Anticolonial Platform Studies
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Introduction

Major high- tech platforms like Apple, Google, Meta, and Pinduoduo boast about socially responsible, civil rights – based privacy measures and AI practices, but their supply chains are rife with brutal labor practices. In countries in the Global South, such as Myanmar and the Democratic Republic of the Congo, miners die mining the vital minerals of smart-phone batteries, green energy, electric cars, and wind turbines essential to digital platform production. In the eastern Congo, hundreds of thousands of enslaved men, women, and children mine cobalt at gunpoint. In Myanmar miners and their families die in high numbers from exposure to toxic chemicals, fatally toxic water, and an intentionally imported opioid crisis.[2] Brutal mining conditions are just one catastrophic example of how things can go wrong when massive, impersonal, unaccountable corporations coordinate the everyday lives of millions. Researchers document the [31] barriers and casualties of platform gatekeeping: in health care,[3] welfare,[432]refugee access,[5] democratic voting rights,[6] and access to information.[7]

Elsewhere I have written about how corporate social media algorithms[34] incentivize violent populism and polarization.[8] High- tech digital platforms coordinate global arrangements of labor, health, education, activism, sex, culture wars, identity politics, and life. This spreading corporate governance is perilous because platforms' centralized standardized rules are enforced by indifferent, agnostic, computerized algorithms in service of a corporate profit agenda. Stories of exploitation and oppression proliferate as automated algorithms determine who qualifies for gig work, bank loans, welfare, refugee claims, health care access, shorter jail sentences, and broad political influence. As populations adapt to ubiquitous platform standards, corporate agendas mold labor, land, identity, and values in line with commercial priorities. Data is continuously readied for the algorithm through interfaces, affordances, and labor intermediaries who prepare work arrangements that function as efficiently as possible in market terms.

Critical theorists concerned with labor, education, incarceration, sex, migration, or life on earth must reckon with platforms. We may turn to platform studies as the field of experts who guide researchers to understand and tackle the rise of platform dominance. For two decades, this field has been crucial for documenting and identifying negative social trends that might otherwise have

been mistaken for organic representations of life — for example, that Twitter hate is curated rather than being a real social barometer,[9] or that the news reflects ranking metrics rather than the pursuit of truth.[10]

However. platform studies cannot apprehend the most pressing platform problems if it does not meaningfully engage with the insights of colonialism. In an atmosphere of AI market hype and geopolitical tensions, platform studies is incentivized by federal and private funding to train a digitally prepared citizenry with cybersecurity and other empirical data skills. As a result, research agendas favor social science and political economics frameworks over critical digital scholarship. Subsequent digital research frames platforms as a new, unprecedented neoliberal conflation of technology and business strategy ominously described by Benjamin Bratton (2016) as a new danger — "the machine as the state."[11] Platforms are portrayed as bad apples in an otherwise smoothly running capitalist landscape that threatens the common good in most Western democracies. This scholarship teaches students to interpret platform strategies in order to develop regulations and protect civil liberties, such as privacy and digital property,[12] while naturalizing the racial capitalism that makes Western democracies run smoothly. In other words, dominant platform studies teaches a digital vision committed to colonial and racial order and unable to unpick the overwhelming platform problems caused by these very tensions. This article argues that platform studies must be taught through the vast insights of decolonial struggle and scholarship, understood as problems of racial plunder and theft. This article is an invitation for colonial theorists to see themselves as digital theorists, already equipped with the anticolonial lens that is fundamental to tackling modern platform crises. It offers a primer on platform studies to readers of Social Text and culminates in an example of the East India Company (EIC) in British Malaya as a model of anticolonial platform studies.

A platform is defined as a corporation that fosters and facilitates trade within its ecosystem.[13] For example, trade between Uber drivers and passengers, between Amazon sellers and customers, or between Instagram advertisers and users. Platforms are different from other multinational postcolonial industries such as mining, farming, or industrial factories in that they do not produce a product: a platform is an interoperable system that hosts interactions between other businesses, orchestrating all of these exchanges according to its codes and specifications in order to reap a cut of all trade. This definition easily applies to colonial corporations like the EIC, which fostered and facilitated trade within its ecosystem of colonized societies like a true "machine as the state" — indeed, the machine before the existence of an absolutist state.[14] Philip Stern's The Company- State documents how the EIC brought swaths of global life in line with its commercial priorities for centuries, administering law, collecting taxes, sentencing life and death,

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commanding religious life, extracting rent, cultivating obedience, and waging war according to centralized contracts and laws that streamlined and stabilized profits from the businesses that traded in its territories. When enriched by the insights of colonial theory, "platforms" are not contemporary innovations but a continuation of long- standing colonial business as usual. The thesis of this article is that the EIC is a platform — not an analogy but a platform — to enhance platform studies with centuries of decolonial struggle and insight. Platform studies and the very notion of "platform" are products of colonial history and abstractions that accomplish the erasure of the history that produced them.

The EIC cannot be bluntly forced into the category of platform, as it is unique insofar as each platform is a particular product of its immediate conditions, attitudes, and policies. However, modern technologies are not as distinct as they are described to be. In fact, they may be understood as updated bureaucrats. Digital scholars Robyn Caplan and danah boyd persuasively argue that "algorithmic and data- driven technologies must be 'de- mythified' and viewed more akin to bureaucratic or administrative mechanisms than intelligent systems."[15] Algorithms are regulatory instruments just like bureaucrats throughout history. An algorithm is defined by computer science as a list of clear, step- by- step directives for processing or automatic reasoning that produces a certain output from given input.[16] Algorithms are faster than traditional bureaucrats, enforcing administrative policies at greater speed and scope, but with the same inflexible top- down logics. Ezekiel Dixon- Román insightfully calls this "algo- ritmo," the sociopolitical relations of racializing assemblages fundamental to modern platform operations.[17] This article applies Dixon- Román's important anticolonial digital praxis to platform studies to argue that platforms represent a set of continuities in the capitalist organization of governance, ownership, rationale, dispossession, exploitation, and management with greater velocity, volume, value, variety, and conformity. Today's exploited gig workers, social media polarization, hate, conflict, division, and exploitation are not a side effect of platform production but a technologically intensified four- hundred- year- old project of colonial standardization that Hortense Spillers calls American grammar[18] and Cedric Robinson calls racial capitalism[19]. This thesis will seem obvious to colonial activists and researchers, which is why it matters, because this obvious historical continuity of platforms is willfully ignored by capital and state- driven digital research and curricula and depicted instead as new problems that need new solutions from business and management sectors. In other words, while the idea of "the East India Company as platform" works, and doesn't work, the tension, provocation, and spark is what matters, reframing platforms as continuities of colonialism and insistently returning to the point of invasion, conversion, and domination and refuse the willful ignorance of empirical positivist platform studies.

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The first section of this article is a primer on platform studies' prevailing frameworks and theories, challenging its oversights, and the second section applies these to the EIC's operations in Malaya as an example of how platform studies and anticolonial theory might work together. In this moment when the liberal arts are devalued in the face of STEM education, colonial and critical theory could not be more urgent for tackling digital problems. Platform violence cannot be solved by liberal management solutions like greater transparency, consumer privacy, or antibias training. Instead the internal, centuries- old logics of platforms must be made explicit — racial coding, land theft, and colonization. Anticolonial contributions can clarify that the only way to stop platform violence is to stop allowing corporations to organize life: give back the land, end slavery, abolish policing, dismantle capitalism. This article offers a brief introduction to platform studies as an invitation.

A Platform Studies Primer

Outside of platform studies, broader digital humanities and new media theorists contribute to a more colonial conception of digital production, including household names of the field, such as Wendy Chun and Simone Browne. For example, in a 2009 special issue of Camera Obscura on race and technology, Wendy Chun and Beth Coleman argue that race is not merely affected by technology; rather, race is/as technology.[20] Chun differentiates her argument from critical- race- informed technology studies that analyze how technology is impacted by racism. Race as technology claims that race is design, and this idea calls for a reformulation of fundamental beliefs like "privacy," "nature," "self," and "society."[21] Coleman calls race a "contraption by one people to subject another"[22] — a meaningless signifier that relies on motion to formulate difference and embed inequity into the architecture of everyday life. Race is technology, designed to expand and secure white property by continually reproducing exploitable groups. So, although modern technological surveillance like facial recognition, fingerprint passwords, and drones seem new, they are updates of historic white supremacist practices of enslavement, criminalization, wage labor, coercion, and power. In the field of surveillance studies, Browne argues that the dehumanizing surveillance and literal branding of Blackness has evolved into platform technology, especially its security.[23].

Platform scholars made some of the first cynical observations of cyberspace during the utopic heyday of internet optimism. As early as 2000, "post-worker" Marxist scholar Tiziana Terranova drew attention to how the web was pocked with free labor.[24] Lawrence Lessig predicted that cyberspace could become oppressively coded by the influence of commerce.[25] The umbrella of "platform studies" was gathered together in 2007 by an MIT book series edited by a poet and a games designer who envisioned this new field as an instrument for humanities researchers to conduct culture critique. Editors Nick Montfort and Ian Bogost wrote, "We believe it is time for those of us in the humanities to

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seriously consider the lowest level of computing systems and to understand how these systems relate to culture and creativity."[26] In other words, just as a poetry critic must know iambic pentameter and the history of the sonnet in Tudor England, a critic of Grand Theft Auto must know the formative origins of the action-adventure third- person shooter.[27] Montfort and Bogost define a platform "in its purest form is an abstraction, a particular standard or specification" — a set of rules that dictate the development and form of every actor interacting in its landscape. Platform study is essential for any meaningful artistic critique of contemporary computer games, augmented reality, and other digital art.[28]

However, today platform studies is no longer dominated by discussions of Marxist labor struggles or technical media archaeology but the business of digital life — platform revenue models, governance and CEOs, and how they shape broad social activity. It is this focus on capital accumulation that makes platform studies an ideal home for colonial history, analyzing the scaffolding of labor management, trade, contracts, and markets in shaping population management and cultural expression. The next section will review some field terminology, followed by its two leading schools of thought.

What Is a Platform?

By definition, a platform is a company that facilitates trade. Apple introduces users to millions of apps, Airbnb brings together hosts and guests, Google leads users to websites and advertisers. Platforms do not make a product. For example, TikTok does not produce any of its own entertainment; it is a matchmaker between friends, influencers, artists, news outlets, and advertisers. In possibly the most clear and succinct book on the subject, Platform Capitalism, Nick Srnicek explains that a platform is a corporate entity whose software and development kits allow different groups to interact.[29] The term platform came into common use in 2001, popularized by media CEO Tim O'Reilly. Right after the first big dot- com bubble crash, O'Reilly inspired demoralized entrepreneurs at his "Web 2.0" conference, where he argued that the next step would be to move away from static websites, toward systems that other businesses could plug into for a thriving ecosystem.
Today, leading platform scholars follow the money, revealing what makes platforms lucrative and why their infrastructures attract entrepreneurs. Platform studies fascinatingly explains the role of business models in shaping cultural expression. For example, in an otherwise incisive article, New York Times contributor Michelle Goldberg mistakenly argues that social media polarization is a transparent representation of human behavior: "The sanctimony and censoriousness of the social justice internet is like a machine for producing red pills. It makes people think it's daring to, say, acknowledge that men and women are different, or pick on immigrants, or praise the president of the United States."[30] Goldberg makes the common assumption that platform activity is a direct response to social stimuli, allegiances, or personal dispositions. On the

other hand, platform studies explains that these interactions are nudged by a trade ecosystem choreographed for maximum platform revenue. For example, much online "sanctimony and censoriousness" was spread in the 2010s by content creator Christopher Blair, who has been dubbed the Godfather of Misinformation for spreading viral fake news about the Clintons and Obamas.[31] In truth, Blair is not even right-wing; he began his writing career as a liberal left-wing blogger in the Boston area. He began spread- ing lies because he felt validated by attention, and then eventually because Google's advertising revenue allowed him to quit his day job. People like Blair will exhibit radical views that they do not even believe in order to harness ad- driven algorithms.

Platform scholars are not technological determinists, but they argue that ad-driven recommender algorithms compellingly open the door to followers, influence, and the promise of successful overnight entrepreneurship. As users adapt to platform rules, platform agendas shape the life they touch. As groundbreaking platform scholar Tiziana Terranova declares, "Behaviorist interfaces that are designed with the purpose of maximizing engagement corrupt collective intelligence by facilitating the spread of fake news, conspiracy theories and hate speech."[32] This does not mean that all online activism is insincere; rather, radical partisan communities are a chicken- and- egg cycle of platform business models, ownership, governance, technology, content, and the users themselves.[33] Platform scholars explain that the right-wing extremism that Goldberg attributed to irritating lefty virtue signaling — is in fact largely a platform- contingent commodity shaped by strategic calculations adapted to platform business models.[34]

Colonial theorists would immediately recognize this historic pattern. Corporate colonial ecosystems like the Dutch East Indies Company, the Hudson's Bay Company, or the British East India Company shaped markets and so deeply impacted local culture. "Users" in this case were colonial customers, European and American merchants and consumers, since, like today, enslaved and indentured populations are not viewed by platforms as "users" but resources. Using the cutting-edge technologies of the moment, colonial corporations shaped culture with financial instruments, military weapons, mapping techniques, and modes of surveying, measuring, classifying, and accounting, thereby transforming labor and value extraction and dynamically recasting race and gender as means to discount life. Smaller subordinate colonial platforms proliferated, like nineteenth- century gangmasters who, like Uber, mobilized vulnerable laborers, directed their work, and acted as paymasters.[35] The second section of this article will offer examples like the Indian kangany system.

Platform scholars further argue that modern platforms work because of their clear, standardized software protocols, disseminated through freely available collaborative tools. For example, Apple offers tools for new app developers to make their app iPhone-compatible. These tools are called Software

Development Kits (SDKs). If, for example, app developers want their apps to be compatible with Android systems, Android offers free features like "Developer Guides," "Sample Code," "Quality Guidelines," and how to "Distribute your App" as free simple manuals and tools.[36] SDKs are like writers' style guides — containing the standards, protocols, code libraries, documentation, and other tools a developer needs to make their app compatible with a platform.

One example of an SDK is an Application Programming Interface (API). For example, at the time of writing, when a user signs into Tinder, they can choose to "Continue with Google," "Log in with Facebook," "Log in with phone number" or "Log in with Friend Account." This option is the result of Tinder developers using Google and Facebook APIs to create buttons for users to sign in to their app. This button makes Tinder more convenient and appealing for users and allows Tinder to access all of Google and Facebook's existing contacts, allowing users to find dates through existing networks and get relevant suggestions. This was worth it for Tinder, because it granted access to Google and Facebook's trove of years of user tastes and networks. The biggest winner is Google and Facebook, because SDKs attract new businesses to enhance its platform, on its terms, in exchange for user data.

When Tinder adopted the "Sign in with Facebook" button, it had to standardize its operations according to Facebook terms and share all its data with the platform. The developers of Tinder, SoundCloud, TikTok, and millions of other apps use SDKs and APIs to connect their apps to Apple, Android, Meta, and other major platforms, gaining access to billions of users, events, groups, pages, and more. This is called platform "interoperability" — freely available tools that attract new apps and their user data, all while making the platform more powerful.

Platform studies keeps track of every moving piece in these large ecosystems to offer a bigger picture of why and how platforms work. However, the field would thrive on a deeper history of platforms in colonial population management techniques. The second section of this article compares platform software to EIC treaties — and SDKs to "race," a freely available collaborative tool that made the EIC interoperable with plantation owners, colonial agents, and other third- party entrepreneurs. This historic backdrop is essential to understanding the logics and consequences of modern platform operations. This article will now turn to a brief overview of two leading schools of thought in the field, divided roughly as "political economists" and "platform ontologists."

Political Economists

In a landscape of AI market hype and cybersecurity concerns, research funding tends to overarchingly favor one camp of platform studies: the political

economists. These scholars dominate the field with explanations of platforms as bad actors in the capitalist landscape — minus the history of capitalism's already dehumanizing classification systems. The ideas of political economists are summarized and marshaled by the senior scholar who supervised many researchers in this field, José van Dijck, whose canonical Critical History of Social Media explains why platforms work. Van Dijck brilliantly illuminates how platforms like Twitter shape future behavior. Combining actor network theory with Manuel Castells's scrutiny of the network society, she builds an impressively simple anatomy of six factors that forge social media platform power: governance, ownership, business models, content, users, and technology.

For example, van Dijck moves through platform "ownership" and "governance" to explain Twitter's changing limitations on expression. She establishes the revelation that Twitter trends are not transparent representations of what the public cares about (for example, only 10 percent of users are responsible for 80 percent of tweets; 90 percent of the world may not care at all about trending topics).[37] Van Dijck explains that some Twitter users are valued more highly by the platform because their tweets "weigh" more based on the intensity of their tweets per second. Algo rithms promote this "intensity" and rapidly circulate messages that may become viral trends.[38] Van Dijck explains that in the lead- up to its initial public offering, Twitter had to decide whether it was a microblogging site that connects people or a company that offers advertisers a smorgasbord of user data. Founder Jack Dorsey had called it a "social networking site," but his successor as CEO, Dick Costello, called it an "information network" allowing advertisers to sponsor tweets. This gradual shift pivoted Twitter's mechanisms toward engineering and manipulation. Studying the relationship between "governance" and "ownership" explains how and why Twitter shapes social attitudes. "Complex algorithms derived from past user behavior are used to anticipate but also affect future behavior: The process of aggregating and disaggregating data from individual consumers may be deployed to tap into users' buzz about brands as well as to create brand communities based on Twitter dialogues on specific topics."[39] Van Dijck's clear, concise explanation sheds crucial early insight on the manipulative agendas behind a seemingly organic social landscape. Twitter's algorithms go beyond promoting trends — they also anticipate consumer trends. In other words, highly visible tweets do not express the genuine zeitgeist of cultural feeling; they signal future consumer trends. This insight is groundbreaking: Van Dijck explains that Twitter critics must understand more than what they see on the platform; they must understand what the platform wants.[40] The conclusion of this article will return to van Dijck's six platform vectors as potential guides for colonial analysis.

Van Dijck's students and colleagues at the University of Amsterdam prolifically built a political economy of platforms. Anne Helmond and Carolin Gerlitz coined

“the like economy” to describe how relationship- building “likes” are converted into fuel for advertising traffic.[41] Van Dijck and Thomas Poell described how social media platforms produce a successor to mass media logic — the discourse that organizes public space — to “social media logic” — an equally manufactured, natural- seeming common sense. Social media logic is generated by popularity, connectivity, datafication, and “programmability,” which is the means platforms use of code, data, algorithms, protocols, and interfaces to trigger and steer users, as well as users’ refusals or adaptations.[42] Poell and David Nieborg argue that video games and even the news itself is now massaged and repackaged according to platforms’ datafied user feedback in an illuminating article that explains how platforms shape “contingent cultural commodities.”[43]

US scholar Tarleton Gillespie is the most- cited platform scholar for his foundational unpacking of the word platform and how companies use it to avoid liability — for example, as a way for social media companies to refuse liability as “publishers.”[44] In 2014 he outlined six ways that algorithms shape power.[45] I described his list of six power tactics to my Singaporean peers as an analogy of colonial bureaucracy and elicited an emotional response about the impact of colonial business practices on our collective self- realization. First, patterns of inclusion: social media algorithms choose which cultural forms to index, based on strict inflexible hierarchies. Second, cycles of anticipation: algorithms anticipate and predict what each person represents, in a broad generalization that comes to shape political calculations. Third, the evaluation of relevance: algorithms are hidden rubrics that determine which knowledge is legitimate. Fourth, the promise of algorithmic objectivity: algorithms falsely claim to be objective. Fifth, entanglement with practice: algorithms change us; as we seek validation and aim to be visible — and algorithmically legible — as we are “habituated” and “domesticated” by algorithmic agendas. Finally, sixth, the production of calculated publics: algorithms shape a public’s sense of itself and its most worthy beneficiaries. The second section of this article will apply detailed examples of Gillespie’s theories from Southeast Asian history.

Political economists explain platform trends through business management theories like “multisided markets” (platforms don’t produce content, they are matchmakers bringing together entertainment, advertising, software developers in a multisided market).[46] Or “network effect” (the more users join a network, the more valuable it becomes).[47] Or, somewhat debatably, “winner- take- all strategies” (many can experience platforms simultaneously and get easily locked in, and find it hard to quit).[48] In the readable textbook Platforms and Cultural Production, David Nieborg, Thomas Poell, and Brooke Erin Duffy use these terms to explain how YouTube supports or hurts content creators like the megastar gamer PewDiePie or comedy team Ethan and Hila Klein, in order to show how platforms and cultural producers haggle over creation, distribution,

marketing, and monetization,[49] shaping, sidelining, or even erasing cultural expression.

Colonial theorists will recognize here that what is missing from a political economic analysis is platform expression that is not ostensibly driven by money — activism, identity- based groups, or social movements that make up a great deal of social media content and drive its most far-reaching conflicts. For example, in the case of Christopher Blair, "the Godfather of Misinformation," his political incitement was incentivized by platform monetization, but his readers were moved by deep- seated allegiances along lines of identity, ethnicity, religion, and race. Many online activists are motivated by hierarchical, colonial ranking systems, driving tectonic social trends from virtue signaling to dangerous political influence to acts of terrorism.[50] A purely monetary evaluation of social motives is limited by what Gayatri Chakravorty Spivak calls a "humanistic training in consumerism" that cannot apprehend, never mind oppose, ethnic, gendered, and classed ranking systems for the artificial colonial technologies that they are. Instead, political economists who analyze social media cultures take these classification systems as natural facts and cannot tackle the roots of rising worldwide culture wars.

Without these colonial insights, however, political economists frequently lean on anachronistic histories, such as a 2018 article by Jean- Christophe Plantin and colleagues that became one of the field's most highly cited articles. This article explains that platform power can be understood through the traditional infrastructural theory of interoperability. A simple way to describe this idea is that platforms are very easy for new developers to join. As in the example of Tinder, developers use platform APIs to access vast audience networks, build audiences, host events, advertise, gain users, and collect more data from across the platform's ecology. This interoperability makes platforms irresistible: users enjoy endless apps personalized according to their networks, app companies thrive on massive platform consumer markets, and platforms gain data and lock- in. Interoperability makes a platform more than just an app — it is an infrastructural ecosystem connecting millions to modern affordances.

However, Plantin et al.'s now canonical platform studies article builds an ahistorical argument that platforms are the result of a set of specific economic conditions that only unraveled after World War II. They explain that, from an infrastructure studies point of view, platforms are powerful and unprecedented — because they are designed from the ground up to be interoperable. This distinguishes platforms from traditional infrastructures like railways, which, they argue, began as local, independent regional systems. Railway systems were then later integrated into global internetwork standards — for example, through the International Organization for Standardization (ISO) standard shipping

container. Plantin et al. argue that platforms represent the demise of the hopeful infrastructural ideal of the 1970s, instead inaugurating prefabricated, corporate-standardized core systems. The difference is illustrated with a table (see fig. 3): traditional infrastructures on the left, boasting public interest, public value, and accessibility; and platforms on the right, hatching private agendas, core systems, and private profits.

Plantin et al.'s insights are cited by thousands of authors, including the essential textbook, The Platform Society, in which van Dijck, Poell, and Martijn de Waal argue that platforms threaten a traditional society of collective participation and the common good in most Western democratic societies. These scholars see platforms as undermining benevolent traditional infrastructures with the agendas of centralized private profit. The result is a "Platform Society . . . in which social and economic traffic is increasingly channeled by an (overwhelmingly corporate) global online platform ecosystem that is driven by algorithms and fueled by data."[51] Like many platform scholars (before and since), Plantin et al. argue that in the economic downturn of the 1970s, pro- business activists gutted labor securities like unions, outsourced good jobs, and capitalized on the debt products that proliferated in the post-financialization boom. This neoliberal turn "splintered the modern infrastructural ideal of universal service"[52] and privatized and deregulated traditional benevolent infrastructures.

But splintered, privatized, deregulated infrastructures existed before World War II. In the Global South corporate platforms facilitated plantations, factories, and mines and privatized deregulated public services for centuries. The history that political economists omit is the colonial extraction and exploitation that sponsored midcentury affluence in the Global North, an anomalous affluent "middle class" within capitalist history. Economic and business- informed platform theory describes Western democratic societies in a vacuum, placing its supply chain on what Spivak calls "the other side of the international division of labor from socialized capital."[53] The trade and commercial infrastructures that enrich the Global North were not "grassroots regional systems" regulated in the public interest but corporate enterprises that have privatized, deregulated, and splintered the world for centuries. Because political economists focus on the Global North in a vacuum, they cannot tackle complex online conflicts of identity that are unrelated to monetary motives.[54] As modern platform problems worsen, this oversight must be remedied.

Platform Ontologists

Before the ascent of political economists, platform studies was mainly the scholarship of a group that I call "platform ontologists." These scholars are less favored by corporate partnerships or cybersecurity funding priorities, and so are less visibly cited in the field today — unfortunately because they effectively

recognize platforms as legacies of colonialism. This article connects their important abstractions to the specificity of colonial history.
For example, foundational platform scholar Tiziana Terranova recently published a fascinating and unusual essay in e- flux with experimental media critic Ravi Sundaram, in which the two write responses back and forth to each other about the role of colonial infrastructures in platform development. Terranova declares that platform history must harken further back in time. "Foregrounding the history of colonial techne disrupts accounts of surveillance capitalism as a contemporary threat originating in Silicon Valley technologies."[55] Terranova argues that platforms are not contemporary threats but colonial techne.

In response to Terranova's earliest platform interventions, Ganaele Langlois and Canadian colleagues argued that platform power is a form of "World Mapping." Although they insist that "corporate colonization" is not an adequate label for platform power, their analysis embodies colonial theory. They see platforms producing knowledge regimes, or "the technocultural conditions within which users can produce content and within which content and users can be re-channelled through techno- commercial networks and channels."[56] Their interrogation of knowledge- making itself is a colonial inquiry reminiscent of V. Y. Mudimbe's "colonial library," the European worldmaking of missionaries, ideologists, philosophers, and anthropologists that shape even the most original African philosophy in a conflicted, ambiguous relationship.[57] Langlois et al. interrogate how things come to matter on the platform, arguing that user-generated spaces must question not only platform censorship but its integrated world of subjectivation through economic, legal, and techno- scientific means.[58]

More recently, Kate Crawford, Ulises Mejias, and Nick Couldry examine digital supply chains to argue that modern platforms are akin to colonialism. In The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism, Mejias and Couldry seek, as does this article, to bring critical colonial research into conversation with critical internet studies.[59] However, unlike this article, their central concern is to stop data harvesting.[60] Similarly, Kate Crawford's Atlas of AI tours AI supply chains to reveal the graphic human work behind artificial intelligence. She does not explicitly refer to this ongoing practice and its history as colonialism but comes close, asserting, "We need a theory of AI that accounts for the states and corporations that drive and dominate it, the extractive mining that leaves an imprint on the planet, the mass capture of data, and the profoundly unequal and increasingly exploitative labor practices that sustain it."[61] This article would describe that theory as racial capitalism.

The theory of racial capitalism is made explicit by Tressie McMillan Cottom, who is not a platform scholar but a sociologist.[62] Nevertheless, she is included here because her platform analysis is incisive, interrogating platforms as a ground

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zero of racial capitalism. She elegantly summarizes two factors behind this dominance: first, “predatory inclusion,” which forcibly includes marginalized groups in theoretically democratizing opportunities, but on extractive terms like unpayable, bad, racist social policy loans for night college or cheap home ownership; second, global privatization — for example, TaskRabbit might mobilize unskilled labor in a “U.S. racial project,” but it is financed by transnational capital flow.[63] Dating exclusively happens on apps; education happens in black- box ed- tech; life happens in smart cities — work, love, and living are privatized inside secretive, obfuscated platform agendas, privatizing and extracting data that would have been public.

For this group that I label platform ontologists, corporate platform agendas perpetuate and innovate who and what matters. In other words, these scholars importantly point to the fact that platform studies and the very notion of “platform” is a continuation of colonial practices. This article builds on these platform ontologists theoretical arguments with the specifics of EIC history.

East India Company Governance

My father grew up in 1950s Singapore as a British subject, singing God Save the Queen and marveling at prestigious British administrators who played cricket in all- white on the green, manicured padang in the shade of the Supreme Court. He was determined to follow their example and marry a British bride. My sister and I are embodiments of EIC optimization, an example that is repeated throughout our nation. My classmates and I memorized the decorated history of our EIC founder, a British company executive named Sir Stamford Raffles. We absorbed Mary Turnbull’s Orientalist accounts of our region,[64] intensively ranked ourselves according to the UK- based General Cambridge O Levels, attended theater productions at Anglo Chinese Secondary School, strove to enter Raffles Junior College, and feared homosexuality as criminalized by the British penal code until 2023. In other words, the EIC did more than business; it generated Mudimbe’s colonial library: education, laws, police, courts, culture, and media. We embodied a tension of aspiration and resistance to British education, legislation, military training, religious conversion, and ranking systems to make ourselves compatible with colonial business infrastructures. Repeating Gillespie’s phrase, in Singapore we are a “calculated public.”[65] This next section of the essay will detail how colonial history enriches van Dijck’s primary analysis of platform governance.

Software

In new and old platforms, corporations govern commercial flow and user participation through protocols.[66] Modern platforms call this “software”; traditional platforms call this “treaties.” Like a treaty, software is the privatization of noncommodities. The concept of software was introduced in the 1950s by corporate, state, and military sectors to establish managerial governance over computer programmers and their programs.[67] Early computing was a tedious

mechanism of flicking switches and punching holes, a process that did not make sense to privatize; in fact, the idea of privatizing it was initially rejected by the US Supreme Court. Wendy Chun describes how, in 1972, legal scholar Pamela Samuelson successfully argued that algorithmic "scientific truths and laws of nature" should not be patented as software.[68] Eventually this case was overturned, and business, military, and government sectors patented high-speed computer calculations into programming languages, systems, databases, communications, and networks. Chun writes, "Software emerged as a thing — as an iterable textual program — through an axiomatic process of commercialization and commodification that has made code logos: a word conflated with and substituting for action."[69] By making "software products," state military and business sectors made programmers, computing services, business partners, Third World moderators, and supply- chain manual laborers into governable, reliable, manageable, repeatable, and usable.[70]

Similarly, the East India Company used treaties to make natural resources, laborers, agents, and trade partners governable, reliable, manageable, repeatable, and usable. For example, its first treaty, signed on the last day of the year 1600 between the company and Queen Elizabeth, established the company's rights to the East Indies: to "have, purchase, receive, possess, enjoy and retain, Lands, Rents, Priviledges, Liberties, Jurisdictions, Franchises and Hereditaments" to the "Governor and Company of Merchants of London, Trading into the East- Indies, and their Successors." This treaty allowed the company to commodify noncommodities and set social- cultural protocols throughout modern day Indonesia.[71] To use Wendy Chun's poetic description of software, EIC treaties allowed the company to govern remotely, geographically, temporally, personally, and impersonally, empowering and surveilling through particular standards or specifications.[72]

EIC treaties, which were regularly updated, regulated interactions between merchants, shipping companies, slave traders, plantation owners, and other enterprises by writing charters and treaties, their "software" that coded land, resources, and trade agreements as their exclusive trading rights for all to abide by. What political economists describe as a contemporary "Platform Society . . . in which social and economic traffic is increasingly channeled by an (overwhelmingly corporate) global online platform ecosystem" is an old practice. In fact, much like today's platforms refusing the liability of "publishers," these early corporations often avoided accountability by insisting on being a "mere merchant" rather than a sovereign ruler over these company states.[73] Platform software continues the colonial impulse of treaties, expanding exclusive corporate rights across global human activity.
Two centuries later, in 1819, an EIC treaty claimed total corporate control of British Malaya, forced on local leadership through routine company tactics of manipulation and addiction. When EIC executive clerk Stamford Bingley Raffles arrived in Singapore, the Dutch had the main control over

shipping channels because of a treaty they had made with the Sultan of Johor (all of which was British Malaya until 1957). How ever, the Sultan of Johor had an elder brother who claimed his right to the throne. Raffles declared the elder brother the rightful ruler of Johor on behalf of the British Crown and signed a treaty with his own new Sultan of Johor.[74] The first treaty the company made was modest, allowing the sultan to retain ownership of the land, a portion of customs duties, and permission to continue debt bondage and slavery. But starting the next year, the EIC questioned the legitimacy of his right to collect these customs payments after all because they claimed that the treaty had not been ratified by the British Supreme Court. Based on this manipulation, the company demanded that the sultan repay all of the money, but they proposed to cancel his debts in return for full company control of Singapore.[75] The sultan resisted at first but eventually gave in, partly because he, and soon also his people, had become completely dependent on the British "free gift" of opium.[76] The opioid crisis was the company's largest source of revenue for the first one hundred years of Singapore's existence, following the company playbook that facilitated their trade between British India, China, and Iran.[77] Under pressure the sultan signed a treaty called the "Treaty of Friendship and Alliance" in 1824 and surrendered Singapore and the adjacent islands and waters within ten geographical miles in perpetuity to the EIC.[78] Just as a platform is a particular standard or specification, treaties established the East India Company's particular standards and specifications over foreign territories and set up the conditions for businesses to interact on their coercive terms for maximum corporate profit.

Software Development Kits

In this section, the invention of race is interpreted as a colonial SDK, a free collaborative platform tool that trained company agents and business partners to make their businesses compatible with the EIC.

The role of ethnicity in cementing platform power began with the plantation system in the 1680s, when the East India Company determinedly built out its "plantation economy" model and exported its Barbadian model of plantation slavery to its colonies around the world.[79] Colonial global corporate ecology would not have been possible without the buy- in of politicians, plantation owners, merchants, and slave traders through a shared investment in racial hierarchies. Colonial scholars Anabel Quijano and Immanuel Wallerstein write that ethnicity is "the building block of modern world systems."[80] Once seventeenth- century corporations established their "software," or land contracts, declaring the code or laws of governance and trade in their territories, they streamlined this governance through interoperable standards. This software development kit was tried and tested, calibrating racial hierarchies of human, subhuman, and nonhuman aptly described by Sylvia Wynter as the Master Code.[81]

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The Dutch East Indies Company (VOC) preceded its British counterpart in Southeast Asia, privatizing Jakarta, Banten, and the Indonesian nutmeg trade in the sixteenth and seventeenth centuries. Like many corporate executives after him, Jan Pieterszoon Coen ordered the slaughter of thousands of Indigenous people to advance the company's monopoly over profitable nutmeg plantations. His massacre of fifteen thousand Indonesian Bandanese was rewarded within corporate rationale as a sound business decision, earning him a promotion to company director in Hoorn. Judged by the rubrics of business, Coen made a neutral, impartial business decision that paved the way for modern impartial algorithms to make neutral decisions based on the same ideologies. Colonial history records cases of swiftly, vastly enacted rules that shape culture according to commercial goals as empirical objectivity. Colonial administration was ruthless because it was corporate administration over the land's inhabitants. Gillespie describes how companies advance a myth of efficient objectivity to defend themselves against accusations of bias, error, or manipulation, which instrumentalizes the same profit- based rationale forged by Coen and the Dutch East Indies Company.[82] When platform scholars argue that centralized privatized infrastructures replace traditional infrastructures for the public good, they overlook the history of international corporate governance.

An enterprising European who wanted to join Southeast Asia's interoperable corporate colonial ecosystem might start a plantation and immediately organize it by ranks of racial superiority and inferiority. Like modern online tutorials that walk new programmers through SDKs, local colonial newsletters like the Selangor Journal outlined clear racial strategies:
To secure your independence — work with Javanese and Tamils and, if you have sufficient experience, also with Malays and Chinese; you can then always play the one against the other, and as the different nationalities never agree with each other, one will watch and control and compete against the other. In case of a strike you will never be left entirely without labour, and the coolies of one nationality will think twice before they make their terms, if they know that you are in such a position that you can do without them.[83]

The journal advised plantation owners to hire a mix of races in order to play them against each other as a business strategy to prevent worker solidarity, avoid strikes, keep a supply of scabs, and keep workers insecure. Following these tips, European plantation owners hired labor intermediaries like the Chinese triads who imported paid or indentured Chinese laborers to Singapore, which was essential to the company since Europeans were not able to access Chinese workers.[84]
Plantation owners in British Malaya used ethnically specific gangmasters like the kangany system, which is usually a laborer already employed on the plantation, sent to recruit others from his village. Amrit Kaur describes how kanganies became shopkeepers, moneylenders, and overseers who were paid

"head money" for each day that each laborer worked.[85] The kangany system enslaved and indentured Bangladeshis with ease after company rule in Bangladesh oversaw fifteen unmitigated famines. Kaur explains that these labor intermediaries restricted labor supply for higher commissions and intentionally selected the lowest caste- workers who were considered more "pliant."[86] When they arrived in Singapore, Coolies were subject to impossible labor bonds and repayment systems causing cycles of oppression. These labor bonds were deemed illegal by the EIC in 1910 — not on compassionate grounds but as a business decision, because plantation owners lobbied about lost earnings since as many as 60 to 90 percent of the laborers died within a year of arrival.[87] These inflexible, impersonal, and often inhumane labor intermediaries prefigure the modern indentured labor of the gig economy where freelancers have no recourse in the face of oppressive labor conditions.

Plantation owners depended on ethnic division and competition for their enterprises to succeed, securing revenue as they adapted to the EIC's fluctuating pricing systems. As Terranova and Sundaram write, "Colonial enumeration technologies were a careful orchestration of disciplinary technologies of policing, contract enforcement, racial superiority, and global circulation."[88] For the plantation owners and labor intermediaries that joined the EIC ecosystem, contract enforcement and racial superiority were the SDKs that ensured their successful business networks.

Colonial bureaucracy selectively indexed all life- forms based on select commercial hierarchies. This repetition of data, with alterity, that Dixon-Román calls "algo- ritmo," continues to be the ontological basis of modern corporate algorithms. When EIC treaties dedicated life "in perpetuity to the EIC," the company commanded order by indexing cultural forms — nomadic subsistence indexed for commercial plantations, Indigenous groups as slaves or Coolies, neighboring populations as racially ranked labor, and natural resources as materials of free and unrestricted British commerce. As Gillespie notes, algorithms are not truly automatic; colonial indexes were enforced by the algorithms of repetitive British labor and legal, judicial, and educational bureaucracy. Data is continuously readied for the algorithm through interfaces, affordances, and labor intermediaries who prepare work arrangements that function as efficiently as possible in market terms.

The collaborative SDKs of "ethnicity" and racist ranking systems were explicitly taught at the East India Company College in England and the Anglo-Oriental College in Malaya. The East India Company College was established in 1806 nineteen miles north of London, and one of its longest- tenured professors was population theorist Thomas Malthus. While the company created famines through extreme taxation, Malthus taught that famine is a sign of inferior,

immoral races and must not be mitigated, or it would produce an unsustainable population of dependent people. Malthus trained company administrators from 1805 to 1834, and Malthusian economics and population theory strongly influenced the company's governance mechanisms. British administrators refused and blocked famine relief around the world, beginning with the Irish potato famine to many successive famines worldwide, each time increasing taxes to compensate for profit loss. For example, Sir George Couper, who administered in India starting in 1846 and governed the 1878 famine in the North Western Provinces, declared, "If we are to secure that a class of men — so low in intellect, morality, and possessions . . . as to be absolutely independent of natural population checks — shall be protected from every cause, such as famine or sickness, which tends to restrain their numbers by an abnormal mortality, they must end up by eating every other class in the community."[89] Top- down, inflexible EIC bureaucrats calculated Indian lives as excessive and expendable and disseminated this rule as a widely disseminated algorithm multiplied throughout its territories. This algorithm earned Britain nearly $45 trillion in the subcontinent alone.[90] As the EIC and its business networks anticipated continued profits, colonial policies came to shape political calculations, casting famine death as a problem of overpopulation rather than a problem of unchecked corporate resource extraction[91] in an eerie echo of Gillespie's explanation that algorithms collect "the most knowable information . . . that is imperfect but sufficient. What is less legible cannot be known about users falls away or is bluntly approximated." Thomas Malthus and other East India Company College professors trained company officers in the optimal hierarchies of less- than- human populations to standardize an efficient system of profits.

Regional schools imparted ethnic ranking ideologies and maintained a divided population through competitive aspiration to become future administrators. One of Raffles's first projects was to establish such schools in Singapore and Malacca.[92] At a meeting of the Principal Inhabitants of Singapore, Raffles outlines his vision for a local curriculum, prefaced by his highly politicized characterizations of the region's inhabitants — like neighboring uncolonized Borneo — "human nature at its lowest point in the Woolly- headed savage."[93] His motives are very clear about training populations to be as compatible as possible with company business and "free and unrestricted commerce with the whole of these countries." He explains that an education in Western science and geography would ensure that any Native farmer or miner would pliantly share their knowledge and skills with an authoritative Western explorer. "No motive will exist for withholding information. . . . How much shall we increase this readiness and desire on the part of the natives."[94]

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Literary scholar Adeline Koh conducted an analysis of the textbooks used in early colonial colleges in Singapore. She describes how this education succeeded in spreading compliance and divisive ranking systems, including local Chinese elites who were taught Victorian upper- class distinctions "such as notions of being from a 'correct' background and through the idea of team sports such as cricket and polo, notions of 'fair play' and being a 'good sport.' "[95] Local populations strove to rise above the ranks of labor instrument to colonial administrators, perfecting the goal of a software development kit to reproduce new business partners. To use Gillespie's language, colonial policies are enforced with strict inflexible hierarchies, "anticipating and predicting consumer tastes in broad generalization that comes to shape political calculations," hide the rubrics that determine which knowledge is legitimate, falsely claim to be objective, and shape a public's sense of itself and its most worthy beneficiaries.

Former and current colonies are platform nations. This history is overlooked by scholars who raise concerns about the new rise of "platform nations" shaped by Silicon Valley agendas, including media CEO Tim O'Reilly himself. Two decades after he popularized the term "platform," O'Reilly published a Vox article called "Mark Zuckerberg Runs a Nation- State, and He's the King." O'Reilly and his coauthors argue that Facebook is a powerful sovereign and Mark Zuckerberg is the key lawgiver,[96] because code is "law" and Meta's code sets the laws of billions of people and millions of online negotiations. These insights would be enriched by the history of the East India Company, a corporation whose business agenda set the laws of billions of people and millions of negotiations for centuries. Platform theorist Benjamin Bratton similarly erases colonial history when he writes that today we are worse off than Max Weber's vision of a bureaucratic machine state or Louis Althusser's repressive state apparatus, or Michel Foucault's technologies of governance — because modern high- tech platforms are "the machine as the state." Bratton calls platform control the Stack,[97] an interdependent assembly of grids, cloud infrastructure, public service privatization, addressing systems, the Internet of Things, augmented interfaces, and excessively datafied users shaped by sensors, algorithms, and robots. Considering how life has been ordered, calculated, and exploited by colonial corporations for centuries, Bratton's dystopia has always been the backdrop of capitalist reality. O'Reilly, Bratton, and platform scholars would benefit from the insights of four centuries and four continents of platform nations.

Conclusion

In February of 2024 a bold group of twenty- one Congolese protestors burned the flags of the United States, the European Union, France, and Poland. The protest denounced Western countries for sponsoring Rwandan rebels in an effort to indirectly control the Congo's vast mineral resources, driven by platforms like Apple and Google. Congolese activists with the Lucha (Struggle for Change) movement told Al Jazeera, "We are in the street to denounce the

crimes of which the Congolese are victims. Rwanda kills us every day and is supported by the international community, which is why we burned these flags."[98] Fighting a similar battle a year before, more than a thousand Burmese people from over ten villages protested rare earth mines controlled by China to export the vital ingredients of green energy electric vehicles, wind turbines, and smartphones. The Congolese protest of a mere two dozen people drew international news coverage. The Myanmar protest succeeded in temporarily halting Chinese mining activities and drawing attention to the regions' environmental damage.

These protests are part of four hundred years of struggle and resistance against corporate platforms. The EIC is archaic compared to contemporary platforms, in the sense that new technologies enforce bureaucratic activity at an unprecedented pace. However, the act of using new technology repeats history. Future research might consider how colonial theory could deepen the other five vectors of van Dijck's canonical platform anatomy. Some brief suggestions might include the following.

(1) Technology: Contemporary platform technology, in its conception and execution, is indebted to the cutting- edge technology used by the EIC to strike awe and compliance in the form of instruments of measurement, systems of mapping, financial theories, scientific disciplines, and hierarchies of race. The interpreted logic of these technologies continue to shape contemporary technologies and business opportunities, formulated by default conditions that reflect the companies' strategic choices. Modern digital tools depend on the calculations, classifications, and coding of these colonial technologies that order people and activities into an automatic, friction- free architecture processed through preformatted profit- driven protocols.

(2) Users: The EIC's "users" were its European customers, who fiercely debated the company's power to debate not only modern market logic but also Enlightenment notions of the human. Karl

Marx wrote op- eds about the British EIC in the New York Tribune to criticize or praise its brutality, while Kant and Hegel scoured the field notes of the Dutch EIC in their formulations of intellectual reason. John Stuart Mill was its employee for over thirty years, and Voltaire was a shareholder in the French EIC. In other words, these corporate monoliths inspired Western Enlightenment notions of the human that were shaped in no small part to justify these companies' winner- take- all strategies in the name of liberty, truth, and justice.

(3) Business Model: The EIC's business models had to manage a delicate balancing act between its monetizing agenda and the trust of the European merchants that used its infrastructures.[99] For example, the EIC would send shipboard business agents on its supercargoes with explicit rules to oversee the

inventory calculation and mechanics of trade with Eastern complementors, including trade merchants and officials; these mechanics included implicit social protocols like bribery.[100] Economic historian Kirti Chaudhuri explains that EIC directors would carefully curate plantation imports by consulting company sales figures, rates of profitability, and the level of the auction bids of their Western buyers.[101] Chaudhuri's research is an incredible resource for making sense of contemporary platform formats and dilemmas. These cursory ideas might suggest some of the ways that colonial theorists can shed new insights into platform problems.

(4) Content: As modern platforms inexplicably invigorate ethnic conflict, these dynamics would benefit from a genealogy of platform- contingent cultural commodities.[102] Like modern platforms, the EIC did not produce its own content but facilitated content delivery between third parties and European consumers. As influencers like Marie Antoinette promoted an Asian shell-decorating craze, for example, the infrastructures of content produc- tion redefined categories of human, subhuman, and nonhuman supply- chain labor along racial lines.

(5) Ownership: Contemporary platform ownership inherits the politics of changing leadership of the East India House on Leadenhall Street in London, where twenty- four new directors were elected every April, including even members of British Parliament.[103]

Platforms manage profitable population arrangements with no means of recourse, by leveraging freely available tools and ideologies and prefabricated interoperable systems and incentives for enterprising businesses to join and thrive in the platform ecosystem. This is a continuation of all- encompassing colonial policies that, like modern platforms, incentivized the kangany and the Victorian- educated Chinese elite to calculate the most marketable, exploited, fatal version of every act. If platform studies include this history of colonial administration, it has much greater potential to illuminate the logics and protocols of modern platforms, including the trafficking of social difference and the relentless drive for value extraction. Bypassing the long history of "platforms" leaves contemporary platform studies unable to reckon with the basis of platform power in racial categories, land expropriation, violent labor arrangements, and, as a result, sensational, polarizing identity politics.[104] The East India Company is the "Stack" that Bratton imagines, a towering superstructure of interdependent grids, privatization, addressing systems, administrative interfaces, and datafied users. What does it mean if racism and land theft are the basis of a successful platform? How does this open new platform revelations and solutions?

The productive outcome of this article is to argue that colonial scholars are digital experts. Colonial corporations and resistance movements are a crucial resource for understanding platform problems, including why granular classification systems invigorate ethnic conflict, why automated ranking systems galvanize identity politics, why platformized labor is inevitably extractive and exploitative, and more. Platforms throughout history are enabled by racial categories and land expropriation accelerated by indifferent bureaucratic protocols (a.k.a. algorithms) and the most cutting- edge technologies of their time. If "platforms" are understood as "colonialism," modern platform problems can be tackled with much greater historic expertise and decolonizing momentum.

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Notes

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1. Qiu, Goodbye iSlave; Crawford, Atlas of AI.
2. Smith, Eyes of the World; Sadan et al., Rare Earth Elements.
3. Cruz, Social Life of Biomedical Data, 294.
4. Eubanks, Automating Inequality; Marwick, Private Is Political. 5. Molnar and Gill, "Bots at the Gate."
6. Noble, Algorithms of Oppression.
7. Al Jazeera, "Meta 'Stifling' Pro- Palestine Voices."
8. Lim, "Personal Identity Economics"; Lim, Pious.
9. Van Dijck, Culture of Connectivity.
10. Nieborg and Poell, "Platformization of Cultural Production."
11. Bratton, Stack, 8.
12. Gillespie, "Facebook's Blueprint Needs a Blueprint"; Crawford, Atlas of AI.
13. Srnicek, Platform Capitalism.
14. Stern, Company- State, 9.
15. Caplan and boyd, "Isomorphism through Algorithms," 2.
16. Van Dijck, Culture of Connectivity, 31.
17. Dixon- Román, "Algo- Ritmo."
18. Hortense Spillers uses "American Grammar" to describe a white supremacist conditioning and cultural attitudes designed to organize and

discipline Black and non- white life in a symbolic order of value. Spillers, “Mama’s Baby, Papa’s Maybe.” 19. Robinson, Black Marxism.
20. Chun, “Introduction”; Coleman, “Race as Technology.”
21. Chun, “Introduction,” 28.
22. Coleman, “Race as Technology,” 180.
23. Browne, Dark Matters.
24. Terranova, “Free Labor,” 33 – 58.
25. Lessig, “Code Is Law.”
26. Montfort and Bogost, Racing the Beam, vii.
27. Bogost and Montfort invite readers to consider the Atari Video Computer System (VCS). In the 1980s, arcade games like Pac- Man and Space Invaders came home through a personal Atari VCS console, plugged into a standard living room television. It was cheap — $199 compared to $1,298 for an Apple computer at the time — and dominated the video game market in the 1980s. The hidden price of an Atari was the massive supply of nearly a thousand purchasable video games about dogfighting, treasure hunting, slot car racing, sex acts, and more. As game developers raced to create Atari games, the Atari VCS platform — its code, hardware, and software — shaped video game techniques, mechanics, and entire genres, including single shooter games. Any serious digital art critic, argue Bogost and Montfort, would benefit from a deeper dive into the material construction of platform software and hardware that shapes the genre. At first the new field of platform studies stoked fears of obsolescence — that all culture critics need to get computer science degrees to preserve their authority. Two years after their series launch, Bogost and Montfort released “Platform Studies: Frequently Questioned Answers” in 2009 to assuage these fears, clarifying that their priority is to understand culture — “The scholars we need most in digital media are those who bring nuanced cultural analysis to bear on computer systems.”Video game studies goes back to the 1990s, but social media studies blossomed after, and because of, platform studies.
28. This differs from the digital humanities, which studies programs, interfaces, forms, and functions — instead, platform studies digs into software and corporate decision.
29. Srnicek, Platform Capitalism.
30. Goldberg, “How the Online Left Fuels the Right.”31. Subedar, “Godfather of Fake News.” 32. Terranova, After the Internet, 10.
33. Van Dijck, Culture of Connectivity.
34. Nieborg and Poell, “Platformization of Cultural Production.”
35. Conford and Burchardt, “Return of the Gangmaster.”
36. “Developers” Android website, https://developer.android.com/ (accessed January 30, 2025).
37. Pew Research Center, “Sizing Up Twitter Users.”
38. Van Dijck, Culture of Connectivity, 77. 39. Van Dijck, Culture of Connectivity, 82.
40. Van Dijck, Culture of Connectivity, 78.

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41. Gerlitz and Helmond, “Like Economy.”
42. Van Dijck and Poell, “Understanding Social Media Logic.”
43. Nieborg and Poell, “Platformization of Cultural Production.”
44. Gillespie, “Politics of ‘Platforms.’ ”
45. Gillespie, “Relevance of Algorithms.”
46. Rochet and Tirole, “Two-Sided Markets.”
47. Katz and Shapiro, “Network Externalities.”
48. Barwise and Watkins, “Evolution of Digital Dominance.”49. Poell, Nieborg, and Duffy, Platforms and Cultural Production.
50. Lim, “Personal Identity Economics.”
51. Van Dijck, Poell, and de Waal, Platform Society, 4.
52. Plantin et al., “Infrastructure Studies,” 20.
53. Spivak, Can the Subaltern Speak?, 78.
54. For example, unfree laborers in Southeast Asia who are nonetheless beloved influencers — including the popular @ilove_bhing (twelve thousand followers), who documents her life as an indentured foreign domestic worker in Singapore (Lim, Kaur- Gill, and Kantachote, “Subaltern Digital Cultures).
55. Terranova and Sundaram, “Colonial Infrastructures.”
56. Langlois, Greg Elmer, Fenwick McKelvey, and Zachary Devereaux cite Félix
Guattari’s Integrated World Capitalism theory in their essay “Networked Publics.”
57. Mudimbe, Invention of Africa.
58. Langlois et al., “Networked Publics.”
59. Couldry and Mejias, Costs of Connection, 87.
60. Couldry and Mejias, Costs of Connection, xvi.
61. Crawford, Atlas of AI, 10 – 11.
62. McMillan Cottom, “Where Platform Capitalism and Racial Capitalism Meet,” 445.
63. Cottom, “Where Platform Capitalism and Racial Capitalism Meet,” 442.
64. Mary Constance Turnbull wrote the history of Singapore for textbooks used in schools throughout the island for over two decades.
65. Gillespie, “Relevance of Algorithms,” 260.
66. Van Dijck, Culture of Connectivity, 29.
67. Mahoney, “The Histories of Computing(s),” 120.
68. Chun, Programmed visions, 4.
69. Chun, Programmed visions, 9.
70. Chun, Programmed Visions, 6.
71. Charters of the East India Company.
72. Chun, Programmed Visions, 57, 58.
73. Stern, Company- State, 13.
74.
Turnbull, History of Singapore; Kwa and Borschberg, Studying Singapore before 1800. The fact that the new British- endorsed Sultan of Johor was in the midst of a succession dispute and thus locally precarious was an asset to the

EIC. This history is continuously being unearthed by Indigenous Singaporean sociologists like Noorman Abdullah and the editors and authors of the 2021 collection Raffles Renounced: Towards a Merdeka History.
75. Kwa and Borschberg, Studying Singapore before 1800, 38.
76. Abdullah, “Exploring Constructions of the ‘Drug Problem.’ ”
77. Trocki, Singapore.
78. Wake, “Raffles and the Rajas.”
79. Bennett, “Caribbean Plantation Economies.”
80. Quijano and Wallerstein, “Americanity as a Concept,” 550.
81. Wynter, “Unsettling the Coloniality.”
82. Gillespie, “The Relevance of Algorithms,” 180.
83. Selangor Journal.
84. Kaur, “Sojourners and Settlers,” 189.
85. Kaur, “Sojourners and Settlers,” 189.
86. Kaur, “Sojourners and Settlers,” 192.
87. Kaur, “Sojourners and Settlers,” 193.
88. Terranova and Sundaram, “Colonial Infrastructures and Technosocial Networks.”
89. Quoted in Ambirajan, “Malthusian Population Theory,” 9.
90. Chakrabarti and Patnaik, Agrarian and Other Histories.
91. Rudrappa, “Famines, Fertility Interventions, and Death.”
92. Raffles’s meeting notes are free online and preserved by Singapore’s National Library. See Formation of the Singapore Institution.
93. Formation of the Singapore Institution, 19.
94. Formation of the Singapore Institution, 22.
95. Koh, “Educating Malayan Gentlemen.”
96. Farrell, Levi, and O’Reilly, “Mark Zuckerberg Runs a Nation- State.”
97. Bratton, Stack, 8.
98. Al Jazeera, “Congolese Protest against West, Rwanda in Eastern City of Goma.”}
99. Kaur, “Sojourners and Settlers,” 192.
100. Fashion historian Leanna Lee- Whitman carefully studied records of shipboard agents’ pricing strategies, which can be analyzed at the London India Office Library and Records, Foreign and Commonwealth Office (“The Silk Trade”).
101. Chaudhuri, The Trading World of Asia.
102. Nieborg and Poell’s “Platformization of Cultural Production” first inspired my connection between old and new platforms.
103. Interestingly, there were sixteen committees in 1813: Buying, College, Correspondence, Government Troops and Stores, House, Law Suits, Library, Military Fund, Military Seminary, Preventing the Growth of Private Trade, Private Trade, Secrecy, Secret, Shipping, Treasury, and Warehouses. See Proceedings of the Select Committee.
104. Lim, Pious.

References

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Abdullah, Noorman. “Exploring Constructions of the ‘Drug Problem’ in Historical and Contemporary Singapore.” New Zealand Journal of Asian Studies 7, no. 2 (2005): 40 – 70.
Ali, Muna- Udbi. “Unsettling the ‘Failed State’: An Anti- racist Approach to State and State Formation — a Study of Somalia.” In Anti- colonial Theory and Decolonial Praxis, edited by G. S. Dei and M. Lordan, 85 – 100. New York: Peter Lang, 2016.
Al Jazeera. “Congolese Protest against West, Rwanda in Eastern City of Goma,” February 20, 2024.
https://www.aljazeera.com/gallery/2024/2/20/congolese - protest- against- west- rwanda- in- eastern- city- of- goma.
Al Jazeera. “Meta ‘Stifling’ Pro- Palestine Voices on Social Media, Rights Group Says.” December 21, 2023. https://www.aljazeera.com/news/2023/12/21/meta- stifling - pro- palestine- voices- on- social- media- hrw.
Ambirajan, Srinivasa. “Malthusian Population Theory and Indian Famine Policy in the Nineteenth Century.” Population Studies 30, no. 1 (1976): 5 – 14.
Barwise, Patrick, and Leo Watkins. “The Evolution of Digital Dominance: How and Why We Got To GAFA.” In Digital Dominance: The Power of Google, Amazon, Facebook, and Apple, 21 – 49. Oxford: Oxford University Press, 2018.
Bennett, Michael D. “Caribbean Plantation Economies as Colonial Models: The Case of the English East India Company and St. Helena in the Late Seventeenth Century.” Atlantic Studies Quarterly 20, no. 4 (2023): 508 – 39. https://www.doi .org/10.1080/14788810.2022.2034569.
Bogost, Ian, and Nick Montfort. “Platform Studies: Frequently Questioned Answers.” Proceedings of the Digital Arts and Culture Conference, 2009. https://escholar ship.org/uc/item/01r0k9br.
Bratton, Benjamin H. The Stack: On Software and Sovereignty. Cambridge, MA: MIT Press, 2016.
Browne, Simone. Dark Matters: On the Surveillance of Blackness. Durham, NC: Duke University Press, 2015.
Caplan, Robyn, and danah boyd. “Isomorphism through Algorithms: Institutional Dependencies in the Case of Facebook.” Big Data and Society 5, no. 1 (2018): 1 – 12. https://doi.org/10.1177/2053951718757253.
Chakrabarti, S., and U. Patnaik. Agrarian and Other Histories: Essays for Binay Bhushan Chaudhuri. New Delhi: Tulika Books, 2017.
Charters of the East India Company with Related Documents: The “Parchment Records,”
1600 – 1947. https://archiveshub.jisc.ac.uk/search/archives/d78e6147- 9bd5- 3dd9 - ac31- b46210182397?component=7dfd8c8c- f9be- 3a4a- 8c91- 8ad70c61d532.
Chaudhuri, K. N. The Trading World of Asia and the English East India Company, 1660 – 1760. Cambridge: Cambridge University Press, 2006.
Chun, Wendy Hui Kyong. “Introduction: Race and/as Technology; or, How to Do Things to Race.” Camera Obscura, no. 70 (2009): 7 – 35.

Chun, Wendy Hui Kyong. Programmed Visions: Software and Memory. Cambridge, MA: MIT Press, 2011.
Coleman, Beth. “Race as Technology.” Camera Obscura, no. 70 (2009): 177 – 207.
Conford, Philip, and Jeremy Burchardt. “The Return of the Gangmaster.” History and Policy, September 6, 2011.
Couldry, Nick, and Ulises A. Mejias. The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism. Stanford, CA: Stanford University Press, 2019.
Crawford, Kate. The Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence. New Haven, CT: Yale University Press, 2021.
Cruz, Taylor Marion. “The Social Life of Biomedical Data: Capturing, Obscuring, and Envisioning Care in the Digital Safety- Net.” Social Science and Medicine 294 (2022): 114670.
Dixon- Román, Ezekiel. “Algo- Ritmo: More- Than- Human Performative Acts and the Racializing Assemblages of Algorithmic Architectures.” Cultural Studies ↔ Critical Methodologies 16, no. 5 (2016): 482 – 90.
Eubanks, Virginia. Automating Inequality: How High- Tech Tools Profile, Police, and Punish the Poor. New York: St. Martin’s, 2018.
Farrell, Henry, Margaret Levi, and Tim O’Reilly. “Mark Zuckerberg Runs a Nation-
State, and He’s the King.” Vox, April 9, 2018. https://www.vox.com/the- big - idea/2018/4/9/17214752/zuckerberg- facebook- power- regulation- data- privacy - control- political- theory- data- breach- king.
Formation of the Singapore Institution, A.D 1823. Mission Press, 1823.
https://www.nlb .gov.sg/main/book- detail?cmsuuid=c862d6a7- 03d3- 4333- 9191- 36bb78288b2f.
Gerlitz, Carolin, and Anne Helmond. “The Like Economy: The Social Web in Transition.” In MiT7- Unstable Platforms: The Promise and Peril of Transition: abstracts and papers. 2011.
http://web.mit.edu/commforum/mit7/papers/MiT7%20Gerlitz
%20%20%20%20%20%20Helmond%20- %20The%20Like%20economy.pdf.
Gillespie, Tarleton. “Facebook’s Blueprint Needs a Blueprint.” Slate, November 16, 2018.
https://slate.com/technology/2018/11/facebook- zuckerberg- content- moderation - appeals- independent- council.html.
Gillespie, Tarleton. “The Politics of ‘Platforms.’ ” New Media and Society 12, no. 3 (2010): 347- – 64.
Gillespie, Tarleton. “The Relevance of Algorithms.” In Media Technologies: Essays on Communication, Materiality, and Society, 167 – 93.Cambridge, MA: MIT Press, 2014.
Goldberg, Michelle. “How the Online Left Fuels the Right.” New York Times, May 11, 2018. https://www.nytimes.com/2018/05/11/opinion/intellectual- dark- web - red- pilled.html.

Katz, Michael L., and Carl Shapiro. “Network Externalities, Competition, and Compatibility.” American Economic Review 75, no. 3 (1985): 424 – 40.
Kaur, Amrit. “Sojourners and Settlers: South Indians and Communal Identity in Malaysia.” In Community, Empire, and Migration: South Asians in Diaspora, 185 – 205. New York: Springer, 2001.
Koh, Adeline. “Educating Malayan Gentlemen: Establishing an Anglicized Elite in Twentieth- Century Colonial Malaya.” Biblioasia, April 2007, 10 – 20.
Kwa, Chong Guan, and Peter Borschberg. Studying Singapore before 1800. Singapore: NUS Press, 2018.
Langlois, Ganaele, Greg Elmer, Fenwick McKelvey, and Zachary Devereaux. “Networked Publics: The Double Articulation of Code and Politics on Facebook.” Canadian Journal of Communication 34, no. 3 (2009): 415 – 34.
Lessig, Lawrence. Code: And Other Laws of Cyberspace, Version 2.0. New York: Basic Books, 2000.
Lee- Whitman, Leanna. “The Silk Trade: Chinese Silks and the British East India Company.” Winterthur Portfolio 17, no. 1 (1982): 21 – 41.
Lim, Elisha C. “Pious: Why Meta’s Business Model Drives Intolerance.” PhD diss., University of Toronto, 2023.
Lim, Elisha. “Personal Identity Economics: Facebook and the Distortion of Identity Politics.” Social Media and Society 7, no. 2 (2021): 20563051211017492.
Lim, Elisha C., Satveer Kaur- Gill, and Krittiya Kantachote. “Subaltern Digital Cultures: Precarious Migrants on TikTok.” In The Oxford Handbook of Media and Social Justice, edited by Srividya Ramasubramanian and Omotayo O. Banjo, 205 – 18. Oxford: Oxford University Press, 2024.
Mahoney, Michael S. “The Histories of Computing(s).” Interdisciplinary Science Reviews 30.2 (2005): 119 – 35.
Marwick, Alice. The Private Is Political: Networked Privacy and Social Media. New Haven, CT: Yale University Press, 2023.
McMillan Cottom, Tressie. “Where Platform Capitalism and Racial Capitalism Meet: The Sociology of Race and Racism in the Digital Society.” Sociology of Race and Ethnicity 6, no. 4 (2020): 441 – 49.
Molnar, P., and Lex Gill. “Bots at the Gate: A Human Rights Analysis of Automated Decision- Making in Canada’s Immigration and Refugee System.” Citizen Lab and International Human Rights Program (Faculty of Law, University of Toronto), Research Report No. 114. University of Toronto, September 2018.
Montfort, Nick, and Ian Bogost. Racing the Beam: The Atari Video Computer System. Cambridge, MA: MIT Press, 2020.
Mudimbe, Valentin Yves. The Idea of Africa. Bloomington: Indiana University Press, 1994.
Nieborg, David B., and Thomas Poell. “The Platformization of Cultural Production: Theorizing the Contingent Cultural Commodity.” New Media and Society 20, no. 11 (2018): 4275- – 92.

Noble, Safiya Umoja. Algorithms of Oppression. New York: New York University Press, 2018.
Pew Research Center. “Sizing Up Twitter Users.” April 24, 2019. https://www.pew research.org/internet/2019/04/24/sizing- up- twitter- users/.
Plantin, Jean- Christophe, Carl Lagoze, Paul N. Edwards, and Christian Sandvig. “Infrastructure Studies Meet Platform Studies in the Age of Google and Facebook.” New Media and Society 20, no. 1 (2018): 293 – 310.
Poell, Thomas, David B. Nieborg, and Brian E. Duffy. Platforms and Cultural Production. Hoboken, NJ: John Wiley and Sons, 2021.
Proceedings of the Select Committee appointed by the General Court of Proprietors, on the 6th October 1813, to consider and report upon the expediency of augmenting the allowances to the Directors for their attendance upon the business of the Company [. . .]. London, 1814.
Qiu, J. L. Goodbye iSlave: A Manifesto for Digital Abolition. Champaign: University of Illinois Press, 2017.
Quijano, Aníbal, and Immanuel Wallerstein. “Americanity as a Concept; or, The Americas in the Modern World- System.” International Social Science Journal 44, no. 4 (1992) 549 – 57. https://europhilomem.hypotheses.org/files/2018/07 /Quijano- and- Wallerstein- Americanity- as- a- Concept.pdf.
Rochet, Jean- Charles, and Jean Tirole. “Two- Sided Markets: A Progress Report.” RAND Journal of Economics 37, no. 3 (2006): 645 – 67.
Robinson, Cedric. Black Marxism: The Making of the Black Radical Tradition. London: Zed Books, 1983.
Rudrappa, Sharila. “Famines, Fertility Interventions, and Death: Modernization Projects in Southern India.” e- flux Architecture, April 2021. https://www.e- flux .com/architecture/exhausted/388538/famines- fertility- interventions- and- death - modernization- projects- in- southern- india/.
Sa’at, Alfian, Faris Joraimi, and Sai Siew Min, eds. Raffles Renounced: Towards a Merdeka History. Singapore: Ethos Books, 2021.
Sadan, Mandy, Dan Smyer Yü, Dan Seng Lawn, David Brown, and Ronghui (Kevin) Zhou. Rare Earth Elements, Global Inequalities, and the ‘Just Transition.’ London: British Academy, 2022.
The Selangor Journal: Jottings Past and Present. Selangor Government Printing Office, 1839. Vol. 4, 439. https://archive.org/details/selangorjournal01unkngoog/page/n6 /mode/2up.
Smith, James H. The Eyes of the World: Mining the Digital Age in the Eastern DR Congo. Chicago: University of Chicago Press, 2021.
Spillers, Hortense J. “Mama’s Baby, Papa’s Maybe: An American Grammar Book.” diacritics 17, no. 2 (1987): 64 – 81.
Spivak, Gayatri Chakravorty. “Can the Subaltern Speak?” In Imperialism: Critical Concepts in Historical Studies, 3:171 – 219. New York: Routledge, 2004.
Srnicek, Nick. Platform Capitalism. Cambridge, MA: Polity, 2017.

Stern, Philip J. The Company- State: Corporate Sovereignty and the Early Modern Foundations of the British Empire in India. Oxford: Oxford University Press, 2011.
Subedar, Anisa. “The Godfather of Fake News.” BBC, 2018. https://www.bbc.co.uk /news/resources/idt- sh/the_godfather_of_fake_news.
Terranova, Tiziana. After the Internet: Digital Networks between Capital and the Common. Cambridge, MA: MIT Press, 2022.
Terranova, Tiziana. “Free Labor: Producing Culture for the Digital Economy.” Social Text 18, no. 2 (2000): 33 – 58.
Terranova, Tiziana, and Ravi Sundaram. “Colonial Infrastructures and Technosocial Networks.” e- flux Journal, no. 123 (2021): 1 – 11.
Trocki, Carl A. Singapore: Wealth, Power and the Culture of Control. Hove, UK: Psychology, 2006.
Turnbull, Constance Mary. A History of Singapore, 1819 – 1988. Singapore: National University of Singapore Press,1989. van Dijck, José, and Thomas Poell. “Understanding Social Media Logic.” Media and Communication 1, no. 1 (2013): 2 – 14.
van Dijck, José. The Culture of Connectivity: A Critical History of Social Media. Oxford: Oxford University Press, 2013.
van Dijck, José, David Nieborg, and Thomas Poell. “Reframing Platform Power.” Internet Policy Review 8, no. 2 (2019): 1 – 18.
van Dijck, José, Thomas Poell, and Martijn de Waal. The Platform Society: Public Values in a Connective World. Oxford: Oxford University Press, 2018.
Wake, C. H. “Raffles and the Rajas: The Founding of Singapore in Malayan and British Colonial History.” Journal of the Malaysian Branch of the Royal Asiatic Society 48, no. 1 (1975): 58 – 61.
Wynter, Sylvia. “Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, after Man, Its Overrepresentation — an Argument.” CR: The New Centennial Review 3, no. 3 (2003): 257 – 337.