

*Immigrant Excisions, “Race Suicide,”
and the Eugenic Information Market*

THEIR GAZES STARED BACK AT me through the camera. Row after row of standardized square photographs of Chinese residents, all framed like mug shots, filled the 160-page paper ledger—an artifact that had been assembled by law enforcement officials in Downieville, California, across four decades following its boom as a nineteenth-century US mining town.¹ Each black-and-white photo had been carefully annotated with the specific identification details and metrics the examiner had taken of each resident, including, in most cases, the name, site of residence, age, height, occupation, and body markings that an interrogation and visual scan had captured. Some photos included a history of movement into and out of Sierra County, and sometimes “back to China.” The inscriptions “miner,” “cook,” and “housekeeper” appeared alongside each photo, as unadorned indices of the kinds of work that had been common for many Chinese residents in California’s mining towns. Other details, such as “sear on left side of neck” and “second finger of right hand off at first joint,” flagged distinctive markers and reflected the kind of routine dangers such labor entailed. Even packaged as it was, in the veneer of what today might have innocently passed as a portable photo album, its careful study tells enough to enable a contemporary viewer to surmise this much: that this is what the contents of a nineteenth-century US criminal databank looks like. And it channeled all the aims of heightening scrutiny over the “probable” lawlessness of the bodies and faces it amassed.

In its finding aid, the California Historical Society, which recently displayed the archive publicly for the first time in a 2022 exhibition on exclusion-era photographs, gave clues of the unusual efforts taken to organize its contents. They specified that it was maintained for nearly half a century (1890–1930) by the Downieville justice of the peace and former sheriff,



FIGURE 1. Pages of the 1890 archive maintained by the justice of the peace in Downieville, California, until 1930 to monitor Chinese residents' movements. (Courtesy, California Historical Society, Vault 184_001)

John T. Mason, who recorded data on over 320 Chinese residents in Sierra County. This included 176 residents for whom identification photos had been collected in a single month in 1894. What is clear is that to have produced this kind of visually forensic, anthropometric archive in the late nineteenth century, and to have maintained it as an active surveillance architecture with careful additions of movement history and geocoded information taken and entered over years, required more than an ordinary sense of duty from local officers.

What is also clear is that women were not excluded from criminal profiling. If anything, the archive's gendered classification indicated Chinese women as subjects of special scrutiny. Beyond the standard data collected, the entries produced demonstrate the importance the examiner placed on tracking Chinese women's local relations. Si Nun was labeled as "Jo Wah's woman," Ung Gook as "China Susie," and Maw Gook as "Female Laborer," but with the word *female* conspicuously underlined and the entire phrase framed emphatically in hand-drawn brackets as if to encode other meaning. Updates were added on the women's movement history, including "Gone to

China to never return,” “Gone to China for good 1900,” and “Went to China July 1907.” Reading through the entries, it is difficult not to be unsettled by the quiet zeal channeled through the compact notations and the punctuated disdain in the inscription “gone for good.”

It is difficult to not be frustrated by how little the archive speaks for the subjects captured, how much it allows the final testimony to remain that of the examiner’s contempt, and how many more questions arise than are answered, given all the rows of carefully compiled data and the work to create what critical data scholars today would call “data doubles” of residents. Foremost among those questions are: Why maintain a device like this for decades when, by the ledger’s own account, no apparent crime had actually been committed by any of the Chinese residents in its pages? What varied ambitions compelled such pitched investments from local officials, when, despite the growing exclusion-era laws passed to surveil Chinese migrants before and as they crossed US borders, local officials had no requirement to track migrants once inside national borders? What do such dynamics reveal about the continuity of data practices that, beyond simply heightened scrutiny of targeted classes of individuals, created the conditions for the emergence of a newly specialized information class? Such a class came to see social monitoring and a newfound capacity for surveillance as new means to authorize and deepen social hierarchies around race and gender.

This chapter focuses on the long history of predatory data as a means to explore answers to such questions. While critical data scholarship has valuably drawn attention to the forms of algorithmic discrimination that have globally scaled through contemporary surveillant assemblages, growing work by feminist and critical race scholars underscores how a legacy of segregating information practices—and the use of data resources to exploit marginalized populations and expand dispossessive and segregationist data infrastructures—stretches back centuries. As I explore here, this is accomplished through information professions’ shared roots in racial sciences and eugenics that seeded growing movements in the United States and Western nations at the end of the nineteenth century. New international interests and enthusiasm for eugenics thinking worked fervently to convince publics that certain races and populations were innately disposed to criminality, poverty, disease, and intellectual as well as physical and moral unfitness. They inspired an explosion of data collection and documentation and archival practices to channel their convictions around racialized others. Various reports, surveys, and studies were thus undertaken to advance eugenic techniques for

population prediction and the so-called racial improvement of future societies through the excision or segregation of undesirable classes.

Across the United States, especially, new labs and centers of research, as well as hundreds of classes in virtually all the nation's most prominent institutions of higher education, were established in the early 1900s to promote eugenics. They were preceded decades earlier by varied museum exhibits, public lectures, best-selling publications, and popular news columns that had been launched to popularize eugenics to general audiences and to generate mass legibility in a turn-of-the-century disinformation boom. Far from a fringe practice or pseudoscience, eugenics was in fact a powerful global movement that from its earliest days was enthusiastically promoted by Western elite and lettered classes. Even while eugenics targeted broad classes of social deviance for invasive forms of surveillance and intervention, it remains inseparable from the founding of basic information practices around datafication, prediction, and probability still commonly used in liberal societies and markets today. From the uses of AI-driven bio- and psychometric and criminal databases, to passports and border surveillance techniques, to IQ tests and intelligence exams, to predictive methods through statistical regression now applied by contemporary data scientists, eugenic ambitions drove varied developments to classify and manage populations still in use today. Such developments were undertaken in the name of optimizing futures, with eugenics' specter still reverberating through the foundations of datafication and prediction functions that today lay at the heart of modern data practice and the shaping of information classes.

The Downieville archive as a nineteenth-century channel of predatory data reminds us that eugenic pursuits sought to do more than merely control deviants and prevent them from "contaminating" and "degenerating" genetically superior White and Western elites. Indeed, eugenics' data-centered practices provided a means for individuals and expanding professional classes to see themselves as uniquely well-informed and empowered rational subjects—ones who were members of an emergent information class interrelated through their shared capacity to possess and manage data. Moreover, they could empiricize their propriety as subjects entitled to full legal privileges and freedoms that authorized them to manage not only their own futures but the futures of "inferior" others. Downieville provided us with a snapshot of how eugenicists saw and dissected those classes they argued were not deserving of full autonomy. It provided a glimpse too at how they channeled such a vision through varied data-centered products that cultivated a

possessive relation to data. Those included self-managed archives, best-selling books, news publications, museum and fair exhibits, commissioned studies, and coded maps of ethnic neighborhoods.

Looking through the rows of stolen portraits in the Downieville archive, I am reminded of visual historians' observation that in the nineteenth century growing movements in the United States, as well as new international interests in eugenics, worked fervently to normalize the use of photographic archives to document and regulate classes deemed dangerous. This coincided with experiments in facial imaging and archival techniques by eugenicists via new uses of mug shots, composite photos, and recording systems to document bodily measurements, all collected to metricize, track, and gauge probabilities for and ultimately predict the criminal "type" (Maguire 2009; Sekula 1986). Like the criminal identification system developed by French criminologist Alphonse Bertillon in 1879, each of the Downieville records contained a mug photo with a catalog of varied physical measurements and distinctive physical features. Like the composite portrait technique promoted by British eugenics founder Francis Galton, who blended facial photographs to render predictive composite portraits of criminal, healthy, and Jewish types (1883, 1884) as an early eugenic identification method, the explicitly racialized portraits of Downieville's criminal types were likewise presented as side-by-side comparative images. Unlike either system, however, Mason's ledger also documented individual travel, employment history, and links to social associations, with each entry annotated with numeric codes that cross-referenced single records to others with whom the interrogator had deemed them associated.

In the United States, expanding eugenic arguments in the late nineteenth century swirled around the Chinese, whose racial character was projected as defined by hereditary vices. Rhetoric that framed the "entire Chinese community [as] engaged in criminal activities" (Pegler-Gordon 2006, 57) would, by the 1870s, lead to the first—and what US historians today recognize as still among the most radical—immigration policies with the Chinese Exclusion Acts. The series of acts, which began with an 1875 ban, became the first laws implemented to prevent all members of a specific ethnic or national group from immigrating to the United States (Chan 1991a, 1991b; Lee 2010; Lee 2019; Peffer 1986, 1999). While concerns around labor competition from working class Chinese men arose in the mid-1800s, growing studies documenting Chinese subjects' innate "habits and manner of life . . . [that] breed and engender disease wherever they reside"—and that warned

of how Chinese immigration would lead to the “Physiological Decay of a Nation” from the poison of “bad blood” from the inferior “Mongolian” race (Stout 1862)—spurred middle- and upper-class Americans to call for state and national laws to expel the Chinese danger. Tellingly, this began with broad exclusions applied first to Chinese women rather than male laborers through the 1875 Page Act. Advocates for exclusion argued that without extreme measures for segregation or expulsion, “[s]ome disease of a malignant form may break out among them and communicate itself to our Caucasian population” (Shah 2001, 27), as San Francisco’s health officer predicted in 1869.

The efficacy of such arguments to project and racially “dataify” the Chinese as uniquely virulent sources of moral and physical contamination that put healthy, civilized White natives at risk also turned the Chinese into what historians today describe as the most closely observed, documented, and photographed immigrant group in the United States of the day (Pegler-Gordon 2006, 2009; Shah 2001). The 1875 Page Act’s requirement of photographic documentation for Chinese women, and its expansion in 1882 to require that all Chinese laborers in the United States register for certificates of residence proving their right to remain in the country, put in place the first photographic documentation requirement of its kind. For decades, the Chinese would remain the only immigrant group in the United States for whom such identification was required for entry into the nation. The case set a precedent for eugenicists’ advocacy and future success in expanding legal requirements for photographic documentation for expanding immigrant classes—including Latinos in 1917, and all immigrants in 1924—to enter the country (Lytle Hernández 2022; Pegler-Gordon 2006).

Historian Anna Pegler-Gordon noted that the “racial dimensions of photographic regulation” (2006, 58) during the era were further underscored by the San Francisco Police Department’s creation of a discrete mug book collection for Chinese arrests shortly after it began to use photographic archives for criminals in the 1850s, and that was kept separate from its general mug shot collection until the 1940s. In an era marked by the complex global transformations brought on by rapid industrialization, migration, and national independence and abolition movements, the pitched anxieties of native-born Whites surrounding immigration broadly, and Chinese immigration in particular, allowed eugenic researchers and xenophobic political leaders to gain ground for testing new datafication and prediction instruments to enforce segregation and to justify the dispossession and excision of particular

residents. This also allowed the measure and consumption of difference to become the key metric to stabilize the propriety of White, native-born populations. In the process, White dispossessors could become legible too as a new information class, whose membership relied upon routines of managing information resources, the cultivation of newly possessive relations to data, and tolerance for growing forms of political violence.

In the 1880s, as legislative action passed to completely ban the immigration of almost all classes of Chinese men and women from entry into the United States—and as states expanded anti-miscegenation laws between Whites and Blacks to outlaw relationships between White and Chinese individuals, too² (Curry 2021; Shah 2001)—at least thirty-four towns in California and several others in Oregon, Nevada, and across the Western states saw Chinese residents systematically attacked and violently expelled, with “millions of dollars of Chinese property damaged or destroyed” in the assaults (Francisco 2018, 974). News outlets such as *Harpers Weekly* dubbed discrete events a “massacre of the Chinese” (1885) by Whites. The developments ensured for the next century that Chinese settlements all across the United States remained largely defined as immigrant bachelor societies with few children to extend families or future generations (Curry 2021; Pepper 1986). For over half a century, it ensured that the birth of Chinese American citizens would be largely precluded.

Such stakes cross my mind as I considered the data amassed in the Downieville ledger and the technological architecture required to assemble it. For all the new legal instruments that had been put in place in the late nineteenth century to obligate Chinese immigrants’ documentation, local officials themselves had not yet been required to track or document the Chinese inside national borders (Luo 2022; Pegler-Gordon 2006). Taking on the challenge independently, as the Downieville justice of the peace did, required substantial labor to find and gather resources to scale and centralize a visual archive on local populations. Mason was motivated enough to mount such an effort and to build his archive with enough information to make it a viable tracking device for the county’s Chinese population (Luo 2022). He called upon his son-in-law, a photographer with a studio in Grass Valley, Nevada County, to travel to Downieville in early 1894, just months after the national photography requirement for the Chinese became official. He summoned hundreds of local Chinese residents across the county to comply with the new registration and photo requirements, orchestrating mass travel into Downieville during the ten-day window when recording took place.

He reerected a photo studio in Downieville months later to continue data collection for his archive. Historian Erika Lee commented on the anomaly of Mason's efforts as a local law enforcement official who would go to such ends to construct his surveillance instrument for immigrants. Far from upholding any legal rationale, she observed, above all, "This is a form of racial control and terror" (Luo 2022).

Whatever Mason's presumed justifications to save Sierra County from the specter of immigrant crime and contamination, his archive and profiling instrument must have failed in at least one key expectation. Reading his ledger today, the most conspicuous detail is how Mason maintained it for forty years without apparently attributing a single criminal incident to Chinese residents. Mason's xenophobic experiment to prove that his ledger could keep Downieville's native residents safer from immigrant crime might not have been conclusive, but that didn't keep it from being effective in other ways. In scanning the ledger's pages, it is notable how frequently the lone inscription "Dead" appears alongside many of the photos. Also notable, in just a few cases where Mason elaborated, were reports of more unsettling fates—including "burned" and "froze to death on Lost Creek Feb 1895"—that Chinese residents suffered. They tell enough, however, to warrant another line of questioning. The question was not whether the ledger kept Sierra County's White, native-born residents safer. The question instead was whether the ledger, with its collection of visual and written data compilations, fostered a version of possessive relations that authorized its owners to enact new forms of control—even violence—upon the Other they labored so intently to document. In other words, if the ledger had functioned as a kind of prediction machine, how might it have foretold probable harm to the Other whose excision it had been programmed for all along?

BODIES IN THE ARCHIVES AND THE POSSESSIVE AFFECT OF EVALUATION

Security and violence as twin operations of modern knowledge architectures, of course, have long been recognized and critically mapped by historians of modernity (Foucault 1977; Trouillot 1995). In describing the significance of nineteenth century visual practice and the rise of a new modern culture of archiving in the West, photographer and historian Allan Sekula wrote of the dual operations of "pleasure and discipline," and honor and repression,

that the possibility of visually capturing and “arresting” the body within the archive made available for the first time to mass publics (1986). I cannot look at the Downieville ledger without being reminded of Sekula’s prescient observations, without seeing the interlocking symptoms of pleasure and discipline that extend from big data ecologies and their vast scales of information records and endlessly expanding repositories. And I cannot consider it without seeing at once all the pitched euphoria and anxieties of the age of eugenics that, in the decades of the ledger’s keeping nearly a century before the explosion of digital media we are witnessing today, paralleled big data’s contemporary hope and hype engine. Sekula underscored how deeply the body of the Other and the history of metrification, documentation, and informatic violence around human difference still haunts contemporary archival techniques and ambitions. Writing that “we understand the culture of biometric archives only dimly if we fail to recognize the enormous prestige and popularity of a general eugenic paradigm from the 1870s onward,” he would go on to observe that “especially in the United States, the proliferation of archival techniques and eugenics were quite coincident” (Sekula 1986, 12).

Tailored for a new age of heightened global migration, the Downieville ledger reads as a testimony to predatory data practice and what an archive for xenophobic racial profiling and engine for dispossession looked like in the early decades of the American eugenics movement. It was the seed of what would become, a century later, more expansive techno-eugenic architectures for generalized surveillance that later expanded beyond immigrant classes. In the nineteenth and twentieth centuries, the movement’s infamous obsession with the concepts of “racial hygiene” and “race betterment” drove its fevered pursuit of novel data collection and prediction methods in the United States (Black 2003; Okrent 2019), with the immigrant and criminal body—and the Chinese, who were understood to merge both—as objects that especially energized eugenic fervor. Social monitoring experiments on such classes would seed eugenic pursuits in the United States in its earliest years, before their aims later expanded to arguments for increasingly radical solutions that targeted ever-larger classes of “unfit” populations. While in popular memory eugenics is often recalled as a bygone remnant of a fringe racial science that only gained significant influence in Nazi Germany, eugenics was in fact driven by an expansive global network of elite and professional knowledge classes who were searching for universal laws of population betterment and who powerfully influenced Western imaginaries in their day

through their instruments and experiments to prevent race degeneration (Kevles 1985). From their vantage, the data-driven methods they developed were the basis of new scientific techniques for the control and perfection of populations in the face of modern uncertainties that stroked the anxieties of White elites. Seeded in an age when rising global migrations, abolition, and independence movements from Western colonization shaped new hopes and anxieties among elites around freedom and equity as exercised by new global and domestic agents alike, eugenics held the promise of conserving racial orders and social hierarchies by classifying, tracking, and segregating those who were predisposed to degenerating forms of physical, mental, and moral fitness. Notably, too, eugenics made the most prominent gains not only in Britain and Western Europe, where it began, but in the United States, where the growth of immigration could be leveraged as a distinctively visible target. This is also where expanding circles and resources for eugenics' promotion became the infamous envy of eugenicists worldwide, including in the Nazi regime (Bashford and Levine 2010).

This chapter maps the overlooked history of predatory data by bringing together the interdisciplinary threads of critical data studies and histories of eugenics in the United States, where the movement found its largest base of national support in the decades prior to the rise of Nazi Germany. It highlights the archival politics and information-based techniques around datafication and prediction that mobilized predatory data's segregating and dispossessive impacts over generations. Over a century ago, they also enabled eugenicists to advance their radical reform arguments among lay and lettered audiences alike. In particular, I build on the work of other feminist, critical race, and STS scholars who have demonstrated how eugenic techniques for racial betterment and the control of unfit masses lay at the foundation of varied techniques in modern sciences and professional knowledge practice still used today. These include statistical sciences (Cowan 1969; MacKenzie 1981), methods of correlation and linear regression used in contemporary data science professions (Chun 2021), genetics and evolutionary biology (Stern 2005; Subramaniam 2014), criminology (Maguire 2009), education (Brown 1992), architecture and urban planning (Cogdell 2004), and visual documentation. In conversation with such scholarship, I explore how eugenics seeded a culture of predatory data through popularizing new practices of archival and information management centered around the monitoring and "metricization" of diverse, globalizing populations. Access to eugenics data resources, that is, allowed native-born Whites to

self-recognize as part of a new kind of worthy, proper information class, while rendering racialized others into objects of informatic possession. Through its social experiments, eugenics constrained liberal principles of individual self-possession, autonomy, equality, and inclusion. And much like datafication and AI-driven prediction regimes today, it turned foreclosures of liberal promises that allegedly only occurred in exceptional cases into generalized public rationales necessary to maintain social order.

Central to eugenics' growth was not only the development of methods relevant for scientific disciplines and professionals. As critical was its operationalization of predatory data through the seeding of an information market that could empiricize a threat to social order through affective uses of data. Via market-based approaches, it could amplify broad public appetites for increasingly radical population management techniques. The research-driven methods and data collection instruments eugenics deployed were not merely relevant for growing professional networks invested in research practice, but were imperative for allowing eugenic-age conspiracy theories around race, class, and gender contamination to circulate and be perceived as fact by general publics. In the United States, such work would empower eugenicists' policy gains with historic immigration bans, the introduction of national immigration quotas, and the implementation of intelligence exams to ensure adequate mental fitness of entrants (Black 2003; Okrent 2019). And eugenicists later passed sterilization laws in thirty-two states targeting the unfit and saw to the sterilization of tens of thousands of individuals who were disproportionately poor, disabled, and minority women (Andrews 2017; Hawkins 2021; Kaelber 2011; Ladd-Taylor 2017; Mizes-Tan 2021; Stern 2005; Zhang 2017). While varied actors at the turn of the century publicly critiqued eugenicists for promoting ever-widening violations of democratic political norms, eugenicists advanced techniques for using predictive resources that could both rationalize and rally popular support. Such work in eugenics' earliest decades, however, was especially energized by targeting non-Western immigrants' movement across national borders—and for the Chinese, even within national borders. Such monitoring techniques enabled eugenicists to continue to expand categories of social threat to codify as principle the notion that only society's empirically worthy could be entrusted with the privilege of self-possession and autonomous choice, particularly related to movement, migration, and marriage.

Diversely oriented for the enrollment of everyday individuals, professional classes, and social institutions alike, eugenicists needed to popularize

not only the general idea that individual identity was based on fixed and thus predictable traits that social mechanisms could track in order to optimize. They needed to generate acceptance, too, for graduated suspensions around liberal personhood and individual liberties—and their foundation in principles of equality, possessive individualism, and autonomy—in the interest of advancing social optimization and ensuring White supremacy. As global independence movements in the nineteenth and twentieth centuries underscored the promise of liberal ideals around freedom and equality and the possibility of self-government by rights-bearing individuals around the world, eugenicists actively worked to constrain and invert such possibilities. They did this by amplifying doubts around whether all classes should be allowed full autonomy and questioning whether all classes had the inherent capacity to self-govern, be soundly informed, or make the choices of proper self-possessing individuals. Allegedly, when in proximity to White lettered classes, the most mundane forms of free choice when exercised by “inferior” classes threatened to contaminate “well-evolved” populations. Eugenic information techniques thus entailed not only extending to professional classes the capacity to metricize and empiricize the threat of the unfit, but extending new possibilities for publics to self-recognize as part of a modern information-engaged class, capable of managing eugenics’ knowledge resources and worthy of the privilege to self-rule.

Sekula thus noted that the visual and archival methods developed in the late nineteenth century by Galton and Bertillon for tracking anthropometric measurements for criminal identification were significant for more than merely introducing new classificatory methods relevant for law enforcement officials. They were significant, rather, for expressing a new general “culture of biometric archives” that, in the inclusion of standardizable photographic documentation, promised to translate a messy disordered world of real bodies into a form of measurable, fungible data that reduced nature to “its geometrical essence” and converted “all possible sights to a single code . . . grounded in the metrical accuracy of the camera” (Sekula 1986, 17). In creating a standard physiognomic gauge of the body—and of the socially deviant body in particular—the culture of biometric archives that emerged in the late nineteenth century was marked by new understandings of how to see and read bodies in a world where it was newly possible to assign each recording, criminal or otherwise, “a relative and quantitative position within a larger ensemble” (Sekula 1986, 17). Such expanded potentials for comparative, hierarchical assessment through archival systems

extended powerful new habits of social calculation for those classes with the privilege of archival access. This offered them a distinct “social calculus of pleasure and discipline” that turned on the ability to self-recognize, and to both look up at one’s betters and look down at one’s inferiors. As bodies marked with global difference were increasingly targeted for tracking, such forms of archival assessment offered White native viewers new means to invest the exercise of evaluation with distinct worldly dimension. Techniques advanced by eugenicists for archiving information to track and measure migrants and criminals—and that developed into contemporary standards in the use of visual databases in law enforcement and immigration—thus promised to index social deviancy as much as they allowed social virtue to become measurably recognized at a global scale (Maguire 2009). In the hands of eugenicists, such techniques quickly expanded to include the first uses of intelligence tests, civic literacy evaluations, and IQ exams (addressed in a future chapter) to classify and filter out the unfit. They were first primarily used to target immigrants at the border, and in later decades, increasingly used with other categories of social deviants (Black 2003; Okrent 2019).

Over a century before online social media databases and internet search functions would massify comparative modes of seeing the self and others within a spectrum of documented others, new potentials for late-nineteenth-century information practice projected possibilities too for assessment against a general, all-inclusive universal archive. Such an archive, ideologically eugenic from its seeding, “sought to encompass an entire range of human diversity” (Sekula 1986, 11) that contained “both the traces of the visible bodies of heroes, leaders, moral exemplars, celebrities” as well as “those of the poor, the diseased, the insane, the criminal, the nonwhite, the female, and all other embodiments of the unworthy” (1986, 10), who endured forms of structural inequalities. Importantly, too, the archive offered concrete means for new kinds of information-empowered classes to metricize deviance, increasingly marked as global in form. In the same turn, it measured and empirically affirmed the respectability, worth, and value of elites. In the context of Western nations’ nineteenth-century reshaping through new global migration patterns and struggles for postcolonial independence, it could assure the White viewer of their own rightful status, privilege, and entitlement to possessive relations. And it could do all this while opening the question of the appropriate means and scale for the control of perceived social deviants among the native-born and foreign alike.

“BAD BLOOD” AND “WHITE SUICIDE”
IN THE INFORMATION MARKET

Eugenics doesn't have to appear once in the Downieville ledger to see that its imprint is all over its pages. In the 1860s, English geographer and mathematician-turned-biostatistician Sir Francis Galton asserted in his first work the founding principles of eugenics, which began a movement among global researchers for decades. Penned in 1864—the same year the US Civil War entered its final stages, following the Haitian Revolution, the 1857 Indian mutiny, and independence uprisings across European colonies—Galton's “Hereditary Character and Talent” asserted an aggressively anti-egalitarian, hereditarian vision for conserving Western-driven progress. With it, he provided a program for maintaining Western dominance over broad global populations and so-called unfit classes. Published after Galton's own two-year mapping expedition in southwest Africa had earned him recognition among Western researchers “as an expert on geography, travel, and meteorology” (Fancher 1983, 67), the essay planted Galton's bold vision for controlled race improvement and social engineering pinned around the controversial assertion that individual character, talent, and intellect were incontrovertibly hereditary.

Countering liberal enlightenment thinking of the time around the possibility of educating and civilizing bodies, his argument for the innate nature of the character and intellect of different races set Galton “apart from the mainstream of thought in Britain in the middle of the 19th Century” (Cowan 1969, 20). Galton struggled, however, to illustrate his argument through data. Drawing from selected portions of five biographical dictionaries—four English and one French³—he attempted to convince his audience that such a body of data was representative of “the chief men of genius whom the world is known to have produced” (1865, 159). He thus used statistical analysis to insist that “abundant data” supported his claim that “everywhere is the enormous power of hereditary influence” (1865, 163). He also credited his prior “ethnological inquiry” abroad with seeding his ideas for not only “hereditary genius,” but his belief in the “mental peculiarities of difference races” (Galton 1869). He asserted in his 1865 article that, in fact, broad peculiarities of character, too, including “craving for drink,” “pauperism,” and proclivities to “crimes of violence” and “fraud,” were all inheritable. Galton, a cousin to Charles Darwin who had voraciously read *On the Origin of the Species* after its release in 1859, further used his eugenic model to launch a

critique of national welfare policies as artificially preserving the lives of the weak and “deteriorat[ing] the breed” (Galton 1865, 326). If social elites could be empowered to build what he projected as a social “utopia,” where elite knowledge classes were charged with the assessment of populations and enforcement of a regime of controlled, selective breeding, he enthused, what “prophets and high priests of civilization” and “what a galaxy of genius might we not create!” (1865, 165).

Published in the distinguished London periodical *Macmillan's Magazine*—whose contributors included prominent scientists of the day, including Thomas Henry Huxley and Charles Lyell, and poets Alfred Tennyson and Henry Wadsworth Longfellow (Gillham 2001)—Galton's 1865 manifesto set him and fellow converts on a mission to mainstream eugenics, starting with lettered classes. While it was not until the release of Galton's *Natural Inheritance* in 1889 that the academic world became energized by his cause (Cowan 1969), Galton and his protégés remained steadfast in their work to not only amass the necessary data and methods to authorize eugenics as a knowledge practice, but to translate their vision for the broad reshaping of social institutions and public understandings of self-government alike. In the final decades of the nineteenth century, Galton and his supporters thus saw to the founding of a biometric laboratory at University College London that invited participants to be measured and examined to “gain knowledge” on themselves for a small fee. They collected questionnaires from families asked to record their physical characteristics (such as height, weight, and lung power), and offered cash rewards for more granular family histories (Black 2003; Cowan 1969; Kevles 1985; Orkent 2019). They likewise designed and constructed machines to measure and test human attributes. And they published prolifically on experiments with composite photography and portraiture of genetic and criminal types that would advance law enforcement's documentation methods (Maguire 2009; Sekula 1986). Their work allowed the collection of thousands of profiles and “large amounts of data about the characters of parental and filial human populations” (Cowan 1969, xi), whose analysis would lead Galton in this period to discover the statistical phenomena of regression and correlation that remain foundational to data science practice to this day (Chun 2021; Cowan 1969). Such gains allowed eugenics' growing influence to be visibly institutionalized in England by the beginning of the twentieth century, with the 1901 founding of the Eugenics Education Society in London (that grew to include various respected members of the scientific and political elite of the turn of the century, including Winston

Churchill and Charles Darwin's son, Leonard Darwin), the endowing of the Galton Laboratory for National Eugenics at University College London, the addition of new research fellowships in eugenics there, and the founding of the eugenics journal *Biometrika*. It was in the United States, however, where eugenics' policymaking ambitions gained larger ground and where data-centered techniques—specifically, “visibilizing” the threat to White lives and the survival of society's worthy classes—were leveraged to expand eugenics audiences and advance its cause.

As in Britain, in the United States eugenicists rapidly developed research infrastructures to grow their movement. This spanned the United States' Eugenics Record Office (ERO), the Galton Society, the Race Betterment Foundation, and the American Eugenics Society, with its twenty-eight state committees and even a specific Southern California branch. Eugenics' leadership and promoters included some of the most distinguished scientists and professionals of the day. University presidents (e.g., Stanford's first president, David Starr Jordan), countless professors (e.g., Harvard's Charles Davenport and Yale's Irving Fisher), famed inventors (e.g., Alexander Graham Bell), medical professionals (e.g., John Kellogg), cultural leaders (e.g., H. G. Wells and Henry Fairfield Osborn, the president of the American Museum of Natural History), and even noted progressives (e.g., Margaret Sanger) championed the eugenics cause. Eugenics research centers such as the ERO gained prominence by gathering data on the genetic backgrounds of local households to advance research and develop aggressive, often invasive, techniques to collect family details and compile dispersed datasets scattered across the country.

However, unlike in Britain, eugenicists in the United States quickly came to recognize and leverage growing patterns of non-White, racialized immigration to empiricize the rising threat to White families and worthy social classes. And it would be the “factual” matter of ever-widening immigrant contaminations that they used to awaken public consciousness to the even broader threats of social degeneration posed by “unfit” classes. Leveraging data-driven methods thus enabled US eugenicists to gain broadening support—not merely from nationalist and xenophobic politicians, but “respectable” knowledge classes, professionals, and liberal reformers of the Progressive Era (Cogdell 2004; Leonard 2016), as well as popular classes and ordinary families. If in the late nineteenth century arguments of contaminating non-Western immigrants and the need to intensify monitoring and suspend democratic liberties were levied most loudly against Chinese

immigrants, by the twentieth century US eugenicists warned of threats from broader “degenerate” classes. These spanned southern and eastern European immigrants, US-born minorities, and poor and disabled citizens, all deemed too unfit to shape a modern society’s future.

Eugenics’ growing influence among American researchers was already evident in the late decades of the nineteenth century. Published accounts characterized the kinds of appeals made to research classes at the time. One example was Frederick Wines’s “Report on the Defective, Dependent and Delinquent Classes of the Population of the United States,” a special schedule commissioned for the 1880 US census that used census and medical data to project the growing numbers of immigrants and “defective types of humanity” and that calculated the tax burden imposed on civilization by such dependents (Ladd-Taylor 2017, 29). So too were texts like *The Races of Europe*, an 1899 publication that was based on a lecture series at Columbia University by the economist William Z. Ripley—later a professor of economics and political economics at MIT and Harvard—that based his argument of different European “races” on anthropometric measurements. By the turn of the century, US eugenicists would build on such techniques with growing attention to forms of popular, market-friendly communication that could extend literacy of their movement beyond established research circles. Key to this was leveraging information resources to visibilize—and amplify—the “reality” of the pending threat of growing immigrant classes, whose excessive freedom threatened to contaminate the bloodline the ideal “American race.” Such developments allowed the movement to at once promote imaginaries around “racial preservation” to broader White “American” classes. US historian Nancy Ordover underscored the significance of this “creative visualization” work around racial purity that the movement advanced, writing that “[t]he eugenics project revolved around imagining the nation: what it was (now threatened) and what it might be (with and without government and medical intervention)” (Ordover 2003, 7).

Such visualization work incorporated the use of images as well as “visualizing” narratives to project future degeneracy and translate visual and numeric data for broad publics. American eugenics leaders exploited such predictive, future-making techniques as they tailored education materials for students at university and college campuses. Davenport thus authored a textbook, *Heredity in Relation to Eugenics* (1911), shortly after founding the ERO to promote eugenics to American higher education institutions. Countless institutions, including Harvard, Columbia, Cornell, Brown,

Wisconsin, Northwestern, and Berkeley, offered popular courses in eugenics (Kevles 1985). Published by Henry Holt & Company, Davenport's textbook warned against the effect of growing classes of new immigrants of bad blood and invited readers to imagine how, without greater restrictions, America would "rapidly become darker in pigmentation, smaller in stature, more mercurial, more attached to music and art, more given to crimes of larceny, kidnapping, assault, murder, rape and sex-immorality" (Black 2003, 41). The Davenport textbook's conclusion that "immigrants are desirable who are of 'good blood'; undesirable who are of 'bad blood'" repeated arguments around race suicide that other American eugenicists invoked. Writing in an 1896 *Atlantic Monthly* article titled "Restriction of Immigration," former Census Bureau Director Francis Walker lamented the statistical imbalance between America's traditional Anglo-Saxon settlers and the new waves flowing in from southern Europe that he warned would inflict "vast throngs of foreigners . . . and persons, deaf, dumb, blind, idiotic, insane, pauper, or criminal, who might otherwise become a hopeless burden upon the country" and would risk national "degradation" (Walker 1896).⁴

Eugenicists were keenly aware of the growing channels for information distribution and promotion that late-nineteenth- and early-twentieth-century markets in the United States made available to lettered classes. These included not only journal and academic publications and curated museum exhibits (Black 2003), but explicitly commercial and popular outlets, including magazines and news articles, films (Pernick 1996), book publications, urban expos, and rural fairs (Cogdell 2004), that targeted broad consuming classes. American eugenicists thus actively cultivated relationships with heads of leading cultural institutions, filmmakers, and journalists. By the early twentieth century, they had developed relations with several of the nation's most powerful publishing houses that yielded a host of publications in international circulation. Such global visibility demonstrated their success in negotiating market-based information channels during what historians would later call "the golden age of eugenics publishing" (Regal 2004, 319). Varied eugenics books were released between the 1890s and the 1920s, from authors such as David Starr Jordan (1902 and 1909), Luther Burbank (1907), C. W. Saleeby (1911), William Castle (1912 and 1916), Robert Yerkes (1915), Havelock Ellis (1916), and Margaret Sanger (1917), by respected publishing houses, from G. P. Putnam's Sons to Henry Holt & Company, the Macmillan Company, and Scribner's. The 1856 book *Moral and Intellectual Diversity of Races*, by France's Arthur de Gobineau, whom contemporary

critics recalled “as undoubtedly the most influential academic racist of the nineteenth century” (Gould 1981, 379), was reissued by G. P. Putnam’s Sons in 1915 with a new, inciting title: *The Inequality of Human Races* (Regal 2004).

Recognizing the high sales eugenics’ baiting sensationalism and alarmist frameworks fostered, many of America’s leading publishing houses sidelined any misgivings they had about amplifying and authorizing the disinformation and lack of scientific foundation by such texts and actively sought out eugenics authors to promote and amplify such work (Regal 2004). *The Passing of the Great Race* by Yale University-trained lawyer, conservation advocate, and Immigration Restriction League vice president Madison Grant played a key role in solidifying such coproductive dynamics. Grant’s 1916 text, that twentieth-century natural historian Stephen Jay Gould later described as “the most influential tract of American scientific racism” (1991, 145) for its role in instituting historic immigration restrictions, also popularized White genocide conspiracy theories through its authoritative use of coded maps and visual data to represent European migrations. Grant’s viscerally cinematic descriptions of “alien invasion,” “mongrelization,” and racial “extermination through immigration” (Regal 2004, 319) to complement his published visualizations helped center and ignite eugenic concepts of race suicide and racial conflict in the public imaginary. His promotion of Nordic theory that elaborated on nineteenth-century models of racial difference⁵ built on earlier works, such as Ripley’s 1899 *Races of Europe*. However, Grant’s text animated the theories for new audiences, unlike those of others before him. He would use it to further his critique of changing patterns of American immigration in the early twentieth century, which saw increased numbers of southern and eastern European immigrants, and to elevate Nordic races as the height of White civilization. Across the text’s pages, Grant projected apocalyptic images to urge audiences to beware of “the invasion of America by lesser tribes [that] had placed the blade of a knife against the Nordic throat . . . [and] are beginning to take his women.” He decried misguided democratic values around the brotherhood of humanity that had allowed a suicidal ethics to be put in place via US immigration policies that enabled the “native [White] American” to see to the “exterminati[on of] his own race” (Okrent 2019). While anthropologist Franz Boas lambasted Grant for “inventing a great race” in a book that was built on “fallacies,” “faulty” use of evidence, and “fanciful” and “dangerous” historical reconstructions (Okrent 2019, 401), its reputed publisher, Scribner’s, continued to promote it. In the first five years after its publication, its popularity in the United States drove its

sales through eight new editions, with translations into multiple languages and promotional materials emphasizing its credibility as a “scientific” history of Europe “which may be traced back to the teachings of Galton” (Okrent 2019, 397).

Scribner’s editors later credited Grant’s anti-immigrant volume as “undoubtedly one of the most successful books” they had published that year (Okrent 2019, 403), and it solidified for the publishing house how profitable packaging and amplifying eugenics disinformation could be. In the years following *The Passing of the Great Race*, Scribner’s grew its reputation “as the publishing home for many of America’s leading proponents of scientific racism” (Okrent 2019, 403). It released eugenics volumes, including Seth K. Humphrey’s *Mankind: Racial Values and the Racial Prospect* (1917), Charles W. Gould’s *America: A Family Matter* (1920), William McDougall’s *Is America Safe for Democracy?* (1921), Edward M. East’s *Mankind at the Crossroads* (1923), Ellsworth Huntington’s *The Character of Races* (1924), and Charles Conant Josey’s *Race and National Solidarity* (1922). The publishing house’s investments culminated in the release of Stoddard’s *The Rising Tide of Color*, whose targeting of popular audiences quickly drove it to become a bestseller. It swept through fifteen separate printings in four years and received visible public endorsements from the *New York Times*, who called the text in an editorial “a new basis for history.” Even US President Warren G. Harding’s 1920 campaign emphasized the slogan “America First” (Okrent 2019). Charles Scribner, the head of Scribner’s publishing, later cited how Grant’s book had been “a pioneer” that allowed US publishers to see how much “the race question has now become a favorite” among American and international audiences (Regal 2004, 332).

Contemporary historians credit Grant’s text—and the flood of eugenics publishing that came with it—for helping to harden a vision of “White suicide” into empirical fact in the year leading up to the historic 1917 and 1924 Immigration Acts. It further worked to produce a wave of support necessary to pass them, despite three presidential vetoes over concerns for the political precedents they would set (Black 2003; Okrent 2019). Indeed, the 1917 Act broke ground for imposing the first national test—a literacy exam designed by eugenicists to set minimum standards for adequate character and standards for new entrants into the United States. Decades of active political advocacy by US eugenicists around immigration quotas to limit entry of migrants from undesired nations finally came to fruition with the passing of the 1924 Immigration Act. The act drastically reduced immigration via

a “national origins quota” (set at 2% of the total number of people of each nationality as of the 1890 US national census). It ensured that the largest number of slots were reserved for what promoters framed, in direct consultation with US eugenics leaders, as Nordic races (Spiro 2009). To ensure its passing, Harry Laughlin, ERO superintendent, lined the walls of the US congressional hearing room with large maps of European migration from Grant’s *The Passing of the Great Race* “for a grand visual effect.” Laughlin further presented the committee with a variety of tables and statistics, drawn from his study of populations at 445 public institutions classified by ethnicity, to establish the fact of degeneracy among specific immigrants.⁶ The evidence, he argued, demonstrated that such degenerate classes would dangerously “dilute the bloodstream of America.”

Today, more than a century after its original publishing, Grant’s work continues to gather global audiences, being commonly invoked by alt-right figures in the United States and Europe in contemporary anti-immigration formulations of xenophobic Nordic and White genocide conspiracy theories. US White nationalist Richard Spencer, in the introduction to the 2013 republication of Grant’s 1933 *The Conquest of a Continent*, reminded readers of the long threat of a “miscegenating” US nation that would destroy the “White America that came before it” (Serwer 2019). Emphasizing the plight of White races, such invocations omit mention of how in the years immediately following the 1917 and 1924 immigration bills’ passing, Grant’s work and US eugenicists’ tactics to visualize the fact of non-Nordic degeneracy had earned the admiration of antidemocratic political parties around the world. They leave unmentioned, too, how Grant’s first book grew to become a global bestseller, which came to be considered essential reading by German race theorists, including Adolf Hitler, who notably called the US text “his Bible” (Regal 2004).

DISINFORMATION’S EUGENIC AGE

While the US eugenics movement’s strategic exploitation of information channels, and the convergence of interests they found in American publishing circles and marketing operations, are remembered for their role in mobilizing legislators and publics toward the historic 1917 and 1924 immigration acts, US eugenicists drew from a record of past decades of tactical successes and experiments in communication to make such policies. In the

late nineteenth century, the anti-Chinese immigrations acts installed the first national immigration policies, whose racialized restrictions energized eugenicists across half a century. The 1917 and 1924 immigration acts were indeed culminations of American eugenicists' sustained efforts to expand restrictions around so-called "unfit" classes. They invigorated the movement to persuade publics of the need to not only protect the nation from degeneration through the entry of unfit non-Western populations, but of the risk that eastern and southern European immigrants posed to the nation's valuable Nordic race (Spiro 2009). With the immigration acts newly secured, eugenicists could turn their attention in the next decade to new classes of the unfit, beyond immigrants. The same year that Laughlin presented the ERO's data on degenerate immigrants to the US Congress, he also completed writing for a new work, "Eugenical Sterilization in the United States," that occupied him for the next decade. The text, which penned a model for sterilization law for the unfit, eventually influenced new laws that passed in thirty-two states in the early twentieth century (Okrent 2019; Stern 2005).

Before such advances, however, US eugenicists had to repeatedly contend with prominent political critiques, including from US presidents Grover Cleveland, William Howard Taft, and Woodrow Wilson. Dismayed over immigrant scapegoating and political precedents that were set by closing "the gates of asylum which have always been open to those who could find nowhere else" (Wilson 1915), the three presidents issued a series of vetoes to immigration restrictions proposed between 1897 and 1915 (Black 2003; Okrent 2019). To overcome such critiques, eugenicists drew from earlier models of racializing difference, and empiricized harms to White natives from the racialized bodies of the Chinese in particular, to effectively close borders. No other immigrant group more concretely facilitated an intensification of "fear about the future of white lives" (Luibhéid 2002) at the turn of the century than the Chinese. And more than any other group, it was Chinese women specifically who first enabled such fears to readily be shaped into hardened facts about the danger posed to White society, the need for growing surveillance and monitoring, and eventually, the need for outright exclusion of targeted classes.

Sponsored by California Republican Horace Page, the 1875 Page Act was the first national act designed to "end the danger" of "immoral Chinese" (Peffer 1986). Targeting Chinese women specifically, it set in place not only the first significant US immigration restrictions, but the first laws preventing members of a specific ethnic or national group from immigrating.

Leveraging eugenic arguments of an innate “Chinese racial character” that claimed criminality and immorality were unique “hereditary vices” (Shah 2001), the Page Act barred women immigrants from “any Oriental country” from entry into the United States based on their presumed criminal status as prostitutes. While not all Chinese women immigrating at the time were prostitutes, and while the Chinese were not the only immigrant group involved in prostitution (Luibhéid 2002), the act nonetheless justified the broad classification and exclusion of Chinese women specifically from seeking entry as “immoral labor” for over half a century. Historian Nayan Shah noted that the “queer domesticity” (2001) Chinese immigrant households often exhibited at the time routinely entailed multiple women and children living in a female-dominated household or without the presence of a male head. Such household models, that included cohabitating communities of men and common-law marriages of Chinese men and “fallen” White women, were a stark departure from White American notions of respectable domesticity. As one author of an 1885 report by a Special Committee of the Board of Supervisors of the Chinese in San Francisco stated, it made it impossible to tell “where the family relationship leaves off and prostitution begins” (Shah 2001, 41). The Page Act nonetheless established a powerfully influential model for enabling the expanding exclusions of broader categories of undesired populations by demonstrating how readily discriminatory data, and the markings of marginalized difference, could be hardened into objective public fact about the dangers posed by racialized and sexualized others. By branding Chinese women as prostitutes and restricting the immigration of Chinese women, “lawmakers were able to control the formation of families and birth of Chinese American citizens” (Curry 2021, 15). With revised anti-miscegenation laws outlawing relationships between White and Black and White and Chinese residents (Curry 2021; Shah 2001), the effect was to radically delimit Chinese American citizen births in ways that eugenicists hoped could eliminate the Chinese, and eventually other inferior populations, from the United States altogether.

Indeed, historians have noted that the decades prior to the Page Act’s passing saw the “systematic surveillance” of the Chinese grow across the West Coast, where the “technologies of liberal security” (Shah 2001, 46) via municipal reports, health surveys, and geographic mappings intensified the targeted inspection of Chinese bodies, and their places of residence and work. The “extensive data” (Shah 2001, 46) such a regime generated worked to empiricize the menace of the Chinese into given fact that would extend across

decades (Shah 2001, 37)—so much so, that by the beginning of the twentieth century in cities such as San Francisco the monitoring and control of the “Chinese race [had] become inseparable from the operation of [the city’s] public health systems” (Shah 2001, 48). Reports by medical, public health, and municipal officials during the period repetitively represented the “entire Chinese community” as not just a danger for being categorically “engaged in criminal activities” (Shah 2001). Such accounts projected the Chinese as posing a “social, moral and political curse to the [White] community” (Trauner 1978, 70) and festering a “laboratory of infection” and contagion that threatened native-born Whites. Beyond San Francisco, too, Chinese settlements were blamed for disease outbreaks—from smallpox to cholera to the bubonic plague—that were alleged to spread due to the Chinese population’s racial preposition to criminal behavior and virulent disease.⁷ Municipal reports throughout the 1860s and 1870s, such as *Chinese Immigration and the Physiological Causes of the Decay of a Nation* (1862) and *Impurity of Race, as a Cause of Decay* (1871), written by prominent San Francisco physician and member of the California Board of Health Dr. Arthur Stout, echoed eugenic warnings of the racial degeneration and “self-destruction” that would befall the “Caucasian race—the race created with the highest endowment and greatest aptitude” (Stout 1862, 6)—from the infusion of bad blood from inferior Eastern Asiatics. Such immigrants threatened to “poison” the “manifold beauties” and “mental and physical energies” of the nation unless measures of “self-preservation” were taken (Stout 1862, 9).

With the full authority of leading medical researchers and public health officials behind them, municipal examiners repeatedly invaded Chinatowns of the West Coast in the late nineteenth century, subjecting residents to violent inspections that routinely resulted in expulsions, the destruction of buildings, and the dispossession of residences as alleged “sources of disease.” One case was Honolulu’s Chinese quarter, where forty-five hundred residents lived in 1899; the entire Chinese quarter was burned to the ground after two cases of bubonic plague were reported (Trauner 1978, 77). Widespread publicity was generated from the inspection theater,⁸ as routine news reports of “periodic public health investigations—both informal midnight journeys and official fact-finding missions—fed the alarm about the danger Chinese men and women posed to white Americans’ health” (Shah 2001, 17–18). News illustrations of burned and destroyed buildings came with captions of how “city officers ‘survey[ed] with satisfaction’ the demolishing of ‘the Den of Filth’” (Trauner 1978, 77), just as city officials boasted of their success in

seeing to the passage of extreme measures and orders to have “every house in Chinatown thoroughly fumigated” (Trauner 1978, 82).

Proposals to segregate and expel the Chinese settlements outside of the city limits of San Francisco that were set forth since the 1850s were still met with varied rebuttals throughout the late nineteenth century (Trauner 1978). Throughout the late nineteenth century, the use of exceptional surveillance techniques on the Chinese—especially photography—was debated⁹ even as “supporters of Chinese immigration were concerned that photographic documentation marked innocent Chinese residents as criminals” (Pegler-Gordon 2006, 58). Varied concerned officials, moreover, on principle, embraced the possibilities of “tutoring and reforming conduct to ensure self-regulation . . . [and] vigorously questioned whether the Chinese residents were amenable to reform or so recalcitrant that they must be expelled so the rest might thrive” (Shah 2001, 48). The campaign to exclude Chinese women as prostitutes demonstrated how such political sympathies could be overcome. It also provided a model that proved how “datafying” the threat to White native lives could energize campaigns that pushed the negating of democratic rights for improper subjects. Indeed, the Page Act created a first-of-its-kind, cross-continental system of examination, investigation, and documentation—only genuinely enforced on Chinese women at the time of its passing. It required varied photographs, biographical records of family and relations, and certificates demonstrating moral character to be generated, verified, and resubstantiated by authorities at ports of departure and entry (Curry 2021; Peffer 1986).

Immigration historians have noted too how the surveillance of Chinese women in the nineteenth century instantiated the power of the case file for immigration, a format that was integral to the functioning of modern disciplinary societies for opening new correlative possibilities. This included the constitution of the individual as a describable, analyzable object, and the constitution of a comparative system that made possible the measurement and description of observed phenomena in individuals within and between systems. Eithne Luibhéid thus noted how the combined data of case files on Chinese women enabled a series of investigations to be brought to bear upon them. Individual files could be cross-referenced with aggregated archival records of other Chinese immigrants, including in other cities, to verify and track familial relations, and a sequence of others to then track and calculate incriminating gaps in individual testimony.¹⁰ Historians thus noted that unlike any other immigrant group, Chinese women were required

to prove their propriety. With no evidentiary standard designated,¹¹ however, the system ensured that nearly all Chinese women were criminalized and denied entry (Curry 2021).¹²

It was the notion of the especially “virulent threat” that Chinese women posed to White men and respectable domesticity that late-nineteenth-century eugenic campaigns aimed to harden into objective facts through medical and legal officials’ ominous predictions about infectious transmissions from Chinese female prostitutes to White male clients and innocent families. Testifying before a congressional committee investigating conditions in Chinatown in 1877, the founder of the University of California Medical School,¹³ Dr. H. H. Toland, claimed that an astounding 90 percent of the venereal disease in San Francisco could be traced directly back to Chinese prostitutes, who were “the source of the most terrible pollution of the blood of the younger and rising generations” (Trauner 1978, 75). Eugenic physician and publisher Dr. Mary Sawtelle, editor of the *Medico-Literary Journal*, a medical advice journal with largely middle-class White female readers, likewise circulated articles representing all Chinese women as prostitutes who conspired to “infus[e] a poison into the Anglo-Saxon blood” and imperiled American families and the “future of the American nation” with syphilis (Shah 2001, 107). By the late 1870s, eugenic reformers such as Sawtelle would propose measures that historians today describe as “far more aggressive” than even systems of mandatory inspection imposed on female prostitutes in western European colonies (Shah 2001, 110). Sawtelle argued for the creation of a federal bureaucracy and surveillance system to leverage public health authorities to “track syphilis to its lair” and to require physicians to register all venereal disease cases, report the condition of victims to their sexual partners, and isolate carriers behind locked hospital doors. Chinese proximity to White residents was used to amplify claims that domestic servants, chambermaids, and “half of the Chinese servants employed in the families of the wealthy . . . reek[ed] with this venereal virus” (Shah 2001, 89). In the midst of such attacks, Chinese women were reduced “to the menacing stereotype of the syphilitic prostitute” and classified as a uniquely vicious “source of contamination and hereditary diseases” (Shah 2001, 80). By historian Nayan Shah’s account, such framings reified the notion of Chinese bodies and sexuality as threats, not merely to the moral sanctity and health of White citizens and workers, but to the institution of White heterosexual marriage, the purity of heterosexual reproduction, and White American middle-class domesticity as a whole.

By 1882, the expanded anti-Chinese immigration act prohibited the entry of almost all classes of Chinese men, too. Included in the act were prohibitions on the entry of immigrant convicts, prostitutes, lunatics, and idiots into the United States. Such additions codified eugenic worldviews of the need to protect superior classes from broadening degenerate populations into national policy. The Immigration Acts of 1903 and 1907 expanded barred categories to include anarchists, epileptics, the insane, those with infectious diseases, and those who had physical or mental disabilities that hampered their ability to work. By 1917, the exclusions culminated further to include a broad list of immigrant undesirables: alcoholics, anarchists, contract laborers, epileptics, feeble-minded persons, idiots, illiterates, imbeciles, paupers, persons afflicted with contagious diseases, persons being mentally or physically defective, persons with constitutional psychopathic inferiority, political radicals, polygamists, and vagrants—all viewed as biological and social expenses to society. The measure also granted the government the authority to deport alien radicals in the country and imposed a literacy test for all immigrants for the first time (Okrent 2019). They laid the ground, too, for the historic 1924 Immigration Act that drastically reduced immigration into the United States and that initiated use of national quotas designed to limit immigration from undesired nations, to reserve the largest number of slots for Nordic races (Black 2003; Spiro 2009) and to ensure that the future of the nation would be driven by eugenic worldviews.

The growing political gains of anti-immigration laws by eugenics advocates in the United States are reminders of how much eugenicists had come to play dominant roles in various channels of research and information culture in the late nineteenth century, even before the 1917 and 1924 immigration restriction laws. For decades, the naïve defenses of democratic norms of government had been read as a necessary target of eugenics advocates, who decried the danger of liberal ideals that weakened national futures by protecting the individual rights of the unfit without appropriate checks or outright prevention from better informed parties. By 1916, texts such as Grant's *Passing of the Great Race* warned that the seeds of racial suicide were embedded in democratic ideals; he argued that in nations like the United States, liberal immigration policies were "introducing the seeds of fatal disease into the body politic" (Spiro 2009). Projecting the future extinction of "native Americans of Colonial descent" from an immigration policy that granted overly expansive rights of "asylum for the oppressed," Grant urged, "We Americans must realize that the altruistic ideals which have controlled

our social development during the past century and the maudlin sentimentalism that has made America ‘an asylum for the oppressed,’ are sweeping the nation toward a racial abyss. If the Melting Pot is allowed to boil without control and we continue to follow our national motto and deliberately blind ourselves to ‘all distinctions of race, creed or color,’ the type of native American of Colonial descent will become as extinct as the Athenian of the age of Pericles, and the Viking of the days of Rollo” (Serwer 2019). Such assertions remobilized arguments made since the mid-1800s on “the perils” of democratic government and leveraged the threat of racialized immigration in published accounts to do so.

Dr. Arthur Stout’s 1862 report to the California Board of Health, *Chinese Immigration and the Physiological Causes of the Decay of a Nation*, warned that racial degeneration among the Caucasian race would result from the “morbid philanthropy in liberal government and by the belief in the general equality of mankind” (1862, 7). This invective followed Arthur de Gobineau’s 1855 “Essay on the Inequality of Human Races,” which advocated for the segregation of superior White races from inferior Yellow and Black races and warned that nations’ incorporation of such lower races had led to the fall of past civilizations. He further decried the French Revolution and the rise of democratic governments for “reveal[ing] the failure of superior individuals to control the weak and the mediocre” (Kale 2010, 52). Stephen Jay Gould reminded readers that Gobineau, in his 1855 essay, also tellingly argued for the need to establish methods to “find a measure, preferably imbued with the prestige of mathematics, for average properties of groups,” rather than comparing individuals, to affirm racial hierarchy among populations. “The difficult and delicate task cannot be accomplished until the relative position of the mass of each race shall have been nicely, and, so to say, mathematically defined,” he argued (1981, 382).

The incrementing gains of such arguments in the late nineteenth and early twentieth centuries underscored how much could be realized by eugenic strategies that aimed to harden racialized data into concrete fact. Following gains in immigration restrictions, eugenicists in the United States turned their attention to sterilization laws. From 1907 to 1917,¹⁴ such efforts made rapid gains state by state, so that by 1917, some fifteen states had passed new laws to allow the sterilization of convicted criminals, the mentally disabled, and the mentally ill in state custody.¹⁵ California’s passage of such a law eventually allowed twenty thousand individuals to be sterilized between 1909 and 1979—a disproportionate number of whom were working-class, Latinx,

Indigenous, and Black women who were incarcerated or in state institutions for disabilities (Hawkins 2021; Lombardo 2010, 2011; Mizes-Tan 2021; Zhang 2017).

It was not until World War II and the unapologetic championing of the Nazi party by US eugenicists in the 1930s that eugenic policy gains in the United States officially began to be reversed. During the twelve-year period of Hitler's regime, for instance, US leadership at the ERO still "never wavered in . . . scientific solidarity with Nazi race hygiene . . . [or with the] view that the racially robust were entitled to rule the earth" (Black 2003, 1047).¹⁶ Historians have noted that, indeed, even after Hitler's rise to power in 1933, leadership at the ERO turned publications such as *Eugenical News* into channels of "pro-Nazi agitation" (Black 2003, 1105).¹⁷ Just months before the official start of World War II in 1939, ERO's Harry Laughlin published a report, *Immigration and Conquest*, that continued to predict and decry how America would soon suffer "conquest by settlement and reproduction" through an infestation of defective immigrants, who, like rats, would begin their infestation from Europe via the ability "to travel in sailing ship" (Black 2003, 1069). After years of open endorsement, recirculation, and amplification of Nazi disinformation, the ERO was forced to finally shut down by the Carnegie Institution and its head, Vannevar Bush, after the Nazi invasion of Poland in late 1939, and the official beginning of World War II, allowed news of atrocities to circulate to the shock of publics around the world. A few short years after, when Harry Laughlin passed away in 1943, ERO director Charles Davenport nonetheless defended him in *Eugenical News* as a visionary whose views were opposed by those of "a different social philosophy which is founded more on sentiment and less on a thorough analysis of the facts" (Black 2003, 1071).

Even while the ERO closed its doors, eugenic laws in the United States continued for decades, forcing tens of thousands more Americans to be sterilized, institutionalized, and legally prevented from marriage on the basis of race. During the twentieth century, eugenic visions that first targeted Chinese women as specific racial and sexual threats to secure futures saw to the forcible sterilization of more than seventy thousand people across thirty-two US states—more than half of whom were poor or ethnic minority women (Stern 2020)—with programs targeting Native American women even in the 1970s.¹⁸ One-third of the female population of Puerto Rico was sterilized due to the passage of eugenic policies—the highest rate of sterilization in the world (Andrews 2017). The lasting impact of eugenics in America

and ERO would be noted in at least one other concrete way. Years and even decades after the ERO's closing, individuals who had submitted family data to be assessed and included among the one million index cards, thirty-five thousand files, and half-ton of family genealogical volumes that had been amassed there for research continued to look to the ERO for revelations into their identities by sending requests for information and updates on pedigrees and proof of lineage. Historian Edwin Black noted the continuity of such correspondences demonstrates the enthusiasm for eugenics that was sustained and documented until at least the 1980s. By Black's account, such inquiries "probably never stopped" (Black 2003, 1079).

I draw attention to forgotten archives of an American eugenics age that span the indices of the ERO and the Downieville ledger to insist that they are ready reminders of how much eugenics' legacy has shaped our data past and to shed light on the close proximity of their resonances for our data present. That those proximities are not readily legible among the dominant narratives that shape our imaginaries of the contemporary is a telling indicator of how easy it has become to forget how deeply histories of assessing the Other have shaped data practices across the decades of our information age. This is especially relevant in a moment when fetishizations of AI as a newly evolved, superior form of racialized, rational intelligence (Baria and Cross 2021; Katz 2020) explicitly channel eugenic imaginaries. However, it is also an indicator of how much frameworks of progress and innovation have overdetermined the dominant narratives that are reproduced around our contemporary information age. It underscores how little frameworks of amnesia, silencing, or violence—that might as well have described the symptoms dominant in our data present and that post- and decolonial studies scholars have pointed to as a defining aspect of Western archival practice and history making, too—are permitted space in the conversation (Trouillot 1995).

More than one hundred years later, archives such as the Downieville ledger and the ERO records remind us how far back the cultural obsession for datafication as an instrument for segregation and dispossession goes. They also remind us of how broadly such logics could spread through eugenic imperatives that translate such practices well beyond the discrete research and technical professionals who have largely been the focus of contemporary critical data scholarship today. Downieville reminds us, moreover, how broadly such techniques could spread via the routines of everyday authorities. It reminds us of how everyday local institutions—not merely centers of high technology and knowledge production—came to serve too as core channels

for the extension of informatic instruments and archives for surveillance as supposedly necessary means to enhance security for more properly deserving classes. They remind us too how readily information ledgers could activate and concretize social stratifications between social classes and how vulnerable and marginalized populations would prove to be early inhabitants of new data futures. Much as today, marginalized classes then would likewise serve as the testing grounds for new mechanisms of racialized and gendered surveillance. Such pursuits often argued to uniquely define our big data present. But they have been obsessions sustained by nineteenth-century knowledge paradigms around eugenics that read the impossibility of shared, common welfare as defining constraints on future building.

These resonances, far from being incidental, tie together our data present and past. Both were initially promoted from the obsessions of elite knowledge classes and researchers aiming to perfect “broken” presents through methodological innovations that aimed to quantify and predict the empirical world. Both were driven by visions of a radically contingent future that no longer presumed the future as a temporal space, open to and inclusive of all and conditioned on the simple passage of time. The future instead required new, radical techniques for managing information and filtering populations to preserve the survival of civilization’s fit races. In the case of big data, these techniques allow a new temporal and technical order to be set by emerging classes who promise a more perfect prediction. In the nineteenth and twentieth centuries, such framings of contingent futures in the United States helped naturalize and amplify eugenic calls for surveilling, evaluating, and later segregating and excluding or otherwise excising populations. In the twenty-first century, similar projections of a contingent future have likewise fueled techno-eugenic calls for a radical transformation of knowledge institutions to prioritize research practices anchored around future prediction and to deprioritize outdated knowledge routines and disciplines, some of which have been projected as outdated precisely because of their focus on understanding the past. And in the past as in the present, eugenic paranoidias around contingent futures would be used to bolster authoritarian arguments to limit autonomous choice and suspend ideals around free personhood and self-determination on which liberal societies had been founded. Indeed, whether through generalizing automated decision-making in contemporary AI systems or imposing decisions on classes deemed too unfit to responsibly exercise individual rights and free choice, both called for redesigning societies around new hierarchical structures where only classes

able to demonstrate readiness to manage information as property should be granted full decision-making capacity.

How such logics continued to play out throughout the twentieth century, generations after eugenics had been presumed to recede, is the subject of the next two chapters.