

FIRST-AID IN SOUTH AFRICAN GOLD MINES

Examining Laborers' Right to Bodily
Health through the Lens of First Aid
Practices, 1920-1940

Introduction

In May 1932, on the 51st level of the Robinson Deep gold mine in South Africa, a cascade of rocks trapped sixteen Black miners as they worked in the unbearably hot temperatures of tunnels thousands of feet underground.¹ Despite their fellow miners working to save them from the stones that pinned them down, only seven out of the sixteen survived the injuries they received during the accident, and only one was sufficiently unscathed to report back to work the following morning.² This accident was not unusual in a Witwatersrand gold mine, where 534 more Black laborers lost their lives in accidents — compared to 33 casualties from the white labor force — that year alone.³ Even excluding disasters like the one described above, the conditions of the South African gold mines were all too conducive to injury. After the end of a shift, it was common to see laborers lining up outside of the mining hospitals to be treated for the day's fix of “crushed fingers, cuts and gashes” that had been largely disregarded as they worked alongside their assigned cohort, known as their ‘gang.’⁴

The need for first aid in the gold mines was clear, and “Ikusiza Aba Limele,” the first colonial first aid guide created for local mining laborers, was born out of “a persistent demand [...] for an elementary First-Aid handbook which could be understood by the

1 Adele Lezard, *The Great Gold Reef: The Romantic History of the Rand Goldfields* (Andesite Press, 1937).

2 Lezard, *The Great Gold Reef*, 289.

3 Reports of the Executive Committee, Gold Producers" (Transvaal and Orange Free State Chamber of Mines, 1934), ROCK ANNEX, 164.

4 Lezard, *The Great Gold Reef*, 167.

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uneducated Bantu.”⁵ This analysis will investigate the content and creation of “Ikusiza Aba Limele” within the context of the greater movement of “native First-Aid” in South Africa’s gold mines from 1920, after the establishment of the Transvaal Chamber of Mines Accident Prevention Committee, a group created by the South African Chamber of Mines to reduce the number of accidents occurring in their mines during a period of economic instability. The analysis will end at 1940, 10 years after the publication of the aforementioned first aid guide.⁶ It will provide insight into the health rights of Black miners in pre-apartheid South Africa from the perspectives of European mining corporations. As gold was the primary export in South Africa during this time period, it is important to consider the conditions of Black laborers that accompanied this rapid economic growth. While gold mines grew rapidly in South Africa during the 1930s, conditions within the mines deteriorated, causing an increase in the incidence of accidents involving Black miners.⁷ Instead of prompting improved mining conditions, this increase in accidents gave rise to a documented need to “give the best possible attention to the men who are incapacitated.” The British mining corporations focused on “the rapid growth of the native First- Aid movement” to maintain the productivity of injured miners with minimal financial costs.⁸ Through an in-depth analysis of “Ikusiza Aba Limele,” alongside an examination of official colonial records and mining reports, this research uses the lens of first aid practices to provide valuable insight into the relationship between colonial economic priorities and perceived health rights of Black laborers in British South Africa between 1920 and 1940.

Through an analysis of the practice of first aid in South African gold mines, I will argue that the right to bodily health of Black laborers was largely understood by white officials as a means to ensure the continued economic prosperity of pre-apartheid South Africa through the maintenance of an adequate labor supply. The first section will examine the historical context of South African gold mines — with a particular focus on the economic state of the gold mines between 1920 and 1940 — to provide insight into the circumstances around which British stakeholders began incentivizing first aid in the mines. Using this baseline understanding of the state of the gold industry, the second section will explore the rationale for European mining corporations to create first aid pro-

5 H. T. H. Butt, “Ikusiza Aba Limele: First Aid Illustrated” (The Prevention of Accidents Committee of The Rand Mutual Assurance Co

6 Butt, “Ikusiza Aba Limele: First Aid Illustrated.”

7 David Yudelman and Alan Jeeves, “New Labour Frontiers for Old: Black Migrants to the South African Gold Mines, 1920-85,” *Journal of Southern African Studies* 13, no. 1 (1986): 101-24, <http://www.jstor.org/stable/2636678>; Francis Wilson, *Labour in the South African Gold Mines: 1911 - 1969*, 1. paperback ed, African Studies Series 6 (Cambridge: Cambridge University Press, 2011).

8 The Mining Magazine: Index to Volume XV, vol. XV (Salisbury House, London: The Mining Publications LTD, 1916), <https://play.google.com/books/reader?id=loQjAQAIAAJ&hl=en&pg=GBS.PP7>; Butt, “Ikusiza Aba Limele: First Aid Illustrated.”

grams specific to Black laborers. The third section will place a critical lens on “Ikusiza Aby Limele” to understand how mining officials understood the roles and responsibilities in the provision of first aid in these settings, particularly along racial lines of Black and white workers. Lastly, the fourth section will strive to answer the following question: What can these insights tell us about the value of Black labor? By focusing on the perspectives provided by written documentation largely created by colonial institutions, I seek to provide insight into the manner in which white officials understood and rationalized the policies that impacted the lived experiences and bodily safety of laborers.

In the creation of a first aid guide explicitly targeted at local Black miners to address their physical injuries, the European gold mining corporations appear to acknowledge the miners’ right to bodily safety. However, the underlying rationale behind this apparent acknowledgement must be interrogated. A mere year after the publishing of the first edition of this first aid guide, a report on “medical service for native areas” noted that “apart from any question of humanitarianism or of our duty to a subordinate race, there is the obvious matter of self-interest. [British] mines and other industries are making increasing demands for cheap labour.”⁹ Therefore, the creation and implementation of a first aid guide can be seen as a limited investment made by the mining industry that it would not have considered “unless they [saw] that it [was] in their own self-interest to do so.”¹⁰ As one South African newspaper put it, “Safety First indeed. Profits and dividends first, last, and all the time.”¹¹ Indeed, the right to bodily safety of Black miners as perceived by white officials may have been limited to the bare minimum necessary for economic productivity.

Gold Mining in South Africa

“Gold on Langlaagte? You must be mad. There is no gold here,” Mrs. Oosthuizen is said to have declared about the possibility of finding gold on her farm in 1886.¹² Little did she know, a couple weeks later she would be selling her farm, and within months, the white mining community at Langlaagte, her former estate, would grow to such proportions as to merit the creation of Johannesburg on September 1886.¹³ The main gold reef discovered on her farm became the site of the Witwatersrand gold mines. With the beginnings of the city that would become Johannesburg as a backdrop, these mines became the epicenter of

9 J.W. Brebner and H.W. Dyke, “Medical Services for Native Areas,” *Journal of the Medical Association of South Africa* 5 (January 1931): 26–27; quoted in Karin A. Shapiro, “Doctors or Medical Aids—The Debate over the Training of Black Medical Personnel for the Rural Black Population in South Africa in the 1920s and 1930s,” *Journal of Southern African Studies* 13, no. Special Issue on The Political Economy of Health in Southern Africa (January 1987): 234–55.

10 Randall M. Packard, “Industrial Production, Health and Disease in Sub-Saharan Africa,” *Social Science & Medicine* 28, no. 5 (January 1989): 475–96, [https://doi.org/10.1016/0277-9536\(89\)90102-0](https://doi.org/10.1016/0277-9536(89)90102-0).

11 “Cart Before the Horse,” *The International*, February 5, 1924, sec. International, 12CF31444A024D38, World Newspaper Archive.

12 Lezard, *The Great Gold Reef*, 45.

13 Lezard, *The Great Gold Reef*, 54.

the gold industry in South Africa. For 60 years after the discovery of the reef, including the time period under examination in this paper, the vast majority of South Africa's gold exports came from the area of the Witwatersrand.¹⁴

The history of gold mining in South Africa begins 30 years prior to this find. An 1853 agreement allowing gold prospecting in South Africa between government authorities and Mr. P. J. Marais outlines that when the latter discovers gold, "and the excavation thereof envisages profit for this country, the [government] guarantees to pay a sum of money, or the value thereof in gold ore [...], amounting to Rix-dollars 66,666-5-2, equal to £5000 sterling."¹⁵ The following clause warns that this reward will not be provided "if, however, the said Mr. P. J. Marais does not succeed in disclosing a sufficient supply of gold whereby the cost of excavation and the afore-mentioned reward could be met."¹⁶ Thereby, the first official quest for gold in South Africa began with the premise of profitability for the state engrained in its very core. The promise of gold was not enough. The extraction of said gold had to be feasible at a low enough cost to yield a substantially greater profit than the promised £5,000 reward, which is roughly equivalent to \$800,000 USD in 2018 when accounting for inflation. The stage for the gold industry was set, and its focus from the onset was on minimizing extraction costs and producing profits for stakeholders of foreign origins. The need for the economic sustainability of the mines was engrained in their very discovery.

Ultimately, it was not P. J. Marais who found the gold reef that became the Witwatersrand gold mines, but another British prospector and handyman who made the 1886 discovery on Mrs. Oosthuizen's farm.¹⁷ A mere three years later, in 1889, government authorities established the Chamber of Mines, and the gold industry in South Africa flourished. The gold boom lasted well into World War I, at which point the war effort caused a significant price hike for machinery.¹⁸ This led to a sharp rise in production costs with no accompanying increase in gold prices and, therefore, a loss of profit for the gold mines. As a result, the mines faced substantial financial challenges: by 1921, only seventeen of the thirty-one mining companies that had taken residence in the South African mines remained.¹⁹

The only ways of reversing this ill-fate were to increase the price of gold, which was out of the mining corporations' control, or decrease the costs of production. The mines turned to the latter option to address this challenge, shifting their recruitment focus to Black laborers who were paid much lower wages than white laborers.²⁰ The years following 1922 saw a shift in the demographics of the mining workforce: the white workforce at

14 Wilson, *Labour in the South African Gold Mines*; "Reports of the Executive Committee, Gold Producers" (1934), 144-145.

15 Lezard, *The Great Gold Reef*, 26.

16 Lezard, *The Great Gold Reef*, 27.

17 Lezard, *The Great Gold Reef*, 38-43.

18 Lezard, *The Great Gold Reef*, 177.

19 Lezard, *The Great Gold Reef*, 177.

20 Wilson, *Labour in the South African Gold Mines*.

Witwatersrand fell by over 3,000 and the number of Black miners employed increased by over 8,000.²¹ This contributed to marginal improvements in profit between 1920 and 1930 (from £11,458,776 in 1920 to £13,051,390 in 1930).²² It was only after South Africa abandoned the gold standard in December, 1932 that profit margins saw a steep increase to £29,367,322 in 1934.²³ Importantly, the gold that was being extracted at this time, over 50 years after the mines were first discovered, was primarily low-grade ore, rock with a low concentration of gold.²⁴ Thus, mining corporations were focused on extracting the greatest amount — rather than the highest quality — of ore to extract sufficient gold to offset the costs of the mine.

Throughout this rocky era, gold bullion remained British South Africa's biggest export, and its mines were the biggest gold exporters in the world, making up over 40% of the world's estimated annual gold production.²⁵ However, the comparative success of gold mining to that of coal or diamonds, the two other profitable industries in South Africa, did not come without a cost. In these gold mines, the overall annual accident rate was more than "twice as high as that in the coal mines, and seven times that in the diamond mines."²⁶ Indeed, in the 1930s, disasters like fires, rock-bursts, and flooding were commonplace in the gold mines in the Witwatersrand network.²⁷ Furthermore, the working conditions of the gold mines became increasingly more dangerous between 1920 and 1930, as the depletion of gold stores near the surface forced miners to venture much deeper underground to produce any substantial yield.²⁸ Individual injuries like heat strokes and crushed fingers became more significant in these hotter and more compact environments.²⁹ Rock-bursts in particular, a kind of human-induced artificial earthquake, resulted in mass casualty events like the one described above.³⁰ Over the period of 1920-1930, records indicate that 7,970 men died due to such industrial accidents, and this num-

21 "Reports of the Executive Committee, Gold Producers" (Transvaal and Orange Free State Chamber of Mines, 1930), ROCK ANNEX, 106.

22 These values were taken directly from the output reports for these two years. It is important to note that inflation rates may influence the interpretation of these numbers, although the trends will remain the same; "Reports of the Executive Committee, Gold Producers" (1930), 106.

23 "Reports of the Executive Committee, Gold Producers" (Transvaal and Orange Free State Chamber of Mines, 1920), ROCK ANNEX, 106; "Reports of the Executive Committee, Gold Producers" (1930). "Reports of the Executive Committee, Gold Producers" (1934); Lezard, *The Great Gold Reef*, 252.

24 Wilson, *Labour in the South African Gold Mines*.

25 "Reports of the Executive Committee, Gold Producers" (1920); "Reports of the Executive Committee, Gold Producers" (1930); "Reports of the Executive Committee, Gold Producers" (1934).

26 Wilson, *Labour in the South African Gold Mines*, 22.

27 Wilson, *Labour in the South African Gold Mines*, 22.

28 Lezard, *The Great Gold Reef*, 252.

29 Lezard, *The Great Gold Reef*.

30 Meifeng Cai, "Prediction and Prevention of Rockburst in Metal Mines – A Case Study of Sanshandao Gold Mine," *Journal of Rock Mechanics and Geotechnical Engineering* 8, no. 2 (April 2016): 204–11, <https://doi.org/10.1016/j.jrmge.2015.11.002>.

ber only increased through the 1930s.³¹ Thousands more suffered minor routine injuries, including ones that prevented them from returning to the mines until completing a period of recuperation.

These accidents happened alongside a “wide range of [deadly] diseases” like tuberculosis and silicosis, which were products of crowded living environments and the inhalation of dangerous dust particles within the mines. Between the impact of these diseases and the aforementioned accidents, “the health costs of gold mining during the [20th century] were extremely high.”³² However, unlike the spread of infectious diseases, which could be largely tackled by improvements in living conditions and ventilation systems, industrial accidents were intrinsically linked with the practices necessary for gold mining, which necessitated heavy machinery and damage to the infrastructural integrity of surrounding rocks. Consequently, the occupational dangers of gold mining prescribed the need for first aid measures and a focus on occupational safety. During a period in which the revenue of the mines was largely determined by the extraction costs of ore, mining authorities were forced to address these high levels of mortality and injury in the working population at the Witwatersrand gold mines.

2) *Black Labor*

The development of the South African gold industry would not have been possible without the availability of a Black labor force large enough to produce high yields of low-grade ore and cheap enough to minimize extraction costs. Indeed, Wilson and Lezard, two historians, have proposed that “without the cheap labour, the gold mining industry would have never been able to develop as it did.”³³ Thus, we must consider the sources of this cheap labor in a workforce that was strictly divided between white and Black workers. During the steep economic downturn of the mines in the early 1920s, all 160,400 of the Black laborers employed by the Witwatersrand mines were receiving a mere 38.3% of all the wages paid, whereas the 20,803 white laborers made up 61.7% of the direct labor costs.³⁴ Throughout the next twenty years, the number of white laborers in the mines decreased and the number of Black laborers increased. The proportions of all wages paid between these two groups only changed marginally due to increased demands for higher wages on the part of predominantly white labor unions.³⁵ These substantially lower costs of Black labor in the gold mines meant that the supply and physical state of Black laborers played a crucial role in the volatile economic health of the Witwatersrand mines.

As these employment demographics shifted, one South African newspaper reported that “the period of accident increase corresponds exactly to the period during which the skilled miners in thousands have been discharged and their places taken by

31 “Reports of the Executive Committee, Gold Producers” (1930), 106.

32 Packard, “Industrial Production, Health and Disease in Sub-Saharan Africa,” 477.

33 Wilson, *Labour in the South African Gold Mines*, 16.

34 “Reports of the Executive Committee, Gold Producers” (1920).

35 Wilson, *Labour in the South African Gold Mines*; Lezard, *The Great Gold Reef*.

untrained, low-paid native workers.”³⁶ This article took a much more critical stance of the mining corporations than other publications at the time because *The International*, unlike others journals published in the area, was affiliated with a minority political party that publicly criticized the gold industry.³⁷ The journal's political affiliations and public critique of the mining industry would suggest that they might be more inclined to attribute negative outcomes of mining to the mining corporations and institutional systems themselves. Instead, the article speaks to a perceived causation between the increase in the Black labor force and an increase in mining accidents, emphasizing how pervasive this conception was in South African society as a whole. It reflects an understanding of Black laborers as less capable and safety-minded than their white counterparts, which was pervasive throughout pre-apartheid South Africa. A contemporary author noted that “the native mine worker of the Rand [is of] a race just emerging from the shadows — or the sunlight — of ignorance and civilization.”³⁸ In the context of the mines, these prejudices set a dangerous precedent, allowing white officials to attribute injuries that befell Black miners to the inherent characteristics of their race, instead of the occupational dangers of the work in which they were employed. While accident trends, at first glance, appear to support these conceptions of the safety practices of a Black workforce, a closer examination highlights the fallacies undergirding this argument. When looking at the overall absolute values between 1920 and 1940, the mortality of Black employees caused by accidents in South African gold mines is consistently more than ten times that of white employees.³⁹ However, it is important to consider the difference in roles assigned to each group: the ratio of Black to white miners is drastically different in below-ground physical labor compared to above-ground management work. Black miners were routinely assigned to gangs, groups of miners who worked together to extract ore from a specific target. Unless they were some of the very few who were selected to act as ‘boss-boys,’ their primary tasks were the physical extraction of gold from within the mines. ‘Boss-boys’ were Black laborers who were assigned additional responsibilities, and while they still worked below the surface with a gang, they would assist white supervisors in the organization and direction of the gang under their purview.⁴⁰ In comparison, the white employees of the mining corporations held supervisory or administrative positions that either placed them below the surface, but without having to do much manual labor, or above the surface in mining offices. The positions held by white workers allowed them to face less occupational hazards than Black workers in mining gangs. For example, Black laborers were “more prone to heatstroke [...] because they have to exert far more physical energy during the course of their work,” while white laborers, even the few who did manual labor, were

36 “A ‘Slight’ Increase,” *The International*, May 16, 1924, sec. International, 12CF314789EC2558, World Newspaper Archive.

37 International League of the South African Labour Party and International Socialist League (S.A.), eds., *The International* (Johannesburg [South Africa]: International League of the S.A.L.P., 1915).

38 Lezard, *The Great Gold Reef*, 164.

39 “Reports of the Executive Committee, Gold Producers” (1920); “Reports of the Executive Committee, Gold Producers” (1930); “Reports of the Executive Committee, Gold Producers” (1934).

40 Butt, “Ikusiza Aba Limele: First Aid Illustrated.”

“more able to ease off as they do not work in gangs under direct supervision.”⁴¹ These trends hold throughout the years and are clearly reflected in the employee and accident distributions for 1934 (Appendix I).⁴² Not only are these differences in roles illustrative of the beliefs held by white officials of Black laborers’ inability to hold non-physical responsibilities, but these beliefs also serve to mask the impact of this disparity on the different groups’ accident-related morbidity and mortality. For heat strokes, the public rationale for why the heat seemed to pose a greater danger to Black laborers was that “whites know that they should stop work when they feel their temperatures rising.”⁴⁴ Thus, the consequences of these disparities are attributed to the perceived intellectual capacity and self-awareness of white miners, rather than the difference in experiences of Black and white laborers within the mines. An English-language news outlet proposes that “it is sacrilege to even suggest that the gold mining industry is anything other than a benevolent institution run by high-souled and altruistic philanthropists at a great sacrifice to themselves for the benefit of the workers concerned and the rest of the community.”⁴⁵ Although the economic benefits of first aid programs for miners working below the surface were evident, the public documentation of this work by white officials and the white public rationalizes its creation, and its focus on Black miners, as a means of ‘empowering’ the Black mining population. In using this publicly racialized rationalization, as opposed to one that highlighted the dangerous working conditions of the mines themselves, European mining officials were able to inaccurately present first aid measures as a means to address the supposed racial ‘shortcomings’ of Black laborers, despite it being more accurately characterized as paternalistic ‘benevolence’ borne out of the necessity for cheap labor during a period of economic downturn.⁴³

3) *First Aid Guide*

Outside of the public sphere, white officials reported the “deterioration and eventual failure of the labour supply” as the primary threat to the economic viability of the mines.⁴⁴ An article published in *The Rhodesia Herald* reported the need for first aid in gold mines in Transvaal immediately alongside reports on the mines’ economic output, which had taken a downturn.⁴⁵ Despite not making an explicit link between the two, the calls for first aid within an article that otherwise contains only information on the financial state of the gold mines suggests an acknowledgement of the correlation between the prevalence of injuries and the productivity of the mines as economic producers. In reference to improvements on housing and food in the mines meant to address the former of these two threats, Packard noted that mine owners “realized during the middle years of

41 Wilson, *Labour in the South African Gold Mines*, 96.

42 “Reports of the Executive Committee, Gold Producers” (1930).

43 Wilson, *Labour in the South African Gold Mines*.

44 Wilson, *Labour in the South African Gold Mines*, 96.

45 “Sauce for the Goose,” *The International*, September 5, 1924, sec. International, 12CF315FCF57F698, World Newspaper Archive.

the 1930s that the migrant labor supply on which they depended was not infinite and that the physical condition of the black recruits was declining.⁴⁶ This led to increased investments in improving living conditions, and the creation of the Commission for Miners' Phthisis.⁴⁷ However, the hazardous working conditions within the mines were "difficult to eliminate without massive expenditures," and these investments were ones that the mining corporations were not willing to make.⁴⁸ Instead, efforts in first aid training began by specifically targeting those who were perceived by mining organizations as most at-risk. These first aid efforts addressed mining conditions that undermined the ability of cheap Black labor to provide the economic productivity that made their labor so appealing to the corporations. These efforts were accompanied by the public rhetoric of racism which obfuscated the structural conditions that increased the risk of accidents for these Black laborers.

As Lezard bluntly describes, "black men made profits for the mines with their cheap bargain bodies, and profit, after all, was the only reason for the existence of the industry."⁴⁹ The importance of Black labor to the economic health of gold mines cannot be overstated, and even as early as 1920, the Chamber of Mines extolled the work of the Preventions of Accidents Committee of the Rand Mutual Assurance Company, an insurance company used by South African mining corporations, in promoting their "Safety First" movement to address accidents that posed a risk to this labor group.⁵⁰ During that year, the Committee is reported to have worked to promote safe working practices and created rewards for "ideas and devices that are likely to save accidents."⁵¹ Despite high praise from the Chamber for these "humanitarian efforts," they were sure to note that the movement had yet to receive the attention and support it deserved.⁵² This brief description of safety measures completely overlooks the practical aspects of first aid. Instead, it once again serves as a self-congratulatory assurance on the part of the gold industry that it is doing what it can to prevent the inevitable accidents that they associate with a large Native workforce. It was only in 1930 that the Chamber of Mines started to recommend the systematic attending of minor wounds of laborers at the end of their shift.⁵³

"Ikusiza Aba Limele" was published as part of this 1930 movement towards the prac-

46 South Africa, Committee Appointed to Inquire into the Training of Natives in Medicine and Public Health, and C. T. Loram, Report of the Committee Appointed to Inquire into the Training of Natives in Medicine and Public Health (Pretoria: Govt. Printer, 1928); quoted in Karin A. Shapiro, "Doctors or Medical Aids—The Debate over the Training of Black Medical Personnel for the Rural Black Population in South Africa in the 1920s and 1930s," 236.

47 "Gold Mining & Base Metals," *The Rhodesia Herald*, November 21, 1919, 12E161A75E776C58, World Newspaper Archive.

48 Wilson, *Labour in the South African Gold Mines*, 21.

49 "Reports of the Executive Committee, Gold Producers" (1930), 28.

50 Packard, "Industrial Production, Health and Disease in Sub-Saharan Africa," 477.

51 Lezard, *The Great Gold Reef*, 157.

52 Lezard, *The Great Gold Reef*, 157.

53 "Reports of the Executive Committee, Gold Producers" (1920), 74.

tical implementation of first aid in the Witwatersrand gold mines. "Ikusiza Aba Limele" is the original guide for the practice of first aid on the Black mining population, and it was commissioned from H.T.H. Butt by the Rand Mutual Assurance Co., Ltd in conjunction with the Chamber of Mines. Comprised of 72 pages containing 131 photographs, the content of the guidebook is "confined to the practical side only" of first aid, with step-by-step photographic descriptions of how to dress a wound, stop bleeding, wrap fractures, and resuscitate an unconscious person (Appendix II).⁵⁴ The guide also contains images of first aid tools and where someone should seek care after exiting a mining compound.⁵⁵ Outside of the central portion of the guide, Annex A describes how "Native First-Aid" will be organized within the mines following classes using the guidebook and examination of "native labourers of some seniority and those working as 'Boss-Boys' [...] that are entirely practical."⁵⁶ Not only does this guidebook represent the first attempt to create first aid practicum that focused on treating Black laborers in the gold mines, but it also was one of the only steps taken to create a standardized approach to first aid curriculum for a population that spoke multiple languages and may not be literate in any.

"Ikusiza Aba Limele"'s explicit focus was on providing practical over theoretical knowledge for Black laborers. This content presented Black laborers with a rudimentary skillset that could have been superficially applied in emergency situations and stressed the importance placed on practical first aid skills. Moreover, the focus on the practical showed how the scope of the knowledge that the authorities of the gold industry intended to provide with these first aid materials was restricted by the same perception of limited capacity that dictated the racial designation of jobs within the corporation. For example, although the directions in this guide of how to provide specific first aid related tasks were noted in three different local languages and English (Appendix III), the introduction and annexed instructional material were all exclusively in English, which most of the Black laborers could not read or speak.⁵⁷ This suggests that although local miners were considered able to provide care to others of their same race, the theoretical knowledge and instruction was still exclusively the role of Europeans. Furthermore, the use of photographs to depict the steps for tasks like creating a hand bandage, accompanied by the translated captions "Bandage to cover hand — No. 1," "No. 2," "No. 3," etc., provide no additional explanations that may prove necessary when providing care in the field, such as when such bandaging may be useful, what to do if a bandage is not available, and what the actual purpose of the bandaging is (Appendix IV).⁵⁸ With these gaps in knowledge, it generated a reliance by the Black providers of first aid on the knowledge of white supervisors that inherently undermined the sense of empowerment and self-reliance that Butt proposes the guide should provide.

It could be argued that the focus on practical skills over theoretical knowledge simply

54 "Reports of the Executive Committee, Gold Producers," 75.

55 "Reports of the Executive Committee, Gold Producers" (1930), 32.

56 Butt, "Ikusiza Aba Limele: First Aid Illustrated."

57 Butt, "Ikusiza Aba Limele: First Aid Illustrated."

58 Butt, "Ikusiza Aba Limele: First Aid Illustrated."

reflects how first aid was practiced in the mines, and since Black miners were predominantly employed in the roles of greatest risk, the racial dimension of this focus is simply a consequence of the structure of South African mines. However, this argument falsely assumes that, other things being equal, mining officials perceived white and Black miners as equal. For example, Mr. Anderson, the Director of the Prevention of Accidents Committee, is quoted in a local English newspaper as stating that “the white workers on the mines should particularly make it their duty to become first-aid experts.”⁵⁹ This statement clearly differentiated the relationship of white workers with first aid from that of Black workers. Notably, it emphasizes the “duty” of white workers in learning first aid, while Butt describes the practice of first aid as something “every member of the Native class” must learn that may be “of interest to Europeans.”⁶⁰ While it was a necessity — a bare minimum — for Black laborers, the practice of first aid was seen as an honorable thing to do for those of European descent, despite both working within the same mining structures. Furthermore, in expressing shock at “native mine boys be[ing] apt [at] first-aid,” the same article in which Mr. Anderson is quoted speaks to the paternalistic views that drove the rhetoric of first aid practices by European stakeholders.⁶¹ In the eyes of these stakeholders, first aid was perceived as something that was outside of the ‘natural’ capacity of the Black laborer but that a white miner could easily “become [an] expert” in, once again reflecting the racial biases common at the time.⁶²

Furthermore, after thanking a series of white officials such as Mr. E. Steinberg, Secretary to the Prevention of Accidents Committee, Butt writes that “a word of appreciation is also due to those natives who so patiently posed for the benefit of their race.”⁶³ Butt makes it clear that the direct beneficiaries of these first aid efforts were to be Black laborers, while simultaneously being explicit that the first aid guide was intended to be used by those of the same race. Likewise, in “Ikusiza Aba Limele,” all the images in which more contact than two hands between the caregiver and the patient is needed involve a Black caregiver, whereas those where limited physical contact is necessary, the caregiver is a white individual in a doctor’s coat (Appendix V).⁶⁴ This subtle distinction between the source of care provided when it involves personal contact and thorough engagement and that when it can be done by a mere five fingers serves to reinforce responsibility of Black workers as the primary first aid providers for fellow Black laborers. Considering that, as discussed previously, the perception of Black laborers’ inferior ability to provide care and safety precautions that was held by white officials at the time, one can also extrapolate that the aim of a document that focused on first aid provided by a Black laborer to a Black laborer is not to provide the best possible care to an injured worker, but merely to provide

59 “The Aptitude of the Native,” *Umteteli Wa Bantu*, October 6, 1922, 130A40F64561B368, World Newspaper Archive.

60 Butt, “Ikusiza Aba Limele: First Aid Illustrated.”

61 “The Aptitude of the Native.”

62 “The Aptitude of the Native.”

63 Butt, “Ikusiza Aba Limele: First Aid Illustrated.”

64 Butt, “Ikusiza Aba Limele: First Aid Illustrated.”

it in the cheapest possible manner.

Moreover, the objectification of the Native body in the photographs that make up this first aid guide highlights the practice of first aid across racial lines. In the photographs found within "Ikusiza Aba Limele," there is a stark juxtaposition between the (almost complete) nudity of the Black individuals of the photographs and the entirely clothed white subjects (Appendix VI, II).⁶⁵ The semi-nudity of the Black subjects is particularly striking as a presentation of the 'injured' body that appears to render the person in question as less 'civilized' or of lower importance than the fully clothed white man standing next to him. Importantly, miners were not allowed to enter the mines without being fully clothed, and while Butt describes the use of the photographs as a way of presenting "native workers under realistic conditions," no first aid provided during a below-ground emergency in the mines would involve a nude man like the one depicted in the "Broken Elbow" and "Arm Below Elbow" images.⁶⁶ Comparatively, the white providers pictured are wearing physician coats, which reinforces the image of the white medical expert as the instructor. This again highlights the disparity in perceived medical authority between Black and white employees of the mining industry.

4) Rights to Bodily Safety

The difference in official understandings of first aid medical practices across racial lines and the essential role of the underpaid Black workforce in improving the revenue margins of the struggling South African gold mines provides insight into the right to bodily safety of these Black laborers as perceived by European mining authorities. Through the concept of human capital, Rouse proposes that investments into safety and health are made with the intent to "enhance people's availability to perform."⁶⁷ He goes on to define human capital as "the stock of skills and knowledge embodied in the ability to perform labor so as to produce economic value."⁶⁸ In other words, investments into institutional precautionary measures would be made with the primary goal of increasing an organization's human capital. Using this idea of human capital, Wilson examines the relationship between investments into labor training and productivity goals in South African gold mines. He notes that the white labor force had a wide variety of vocational training opportunities made available to them, as an investment made by mining corporations to prevent the white miners from searching for jobs at other mines.⁶⁹ Essentially, training is an institutional investment into labor management for the sake of improving human capital.

65 Butt, "Ikusiza Aba Limele: First Aid Illustrated."

66 Butt, "Ikusiza Aba Limele: First Aid Illustrated."

67 William B. Rouse, *The Economics of Human Systems Integration: Valuation of Investments in People's Training and Education, Safety and Health, and Work Productivity*, Wiley Series in Systems Engineering and Management (Hoboken, NJ: Wiley, 2010), 3.

68 Rouse, *The Economics of Human Systems Integration*, 59.

69 Wilson, *Labour in the South African Gold Mines*, 97.

Wilson also describes how the Black labor force received no such training intensive training beyond the possibility of first aid training. Instead, new Black recruits were “encouraged to obtain first-aid certificates but upon arrival at the mines [were] sent straight underground with no induction or training.”⁷⁰ Furthermore, in the absence of formalized orientations, Butt recommends that the teachings necessary to become certified in first aid be taken “after shift” by existing Black workers, once again highlighting how receiving such training was promoted but was still seen as secondary to Black laborers’ mining roles.⁷¹ First aid was the sole form of structured training provided by mining corporations for Black laborers; Wilson’s proposed understanding of training and the concept of human capital can be applied to understanding the practice of first aid as intended to ensure that Black bodies work to its fullest potential under the circumstances of their employment. In other words, first aid resources, like “Ikusiza Aba Limele,” represent an investment made by mining institutions to address the threat posed by bodily injuries on the human capital of the mines, not necessarily to improve the health of individual laborers. The economic need for a Black worker’s labor is, thus, reflected in the first aid movement that presents an attempt of the gold industry at “maintaining this delicate piece of machinery in order.”⁷² Even when injured, Butt describes how a laborer’s “penalty ticket” must be taken and delivered to the white supervisor as a part of the first aid practiced.⁷³ A failure to be productive merited a fine, and first aid helped temporarily address the paradox between occupational hazards and economic yield that defined a Black gold miner’s right to bodily health.

Conclusion

The examination of first aid practices in gold mines highlights how the right to bodily safety of a Black laborer within the European mining industry in South Africa were limited to those that would maintain a minimal level of productivity during a time when the cost of labor was a growing concern. Their right to this safety between 1920, just after the hike in production costs, and 1940, just after South Africa left the gold standard, is thereby dictated by the social and economic conditions of the mines. When faced with stagnant, and even lowering, profit margins, mining corporations were faced with only one feasible option: reducing the extraction costs of diminishing gold stores. Expanding the industry’s reliance on Black labor made this option possible, whereupon Black labor became the primary source of human capital for the gold mines. These laborers were placed in increasingly dangerous roles to maximize the quantity of gold ore extracted, and in doing so, physical threats to their safety threatened the productivity of the mines.

However, within the social context of pre-apartheid South Africa, in which racist stereotypes of Black capacity for safety precautions and intellectual ability prevailed, Euro-

70 Wilson, *Labour in the South African Gold Mines*, 92.

71 Butt, “Ikusiza Aba Limele: First Aid Illustrated.”

72 Lezard, *The Great Gold Reef*, 164.

73 Butt, “Ikusiza Aba Limele: First Aid Illustrated.”

pean stakeholders were able to dismiss the need for large monetary investments into the structures of gold mining and, instead, focused on first aid programming that placed the responsibility of protecting fellow miners' right to bodily safety on the shoulders of Black miners. The publicly stated rationale of European stakeholders for this focus relied on an inaccurate and biased understanding of the intellectual capacities of Black laborers. In the creation of a first aid guide intended to be used by Black laborers to provide care for others of their same race, gold mining authorities in South Africa both displayed and reinforced these unbalanced social structures that characterized their uneven workforce. The practice of first aid in these Witwatersrand gold mines is intrinsically linked with the value of Black bodies within the gold industry.

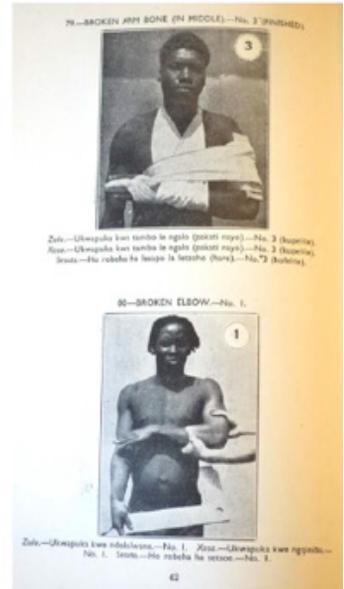
APENDIX 1:

Table 1: Employee distributions and Accidents in Witwatersrand gold mines in 1934 as reported by the Chamber of Mines.⁷⁴

	Total No. Employed	In Roles Below the Surface	In Roles Above the Surface	Total Accident-related Mortality	Rate of Accident-related Mortalities Above (per 1,000)	Rate of Accident-related Mortalities Below (per 1,000)
White workers	24,813	13,789	11,024	57	0.55	3.42
Black workers	238,414	187,485	50,929	553	0.80	2.50

APENDIX II:

Figure 1:
Examples of the practical part of the first aid guide.





APENDIX III:

Figure 2: An example of the three languages used throughout the practical part of the first aid guide.

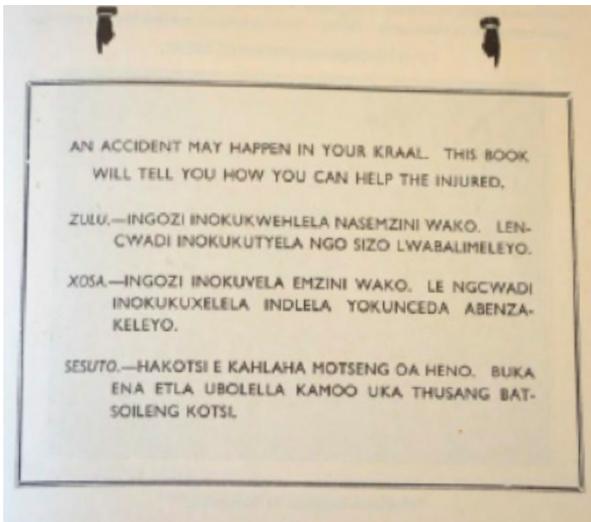
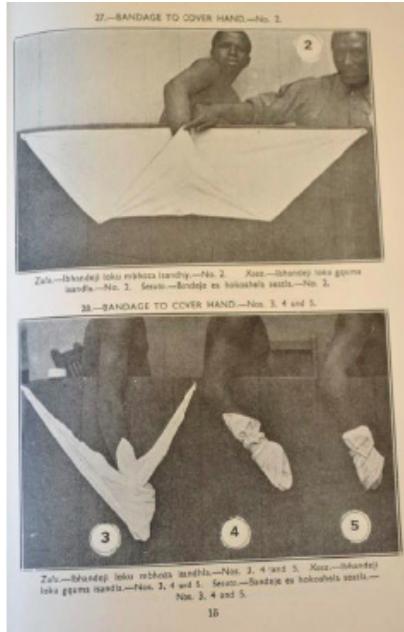
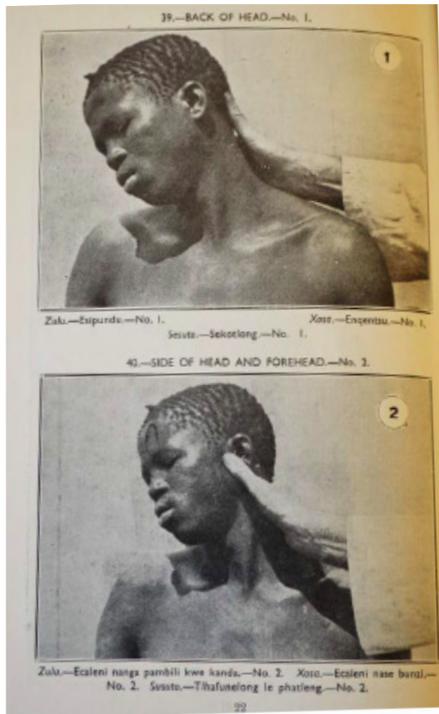


Figure 3: Photos 25-28 of the first aid guide depicting the elbow and hand



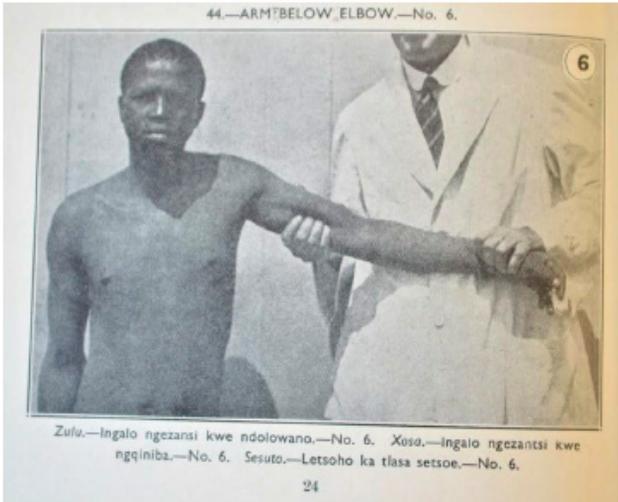
APENDIX V:

Figure 4: Photos 39, 40 of the first aid guide depicting the use of digit pressure to stop bleeding on various parts of the head.



APENDIX VI:

Figure 5: Photo 44 of the first aid guide depicting the use of digit pressure to stop bleeding on the arm



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