

Subterranean Traces: Unearthing Death and Disposability in the Ruins of the Mine

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Abstract Drawing on ethnography, interviews, and archives, this essay charts intertwined histories of Black migrant labor, Chinese indenture, resource extraction, and race-making in the ruins of South Africa's gold mines. Connecting past to present, it examines the *zama zama*, informal migrant miners who work in abandoned mines, and the unmarked graves of Chinese mine-workers to understand how histories of extractive capitalism and racialized disposability reemerge, illustrating the enduring force of not only these histories but also their entanglements. It utilizes a subterranean archive of disappearing figures and buried traces and theorizes the afterlife of death.

Keywords History of the present, death, gold mining, extractivism, South Africa, Chinese indenture, migrant labor

Beginning with the European discovery of the Witwatersrand gold-fields in 1886, South Africa reigned as the world's largest gold producer over the twentieth century. The profitable extraction of low-grade ore from the abysses of the earth rested on the sustained mobilization of Black migrant labor from southern Africa and South Africa's "native reserves." In the 1980s, after a century of extraction ran its course, a wave of mine closures left behind over 6,000 abandoned mines, thousands of retrenched mineworkers, and toxic air, water, and land. Where once were the world's deepest mines are now some of the world's largest tailings dams, majestic pyramids of mine waste that blows downwind to Black townships and informal settlements. Mine water fills the voids of the subterranean city beneath Johannesburg. The acidified water pushes upward, pooling in orange puddles on the surface.¹ Even after the closures, there is significant gold awaiting excavation. Today the industry remines tailings for residual gold and extracts at super-deep levels. Alongside these high-tech, capital-intensive operations, illegalized "artisanal miners" known as *zama zamas* ("to get something from nothing" in isiZulu) risk their lives recovering ore from abandoned tunnels and dig on commercial mines. In the media, *zama zamas* are vilified as violent criminals and trespassers. The foreign

nationals are scapegoated for South Africa's economic problems and crumbling infrastructure. These miners include retrenched miners and migrants from Lesotho, Mozambique, and Zimbabwe, the main sending countries to the Rand. The *zama zama* is not a thief but lives in the aftermath of the migrant labor system and ruins of the mines.

To grasp how the afterlife of gold mining unfolds, in December 2023 I attended an NGO-led "toxic tour" of the West Rand, the western edge of the reef just outside of Johannesburg, a hub for commercial and artisanal mining.² We visited mines and sand dumps in the shadow of a state crackdown on "illegal mining." The previous month, with an election on the horizon, President Cyril Ramaphosa deployed over 3,000 soldiers to arrest informal miners. Our three-person group was accompanied by several armed security guards, sent by mining companies to protect us from the "looming *zama zama* danger." At an open pit mine, we stood at the perimeter and watched an excavator and truck below. Upon closer inspection, two people traversed the mine, their bodies tiny compared to the multi-ton machines in the vast mine. In this space, informal and industrial mining momentarily co-existed, each after what gold was left, each a trajectory of 1886.



Figure 1. Photograph courtesy of Nicolas Adamy.

On this tour, I learned of another story. Somewhere on the West Rand are the unmarked graves of Chinese laborers who were brought to the Rand following the South African War. The mines, facing a postwar shortage of Black labor, transported nearly 64,000 Chinese men to the goldfields as a stopgap. The first laborers arrived in 1904, and the last departed in 1910—after which the migrant labor system took off and made future labor shortages obsolete until the 1980s. Chinese labor was a short-lived but consequential experiment during a critical period in South Africa's national and economic formation with consequences for the development of the migrant labor system. Chinese mineworkers have been on the peripheries of the story of Black labor, but have resurfaced upon the discovery of graves along the Rand. With no descendants, these graves are all that remain of this pivotal moment in South African and global history. Today the afterlives of African migrant labor and Chinese indenture exist as separate yet proximate phenomena in the West Rand's underground tunnels, open pits, and unmarked graves.

Extractivism names the mode of accumulation and ideology governing the large-scale exploitation, commodification, and extraction of land and labor linking the Americas, Africa, Asia, and Europe.³ On the African continent, extractive capitalism played out most intensively in the nineteenth- and twentieth-century scramble for diamonds, gold, rubber, and oil, and is currently undergoing a revival in the mining of "critical minerals." Like extractivism, racial capitalism is fundamentally relational.⁴ As Lisa Lowe writes, racial capitalism "seiz[es] upon colonial divisions, identifying particular regions for production and others for neglect, certain populations for exploitation and still others for disposal."⁵ Black and Chinese labor constituted two racially differentiated, segregated populations divided but linked in the service of capitalist extraction, in life and death. Drawing on ethnography, interviews, and archives, this essay offers a relational analysis of death, disposability, and racial capitalist extraction in the ruins of South Africa's mineral revolution. Connecting past and present, I read the *zama zama* as the descendant of the Black migrant laborer, the unmarked grave as the trace of Chinese indenture, and their convergences above and below ground. Exemplified in the present-day *zama zama* who digs near Chinese graves, histories of the migrant labor system and Chinese indenture uncannily reemerge alongside one another, illustrating the durability of discrete histories that were never discrete after all, and the durability of their entanglements. I treat the West Rand as a palimpsestic landform and archive of disappearing figures and buried traces, at once ephemeral and enduring, variously unseen or unknown. I draw from state archives and the archives of H. Eckstein & Co., one of South Africa's earliest mining houses, which captures the

colonial orders and racial knowledge that mining magnates produced about laboring populations with the purpose of maximizing extraction regardless of human cost. The reports, correspondence, and double-entry accounts capture the anxieties and epistemes of colonial officials and mining magnates—the forcefield of colonial knowledge-power—and includes subaltern voices only in rebellion and death.⁶ It is impossible to recuperate the lives of the dead in the archive but there are clues to what it meant to cross the ocean and die on the Rand.

In what follows, I open with an overview of the history of South African gold mining told from the vantage point of the *zama zama*, then turn to the intertwining of African migrant labor and Chinese indenture. I explore the mine compound and cemetery, twin sites for fostering life, managing death, and differentiating Black and Chinese labor. As Grace Hong complicates the life/death binary, life is proliferative, as is death in the meanings and hauntings it proliferates.⁷ In the archive, death is especially proliferative in the relations it reveals. In the final section, I turn to death, disposability, and the afterlife of death in which the dead, whose lives have been reduced to numbers in the archive, demand recognition.⁸ As Saidiya Hartman eloquently states, “a history of the present strives to illuminate the intimacy of our experience with the lives of the dead, to write our now as it is interrupted by this past.”⁹ The surfacing of African and Chinese remains and the *zama zama* compels reckonings with unresolved violence of colonial extractivism, while laying bare the porosity of the past, present, and future.¹⁰

An enduring labor empire

The Witwatersrand, or simply “the Rand,” is the geological formation—a plateau of sedimentary rock 35 miles long and up to 7,000 meters deep—at the heart of this story. Amidst nineteenth-century gold rushes, the 1886 discovery of alluvial gold on the Rand catalyzed an influx of prospectors, investors, and settlers from Europe and the United States. Like other frontier towns, Johannesburg formed along the main reef. The mining of low-grade ore was achieved through the migrant labor system, the largest, longest-lasting mobilization of oscillating migrant labor on the continent.¹¹ Linked to settler colonialism and imperialism, the exploitation of migrant labor was arguably the defining feature of South African racial capitalism.¹² To create a Black semi-proletariat, colonial taxation and land policies pushed Africans onto rural reserves and compelled them to seek mine wages.¹³ In an oscillating system, groups of men seasonally left the reserves for the mines and returned home to recuperate. On the Rand and beyond, the European quest for precious metals transformed African people into

Black labor, “bodies of extraction and subjects of race” and the “living ore from which *metal* is extracted.”¹⁴

Gold mining institutionalized the exploitation of migrant labor and integrated southern African economies into “South Africa’s labour empire.”¹⁵ In the early 1890s, labor recruitment for the mines was piecemeal. Coercive labor touts annually recruited 15,000 to 50,000 men primarily from Portuguese East Africa (Mozambique).¹⁶ In 1899, the Transvaal Chamber of Mines, the representative body for mining houses, was established. Soon after the Native Labour Department and Witwatersrand Native Labour Association (WNLA) were formed to centralize recruitment and set wages, laying the groundwork for the migrant labor system. From the 1920s, the Chamber entered into agreements with local chiefs and colonial governments to recruit from British Protectorates (Lesotho, Botswana, and Swaziland) and “tropical” territories north of 22 degrees latitude (Malawi, Tanzania, Zambia, and Zimbabwe).¹⁷ The wide net for labor recruitment allowed the mines to manipulate labor market conditions and divide workers by ethnicity, language, and geographic origin. But over the system’s duration, Mozambique was the largest and most constant source of labor. “There is no family in the southern part of Mozambique,” Ruth First recalls, “that has not sent a father and most likely a son to the mines.”¹⁸

After a century of growth, the goldfields entered their twilight period. At its peak in 1970, South Africa produced 78 percent of the world’s gold; in the 1980s, only a third.¹⁹ Accessing new ores required mining at deeper, costlier, more dangerous depths of over 3,000 meters. Concurrently, after the US left the gold standard in 1971, the high price of gold enabled investment in developing new technologies making it profitable to mine poorer-grade ores and remine millions of tons of mine waste.²⁰ In the 1980s, most of Johannesburg’s mines were decommissioned and cleared. Mining companies established treatment plants to remine tailings and developed real estate for malls, warehouses, and factories atop remediated mining lands.²¹ Declining reserves, fluctuating markets, and political tumult created the perfect storm for closing the mines and ending the migrant labor system. In 1973, De Beers abolished the migrant labor system in Kimberley’s diamond fields, a bellwether for the gold mines.²² In the early 1970s migrants accounted for 80 percent of the total labor force.²³ However, the reliance on migrant labor became untenable in light of anticolonial resistance throughout southern Africa and unprecedented labor unrest on the mines.²⁴ The mines shifted to domestic labor but still recruited — albeit less — from Zimbabwe, Swaziland, and Lesotho.²⁵

Over the course of a century, the mines diverted a large proportion of able-bodied men from agricultural production, leading to

regional dependence on mine wages.²⁶ The retrenchments resulted in an immediate loss of wages for communities and newly independent governments while creating an unemployed class of men. The Bench Marks Foundation uses the term “survival miners” in place of “zama zama” or “illegal miners.” Today 70 percent of arrested survival miners are undocumented migrants from countries that served as labor reserves for South Africa’s mines.²⁷ Survival mining “is driven by economic exclusion and neglect of former mine workers and of the former labour-sending areas.”²⁸ Former miners, many of whom did not receive severance or pensions, adapt their skills to rework abandoned gold mines.²⁹ Additionally, the state failed to properly close mines or invest in a post-mining economy. As activist David Van Wyk explained, “Very often when mines get abandoned, the workers also get abandoned. And then they become illegal, undocumented immigrants when in fact they used to be mineworkers.”³⁰ Accordingly, the *zama zama* from Mozambique, Lesotho, and Zimbabwe is a descendant of the twentieth-century migrant mineworker.

Mining did not end after demolition. Mine closures also left behind a subterranean city of decommissioned tunnels and partially sealed shafts. There are over 6,000 “derelict and ownerless” mines in the country.³¹ In the documentary *We Are Zama Zama* (2021) directed by anthropologist Rosalind Morris, viewers follow three Zimbabwean men, outfitted with cameras, above and below ground at what appears to be the West Rand. They descend on pulleys, carrying chisels, picks, pans, food, and water on their backs, for multiple days or weeks. With only headlamps illuminating their way, they search for arteries of gold and chip away at the rockface, careful to not disturb the roof or pillars. As tunnel collapses can be deadly, they do not know if or when they will resurface, but as one miner optimistically says, “you are sure you can come up with something” to send to their families. In a memorable scene in a dark tunnel, the miners light a candle and offer beer to their ancestors. Addressing their forebears, “We are putting this here for you here. We are begging you to give us luck. We [are] asking for you to show us the way. We want to work. We are asking for gold, until we find it...We are asking for all the paths to open up, oh great ones.” The subterranean city is haunted by deceased mineworkers from the colonial to recent past. As syndicates control access to holes and markets, life underground is violent.³² It is easy to romanticize “artisanal” mining but as Morris emphasizes, these practices are a “simulacrum of preindustrial life” not continuous with preindustrial practices but historically rooted in industrial capitalism and deindustrialization.³³ Survival miners return because of colonial dependencies linking southern Africa to the Rand calcified over generations.

Relational histories of colonial extractivism

Following the South African War (1899–1902) between the Boer Republics and British Colonies, the British won control of the Transvaal to secure the mines but faced a shortage of Black labor. The war of “whites against whites” provided Indigenous Africans with reprieve to regain some independence from mine wages.³⁴ The mines could not recruit sufficient Black labor from South African colonies and German, Portuguese, and British territories. Employing unskilled white labor was deemed too costly, and white and Black men working as equals would undermine South Africa as “a white man’s home.”³⁵ To resume production, British administrators and mining magnates considered bringing Chinese labor on three-year contracts, which required a larger outlay in transoceanic recruitment and transport than African labor and could stoke anti-Asian sentiment. Despite the high cost and political risk, Chinese labor presented a ready-made labor reserve that could expediently revive an industry in straits. Crucially, as the Chamber envisioned, “the introduction of Chinese labourers was, from the outset, regarded as of an *experimental* and not of an unlimited or permanent character.”³⁶ The mines could also draw from decades of British expertise in recruiting Chinese laborers for the British West Indies after the abolition of slavery and the neighboring colony Natal.³⁷

From the start, Chamber of Mines and East Rand Proprietary Mines Chairman George Farrar was a proponent of Chinese labor. To win support on the Rand, Farrar vowed to not repeat the mistakes of the Natal. After completing their indenture, Indian laborers were permitted to remain and purchase Crown Land but were outcompeting whites, resulting in a groundswell of anti-Asian sentiment beyond Natal. Repatriation was critical to prevent Chinese settlement.³⁸ “It is quite possible to bring in Asiatic unskilled labourers properly indentured,” Farrar stated, “and at the end of their contract to return them or repatriate them to the country whence they came, *not letting a single man remain behind.*”³⁹ Under Farrar, the Chamber commissioned Harry Ross Skinner to investigate the feasibility of employing Chinese, Japanese, and Korean labor. Skinner traveled to California, British Colombia, Hong Kong, Singapore, Japan, and China to meet with experts in the global Coolie trade. In the final report, Skinner recommended that Chinese laborers be confined to the mines to prevent anti-Chinese backlash as it had fomented in California: “If the Chinese are introduced to these fields as unskilled mine labourers, under the proposed indenture, and kept strictly to their respective compounds and mine areas, except with special pass, they will be found to be no more objectionable neighbours to the towns and villages than the Kaffirs, after the European population have had some little time to get accustomed to them.”⁴⁰ In 1904, after vigorous negotiations between the Chamber,

British, and Chinese governments, Parliament passed the Labour Importation Ordinance. From 1904 to 1907, 34 steamships carrying 63,695 men departed northern China for South Africa. In Durban, laborers quarantined at Jacob's Camp, formerly a British concentration camp, before journeying to the Rand.⁴¹

Black and Chinese labor constituted opposing laboring populations, categorically separate but aggregated as "coloured labour" for the expanding industry.⁴² During the embryonic stage of the migrant labor system, Chinese labor doubled as a stopgap and force to compel Black labor. Senior personnel of Eckstein & Co. said of Cape laborers: "They see now that there is a danger of there not being sufficient work for them, or at least that we are not going to 'kow-tow' to them any longer to the extent that has previously been the case; that we have freed ourselves to a very large extent from the necessity of having them in the large numbers given in our official records, by importing Chinese coolies to fill up the gaps."⁴³ On double-ledger accounts, *Coolie* and *Native* were entered into a calculus of profit and loss and compared as units of labor power: Wages, food, and compound expenses were tabulated against underground output to determine the "comparative cost of drilling by Chinese and Native labour" and "total cost per inch."⁴⁴ More "efficient" Chinese labor was directed to the most strategically productive jobs underground; African workers filled lower-wage jobs on the surface and supplemented Chinese labor underground.⁴⁵

African and Chinese laborers constituted distinct surplus populations to be pitted against one another. Interactions between them were minimized with separate compounds, work teams, and police. In an initial report, Skinner wrote: "Chinese should be kept on mines by themselves only because Kaffirs might molest Chinese not vice versa. Individual mines will have to be manned by white skilled and kaffir unskilled, or white skilled and Chinese unskilled. No mixing of Kaffir + Chinese should be permitted."⁴⁶ Occasionally, the mines deployed African mine police to quell protest and catch Chinese deserters.⁴⁷ But doing so could result in an internecine war "between the two races of labourers," leading to the conclusion "the responsible officials on the mines will do everything in their power to prevent the Kaffir and Chinese from coming into collision."⁴⁸ Other times, Chinese and African workers confronted white managers together, signaling "a danger of mixture of the coolie and kaffir race."⁴⁹ Mine managers sought to protect white men through racial and spatial tactics: "In every stope the Chinamen and the Kaffirs should be placed alternately, so that if the former did turn round the white miners the Kaffirs would come to the assistance... the Kaffir would *naturally* come to the protection of the white man."⁵⁰ Above and below ground, mine managers maintained a delicate equilibrium between fomenting division and inciting hostility by staging separation and proximity.

Systems for exerting control, fostering life, and managing mortalities were critical to maximizing labor power for extraction. From the compound to cemetery, Black and Chinese labor were racially differentiated and managed as laboring populations with purportedly distinct “natural” traits, vices, dispositions, capacities, cultural habits, and physical requirements owing to race and geography. African and Chinese mineworkers visited the same “Native” or “Coloured” hospitals, but Chinese were treated by Chinese doctors. Their compounds were fitted with different beds and cooking and bathing facilities. They were given different clothes and food, locally grown maize or “mealie meals” for Africans and imported rice for Chinese. The compound was the enclosure where workers ate and rested, doubling as a carceral space and biopolitical instrument of vital importance. Before Chinese arrived, malnourishment and overcrowding led to pneumonia, tuberculosis, and illness among African mineworkers. The high mortalities worsened the problem of “Native desertion” from the mines. Mine managers used the euphemism of “Native wastage” to refer to the loss of outlay and costs for recruiting and maintaining laborers over the contract period. To reduce “wastage,” the mines employed doctors, planners, and engineers to improve sanitation, diet, housing, and medical care.⁵¹ The calculus of wastage and outlay, whether regarding Native or Chinese labor, weighed the costs of ensuring the reproduction of productive labor against inches of ore drilled and tons of gold mined. Experimental disciplinary regimes and biopolitical interventions to control and optimize Black and Chinese labor built on each other. The Ordinance stipulated that Chinese would be housed in securitized compounds to restrict passage into town. Prior to Chinese arrivals, a delegation from the Rand visited De Beers’ compounds in Kimberley, a maximally securitized enclosure to prevent the theft of diamonds, to design the Chinese compounds as barracks, densely packed with just enough “cubic feet of air per boy.” Chinese workers were compounded in fortresses amid desolate terrain, such as at Durban Roodepoort Deep on the West Rand (fig. 2).

The reimagination of the compound impacted Black labor. As V.L. Allen writes, “The mine owners came to realize that the pattern of control which prevented the Chinese labourers from absconding also made it difficult for the African mineworkers to break their contracts... the compounds gave mine managers a physical context in which they could impose a strict, 24-hour routine over the behavior of the inmates.”⁵² “From then on,” Allen writes, “from the moment that Africans were accosted by runners in their kraals right through until they had completed their contracts, their movements were monitored and regulated in every aspect by the mechanisms of control devised by mine managements.”⁵³ Chinese labor, as Mae Ngai similarly observes, “promised a measure of control and coercion that had been, to date,

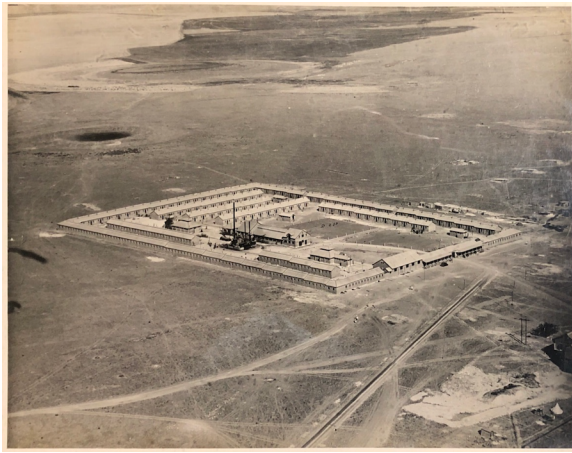


Figure 2. Aerial view of Durban Roodepoort Deep. Photograph courtesy of Barlow World Rand Mines Archive, University of the Witwatersrand, South Africa.

impossible to impose directly on African workers."⁵⁴ Mines became prisons.

Despite the burgeoning system of fingerprinting, fences, night watchmen, curfews, and rollcall attendance, Chinese still deserted. For months, a group of forty to sixty Chinese laborers lived in an unused shaft on the West Rand.⁵⁵ Quite plausibly, some fled to Lourenço Marques and joined the budding Chinese population.⁵⁶ Ultimately, Chinese desertion precipitated the end of the labor experiment. On the Rand, white farmers took up arms against Chinese who wandered onto farms. In the metropole, concerns of "Chinese slavery" divided Parliament during the 1907 election and the Ordinance was not renewed. The last ship of laborers arrived in 1907, and all left in 1910. The recruitment of African labor became urgent considering the looming end of Chinese labor. In the intermittent years, the WNLA geographically expanded its recruitment operations. By 1909, the mines had accomplished a complete "replacement of Chinese by Native Labourers." The entirety of the "wastage" of Chinese laborers had been replaced, and the mines reported an increase in laborers from diversified locations. As Chinese left, employment records began referring to the expiration of Chinese laborers' contracts as "wastage."⁵⁷ In bimonthly employment records, Chinese workers were accounted for on a standalone line. As the last workers were set to depart, Chinese were absorbed into "Coloured labor," and then altogether disappeared.⁵⁸ As I leafed through the reports, the fadeout then sudden absence of Chinese mineworkers felt like a loss.

Although it lasted only six years, Chinese indenture was not an aberrant or discrete episode in the history of Black labor for the mines. Most immediately, the importation of Chinese labor bought the mines time to restore productivity, and in the long term, develop the embryonic scheme of taxation, land theft, and coercion that in time became the migrant labor system. When Chinese labor was becoming increasingly unpopular, the Native Labour Committee issued its first reports on the roles of the WNLA, government, and mines in labor recruitment.⁵⁹ While the WNLA was taking form, a special Chinese division of the WNLA was working out the structure of recruitment and wages in parallel. A Portuguese writer observed the interconnections between labor regimes: "The recruiting of Chinese appeared to the 'Native keepers' to be another branch of the same industry none the less profitable."⁶⁰

African and Chinese populations were further intertwined insofar the control of one shaped the other. The experimental nature of Chinese indenture was key; the short-term experiment piloted long-term strategies. Viewing histories of racial separation in a palimpsestic framework shows "how racialized thinking informs the multiple and manifold histories and presents of spatial segregation."⁶¹ More broadly, Chinese labor connected disparate projects of land, labor, and citizenship for nation-state formation. In 1910, as the last steamship departed, the Transvaal, Natal, Cape, and Orange River colonies became the Union of South Africa, unifying British and Afrikaners in a common project of white supremacy, settler colonialism, and capitalism. In 1911, the importation of Asian labor was abolished across the Union. Shortly thereafter, the Natives' Land Act of 1913 forced the Black majority onto a sliver of land to compel wage labor. Linking the *coolie* and *zama zama*, the end of Chinese indenture ushered in the migrant labor system until the 1980s. Today on the West Rand, the *zama zama* who digs in the vicinity of Chinese graves illustrates the enduring entanglements of Chinese indentured and Black migrant labor.

The afterlife of death

The conditions in the compounds and mines exacted an enormous human cost in the maiming and killing of mineworkers. Approximately 3,200 of 64,000 Chinese laborers died from accident, illness, murder, suicide, and opium overdose.⁶² In the same period, the mortality rate of African laborers was more than double that of Chinese. African workers from coastal climates suffered high rates of pneumonia resulting from dramatic changes in temperature and poor conditions of transport in ships, including repurposed slave ships.⁶³ From 1890 to 1960, a total of 36,000 African workers died in the mines.⁶⁴ These figures fail to account for deaths outside the mines and the debilitation

of labor sending communities. For instance, in 1906 Portuguese authorities expressed concern over laborers returning with silicosis and dying at home, leaving its population "debilitated by the disease" and the southern territory "depopulated" after ten years of WNLA recruitment.⁶⁵

Mining capital treated Chinese and African laborers as similarly expendable in life and death. What to do with the remains of the dead preoccupied mine managers. In the late 1890s, African mineworkers were transported in open carts through Johannesburg's streets for paupers' burials in mine and segregated municipal cemeteries.⁶⁶ Following complaints by white residents, the Chamber ordered individual mines to bury workers "on the most isolated portion of the [mine] property."⁶⁷ In choosing burial grounds, mines selected isolated plots that would not interfere with surface or underground operations.⁶⁸ When Chinese arrived, an Eckstein & Co. memo responds to the creation of "a regular system for internment of natives on mining areas — it is presumed that this also applies to Chinese." At its subsidiary Durban Roodepoort Deep on the West Rand, "natives are buried in special plots set aside for the purpose. Chinese in plots adjoining."⁶⁹ This detail explicates the segregation of African and Chinese in life and death, separate but contiguous.

While repatriating Chinese laborers was critical to gaining white support, repatriating the deceased was a necessary condition for the Chinese government. When the mines were assessing the feasibility of Chinese labor, Eugenio Bianchini, who recruited Northern Chinese for Manchuria and became a Chinese "controller" on the Rand, supplied details:

The Celestials have the deepest veneration for their dead. They are fully convinced that the soul of the departed one wanders for long years about the house where he lived; hence the belief that the dead person is happy when festivities are celebrated in his honour, and with this goes the other belief that a Chinaman must be buried where he was born. If he dies away from his native land, his corpse must be conveyed back to his home.

Bianchini emphasized, "In handling Chinese therefore, one must be prepared to afford the necessary facilities for sending back to China the bodies of those who happen to die in the Goldfields."⁷⁰ Similarly, leading up to the Ordinance, Skinner wrote: "In recruiting it will be of great assistance to be able to give the assurance that if any Coolie dies in South Africa, and the return of his bones to China is desired, the wishes of his relatives will be duly executed." To keep costs low, "The bones could be sent back at stated times in returning ships practically free of cost."⁷¹ Steamships carried laborers and cargo: rice on the

way in, bones on the way back. The mines even considered embalming Chinese to return but it was too costly.⁷² Repatriating deceased Chinese was possible because "freightizing the dead" was already established practice. Beginning in California in the 1860s, Cantonese organizations specialized in the recovery of bones from goldfields and mass graves for reburial in China.⁷³ For the mines, repatriation of the dead was a contractual obligation and recruitment tactic. Farrar lamented to mining magnates, "Look at the organization necessary to bring in even 50,000 Asiatics to these fields. For instance, if we bring in Chinese, not only do we have to repatriate them, but also in the case of death, send their dead bodies back to China. (Laughter.) The organisation necessary for carrying out such an undertaking almost frightens me, and makes me sometimes wish that I had not such heavy responsibilities to my shareholders."⁷⁴

Repatriating Chinese remains was only burdensome to shareholders because the same was not done for Africans. Denied a dignified burial and return home in the afterlife, African workers were expediently buried on the Rand. In a 1907 report on "Native Grievances," J.J. Yates identifies social alienation and fear of an undignified death as a hindrance to recruitment:

There is a complaint that when the native gets to Johannesburg he is shifted about from mine to mine, loses all traces of his friends, and finds himself a desolate and discontented waif in strange company. He adds too that should accident befall him his relatives never know his fate...This is a small matter I admit but it is curious how much importance the native attaches to it. In case of death of a native whilst in the employ of the mines his friends should be notified and any money due to the deceased should be remitted...for payment to his heirs.⁷⁵

Mines were principally concerned with the loss of labor and payment of owed wages, not the social importance of sending the deceased home. Any social comforts were the responsibility of friends. While on foreign land, African workers dug graves for their peoples and positioned the bodies to face home. Throughout the early twentieth century, workers formed burial societies based in common ancestral land, ethnicity, and language to ensure a dignified burial.⁷⁶ For African and Chinese laborers, the mine morgue and mass grave were sites of dispossession of the dead.⁷⁷ In Basotho, Ndebele, Shangaan, and Shona cosmologies, unsettled ancestral spirits would bring misfortune to the living.⁷⁸ Decomposition in public space was the "ultimate desecration of the dead body."⁷⁹ Likewise, Chinese feared dissection by white doctors and the harvesting of eyes, so doctors left the deceased's eyes open to the sky.⁸⁰

When possible, Chinese workers made sure their countrymen were properly returned. In a rare, documented instance, on the eve of departure, a hundred Chinese on the West Rand marched to the cemetery to exhume the bodies of 18 of 72 Chinese workers, who were identified as friends and relatives, to cremate and return their ashes to northern China. The remaining bodies, buried for over one year, were deemed unsafe to exhume.⁸¹ As the *Transvaal Leader* reported, the remains were “carried with great care to the compound, pending [their] final removal to China.” With great curiosity of “Oriental customs,” the author explained that Chinese burn objects to enjoy in the afterlife. Chinese mineworkers were buried with their belongings: “The coffins burnt on this occasion contained pipes, cups, and the whole of the clothing and bedclothes of the deceased.”⁸² Boots and clothing were not necessarily for the afterlife; they were to be repaid before repatriation, a remaining debt in the mine’s Cash Book, and often adorned corpses.⁸³ In this ritual, Chinese workers ensured their kin returned home to enjoy prosperity in the afterlife. But unknown numbers of Chinese remain buried on the Rand. Official mine cemeteries were often unmarked and remain invisible.⁸⁴ The unsettled spirits of African and Chinese mineworkers—the legacies of the migrant labor system and indenture—revisit old shafts, tunnels, cemeteries, and unmarked graves today.

Through geological erosion and human activity, the remains of the dead have pushed their way to the surface to demand reckoning. In 1951, during construction on the East Rand, the skeletal remains of thirty-six Chinese mineworkers were discovered in an unmarked cemetery.⁸⁵ Following the closure of mines in the 1980s, the redevelopment of mining land has led to the discovery of previously unknown cemeteries. In 1992 the Rand Leases Mine cemetery was cleared to make room for a shopping center. The bodies of Chinese, most likely from Durban Roodepoort Deep, were reinterred in a mass grave in Roodepoort Cemetery to the south. Over three days, a bulldozer excavated the remains. A photographer documented the excavation and grave sites (fig. 3). Reminiscent of the industrial machinery used for sinking shafts, a front-end loader breaks up the compacted soil. Inside the graves are hand tools, glass bottles, shoes, and personal items consistent with Chinese burials, but their details are weathered. Many of the graves were numbered but the register was lost when transferring records from Durban Roodepoort Deep to its successor Rand Leases Mine and the town.⁸⁶ Each grave is an archive: a repository of human remains and personal possessions that tell an incomplete story about a life lost in the colonial archive. Objects “‘hold’ the past differently” from documents.⁸⁷ Corpses even more so. As Katherine Verdery explains, “Bodies have the advantage of concreteness that nonetheless



Figure 3. Chinese graves and found objects on the West Rand. Photographs courtesy of the Roodepoort Museum.

transcends time, making past immediately present.” In the ground, the history of Chinese indenture is “indisputably *there*.”⁸⁸

Although Chinese laborers played a critical role in restoring gold production, in the early 1990s on the eve of democracy, the remains of Chinese migrants were pushed to the city’s hinterlands to clear the ground for a shopping mall, their reburial deemed unworthy of memorialization. The silence is noteworthy as the identification of graves and reburial of disappeared freedom fighters has been important to transitional justice in post-apartheid South Africa.⁸⁹ Also resonant, as Sujin Eom writes of the relocation of Chinese graves in South Korea in the 2000s, “biological death could not release Chinese migrants — who held no political clout in a post-colonial polity — from state violence.”⁹⁰ Where information about Chinese graves is sparse, I draw on images of Chinese workers at Durban Roodepoort Deep to piece together a story about the dead. In figure 4, a group of Chinese men — with expressions of weariness, contentment, and defiance — pose alongside white managers. Returning to the aerial photograph of Durban Roodepoort Deep (fig. 2), one wonders how many African and Chinese graves lie beneath the surface in the surrounds.

Against forgetting, the vestiges of past violence nevertheless push upward. In 2010, human skeletons were found near the former Crown Mines on the Central Rand following the removal and reining of a tailings dump. Beneath the dump were 650 burial pits, likely from the



Figure 4. Chinese laborers at Durban Roodepoort Deep. Photograph courtesy of the Humphreys Collection, Historical Papers Research Archive, University of the Witwatersrand, South Africa.

Crown Mines “Native” cemetery from the 1930s. The cemetery was bounded on three sides by a fence and on the fourth by a dump; as the dump grew, it covered the graves. Most of the deceased were buried in blankets or canvas sheets and faced east or west. Over time, the weight of tailings from above and acidic water from below distorted the remains beyond identification.⁹¹ The proximity of cemeteries to mine dumps was deliberate. Toxic dumps were already on the periphery of mining operations. Covering graves with mine waste was also a fix for high mortality rates. For instance, during the 1896 typhoid epidemic in Kimberley, a dump covered a mass grave as a means of containment.⁹² As archaeologists Amanda Esterhuysen, Jasper Knight, and Tarquin Keartland write of Johannesburg’s “unseen dead,” Black workers buried in unmarked graves were “little more than a type of waste to be disposed of along with the rest of the detritus of industry.”⁹³ As Gabrielle Hecht underscores, “the profitability of South Africa’s vast mining system has depended on treating African bodies as waste dumps for well over a century.”⁹⁴ In life and death, Chinese and African laborers were entered into a brutal calculus of maximizing the extraction of ore with maximum efficiency and minimal waste. The violence of “waste” is multiple: African and Chinese workers, their deaths calculated as

“wastage,” debilitated or wasted away from underground work and compound life, only to be buried under the waste produced from their labor. Mining produced waste rock and wasted life, both to be disposed of together. As a racial and spatial signifier, “waste” renders bodies and environments pollutable. As Diné scholar Tracie Brynne Voyles theorizes, “Wastelanding reifies – it makes real, material, lived – what might otherwise be only discursive.”⁹⁵ The disposability of racialized surplus populations is not a metaphor.

Ethereal remains

After the last steamship departed, there was little left of the history of Chinese indenture on the Rand. The arrival of an all-male workforce did not leave any descendants to carry family histories or rebury the dead. Some artifacts and postcards exist in private collections, museums, and archives. Johannesburg is full of phantom spaces where Chinese have left their mark.⁹⁶ In 1975, the last compound built for Chinese mineworkers was demolished. *The Star* shows a bunk room of a compound that housed 1,200 Chinese in Germiston on the East Rand (fig. 5). Each room contained 40 concrete bunks, each measuring only 61 cm wide and 2.1 m long, in rows of 10, with only 90 cm between levels.⁹⁷ Designed to suit “the sleeping requirements of a Celestial,” the tight spaces offered little privacy or comfort.⁹⁸ After working in cramped, poorly ventilated stopes, workers crawled into the bunk to sleep. *The Star* solemnly reflected: “In recent years when excavations have been done around the mines in Germiston, gold coins and other treasures belonging to the coolie miners were discovered. The risk of leaving money or valuables in communal bunk rooms led many Chinese to bury these riches for safety. Sadly, many coolies never returned for their treasure.”⁹⁹ As Chinese were often buried with their belongings, the claustrophobic bunks resemble coffins. The row of beds additionally evokes a “shelving of labour.”¹⁰⁰

The bunk doubles as morgue and archive, each a space of death. Hartman observes that the archive of slavery is “a death sentence, a tomb, a display of the violated body, an inventory of property.”¹⁰¹ In the mine Cash Book, deaths were recorded under “deceased Native wages” and “Chinese remittances” and identified only by government passport number and mine. One report describes: “Each man’s ledger shows a complete record of his doings and of his financial position. A dead man’s finger-prints are taken, compared with the file and his account then closed, any balance being remitted to his relatives in China.”¹⁰² In a second act of erasure, nameless workers were buried in common graves. Morris writes of the Cash Book, “Death is counted there but never fully accounted for. And where it is only



Figure 5. Bunk beds in Chinese compounds. Photograph courtesy of the Pearson Collection, Historical Papers Research Archive, University of the Witwatersrand, South Africa.

counted, where no name marks the spot of a vanishing, the task of reading becomes a pursuit of what remains, not a forensics of the remains, but an orphic search for some echo wherein a voice might have sounded.”¹⁰³ As Ariella Azoulay shows, photographic images and material artifacts contain clues of what was and could still be.¹⁰⁴ Returning to the photograph, the negative space of the empty bunks conjures what is not immediately present: plots to desert, dreams of a freer life, and intimate exchanges of comradeship, conviviality, and commiseration. Following Avery Gordon, reading this image for presence and absence is to “admit the ghost—that special instance of the merging of the visible and the invisible, the dead and the living, the past and the present—into the making of worldly relations and into the making of our accounts of the world.”¹⁰⁵

After mine closures, demolition, and deindustrialization, the City of Gold’s landscapes are replete with loss and forgetting. Where there is disavowal there is haunting. In the topography of the Rand, the past presses up to the present, a vertical force countering the gravitational pull of forgetting. Denied proper burial and memorialization, the *coolie* returns to new capitalist developments where mines, cemeteries, and compounds stood and awaits discovery. The specter of Chinese indenture lingers near derelict shafts where survival miners make their descent into an invisible graveyard. Today the mine is still a grave. Southern African migrants often refer to mine shafts with the isiS-hona (*mgoti*) or isiZulu (*umgodi*) word for “hole,” which also describes graves.¹⁰⁶ In 2023, an underground explosion of methane gas killed 31 miners in Virginia, a mining town in the Free State. Most were from Matšekheng, a labor-sending area in Lesotho, and were working in the old No. 5 shaft owned by Harmony Gold Mines. The only two survivors brought three bodies to the surface. The remaining bodies, trapped a kilometer below ground, were awaiting retrieval and repatriation through an agreement between the South African and Lesotho governments. Their mothers and widows wait for the return of the

miners' bodies for burial. One widow said, "The only thing that will make me better is if I see his body or at least even his bone, if I'm told that this is his bone maybe I will find closure. As long as he is there in that hole, I will never make sense of his death."¹⁰⁷

From Virginia to Roodepoort, there are countless bodies, African and Chinese, awaiting excavation, identification, and repatriation. Lost histories cannot be recovered but recovering bodies is critical for mourning. As Barbara Sostaita writes of migrant deaths in the Sonoran Desert, the dead refuse closure and defy temporal delineation: "The dead behave in ways that reanimate and enliven the past, which never really passes."¹⁰⁸ Mourners undertake what Christina Sharpe calls wake work, a process of tending to the dead and "encountering a past that is not past."¹⁰⁹ These recent deaths "add to the litany of deaths that the migrant labor system and the mining industry in South Africa have suffered historically and continue to suffer. They continue even when mining in South Africa is literally and figuratively in its death throes."¹¹⁰ In early 2025, northwest of Johannesburg, hundreds of informal miners were trapped underground in the disused mines in Stilfontein after the South African government removed the pulleys to "smoke them out." Over 109 miners died from starvation and dehydration.¹¹¹ Stilfontein is a tragic reminder of ongoing state violence against migrant miners after industrial extraction has run its course.

The West Rand's abandoned shafts, tunnels, cemeteries, and graves form a subterranean archive of buried traces and ephemeral evidence to apprehend entangled histories of indenture, migrant labor, and extractivism. Their afterlives manifest as specters, incoherences, and inscriptions at the limits of empirical reality.¹¹² I traced two disappearing figures: the *zama zama* who disappears underground and the *coolie* who disappears from the archive and collective memory. The subterranean brings into focus a dialectics of surface and underground, material and metaphor, horizontal and vertical. Long histories of extraction sediment in mining landscapes, urging new modes of relational analysis and conceptualizing histories of the present. To borrow Duncan Yoon's phrasing, multiple histories and space-times accrete and erode in the alluvium of history.¹¹³ In this alluvium, histories of unfreedom, dispossession, and violence sediment, as do their relations. On the Rand, racial capitalist extraction was predicated on the triangulation of white, African, and Asian relations forged under white supremacy, settler colonialism, and imperialism. Black and Chinese labor were critical to exploiting South Africa's mineral riches and making it a country for white men—and disposable in equal measure. Beyond visibility and knowability, the graves of African and Chinese offer unsettling

reminders of the migrant labor system and indenture. Black and Chinese labor were part of a shared extractivist regime and biopolitical project of optimizing productive output and minimizing “wastage.” Their histories remain interconnected in how and *where* they unfold, eerily close but separate, recalling “Chinese in plots adjoining.” The Rand is all but one node in a world continually transformed by race, colonialism, and capitalist extraction. Beyond South Africa, the discovery of graves triggers painful reckonings with the past akin to the discovery of an African burial site in lower Manhattan in 1991 and 751 graves near former Indigenous boarding schools in Canada.¹¹⁴ Like the Rand, the Sonoran Desert, Mediterranean Ocean, and Gaza Strip are mass cemeteries where entire families, communities, and populations are lost to the terrain, sea, and rubble. These unearthings remind us that histories of slavery, colonialism, and genocide unfold, quite literally, in the ground beneath us.

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