Modern Ireland and English Imperialism," in Kevin Kenny ed., Ireland and the British Empire (Oxford: Oxford University Press, 2005); Marx, Capital, in particular pp. 877-895. In brief: both the Republic of Ireland and Northern Ireland, on the island of Ireland, had been members of the EU, meaning that the contested border between the two states could be porous. But after Brexit, and the political decision to also leave the customs union with the EU, a border needed to be re-created, or else Northern Ireland would have to follow different trade rules from the rest of the U.K. I write this 6 years after the referendum, and this problem of borderization and sovereignty has yet to be resolved.
- 61 Meet Alexander Boris de Pfeffel Johnson. Johnson had failed upwards, as members of Britain's elite tend to. As Anne Applebaum remarks, Johnson's "penchant for fabrication is a matter of record." (Anne Applebaum, Twilight of Democracy: The Future of Politics and the Parting of Friends (London: Allen Lane, 2020), p. 69.) In 1988, Johnson was fired by The Times for inventing a quote about King Edward II: he went on to work for *The Daily Telegraph* (owned by billionaire tax exiles David and Frederick Barclay) making up stories about the EU as a columnist in Brussels: in 2004, Johnson was sacked as Arts Minister for lying: and the recent examples as PM are too numerous to list. See Luke Harding, Jessica Elgot, and Andrew Sparrow, "Accusations of lying pile up against Boris Johnson. Does it matter?" The Guardian, April 30th 2021. Alas, the answer to their question appears simply to be no.
- 62 See David Pegg, "What was Exercise Cygnus and what did it find?" The Guardian, May 7th 2020; Damian Carrington, "UK strategy to address pandemic threat 'not properly implemented'," The Guardian, March 29th 2020. It was a spectacular failure, and reality came to take on the appearance of a cheap dystopic thriller with clunky plot points. Oh, no, the PM is having an affair and must tell his wife about the baby to be born and is too busy with his personal crisis to attend crucial crisis meetings! Oh, drat, there was supposed to be a plan, to deal with a crisis of public health, but it was cancelled because of austerity! And so on. See. for example, Jonathan Calvert, George Arbuthnott and Jonathan Leake, "Coronavirus: 38 days when Britain sleepwalked into disaster," The Sunday Times, April 19th 2020.
- 63 See, for example, Luke McGee and Mick Krever, "Where did it go wrong for the UK on coronavirus?" CNN, May 1st 2020; and Ghaith Aljayyoussi

- and Kate Cross, "Revealed: How, on every measure, Britain's response to the Covid pandemic has been woeful," The Telegraph, August 30th 2020. Of course, the crisis of Covid-19 laid bare the incompetence of governing elites the world over, and no doubt one could write something similar about the U.S., or India, or Brazil, for example. It is no coincidence that all these states had authoritarian leadership, in early 2020, and resorted to denial, obfuscation of reality, and acceptance of the possibility of death for those populations without the wealth to shield themselves.
- 64 Andrew Woodock, "Scathing report blasts 'unimaginable' £37bn cost of coronavirus test and trace system," *Independent*, March 10th 2021. A cross-party report found "no measurable evidence" that the scheme made any "difference in slowing progress" of the pandemic. Here is a mathematical reminder that a billion is 1000 million.
- 65 Johnson, for example, was widely reported to have exclaimed, "let the bodies pile high." Jessica Elgot and Robert Booth, "Pressure mounts on Johnson over alleged 'let bodies pile high' remark." The Guardian, 26th April 2021. Certainly, this is what happened.
- 66 On the ownership of U.K. media, see Media Reform Coalition, Who Owns the UK Media? (March 2021), available here https://www.mediareform. org.uk/wp-content/uploads/2021/03/Who-Owns-the-UK-Media_final2. pdf, last accessed July 21st 2021. On the influence of Fox in the U.S. on the 2016 presidential election see, for example, Yochai Benkler, Robert Faris, and Hal Roberts, Network Propaganda: Manipulation, Disinformation, and Radicalization in American Politics (Oxford: Oxford University Press, 2018), pp. 145-188.
- 67 One small but fascinating example of this: Dominic Cummings, the campaign manager of the Vote Leave group and "senior special advisor" to Johnson as PM, has claimed that as PM Johnson regularly referred to The Daily Telegraph as his "real boss." (Dominic Cummings, interview with Laura Kuenssberg, BBC, July 20th 2021.) It is a simple example of the longer-term process that has rendered politics as a form of mediated spectacle.
- 68 On "mediatization," the shaping of our sense of reality and the social world after "the embedding of media in the fabric of daily life," see Nick Couldry and Andrews Hepp, The Mediated Construction of Reality (Cambridge: Polity, 2017).
- 69 Federal Trade Commission, "FTC Imposes \$5 Billion Penalty and Sweeping New Privacy Restrictions on Facebook," July 24th 2019, available here https://www.ftc.gov/news-events/press-releases/2019/07/ftc-imposes-5-billion-penalty-sweeping-new-privacy-restrictions, last accessed February 7th 2021; Carole Cadwalladr and Duncan Campbell, "Revealed: Facebook's global lobbying against data privacy," The Observer, 2nd March 2019.
- 70 Information Commission Office, "Investigation into the use of data analytics in political campaigns: A Report to Parliament, November 6th 2018," p. 62, available here https://ico.org.uk/media/action-weve-taken/ 2260271/investigation-into-the-use-of-data-analytics-in-political-campaigns-final-20181105.pdf, last accessed February 7th 2021.
- 71 Ben Winck, "Facebook climbs after the FTC approves the company's \$5 billion privacy settlement," Markets Insider, July 12th 2019.

- 72 Six4Three v. Facebook, Superior Court of the State of California, County of San Mateo, Case No CIV 533328, April 10th 2015, p. 8. Currently, in early 2021. Facebook has around 2.8 billion active users, and about 3.3 billion people using the company's other services (principally WhatsApp. Instagram, Messenger). See https://www.statista.com/statistics/264810/ number-of-monthly-active-facebook-users-worldwide/, last accessed February 7th 2021. In February 2021, the total global population is estimated to be 7.8 billion.
- 73 This became a mantra for tech entrepreneurs and business magazines from around 2006. It appears to have been coined by Clive Humby, a British mathematician who helped create the British retailer Tesco's Clubcard loyalty program to gather data about shopping habits. Humby said: "Data is the new oil. It's valuable, but if unrefined it cannot really be used. It has to be changed into gas, plastic, chemicals, etc., to create a valuable entity that drives profitable activity; so must data be broken down, analysed for it to have value." Humby, cited in Jason James, "Data as the new oil: the danger behind the mantra," The Enterprisers Project, July 11th 2019. Variations on this formulation are too widespread to be listed but see these two examples from influential business magazines: Editorial, "The world's most valuable resource is no longer oil, but data," The Economist, May 6th 2017; Dan Gallagher, "Data Really is the New Oil," The Wall Street Journal, March 9th 2019.
- 74 Catherine Lutz ed., The Bases of Empire: The Global Struggle against U.S. Military Posts (London: Pluto Press, 2009); Paul A.C. Koistinen, State of War: The Political Economy of American Warfare. 1945–2011 (Lawrence: University Press of Kansas, 2012).
- 75 One example about media control and violence, from one of those states, oil-rich Saudi Arabia: in 2018, the dissident Saudi journalist Jamal Ahmad Khashoggi was brutally assassinated in the Saudi consulate in Istanbul. It was widely reported (and confirmed in the U.S.'s Central Intelligence Agency report on the murder) that the Crown Prince Mohammed bin Salman ordered the assassination to silence Kashoggi. (See Bradley Hope and Justin Scheck, Blood and Oil: Mohammed bin Salman's Ruthless Quest for Global Power (London: John Murray, 2020). It is a simple example of how authoritarian state's repress media and kill journalists to shape reality and control power.
- 76 Zuboff, The Age of Surveillance Capitalism, p. 8.
- 77 "Commodity fictions" are objects produced not for sale but that become saleable in the configuration of capitalism. In the years after the Industrial Revolution, Karl Polanvi has argued, three commodity fictions became foundational to the establishment of an economy controlled by markets: the subordination of life to labour; the translation of nature into the market to be reborn as "land"; and the rebirth of exchange as money. Karl Polanyi, The Great Transformation: The Political and Economic Origins of Our Time (1944; Boston: Beacon Press, 2001), in particular pp. 71-81. Our recent post-Google history has seen experience translated into data to be reborn as behaviour and prediction as a fourth foundational commodity fiction. See here Zuboff, The Age of Surveillance Capitalism, pp. 98-100. In the history that unfolds here, it shall be worth remembering that a) these deep and consistent logics reimagine social order and life as an adjunct to the market, and b) that capitalism

- foundationally transforms reality into fictions and fictions into reality. One other example of this, essential to the long history of capitalism, has been the transformation of the fiction of "race" into reality.
- 78 On this latter history, regarding the insurrection at the U.S. Capital in early 2021, see: Avaaz, "Facebook: From Election to Insurrection: How Facebook Failed Voters and Nearly Set Democracy Aflame." March available here https://secure.avaaz.org/campaign/en/ facebook election insurrection/, last accessed July 22nd 2021; and David Neiwert, "Stop the Steal' spread on Facebook enabled Jan. 6 insurrection, company's internal report finds," Daily Kos, April 24th 2021.
- 79 One example of this: Facebook's CEO, Mark Zuckerberg, refused 3 invitations from the British Parliament to answer questions about the role his company played in degrading British democracy. (See, for example, Alex Hern and Dan Sabbagh, "Zuckerberg's refusal to testify before UK MPs 'absolutely astonishing'," The Guardian, March 27th 2018.) I borrow the concept of "corporate sovereignty" from a book about the British East Indies Company. See Philip J. Stern, The Company State: Corporate Sovereignty and the Early Modern Foundations of the British Empire in India (Oxford: Oxford University Press. 2011). Facebook's corporate sovereignty now exceeds that of the demos.
- 80 Jonathan Crary, 24/7: Late Capitalism and the Ends of Sleep (London: Verso, 2013).
- 81 Thomas Hobbes, Leviathan (1651; New York: Cosimo, 2009).
- 82 Giorgio Agamben, "From the State of Control to a Praxis of Destituent Power," Roar, $4^{\rm th}$ February 2014.
- 83 Mbembe, "Futures of Life and Futures of Reason," p. 21; Michel Foucault, Discipline and Punish: The Birth of the Prison, trans. Alan Sheridan (New York: Vintage Bookis, 1995), pp. 195-230.
- 84 Enzo Traverso, The New Faces of Fascism: Populism and the Far Right, trans. David Broder (London: Verso, 2019), p. 4. Traverso uses the term "post-fascism" to draw attention both to the continuity with earlier formations of fascism and to the chronological and ideological distinctiveness of these contemporary global developments that stretch from Brazil to India to the U.K. and U.S. and Russia. It is certainly a heterogenous, composite, and often contradictory phenomenon, that manifests general tendencies as well as specific genealogies and local and contingent histories. Broadly, these "post fascist" movements frequently call for the restoration of national sovereignty, economic protectionism, and the defence of a "national identity" presumed to be threatened. Often, paradoxically, they call for the liquidation of government. More clearly neo-fascist formations erupt too, attempting to perpetuate and regenerate the directly racist and violent praxis of the fascism of imperialism that (Arendt and others taught us) mutated into the "classical fascism" growing after the European civil war (1914-1918) and the last great crisis of capitalism (1929-1939) that prompted the collapse of the European liberalism that was the political expression of capital. In the period after 1945, a new liberal world system emerged with the U.S. and the dollar at its centre. Broadly, in the period after the collapse (but zombie like continuance) of financialization, from 2008, this liberal world order begins to unrayel, and we live in the interregnum between neoliberalism and what

- comes next. Or, in the form of McKenzie Wark's recent book title: Capital is Dead: Is This Something Worse? (London: Verso, 2019.) Wark's answer is, by and large, ves.
- 85 Frantz Fanon, The Wretched of the Earth, trans. Constance Farrington (Harmondsworth: Penguin, 1967); C.B. Macpherson, The Life and Times of Liberal Democracy (Oxford: Oxford University Press, 1977).
- 86 Arendt, The Origins of Totalitarianism.
- 87 On the resurgence of authoritarian nationalism (stretching from Brazil to India to the Philippines to Italy to Turkey and beyond), see, for example, Gisela Pereyra Doval and Gaston Sourojon, Global Resurgence of the Right: Conceptual and Regional Perspectives (London: Routledge, 2021).
- 88 On spyware developed by the Israeli company NSO, and sold to authoritarian regimes to be used to "target activists, politicians, and journalists," see Stephanie Kirchgaessner, Paul Lewis, David Pegg, Sam Cutler, Nina Lakhani and Michael Safi, "Revealed: leak uncovers global abuse of cyber-surveillance weapon." The Guardian, June 18th 2021.
- 89 Nihil Pal Singh, Race and America's Long War (Berkeley: University of California Press. 2017): Wendy Brown. Undoing the Demos: Neoliberalism's Stealth Revolution (New York: Zone Books, 2015). As Pal Singh shows, primitive accumulation through overseas conquest was twinned with the domestic dispossession of peasants and other direct producers from their access to communal lands.