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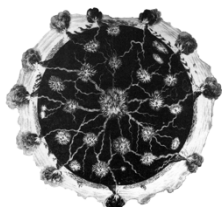
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GEOLOGISTS AS COLONIAL SCOUTS: THE ROGERS EXPEDITION TO OTAVI AND TSUMEB, NAMIBIA, 1892–1895

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ABSTRACT



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From 1892 to 1895, the South West Africa Company (SWACO) expedition led by geologist Matthew Rogers conducted the first geologic mapping in Namibia's Otavi Mountains, including the now world-famous Tsumeb Mine. This paper uses archival documents from the Rogers expedition to trace his geologic contributions and to illustrate important themes in the relationships between 19th century colonial geologists, Western colonizing governments, Indigenous communities, resource extraction, and corporations. To carry out his mapping, Rogers performed a continuous balancing act between British and German colonial powers and local African leaders. The local leaders and communities he interacted with variously resisted his incursions, or collaborated with him, but consistently and vocally asserted their rights to the land and copper in Otavi. In addition to geologic mapping, Rogers understood his role as intelligence gatherer, reporting back on the resources needed to facilitate European settlers in the region, including his views on how Germany might subjugate local communities and ensure their labor for the growing colony. Throughout, the expedition was dependent on African guides to keep them alive and show them where copper outcropped, yet Rogers' letters back to SWACO promoted racial and cultural prejudices that became the foundations for how SWACO would interact with those communities in the future. In addition to laying the geologic groundwork for the Otavi area, the expedition illustrated the many roles that 19th century colonial geologists played in Western colonization.

Keywords: colonialism, Tsumeb, Otavi, minerals, Namibia
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1. INTRODUCTION

No boundaries are ever fixed [in Otavi]; there is no central authority to which they are responsible; no land laws for themselves or the general public. Take all you can, and, according to your strength, protect all you take.¹ (Geologist Matthew Rogers, January 1893).

My dear White-men, I really wish to impress on you the fact that the country really is our own . . . what rights you have are given by us.² (Herero Chief Kambazembi, writing to Rogers, September 1893).

All these Whites are big rascals, and you must not allow them to do too much or go where they like.³ (Aribib, Hailom leader, speaking of Rogers, October 1893).

Nineteenth-century geologists played pivotal roles in European colonization throughout the Americas, Africa, Australia, and southern Asia (see for example Stafford 1990). Their mapping of mineral and energy resources often motivated expansion, and the raw materials they identified made those colonizations profitable. Because geologists were often the first formal expeditions to areas that Western powers were claiming, they also served as scouts, sending back military and diplomatic intelligence and acting as intermediaries between colonizing powers and Indigenous peoples.

¹ BArch R 1001/1480, p. 165.

² BArch R 1001/1482, p. 105.

³ BArch R 1001/1482, p. 102.

Yet, despite their importance, the relationships between geologists and colonization are rarely examined in geologic or colonial histories. For example, in histories of the copper mines in the Otavi Mountains, Namibia⁴ (including the famous Tsumeb copper mine), geologists were reduced to the copper they identified, European powers were ignored, and local African communities were portrayed simply as ‘problems’. Gebhard (1999, p. 24) reported the earliest geology expedition at Tsumeb this way:

[Matthew] Rogers made the first assessment of the ore body at Tsumeb. He concluded that this was the best example of a mineral deposit he had ever seen. During his stay there were constant problems with the native tribes, who of course could not understand that their land now belonged to someone else.

Despite this cursory treatment, it is particularly important to understand the relationships between geologists and European colonization in the Otavi Mountains because of the region’s significance in the history of geology—and in the history of Namibia. For geology, Tsumeb is the most prolific type locality for mineral specimens in the world (Mindat.org 2020), and the Proterozoic carbonates of the Otavi Mountains have been used as evidence in the Snowball Earth debates (Hoffman *et al.* 2021). For Namibia, Otavi copper motivated German (and, later, South African) occupation, served as the largest employer in the country for decades (Cooper 1999), and played a key role in Namibia’s fight for independence (SWAPO 1981). Geologic knowledge production in the Otavi region is pivotal both to our understanding of the Earth and to the history of Namibia.

This paper uses archival materials to examine early geologic knowledge production in Otavi—particularly Tsumeb—during the 1892–1895 Matthew Rogers expedition. Within this expedition, many of the themes of nineteenth-century geologists operating in colonized lands can be seen. The expedition continuously balanced the clout of German colonial authority, British citizenship, and local leaders to gain access to their field sites. Local African communities regarded expedition members as colonial agents, and variously collaborated with or resisted the expedition’s incursions—but always maintained their own claims to the land and copper. The expedition was completely dependent on local guides and laborers to carry out their work—yet they endorsed and perpetuated racial prejudices, sending back to England and Germany information on how best to defeat the communities they interacted with. The expedition began more than 100 years of geologic exploration in the Otavi Mountains, set the stage for industrial-scale mining at Tsumeb, and is a useful illustration of the broader social roles of geologists during this time period.

2. GEOLOGIC SETTING

This paper focuses on the copper deposits in and around the Otavi Mountains of modern-day Namibia, particularly the Tsumeb Mine—a region collectively known as Otavi Mountain Land (OML; Figure 1).

The mountains are located on the southern edge of the Congo Craton. During Rodinia rifting (~756 +/- 2 Ma, Hoffman *et al.* 1996, p. 49), this edge of the Congo Craton rifted and subsided, allowing a thick carbonate platform to form (Hoffman and Halverson 2008). This carbonate platform includes the modern Otavi Group, which underlies much of the Otavi Mountains and hosts the mineralization pipes for Tsumeb and other copper deposits in the area. The carbonate platform grew until the Damara Orogeny, part of the Pan-African Orogeny that accompanied the assembly of Gondwana (*e.g.*, Alkmim *et al.* 2001, p. 320), with mineralization likely happening afterwards (see Lombaard *et al.* 1986 or Kamona and Gunzel 2007 for summaries of mineralization mechanisms).

⁴ The area was called ‘German South West Africa’ from 1884–1915, ‘South West Africa’ during South African occupation from 1915–1990, and ‘Namibia’ since independence in 1990.

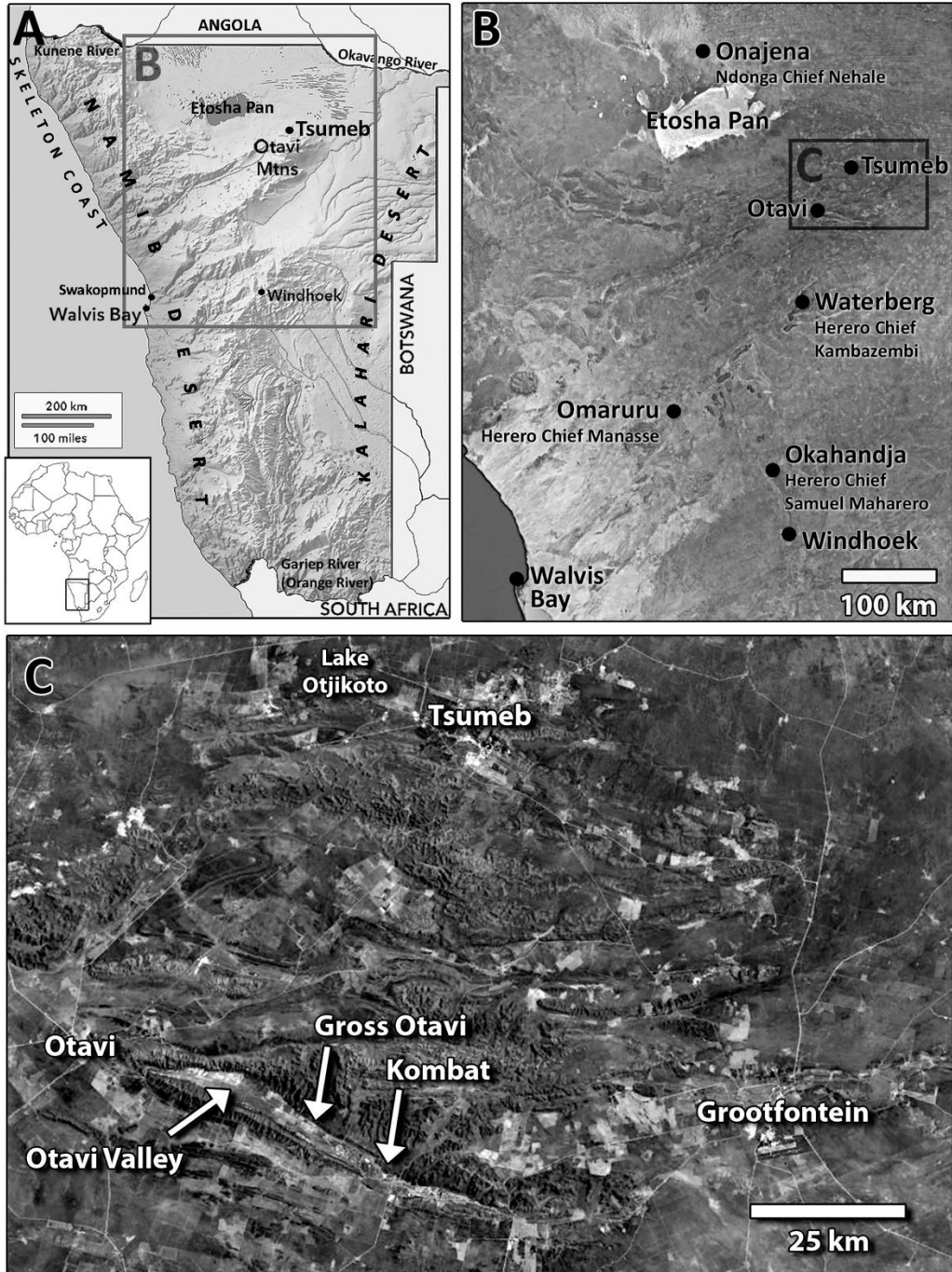


Figure 1: Context maps. A) Modern-day map of Namibia, showing where Rogers landed (Walvis Bay), and the Otavi Mountains. Gray box indicates area covered by B. B) Satellite mosaic of Walvis Bay to Otavi area. Headquarters of the three major Herero chiefs and Ovambo Chief Nehale are labeled. Gray box indicates area covered in C. C) Satellite mosaic of Otavi Mountain Land.

The Otavi Mountain Land (OML) is particularly important in the history of geology because its carbonates have fueled the debate around the Proterozoic ‘Snowball Earth’ hypothesis. Hoffman *et al.* (2021) give a detailed overview of the evidence of glaciations recorded in the

Otavi Group, which includes ‘cap dolostones’ deposited after the Cryogenian glaciation (*e.g.*, Hoffman *et al.* 2007), sulfur isotopic patterns (Hurtgen *et al.* 2006), and sedimentological structures (Allen and Hoffman 2005).

3. HISTORICAL CONTEXT: THE OTAVI MOUNTAINS, CIRCA 1892

The Rogers expedition arrived in the Otavi Mountains in 1892, expecting it to be empty of people. Instead, they found it a complex border region with long, overlapping histories of copper claims and land uses. The early colonial histories of copper mining in Otavi are examined in Hearth (2021); the aspects most relevant to the Rogers expedition are summarized here.

3.1 Otavi copper prior to 1892

Otavi communities had been mining copper for an unknown—but probably significant—amount of time before Europeans arrived. At the time of the first surviving written records of the area, Otavi and its copper were central to at least three communities: the Hailom,⁵ the Ndonga,⁶ and the Herero.

The Hailom are likely the community that early Europeans called the ‘Bushmen’: a group of related nations that today refer to themselves as San (Gordon 1992, p. 5; South African San Institute 2017; Dieckmann 2007, p. 35). In addition to operating a semi-nomadic, hunter-gatherer economy, Hailom mined copper throughout the Otavi Mountains, guarding the locations of their mines and actively driving off Boer settlers who attempted to form ‘the Republic of Upingtonia’ at Grootfontein in 1885 (Gordon 1992, pp. 40–42).

The Hailom traded their copper ore north to the Kingdom of Ondonga, an Ovambo Kingdom on what is now the border of Namibia and Angola. The Ovambo operated centralized, settled, agrarian states with hereditary monarchies that dated back at least to the 1600s and possibly centuries before that (Williams 1994, p. 12; Dierks 2002, p. 378). The Ndonga coppersmiths smelted and shaped the copper into tools and ornaments that they traded through extensive networks. In the years leading up to German annexation, the King of Ondonga claimed control of the Otavi copper deposits, though it is unclear what that control meant, given the Hailom residency, mining, and guarding of the copper mines. By 1892, Ondonga was changing rapidly in response to the Portuguese colony to the north (McKittrick 2002, p. 67; Gustaffson 2005, p. 34).

A third community—the Herero—also claimed relationships with the copper, though the details of this are scant in the surviving records. These claims were likely muddled during the early colonial period, because the Germans used Herero claims to copper and land for their own purposes. Starting around 1883, Chief Maharero kaTjamuaha (1829?–1890; Tonchi *et al.* 2012, p. 246) claimed that Herero had always lived in Otavi and had claims to its copper. His claims would be picked up by his son, Samuel Maharero (1856–1923), who played a central role in the Rogers expedition.

Prior to 1892, there were no permanent European settlements in the area. A group of Boers (‘the Republic of Upingtonia’) had attempted to colonize near Grootfontein, but had been forced to leave by sustained resistance from the Hailom and the complex situation between the Ndonga, Herero, and German colonial authorities (summarized in Hearth 2021, pp. 446–455). A few European traders passed through the area, and several had semi-permanent trading stations in Ondonga, but not Otavi. Similarly, Finnish missionaries had established missions in Ondonga, but not Otavi.

⁵ The ‘l’ symbol indicates a click sound made on the side of the mouth. Hailom has also been spelled Haiom, Heikom, or Heixum to approximate the sound.

⁶ Ndonga is used here to refer to people, Ondonga to the kingdom. Ondonga was one of several Ovambo Kingdoms in that area.

Starting in 1885, conflict arose over who owned Otavi copper rights. The Cape trader William Worthington Jordan (1849–1886) insisted that Ndonga King Kambonde (1866–1909) had sold him the rights; Kambonde denied this and insisted that Ondonga continued to control both the land and the copper. The Hailom continued to mine the copper, as they had since at least 1850 and probably long before that. The Herero, especially Chief Maharero, insisted that the Herero controlled the Otavi area and therefore had rights to the copper; they had guaranteed copper rights to Maharero’s British friend, the trader Robert Lewis (1841–1894).

3.2 SWACO

In 1892, Germany—which had declared the area a Crown Colony in 1890—used the arguments about land and copper claims as an excuse to claim it for themselves. They declared the Otavi area a ‘no-man’s land:’ a piece of land where no one lived and no one had claims (Dreyer 1987, p. 277). They then granted it as part of the ‘Damaraland Concession’ to the South West Africa Company (SWACO), a joint British-German corporation.

SWACO was one of several companies receiving land grants from Germany, which was attempting to execute “empire on the cheap” (Wallace 2011, p. 126) by relying on private investors to develop colonial infrastructure. SWACO was “the only significant force in the early economic development of South West Africa” (Voeltz 1984, p. 623)—and Otavi’s copper was its only significant holding. The only problem was: they didn’t know how much copper there was—or, even, exactly *where* it was within the Otavi area. So, even before the Damaraland Concession was finalized, the SWACO Board of Directors sent an expedition under geologist Matthew Rogers to map Otavi and its copper.

4. THE ROGERS EXPEDITION

The Rogers expedition was the vanguard of colonization in Otavi: the first formal European expedition in the area. The SWACO Board asked him to map the geology and copper deposits, and to assess whether the ore was of a grade high enough to merit a railway from Swakopmund to Otavi. But, from his letters, it is also clear that Rogers understood that he was gathering intelligence for future European settlement plans, for land and mineral rights, the availability of African labor, and how Germany and SWACO should navigate around the African communities (see Section 6 below).

The expedition consisted of Rogers⁷ (in charge of the mining), George H. Copeland (as the company’s representative), David Angus (as the head surveyor for the railway⁸), “Mr. Eslick” (the mining foreman), “Mr. Jennings” (a map maker), several unnamed railway surveying assistants, and the miners: Josiah James, John Watters, Charles Wills, and “Mr. Ware”. The SWACO Board sent six more miners on 31 August 1893 to provide additional support, in response to Rogers’ request for more.⁹

The expedition hired considerable local help as well. G. J. Jetzen (or “Getzen”) and his wife appear to have joined the party as interpreters and cooks in January 1893; from Rogers’ letters, they seem to have been white locals who already had connections with John Kruger¹⁰ (see Section 6.4.1 below). George Tatlow, a white trader living in the area, also occasionally joined the party. The archives also hint at dozens of African servants, cooks, assistants, wagon drivers, firewood carriers, water carriers, hunters, and miners, though Rogers rarely named any of them in his letters (see Section 6.4 below).

The expedition left England on 29 September 1892 and arrived at Walvis Bay (“Walfish Bay”) on 1 November 1892. They were brought to the Otavi Valley by African guides on 19

⁷ Birth and death dates are unknown for this entire party.

⁸ BArch R 1001/1480, p. 57.

⁹ BArch R 1001/1841 p. 73.

¹⁰ BArch R 1001/1482, p. 175.

December 1892,¹¹ and John Kruger with a party of “Hottentots” led them further to Tsumeb in January 1893.¹² They established a mining camp in the Otavi Valley, then transferred their camp to Tsumeb in October 1893.¹³

A small part of the surviving information about the expedition comes from letters Copeland wrote to the SWACO Board of Directors. However, Copeland was recalled by the Board in March 1893¹⁴ on suspicion of corporate espionage (see Section 6.3.3 below), and replaced by a “Mr. Simonsen”,¹⁵ who was himself replaced by the geographer Dr. Georg Hartmann (1865–1946) in October 1893.¹⁶ Rogers and the other miners remained until January 1895.¹⁷

Most of the information on this expedition comes from letters that Rogers wrote to the SWACO Board of Directors. Rogers was a mining engineer who had been working around the world on mining projects since the 1860s. He refrained from alcohol, was devoutly religious, and held religious services for the miners who worked with him and any locals he could convince to join. His letters were prickly; he complained of sandstorms, camp stools, not receiving letters from friends, the weather, boring views from mountaintops, the food, the natives, the ink, the chiefs, the interpreters, the Board of Directors, SWACO-issue blankets, steep mountains that he chose to climb for no reason, Brazil being prettier, how Herero treated their wives, how Herero milked their cows, how Herero worked, how Herero danced, locals asking for tobacco, spiders, limestone, wagons that jostled too much, the food, oxen in bogs, oxen in mud, oxen in general, locals drunk on honey beer, locals drunk on Eau de Cologne, and nearly every other human he encountered. His letters also evidence a ‘stiff upper lip’ mentality: he reported being jostled too much in a wagon with exactly as much irritation as being attacked during a labor strike: “The only thing I can do under the circumstances is to cultivate that estimable virtue, patience, and in this country there is plenty of scope for its exercise”.¹⁸ Converted to 2022 US dollars, his salary was about \$223,000 per year plus expenses.¹⁹

Despite the sheer variety of his complaints, though, Rogers was obviously entranced by the geology he encountered: “From the geologist’s point of view, this country affords ample means for interest and instruction . . . continually coming across new fields for study and research”.²⁰

5. GEOLOGIC KNOWLEDGE PRODUCTION IN THE OTAVI MOUNTAINS: 1892–1895

Geologic knowledge production began in the Otavi Mountains long before German colonization; however, little is recorded about the methods or conceptualizations of the Hailom miners and Ndongan coppersmiths who mined and smelted the copper there (see Hearth 2021, pp. 438–445 for a summary of what is known from pre-1892 records).

Rogers was the first²¹ Western-trained geologist to work in the Otavi area. He produced the first topographic and geologic maps of the Otavi region, from the Waterberg at the south to Tsumeb at the north. These maps don’t appear in the archives; however, Rogers’ descriptions of the rocks he encountered and his interpretations of how they formed are still found in his letters.

¹¹ BArch R 1001/1482, p. 27.

¹² BArch R 1001/1482, p. 39.

¹³ BArch R 1001/1482, p. 107.

¹⁴ BArch R 1001/1482, p. 170.

¹⁵ BArch R 1001/1482, p. 59.

¹⁶ BArch R 1001/1482, p. 107.

¹⁷ BArch R 1001/1588, p. 45.

¹⁸ BArch R 1001/1482, p. 49.

¹⁹ BArch R 1001/1482, p. 72.

²⁰ BArch R 1001/1480, p. 49.

²¹ Rogers referenced rumors about a “Captain Ferrow” who came to Otavi before him representing an unnamed English company, but that rumor seems to be the extent of his person’s contributions to geologic knowledge in that area. BArch R 1001/1482, p. 56.

He began geologic mapping as soon as he arrived at Walvis Bay; however, this paper will focus on his contributions upon reaching the Otavi region.

5.1 Copper along the Otavi Syncline

Upon arriving at Otavifontein, Rogers mapped two parallel limestone ridges running east-west, separated by a valley and joined at the west.²² This is now called the Otavi Syncline: a north-west trending set of folds and thrusts that formed between 600–590 Ma (Gerns, 1974; Lehmann *et al.* 2015; Hoffman 2021), though Deane (1995) reported dates of possibly 537–550 Ma. The limestone that Rogers reported as defining its ridges are mapped today as part of the Hüttenberg Formation within the Tsumeb Subgroup of the Otavi Group (Kamona and Günzel 2007, p. 399).

From Otavifontein, Rogers traveled east through the Otavi Syncline to what had been reported to him as the ‘Otavi Mines’. He reported their location by starting from the western junction between the northern and southern ridges, and traveling 16 miles east along the northern ridge.²³ From this location information, it is likely that the ‘Otavi Mines’ were at the site of (or very close to) the modern Gross Otavi Mine. Rogers set up camp there, started his miners digging Prospecting Shaft No. 1, and used the camp as a base to explore the surrounding region. A local guide showed him some further copper outcrops that he reported as being 8 to 10 miles from the Otavi Mines, east along the Otavi Valley. If his ‘Otavi Mines’ do in fact correspond to modern-day Gross Otavi, then this distance would put the second copper outcrop at the modern-day Kombat Mine. Rogers set miners to work there digging Prospecting Shaft No. 2.²⁴ Rogers and the miners stayed at the Otavi camp until October 1893, when they transferred their camp and their mining efforts to Tsumeb.²⁵

Rogers started his first pit at Otavi (No. 1 Prospecting Shaft; Figure 2) at one of the mining shafts dug by either the Hailom or Ndonga.²⁶ He didn’t indicate how deep these initial shafts were, though his miners eventually sank the No. 1 shaft to at least 90 feet and established two cross-cuts.²⁷ Within, they encountered red soil, quartz gravel, “decomposed slate”,²⁸ and, later, limestone. This likely corresponds to the Kombat Formation, part of the Mulden Group, which overlies the Otavi Group and fills the valley of the Otavi syncline (Kamona and Günzel 2007, p. 399). Within that shaft, they found “splendid loose stones of copper”,²⁹ but never the main ore body those might have come from (Figure 2).

Rogers started No. 2 Prospecting Shaft along what he believed to be the same formation: a vein of copper running at least 2,000 feet parallel to the Otavi Valley.³⁰ He found a similar mix of loose copper there, but, again, no major deposit. The No. 2 shaft also revealed “ironstone

²² BArch R 1001/1482, p. 29.

²³ BArch R 1001/1482, p. 29.

²⁴ BArch R 1001/1482, p. 60.

²⁵ BArch R 1001/1482, p. 107.

²⁶ BArch R 1001/1482, p. 45.

²⁷ BArch R 1001/1481, p. 75.

²⁸ BArch R 1001/1482, p. 33.

²⁹ BArch R 1001/1482, p. 187.

³⁰ BArch R 1001/1482, p. 172.

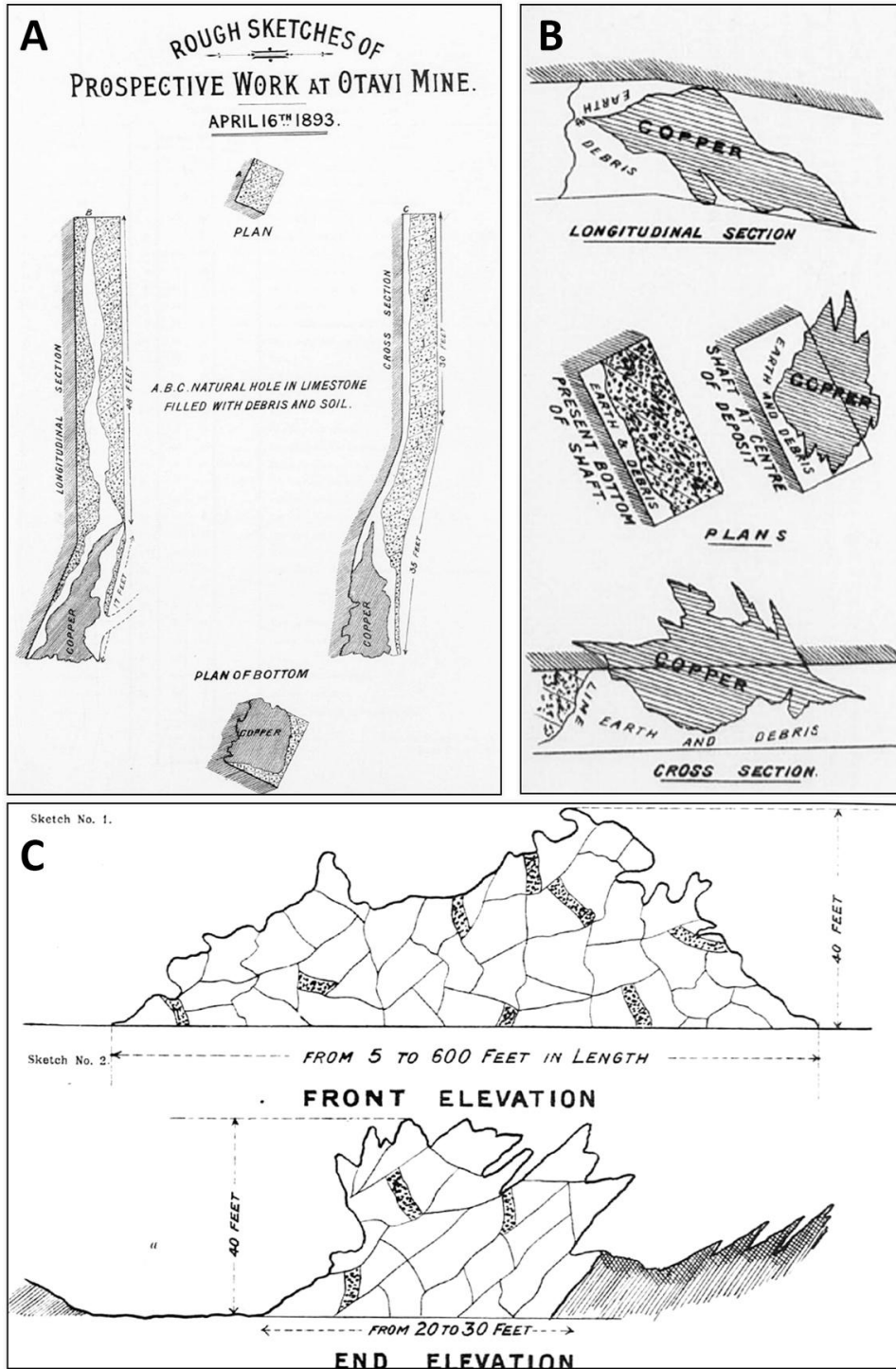


Figure 2: Rogers' sketches. A) No. 1 Prospecting Shaft as of April 16 1893, BArch R 1001/1482, p. 64.
 B) Copper outcropping in No. 1 Prospecting Shaft on 23 June 1893, R. 1001/1482, p. 76.
 C) Rogers' first sketch of the Tsumeb "Green Hill," BArch R 1001/1482, p. 39.

largely impregnated with copper silicate”.³¹ They sank No. 2 to 33 feet, when groundwater flooding outpaced their capacity to remove it.³²

Ultimately, Rogers was disappointed with the quality of the copper ore he found at Otavi. In his final assessment, he speculated that there was indeed a significant copper deposit at that site, but that reaching it would require a shaft of 300 feet and more mining equipment than Rogers had on hand.³³

Of the geology in the Otavi Syncline, Rogers wrote: “There is such a remarkable sameness in the rock formation of this country, that in giving a description of one district, it almost serves for the whole”.³⁴

Rogers mapped the primary rock in the Otavi Syncline as granite. His use of ‘Primary’, though probably did not mean ‘spatially dominant’. Like his contemporaries, Rogers likely meant that he saw granite as the first rock of the planet (see Pearson 1996, p. 52 for an examination of ‘Primary’ rock terminology during this time period).

Cutting through the Primary Granite, Rogers mapped what he called ‘eruptive dikes’. He further speculated that more recent granites and gneisses protruded through the sedimentary sequence, tilting the sedimentary layers by the force of their intrusion. Likely, the granites he was mapping were part of the modern-mapped Paleoproterozoic Grootfontein basement complex or the Mesoproterozoic granites intruding it (e.g., Kamona and Günzel 2007, p. 400).

Rogers mapped a sedimentary sequence of limestone and sandstone as overlying the Primary Granite.³⁵ That sequence was mostly limestone and “very old”³⁶ slate, which he sometimes described as “decomposed”.³⁷ These too were likely part of the Kombat Formation, which Miller (1992) later mapped as 500 meters thick on that side of the Otavi Valley. Rogers also mapped several “beds of more or less impure marble” in the northern hills.³⁸ Söhnge (1964) did map marble associated with the Northern Rift zone that is now mapped as extending from Swakopmund to Otavi (e.g., Kamona and Günzel 2007, p. 397).

Rogers attributed topography in the Otavi region to “convulsions and upheavals”.³⁹ He described at least two periods of “subterranean forces”. The first, he called a time of “general upheaval”.⁴⁰ During this upheaval, he imagined the Otavi Valley limestone ridges were lifted and tilted, producing the slanting valley walls he observed during his mapping. Rogers speculated that copper emplacement had occurred during a later, second upheaval. He wrote that this later upheaval was “not so vigorous as the first”, but had formed the foothills of the Otavi Valley and opened “small fissures” in the rock.⁴¹ Through these, “whether by igneous or aqueous action, various ores of copper have filled”. He mapped chrysocolla at the top, and oxides and sulfides deeper below. In other places, he referred to copper-emplacement as occurring during “blow-outs”, with “subterranean forces” bringing the copper close to the surface.⁴²

5.2 *Tsumeb*

Rogers set up his miners at the No. 1 Prospecting Shaft at Otavi, then began trying to convince local guides to show him additional copper. After much back and forth (see Section 6.4.1 below), Rogers convinced John Kruger and a group of ‘Hottentots’ to show him the copper deposits he

³¹ BArch R 1001/1482, p. 187.

³² BArch R 1001/1481, p. 76.

³³ BArch R 1001/1482, p. 109.

³⁴ BArch R 1001/1482, p. 30.

³⁵ BArch R 1001/1482, p. 30.

³⁶ BArch R 1001/1482, p. 62.

³⁷ BArch R 1001/1482, p. 33.

³⁸ BArch R 1001/1482, p. 62.

³⁹ BArch R 1001/1482, p. 62.

⁴⁰ BArch R 1001/1482, p. 56.

⁴¹ BArch R 1001/1482, p. 56.

⁴² BArch R 1001/1482, p. 79.

knew of north of the Otavi Valley. Kruger showed him several—but the highlight was Tsumeb (“Soomep”).⁴³

His 21 January 1893 letter from his first visit to Tsumeb is the most-quoted passage from his entire geologic work in the region:

I have been holding places of trust in mining for the past 24 years; have visited various countries of the world, inspecting mines, mineral outcrops, and prospecting for minerals; have been associated with the minerals, gold, silver, tin, copper and lead; but in the whole of my experience, I have never seen such a sight as was presented before my view at Soomep, and I very much doubt if I shall ever see such another in any other locality.⁴⁴

Rogers’ description of the original “Green Hill” at Tsumeb (Figure 2) is useful, as the hill has long-ago been mined away:

As if the subterranean forces had made one sudden and special effort to force an entrance through the crust of the earth, a large rent is made. This rent has been filled in probably by aqueous solutions with minerals having as its chief matrix quartz. In this instance the minerals, as far as can be seen, are different ores of copper and lead. In process of time, either by subsidence, or erosion and denudation, the surrounding strata composing the containing rock has been removed, leaving the fissure vein standing in an included position corresponding to the lay of the strata – in some places being 40 feet high – with the green and blue colours of crysocola conspicuously covering it. By various causes the hard quartz matrix has become shattered and rent, and the smaller fissures again refilled with the same minerals.⁴⁵

Rogers described the host rock as blue slate in units 12–18 inches thick. Interestingly, this does not seem to correspond to any of the three modern units near the Tsumeb pipe (the Tschudi Formation, Hüttenberg Formation, and Elandshoek Formation), all of which are dominantly carbonates with occasional chert bands (see summary in Kamona and Günzel 2007, p. 403). Later, Rogers described the Tsumeb area as dominantly limestone,⁴⁶ which would match any component of the Tsumeb Supergroup (Kamona and Günzel 2007, p. 399).

Based on his map of several copper indicators in the Tsumeb region, Rogers concluded that there was a belt of mineralization about 50–70 miles (80–112 km) wide, running NW-SE.⁴⁷ This matches the approximate width of the Otavi Mountain Land’s zone of mineralization. The NW-SE trend Rogers could have been interpreting from the general NW-SE trend of the Tsumeb Syncline and Otavi Syncline. However, despite his assessment of a huge mineral belt, Rogers concluded that the ore was not of a high enough grade to pay for a railway to the coast. His digging at Tsumeb led him to conclude that the principal ore was lead—anglesite—with only some copper carbonates, which he ranked as lower value.⁴⁸

5.3 *Etosha Salt Pan*

Rogers made one mapping expedition north of Tsumeb to the Etosha Salt Pan, complaining that the geology was “tedious and tiresome” except for some granite “bosses” between Namatangie and Otzitambie. He described these as circular and irregular-shaped masses of granite that stood out as hills and ridges. He also described sandy washes bearing garnets, iron oxides, glint, and agate.⁴⁹

⁴³ Rogers referred to Tsumeb as “Soomep” until mid-March 1894, when he abruptly switched to “Tsumeb”. He gave no explanation for the change in this spelling.

⁴⁴ BArch R 1001/1482, p. 39.

⁴⁵ BArch R 1001/1482, p. 39.

⁴⁶ BArch R 1001/1482, p. 109.

⁴⁷ BArch R 1001/1482, p. 80.

⁴⁸ BArch R 1001/1482, p. 140.

⁴⁹ BArch R 1001/1482, p. 135.

Rogers' mapping was the first account from a Western geologist on the Etosha Salt Pan. From his mapping, he concluded that the whole area had been an inland lake that evaporated. This analysis is in line with modern understandings of how the Etosha Pan formed (*e.g.*, Miller *et al.* 2010). He further speculated that the salt pans were still fed by occasional flooding, but that the salts were trapped in the basins as the water evaporated: an endorheic basin.

From his mapping of the surrounding geology, Rogers speculated that the sodium chloride was likely intermixed with "sulphate of lime" (gypsum, perhaps), "chloride of calcium" (sinjarite, perhaps), and "chloride of magnesia" (bischofite, perhaps).⁵⁰ Bhattachan *et al.* (2015, p. 23) reported that Etosha Pan salts are actually surprisingly lacking in gypsum, with the sulfate occurring instead in thenardite (Na₂SO₄) and sulphohalite (Na₂SO₄·NaCl·NaF).

5.4 Hydrology

Though a mineral prospector by training, Rogers had a generalist's interest in how the Earth worked. His observations on the hydrology of the landscapes he passed through are particularly interesting. At one point, he deduced—"from the sound by the prancing of the horses"—that there were caves beneath the ground, and that these might carry subsurface water.⁵¹ He also reported that wide "vleys" filled with water during rains, and lost the water at faster rates than would be expected from either soil absorption or evaporation. He concluded that the water must be sinking into the ground in fissures or holes, implying underground cave networks. He attributed these, though, to fissures caused by temperature-induced expansion and contraction, rather than dissolution processes.⁵² At the large lake Otjikoto, Rogers speculated that the lake must drain the entire region surrounding it to remain full in the dry season.⁵³

He was correct about the prevalence of underground caves and water; the Otavi area has extensive karst (Rogers did not call them karst, though, a word which was only just moving from German to English usage around that time period; *Shorter Oxford English Dictionary* 2002, p. 1481).

6. ROGERS, COLONIAL POWERS, AND LOCAL COMMUNITIES

Germany had manipulated the competing land claims of the Herero, Hailom, and Ndonga to declare the Otavi area a 'no-man's land' – and claim it for themselves. They then granted SWACO the mineral rights. However, neither SWACO nor the Germans had any actual power in Otavi. The Rogers expedition was the wedge they used to start levering control away from the Herero, Hailom, and Ndonga.

Before examining Rogers' interactions with local communities, a note on names: community identities were almost certainly more complex than Rogers' writings suggest, for several reasons. Early European colonial writers tended to categorize people by their perceived economic class. For example, they often gave the label 'Bushman' or 'Bergdamara' to anyone operating in a hunter-gatherer niche (Dieckmann 2007, pp. 36–42). Similarly, the terms Herero and Damara "were in fact used as economic, as much as ethnic or linguistic markers: they indicate not which language a people spoke, but whether they owned cattle" (Wallace 2011, p. 49). Namibian ethnic identities were in a process of formation and change during the late 19th century: ". . . the cohesive ethnic groups of . . . 'the Herero', 'the Damara', 'the Nama' and so on—were largely a development of the late nineteenth and twentieth centuries" (Wallace 2011, p. 49). Additionally, Tochi *et al.* (2012, p. 69) wrote that some Nama and San groups referred to non-Nama/San as 'Damara'. In light of this, Rogers' group labels of the people he was interacting with are sometimes suspect.

⁵⁰ BArch R 1001/1482, p. 136.

⁵¹ BArch R 1001/1482, p. 138.

⁵² BArch R 1001/1482, p. 62.

⁵³ BArch R 1001/1482, p. 77.

6.1 Access to field sites: Colonial powers vs. local leaders

Western powers' expansion into Indigenous lands provided 19th-century geologists with access to new field sites, though that access was not always politically clear-cut. Rogers had expected the Otavi region to be empty. Instead, he found himself walking unaware into a politically-complex border region with overlapping land use claims and systems of ownership he did not understand. He was there to map rocks, and he was not up for the challenge of understanding the politics, writing to the SWACO Board in December 1893:

I feel myself unequal to the occasion. I thought on coming to this district, and being comparatively free of the Damaras [Hereros], we should prosecute our work in peace, but I find it is not the case, and now I really see no end to our trouble.⁵⁴

To access Otavi, Rogers performed an often-precarious balancing act between invoking German and British colonial power and recognizing local sovereignty. (Interestingly, the SWACO corporation was absent from this balancing act—they had no power in the territory beyond what they could convince the Germans, British, or local leaders to give them).

Initially, Rogers and Copeland appeared to believe that all they needed was German backing. Their early letters—before meeting with any local leaders—highlighted their trust in the power of the Germans in this German-claimed territory. In a 11 November 1892 letter, Copeland wrote:

The old [Herero] Chief Mannaseh at Omaruru might give us some trouble, and will undoubtedly ask us many questions, so I wish to have the German officers with us when we enter Omaruru, and they can visit the old Chief with us, and advise us what to say.⁵⁵

This was a terrible plan; Chief Manasse Tjiseseta (1850–1898, Figure 3) hated the Germans. Manasse was one of the most powerful Herero leaders in that time period, and controlled most of the land that Rogers had to pass through to reach Otavi (Gewald 1999, p. 25). Though he had signed a treaty with the Germans in 1885, by the time of Rogers' visit, his trust in them had soured (Wallace 2011, p. 120). The Germans had failed to deliver on many promises, particularly their promise to protect Herero against the Witbooi Nama (Wallace 2011, p. 122).

Copeland and Rogers quickly realized their mistake in aligning themselves with the Germans. They reversed their original plan, begged the German officers to stay away, and emphasized their English citizenship instead. In Copeland's letter of 26 November 1892, he wrote that Chief Manasse expressed preference for the English, and that Copeland responded to this with:

If you mean what you say, Chief, about liking Englishmen, you now have a chance, if the country proves rich enough to see Englishmen come into your land to work your mines, and build a railway, but if you turn us back, it will be many years before you will ever see another English Company come into your land.⁵⁶

⁵⁴ BArch R 1001/1481, p. 94.

⁵⁵ BArch R 1001/1480, p. 34.

⁵⁶ BArch R 1001/1480, p. 38.

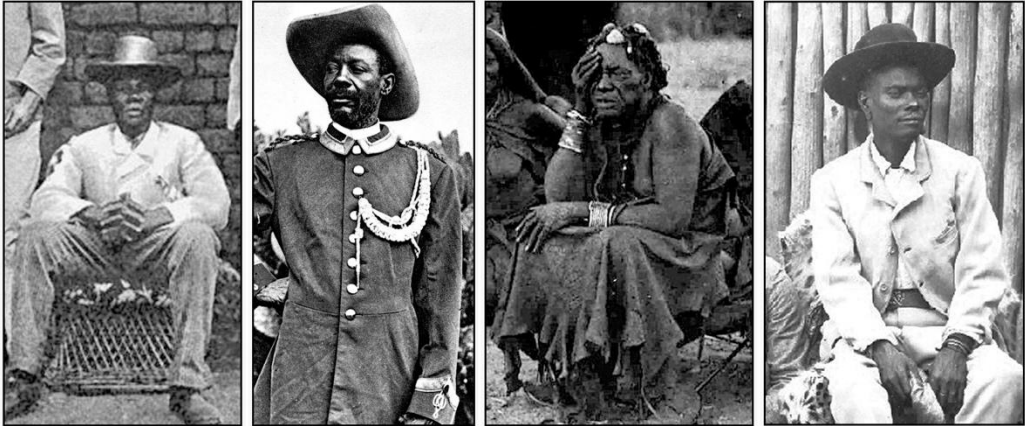


Figure 3: Leaders Rogers interacted with, from left to right: Herero Chief Manasse in 1895 (photo from Namibian National Archives), Herero Chief Samuel Maharero (photo from United Evangelical Mission), Herero Chief Kambazembi, circa 1870 (photo from Deutsche Kolonialgesellschaft), Ndonga Chief Nehale circa 1900 (photo from Leutwein 1906, p. 195).

Rogers similarly leaned on his British citizenship at a March 1893 meeting with Herero Chief Kambazembi: “[The Chief] was acquainted with other Englishmen, who he esteemed very much, and who dealt honestly and truthfully with him, and he trusted we should do the same.”⁵⁷

This emphasis on British citizenship was, at best, a half-truth: SWACO was a joint-venture of British and German shareholders. However, the company was supervised by the German Reichskanzler, and was granted the Damaraland Concession by the German Empire (Voeltz 1984). Rogers and Copeland might have been personally British, but it was a lie that SWACO was *not* a German enterprise.

The locals who Rogers and Copeland interacted with continually—and correctly—assumed as much:

We are looked on by some as being purely and simply Germans, and our coming here is simply a dodge for vantage ground for future attack from the north, by others as being accessory with the Germans, and by most as being in sympathy with them as against the native races. In vain we endeavour to show them our peaceable intentions, and that we are simply here for observations, enquiry, and mineralogical examination. They say our stores, provisions, and associations betray our nationality. Our guns and our ammunition are German, and if we were not German we should be able to get ammunition from them.⁵⁸

The strain of this German/British dance clearly wore on Rogers, who wrote in July 1893:

... the false position in which we are placed makes it awkward honourably to maintain. That we are not Germans can be stated with truthfulness, but in face of the Company’s concession, printed in the English and German newspapers, and which has been told to the respective chiefs, we cannot say we have no connection with them. Even silence in a matter of this kind is like acting under false pretences. To say the least of it, it is an unenviable position to be in.⁵⁹

Appeals to British citizenship, though, still did not provide Rogers with the access he needed—instead, he relied on the protection of local leaders. Throughout their time in Otavi, the Rogers expedition was continually challenged by local communities (see Section 6.2 below), who did not want to show them where the copper was and did not want them there. In response, Rogers pointed to the approval he had received from Herero Chiefs Manasse, Kambazembi, and Samuel

⁵⁷ BArch R 1001/1482, p. 51–52.

⁵⁸ BArch R 1001/1481, p. 42.

⁵⁹ BArch R 1001/1481, p. 44.

Maharero. For example, in April 1893, a group of “Hottentot Chiefs” confronted Rogers about his right to be there, but were convinced to allow him to stay when he produced a “letter from the Damara [Herero] Chief authorising me to work”.⁶⁰ In July 1893, another Herero Chief (Kambatona) demanded Rogers leave; Rogers barely managed to convince him that Samuel and Kambazembi’s authority superseded his own.⁶¹ At another time, the native labor force he had employed went on strike; Rogers managed to convince the strikers to go back to work by threatening to write a letter about them to Herero Chief Kambazembi.⁶²

Throughout his time in Otavi, Rogers recognized the danger of calling upon the German military, advocating continually for diplomatic navigations around the Herero, Hailom, Nama, and Ndonga. This was not out of any sympathy with the local people, whom he saw as (at best) potential future laborers or (at worst) obstacles in the path of civilizing forces (see Section 6.5 below). It was a practical assessment: he thought the Germans would lose. In fall of 1893, in response to Rogers’ reports of increasing resistance from local communities (see Section 6.2 below), SWACO began considering German military aid: 25–30 men stationed at Otjikoto.⁶³ Rogers opposed this plan, writing on 13 November 1893 that he believed his strategy of allying with the local chiefs was sufficient.⁶⁴ He pointed out that, even if soldiers could manage to reach them at Tsumeb, their supply lines would be 400 miles long through African-held territory: “transport carrying would be practically impossible”.⁶⁵

However, within a month, the continually-increasing local resistance compelled Rogers to ask the Board to relieve him of his post and allow him to return to England.⁶⁶ Rogers wrote of the balancing act between chiefs and German authorities that he was almost-continually performing: “Really, gentlemen, this continual worry and anxiety is not good for me . . . it is impossible to carry out our work with any degree of vigour or satisfaction”.⁶⁷

6.2 Local responses: Leveraging and resistance

During this time period, there were at least three communities centered on Otavi copper: the Kingdom of Ondonga, the Hailom, and the Herero. In Rogers’ letters, the “Hottentots” and Berg Damara also play major roles, though it is unclear what relationship these communities had with Otavi copper (see Hearth 2021, pp. 441–442). Though most of these communities’ perspectives were not recorded in the colonial archives, they can still be found in pieces throughout. This section reviews what can be found in the colonial archives and published accounts of these communities’ responses to the early SWACO copper claims in general and the Rogers Expedition in particular.

6.2.1 Herero

Herero were the first (and most frequent) set of communities that Rogers had to negotiate with—and they continued to assert their rights to both the land and the Otavi copper.

This began with Chief Manasse, who carefully controlled and monitored the expedition’s movements en route to Otavi. Manasse controlled most of the territory that Rogers had to traverse to reach Otavi. In November 1892, the expedition neared Manasse’s headquarters at Omaruru (Figure 4B). Before they were allowed to enter, Manasse had the expedition pay a grazing and water tax (taxation being one of the main ways that Manasse exercised control over his polity,

⁶⁰ BArch R 1001/1482, p. 61.

⁶¹ BArch R 1001/1482, p. 83.

⁶² BArch R 1001/1481, p. 92.

⁶³ BArch R 1001/1481, p. 54–55.

⁶⁴ BArch R 1001/1482, p. 112.

⁶⁵ BArch R 1001/1482, p. 112.

⁶⁶ BArch R 1001/1481, p. 94.

⁶⁷ BArch R 1001/1481, p. 94.

Gewald 1999, pp. 69–70). The expedition was then escorted by armed guards and made to wait before being eventually summoned to meet with Manasse and his council.

In this meeting, Manasse repeatedly emphasized Herero ownership:

The [Chief] asked by what authority we came into their country to do these things, where our credentials were, and why no notice had been received by them of our coming. We explained that our Company in London had obtained a permit from the German Authorities to do this work, it being universally understood in England that this part of the country was under the German Protectorate. They declared that the country was their own and that we must have their permission before proceeding further or return to Walvis Bay immediately.⁶⁸

Copeland recounted this meeting in a letter from 26 November 1892:

The Chief then went on to say: ‘This is *our* country! We are *owners* of it! We do not want war! We are for peace. We have been cheated many times before; but now our eyes are opened, and when once you could buy our land with a bottle of whiskey or a suit of clothes, that time is all gone by’.⁶⁹

Rogers wrote in his report to SWACO:

The reason and common sense evinced by the Chief was a matter of surprise to most of us. Certain it is the Germans are not held in favor by the natives or traders. It is also certain, the mining property of Otavi, and other mineral claims, are held by the chiefs to be under the sole control of Mr. Robert Lewis, and that any other claimant will be looked on by them as an usurper . . . A country like Damaraland is a difficult one to keep when the natives are in open hostility to a foreign power. I cannot for a moment think the Company at home knew the actual state of matters here, or they would never have sent the expedition without first advising its members of the state of affairs. In my opinion, whatever the mineral wealth of the country beyond, in the present condition of affairs protection by armed force is necessary to do any work . . . The general opinion of the traders here is, that our stay at Otavi will not be long, and that the other chiefs will compel Manasseh to recall us. At any rate, we will do the best we can whilst there, to get as much information as possible on the mineral wealth of the district . . .⁷⁰

Manasse did let them pass, eventually, though he sent one of his nephews (who was his chosen heir⁷¹) along as an escort.

The next Herero Chief they encountered was Samuel Maharero (1856–1923), the son of the late Chief Maharero. Samuel was in the middle of a prolonged power-struggle. The Germans had designated him ‘Paramount Chief of the Hereros’ in 1892, but the other Herero chiefs did not go along with this (Gewald 1999, p. 46). Though he did not meet with Rogers, he frequently sent letters and emissaries to the expedition, initially challenging their right to be there. He did eventually give his permission.⁷²

It is possible the reason Samuel gave Rogers permission to operate in Otavi is that the expedition gave Samuel an opportunity to enforce his claim over the copper and land in that area, relative to the Nama, Ovambo, Hailom, and other Herero chiefs. In September 1893, Samuel wrote Rogers:

. . . if anyone comes and says, “This is my place; you must pay so much, or so much,” without my knowledge, they are liars, – even if it is Kamabathembie or the Bushmen – and if you listen to them you will be wrong in doing so. I am the High Chief of Hereroland; and further, I have already told you, that if anyone comes to you without my knowledge, and troubles you, or comes with war, you can beat them, or shoot them down, and you will not be held responsible . . . A good deal of trouble

⁶⁸ BArch R 1001/1481, pp. 39–40.

⁶⁹ BArch R 1001/1480, p. 39.

⁷⁰ BArch R 1001/1482, p. 14.

⁷¹ BArch R 1001/1480, p. 53.

⁷² BArch R 1001/1482, p. 40.

comes from your side . . . [because you] listen to everyone that comes and says, “This is my place. I am captain.” Now, I forbid you to listen – even unto death. I will arise, and look for your blood.⁷³

In July 1893, another Herero⁷⁴ Chief, Kambatona,⁷⁵ arrived at Rogers’ Otavi camp, and demanded that Rogers leave, accusing Rogers of previously lying to him about being not affiliated with the Germans. Rogers finally was able to bribe him into letting them resume work, but he turned up occasionally to reassert his rights until Rogers eventually left.⁷⁶

Though spread across several chiefs, the Herero response to SWACO’s copper claims were clear: they maintained that the land and the copper were theirs, but that they were willing to work with Rogers, and, presumably, SWACO.

6.2.2 *The Kingdom of Ondonga*

Despite the Herero claims to copper, they did recognize the power of the Ndonga claim. Manasse reportedly told Rogers: “. . . if anyone could lay claim to the Otavi Mine it was the Ovambo Chief . . .”.⁷⁷

The Kingdom of Ondonga had been claiming rights to Otavi copper since at least the first written records in 1850, and they continued through at least 1904. Their physical distance from Otavi (more than 240 km north) meant their responses were rarely represented in Rogers’ letters—but there were hints.

On 30 August 1893, Rogers wrote that there were rumors that “Chief Nahari, of Oudonga” (presumably Chief Nehale, 1868–1909) was angry at them for being in Otavi. Nehale had sent representatives asking Rogers to visit him, and had also sent two or three sets of Ovambos with baskets to gather more copper ore.⁷⁸ Rogers also noted that he was apprehensive about visiting Nehale, because Jordan had been murdered there explicitly because of the Otavi copper.⁷⁹

In a 20 December 1893 letter, Rogers wrote: “Again, a report is prevalent, the Ovambos being displeased at our being here, are coming in force to make war on us”.⁸⁰ And, again, on 20 January 1894, Rogers wrote: “[The Ovambos] are incensed at our being here, and if they do not come in bodily force to drive us away, will steal from the Damaras, and otherwise harass them, that they will be obliged to recall us”.⁸¹

Though these rumors failed to materialize into physical conflict during Rogers’ expedition, the issue was still alive in 1904. Based on Finnish missionary records, Eirola (1992, p. 167) reported that Chief Nehale joined the 1904 Herero War against the Germans in retaliation for their claims on the copper mines, and attacked Fort Namutoni with the intention of traveling further south and reclaiming Otavi.

Rogers also mentioned Ovambo laborers working in the early excavations of Otavi and Tsumeb mine shafts. Given the rumors of anti-mining sentiment from Ondonga, it is unlikely that these laborers were sanctioned by the Ndonga monarchy, as they would be during the contract labor system that was instituted during South African occupation. It is possible they had instead moved south in response to the instabilities in Ondonga at that time (*e.g.*, McKittrick 2002).

Rogers briefly discounted the Ovambo rumors and copper claims. In his 27 December 1892 report to SWACO, Rogers speculated that Ondonga no longer wanted the Otavi copper:

My own impression is that near the surface, a considerable proportion of the copper consisted of malleable moss copper together with oxides and carbonates, which are easily reduced with carbon and silicon, two fluxes readily obtainable by the natives on the spot; but as depth is reached these

⁷³ BArch R 1001/1482, p. 104.

⁷⁴ Rogers called him Damara, but he almost certainly meant Herero.

⁷⁵ A different version of Rogers’ letters spells this Kambatoni.

⁷⁶ BArch R 1001/1482, p. 94.

⁷⁷ BArch R 1001/1482, p. 96.

⁷⁸ BArch R 1001/1482, p. 96.

⁷⁹ BArch R 1001/1482, p. 97.

⁸⁰ BArch R 1001/1482, p. 119.

⁸¹ BArch R 1001/1481, p. 103.

ores change into the more refractory sulphides, with which are associated galena or sulphide of lead, not so easily reduced, consequently the Ovambo smelters do not care any more for the Otavi ores.⁸²

This conclusion was undercut by the arrival of Ovambo with baskets to retrieve ore.

6.2.3 “Bushmen”

The people Rogers referred to as ‘Bushmen’ were probably the San nation of Hailom (see Dieckman 2007 p. 36 for a map of San nations during this time period).

In contrast to Ondonga, the Hailom response was seen throughout SWACO records: they continued to assert their rights to the copper and the land. There is evidence that they were still actively mining Otavi copper during the Rogers expedition. Möller (1974, p. 148) reported that, in his 1895 visit to Ondonga, the Hailom still brought their yearly tribute of copper to King Kambonde.

The Hailom response was evident from the moment the Rogers expedition arrived in Otavi. Upon approaching Otavifontein, Rogers reported spending four days in meetings with the ‘Bushmen’ before they granted him permission to continue.⁸³ Sadly, neither Rogers nor Copeland recorded these meetings with the same detail they had with Chief Manasse. In his letters, Rogers centered on the Herero chiefs Samuel, Manasse, and Kambazemi—but not the Hailom chiefs. In all his letters, he named only two, and somewhat in passing: Huntsmap and Aribib.⁸⁴ This could be due to the less centralized nature of Hailom communities during this time; Rogers often blurred them into a single group in his letters.

However, even after allowing the expedition into the mountains, the Hailom refusal to reveal copper locations is a dominant theme in Rogers' letters. For example, on 30 December 1892, Rogers wrote:

I am informed there are several places in these hills where Bushmen work for copper, but on asking to be shown where they are, I am coolly told permission must first be obtained of the Bushman Chief, and he lives at some considerable distance from this place.⁸⁵

And again on 30 January 1893:

I start prospecting the adjacent hills in search of a reported rich vein of copper and lead, but do not succeed in finding it. I am informed the Bushmen know where it is, but will not tell us.⁸⁶

In October 1893, at a meeting between ‘big men’ of Samuel, Rogers, Aribib, and Huntsman, Aribib chided Samuel’s men, saying: “All these whites are big rascals, and you must not allow them to do too much or go where they like”.⁸⁷

Rogers letters grew more frustrated with the ‘Bushmen’, and there was evidence that the Hailom were growing more frustrated with him. Rogers wrote:

Whatever we do is looked on with suspicion. Our work will be carried out practically under protest, as the natives are not solicitous we should remain here, and it is not to be wondered at, as they think our very presence and work will perhaps take from them the means by which they have hitherto earned a livelihood, and they have not sufficient foresight to see if mining is carried on by us we shall be able to employ them.⁸⁸

⁸² BArch R 1001/1482, p. 117.

⁸³ BArch R 1001/1482, p. 122.

⁸⁴ Rogers spelled this “Arabib”, but, presumably, this is the same “Aribib” who was cited as a Hailom leader during this time period by other sources.

⁸⁵ BArch R 1001/1480, p. 153.

⁸⁶ BArch R 1001/1480, p. 161.

⁸⁷ BArch R 1001/1482, p. 102; along the margins in the archive letter, someone has typed next to this “Uncalled for statement”.

⁸⁸ BArch R 1001/1480, p. 163.

On 23 June 1893, Rogers reported that the resistance of ‘the races’ was becoming more physical:

They said they had no idea we were going to remain so long or do so much work. Some threaten to bring a big force and drive us away. One waggon has already been stopped, and the Bushman say it is only what all waggons will be subject to.⁸⁹

Rogers took to paying Huntsmap and Aribib so they would cease stopping his wagons.⁹⁰

The Hailom influence in the Otavi area was significant. They had successfully driven away the Boer settlers of the Republic of Upingtonia less than a decade before (Gordon 1992, pp. 40–42). Copeland echoed this in a letter from 26 December 1892: “. . . the Bushmen can make it so hot here for anyone that they could not stay. . .”.⁹¹

SWACO apparently took this escalation seriously. On 30 August 1893, Simonsen sent a telegram to the SWACO Board: “Situation at Otavi alarming. All men must be armed”.⁹² This situation changed, somewhat, when Rogers moved his camp from Otavi to Tsumeb. Rogers wrote in a 10 November 1893 letter that:

I am pleased to say the attitudes of the natives has considerably changed towards us. Whether this is due to the presence of [Samuel’s] big men, or from our abandoning [the Otavi] camp and going to Soomep, they fearing we shall soon leave altogether, or from whatever cause. . .⁹³ [And, later, in the same letter:] I have no apprehension of having trouble with the Bushmen at Soomep. . .⁹⁴

Within a month, though, Rogers’ opinion on the situation changed again, from the combined resistance of the Hailom, Herero, and workers.

6.2.4 ‘Hottentots’

Rogers also frequently wrote of ‘Hottentots’ in the area. It is possible he meant Nama; ‘Hottentot’ was a colonial-era term for Nama people. However, it is more likely that Rogers meant Hailom; it was not uncommon for Europeans to mistake Hailom and Nama (Veder 1934, pp. 77–78, cited in Dieckmann 2007, p. 106). Rogers did not offer insights on how he distinguished ‘Bushmen’ and ‘Hottentots’, never mentioning differences in language. It is possible that he distinguished them based on his perceptions of their economic status, as this was a common method of classification by Europeans at that time (Wallace 2011, p. 49).

Rogers gave very few details about them. He said their numbers were small, and he never named any of them in his letters, referring to them in general as “the Hottentot Chiefs”, except twice: “Adam”⁹⁵ and “Johannes”.⁹⁶ Despite the lack of detail, though, Rogers assigned them significant power in the Otavi region. He wrote that

they are in possession, are really the persons who know the country and have influence over the Bushmen, and, in order to gain information are the persons with whom we have to do.⁹⁷ [Upon seeing the Green Hill, Rogers wrote:] I could scarcely conceal my astonishment and delight, but recollecting we were in the presence of the owners [the Hottentots] I stifled my feelings.⁹⁸

⁸⁹ BArch R 1001/1481, p. 39.

⁹⁰ BArch R 1001/1482, p. 102.

⁹¹ BArch R 1001/1480, p. 124.

⁹² BArch R 1001/1481, p. 52.

⁹³ BArch R 1001/1482, p. 110.

⁹⁴ BArch R 1001/1482, p. 110.

⁹⁵ BArch R 1001/1482, p. 196.

⁹⁶ BArch R 1001/1482, p. 185.

⁹⁷ BArch R 1001/1482, p. 187.

⁹⁸ BArch R 1001/1480, p. 169.

Rogers letters showed that the ‘Hottentots’ also opposed his expedition. He reported that they refused to allow him to work at Tsumeb without paying them monthly rent,⁹⁹ refused to show him copper outcrops,¹⁰⁰ and that their “attitude was the most warlike and threatening of any of the native tribes”.¹⁰¹

Rogers reported that the ‘Hottentots’ and Herero were at odds. On 8 April 1893, he wrote that a group of Hottentots had demanded he stop work. When he responded that he had permission from the Herero chiefs, they responded that “the [Herero] had no right to give us permission, and they should proclaim war against them. They say our coming here will be the means of their cutting each other’s throats”.¹⁰²

All of these observations align with Rogers’ ‘Hottentots’ being a subgroup of the Hailom in the region; regardless, though, they consistently opposed his presence.

6.2.5 *Labor resistance: strikes*

Opposition to Rogers’ expedition was not uniform across all Otavi communities, nor was it uniform in time. At times, some chiefs allowed their people to work for Rogers as cooks, hunters, servants, and miners. This was not necessarily an endorsement: it could have been a way for them to exercise some control and ownership over the expedition. Rogers seems to have seen it that way:

. . . the employment of native labour is done under great risk. If an accident occurs (and accidents will happen under the most careful management), we shall be held responsible and shall have to pay heavy damages in some way or other, if not with our lives. To employ all Europeans brings us under the stigma of wishing to strengthen our position for hostile purposes.¹⁰³

Despite what he perceived as the risks of hiring African workers, Rogers also recognized that his expedition would fail without them. He was tasked with assessing whether the Otavi Mountains held copper deposits rich enough to warrant the construction of a railway from the coast. His initial prospecting at Otavi was disappointing: enough copper to hint at extensive deposits, but not enough to say whether a railway would pay for itself. He needed to dig more prospecting shafts, at both Otavi and Tsumeb, and quickly. Supplementing his European miners with African miners was the only way to do this.

Pay was a major issue for local miners from the beginning. Rogers began employing locals as miners in May 1893, “at a minimum wage per day:”¹⁰⁴ 30 shillings a month for those workers “assisting the miners” and 20 shillings per month for “labourers and jobbers”.¹⁰⁵ He also noted that: “The traders’ price for clothing is so high here, that scarcely a single article can be purchased for less than £1”.¹⁰⁶ By August, he wrote that they were “always suspicious they are not being paid sufficiently for their labor”.¹⁰⁷

Food was also a constant issue: the expedition often ran low. In May 1893, Rogers reported that they were so short on food that the miners were given half-breakfasts, and he and Eslick had gone without: “We shall soon be out of everything”.¹⁰⁸ And, another time:

Our stock of flour and whole meal is finished, at least as far as the store supply here, and we have been reduced to eating corn meal alone as far as cereals are concerned, which seems to have acted

⁹⁹ BArch R 1001/1482, p. 95.

¹⁰⁰ BArch R 1001/1482, p. 68.

¹⁰¹ BArch R 1001/1482, p. 173.

¹⁰² BArch R 1001/1482, p. 172.

¹⁰³ BArch R 1001/1481, p. 44.

¹⁰⁴ BArch R 1001/1482, p. 67.

¹⁰⁵ BArch R 1001/1482, pp. 116–117.

¹⁰⁶ BArch R 1001/1482, p. 117.

¹⁰⁷ BArch R 1001/1482, p. 94.

¹⁰⁸ BArch R 1001/1482, p. 181.

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deleteriously on several of us.¹⁰⁹ [And again:] . . . we are absolutely out of a great many essential things, and have been living on Indian corn meal for the past month . . . Our chief method of eating it is in the shape of pancakes, but they require more fat than our slaughter oxen will yield.¹¹⁰

Water was also often scarce and/or bad: “The water has been so bad, and the effluvia, even after boiling, so objectionable that it is a wonder no serious consequences have occurred”.¹¹¹

Working conditions in the mine were also dangerous (Figure 4A). The bottom of the shaft was so narrow that only one man could work there at a time, “with considerable danger, owing to the loose condition of the earth, in removing which, large rocks would sometimes fall away”.¹¹² The miners encountered carbonic acid gas so thick they couldn’t burn candles.¹¹³ In one August 1893 letter, Rogers speculated that one of the miners’ severe bronchitis was likely due to the fact that he had been working knee-deep in water in the mine shaft for a week.¹¹⁴

Perhaps exacerbated by mining conditions, illness and injury were common at the workcamp. Rogers reported outbreaks of influenza, diarrhea, bronchitis, ‘bronchial colds’, and rheumatism, as well as recurring sciatica. At one point, Rogers wrote that many of the workers were so sick they could not move:

Fever and ague [a shivering sickness, perhaps malaria] prevailed to such an extent among the native population, and especially our employés, as to assume epidemic form . . . Whilst it cannot be said to be malignant, it leaves the patient so weak and prostrate that he takes considerable time to recover. One feature noticeable in the native is his lack of stamina to resist disease . . . To me, when once attacked, he wills to die, and unless aroused out of this low and desponding mood, die he will. Mr. Eslick was the only English person attacked, and he had it rather severely.¹¹⁵

There were also considerable cultural differences between Rogers and the locals he hired in what constituted work. Rogers expected them to do what they were told, but he wrote of the Hailom workers he hired:

Our Bushmen employés refuse to do the work they are sent about. They think they should be allowed to choose their own work.¹¹⁶ [Later, he wrote of the African workers:] They have not sufficient stamina for continuous manual labour, and hence frequently give in, complaining they are sick, which only means, they are tired and sore from their exertions.¹¹⁷

The cultural differences extended to pay and food. The workers brought families with them, and expected their pay and food rations to be sufficient for their kin as well. They were insulted by Rogers’ refusal to provide food and clothing for their families.¹¹⁸ Given the general anxieties about Rogers’ presence, the poor pay, the shortages of food, the dangerous working conditions, the prevalence of illness at the camp, and the mismatch in expectations about what constituted hard work, it is unsurprising that the African laborers organized strikes.

¹⁰⁹ BArch R 1001/1482, p. 55.

¹¹⁰ BArch R 1001/1482, p. 68.

¹¹¹ BArch R 1001/1482, p. 125.

¹¹² BArch R 1001/1481, p. 45.

¹¹³ BArch R 1001/1482, p. 85.

¹¹⁴ BArch R 1001/1482, p. 97.

¹¹⁵ BArch R 1001/1482, p. 68.

¹¹⁶ BArch R 1001/1482, p. 199.

¹¹⁷ BArch R 1001/1482, p. 94.

¹¹⁸ BArch R 1001/1482, p. 117.

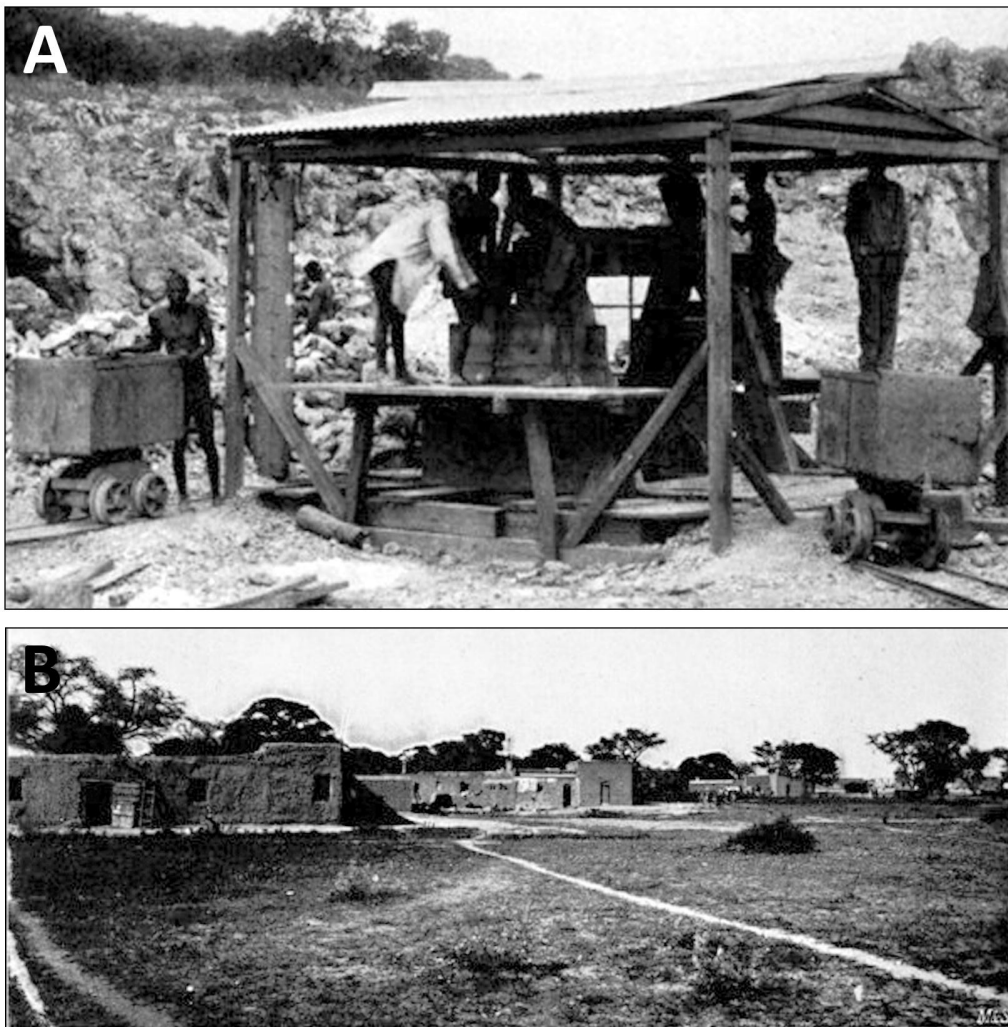


Figure 4: A) Drilling a shaft at Tsumeb. This photo is only constrained as being taken before 1906, so it might have been taken during the subsequent James Expedition of 1901, or during the Rogers' expedition (Leutwein 1906, p. 378). B) Omaruru, home of Chief Manasse Tjiseseta, before 1906 (Leutwein 1906, p. 470).

Rogers wrote that, on 1 December 1893, “the Hottentot Chiefs (who were here to collar the Berg Damara’s pay when they received it), and the Ovambos conspired together to cause a general strike for increase of wages”.¹¹⁹ He recounted that the strikers stopped the whole labor force from working, and, upon Rogers’ intervening, one attacked him by trying to gouge Rogers’ eyes with his fingers. Rogers threatened to send a letter to Kambazembi. Apparently, this threat to call in the Herero chief was enough to convince the strikers to go back to work. Rogers wrote: “There is, however, an under-current of feeling, and [another strike] may break out again at any time”.¹²⁰

About a week later, there was a fire that destroyed the newly-built 60-foot-long store. The fire destroyed the assaying materials, crippling the expeditions’ ability to assess the quality of ore they were mining. Rogers was unsure what caused the fire, but proposed sabotage as one of the possibilities:

¹¹⁹ BArch R 1001/1482, p. 117.

¹²⁰ BArch R 1001/1482, p. 117.

Some are of opinion some evil-disposed persons set fire to it. In view of the recent strike we have had amongst the native employés here, they say they see some motive for it, and maintain this is the disposition of the Damaras, who will do any and every possible harm, if they have been thwarted in their wishes.¹²¹

Not long after the fire (between 16 and 20 December 1893), the African workforce went on strike again, demanding better food. Roger reported the strike lasted several days and that the ‘Hottentots’ had been the ringleaders. He fired all the ‘Hottentots’ and replaced them with Berg Damara and Hailom.¹²²

It appears to have been this final strike combined with another threat of an Ovambo raid that finally broke Roger’s resolve. In his 20 December 1894 letter to the Board, he wrote:

. . . another strike has occurred with our native employés, this time for more food . . . Our difficulties now appear to have taken a more critical form. Before, our enemies were from without, now they are from within the camp . . . Again, a report is prevalent, the Ovambos being displeased at our being here, are coming in force to make war on us . . . Really, gentlemen, this continual worry and anxiety is not good for me. I feel acutely the responsibility of my position here, with so many men under me, and so much property, that oftentimes I feel myself unequal to the occasion. I thought on coming to this district, and being comparatively free of the Damaras, we should prosecute our work in peace, but I find it is not the case, and now I really see no end to our trouble. Looking at all these matters I must ask you gentlemen to take into consideration the propriety of relieving me of my duties. In the present state of feelings here, it is impossible to carry on our work with any degree of vigour or satisfaction.¹²³

Rogers’ letters stopped in mid-March 1894, though a later SWACO document said he returned to England in January of 1895.¹²⁴

6.3 Geologists as intelligence gatherers

As was the case in many regions during this time period, the first geologic expedition to Otavi was the first organized European incursion into that land—and Rogers and Copeland clearly understood they were paving the way for settlers. Their letters back to the SWACO Board detail water locations explicitly in anticipation of agricultural and industrial needs, soil quality for farming, and recommendations for how settlers should deal with the local people. Rogers reported planting seeds in various places along his trek from Walvis Bay to Otavi, in the hopes of understanding whether certain areas would be appropriate for settlers.¹²⁵ Copeland wrote to the SWACO Board:

The only land for Colonists to settle upon is the land north of Omaruru. But the Colonists must have two things: 1st, a small amount of capital spent in opening up the water, so it can be used for irrigating purposes. 2nd, They must have protection from the naked Damara [Herero], who stalks around with a belt full of cartridges and a rifle, and says he owns the country, and will use the water wherever he can find it.¹²⁶

This intention for settlement was explicitly tied to the copper deposits in Otavi. The SWACO Board saw bringing German farmers as settlers to that area as key to politically stabilizing it for mineral extraction. One Board member wrote in 1894:

¹²¹ BArch R 1001/1482, p. 114.

¹²² BArch R 1001/1482, p. 119.

¹²³ BArch R 1001/1482, p. 119.

¹²⁴ BArch R 1001/1588, p. 45.

¹²⁵ BArch R 1001/1480, p. 115.

¹²⁶ BArch R 1001/1480, p. 123.

[Governor of South West Africa] Major Leutwein and [SWACO Board Member] Dr. Hartmann both think it of the greatest importance that our Company should allow the farmers to settle in the territory, as in this way no natives troubles can possibly arise in the north; the population would be so large that the natives would never think of interfering.¹²⁷

6.3.1 Labor availability

In addition to water and farming potential, Rogers and Copeland were also explicitly assessing the availability of another resource critical to European colonization of this area: African labor. They understood that the only way Germany would be able to make their colony pay for itself was to use the local population as farm and mining labor, and they reported back accordingly. Rogers wrote back to SWACO:

From observation I should judge the Berg Damaras the best workmen of any of the native races. The Bushmen, however, when treated kindly, render good service for the small pittance they get in return, and are infinitely preferable to the consequential and haughty Hereros . . . One thing is, however, noticeable, the lack of enduring stamina. Their food is so little, and of the least nutritive order, that they soon get exhausted with little labour; and this is true of all classes, masters and servants . . . I believe, however, with proper nourishing food and stated periods for eating, there is material in some of these natives calculated to make strong and industrious races.¹²⁸

Similarly, Copeland wrote even before they had arrived at Otavi, of watching people work (whom he thought were Berg Damara): “they are large men, and will be the future workmen of this country”.¹²⁹

As part of this assessment, Rogers and Copeland detailed how they thought the Germans and SWACO could navigate and subjugate these communities. For example, on Christmas Day 1893, Rogers and his English miners fired off some rockets, and, observing that the locals were terrified of them, he wrote the SWACO Board: “. . . I am not certain, but that firing rockets would be effectual in dispelling an attack from them”.¹³⁰ Whomever received the letter at SWACO underlined that phrase.

In another letter, Rogers wrote about his opinions that the Germans would not be able to establish a colonial government in the territory because “they have a stubborn and rebellious people to deal with, and that it is far from an easy matter to bring them into subjugation”. Someone at SWACO wrote in the margin next to that statement: “Native races not easily conquered”.¹³¹

At times, Rogers’ communications on this topic took a more ominous tone. After visiting a Nama village near Walvis Bay for an afternoon, he wrote:

It is difficult to do anything for these native races. If one treats them with the best intentions, and after all, they die, the survivors are very likely to charge you with giving them something to cause their death. We must learn wisdom from this information in our dealings with the natives.¹³²

And, later, describing how some Herero shaved their heads using broken glass, he speculated that they were “apparently indifferent to pain”.¹³³ (See Section 6.5 below).

¹²⁷ BArch R 1001/1587, p. 92.

¹²⁸ BArch R 1001/1480, p. 165.

¹²⁹ BArch R 1001/1480, p. 36.

¹³⁰ BArch R 1001/1481, p. 104.

¹³¹ BArch R 1001/1482, p. 102.

¹³² BArch R 1001/1482, p. 139.

¹³³ BArch R 1001/1480, p. 55.

6.3.2 *Land and mineral rights*

Germany had used the perception of conflicting claims—combined with their ignorance of land use traditions in that region—to declare the Otavi region a ‘no-man’s land’ and claim it for Germany (Hearth 2021, p. 456). The German government had then granted SWACO the ‘Damaraland Concession’. However, as Rogers discovered, no one in the Otavi area actually believed that Germany or SWACO was in charge. As part of his work, he was consciously gathering information about land and mineral claims.

Like European travelers before him, Rogers saw the overlapping land use in the Otavi region as evidence of competition for control: “There seems to be a general scramble for the ownership of the northern part of the country. Being inhabited by such a mixture of races, each wishes to claim authority of the whole”.¹³⁴ Again, he wrote in April 1893: “The general impression amongst all classes and races of this country is, that this northern territory is exceptionally rich, and every race wishes to claim authority over it”.¹³⁵ And, again, in May 1893: “. . . every Chief and race we meet with claims the district . . .”¹³⁶

After less than a month in the mountains, Rogers wrote on land ownership in Otavi:

. . . it is difficult to find out how much these people own. The population is so sparse, the land so large, and the cattle allowed to roam whithersoever they will, that the settler in a district claims any and everything within that particular district. No boundaries are ever fixed; there is no central authority to which they are responsible; no land laws for themselves or the general public. Take all you can, and, according to your strength, protect all you take. When a stronger force comes along the weaker goes to the ground, and shifts to some more peaceable locality.¹³⁷

In the margins of the letter, someone from the SWACO Board wrote next to this: “No land laws”.¹³⁸

Despite this perspective on ownership, Rogers reports behaving as though Otavi copper belonged to the locals. Upon being shown the green hill at Tsumeb, he wrote:

I will only say that on first seeing such a grand and prominent outcrop I could scarcely conceal my astonishment and delight, but recollecting we were in the presence of the owners I stifled my feelings.¹³⁹

Additionally, he reported that Herero Chief Manasse told him that the party with the strongest claim to Otavi copper was the Kingdom of Ondonga.¹⁴⁰

In reality, the land use situation in Otavi was probably more complex than Rogers understood. Wallace (2011) summarized how land use, control, and ownership differed in early colonial Namibia from European expectations:

Control of productive resources centered, not on the ownership of specific portions of land, but on rights to wells, pasture, and other resources . . . Claims to resources might be asserted or reasserted at particular historical moments, as land was abandoned or (re)occupied (Wallace 2011, p. 47).

The fact that many communities actively used the Otavi area did not necessarily mean they were in a “scramble for ownership”, but that land and mineral rights followed traditions Rogers was unfamiliar with.

¹³⁴ BArch R 1001/1482, p. 29.

¹³⁵ BArch R 1001/1482, p. 60.

¹³⁶ BArch R 1001/1482, p. 69.

¹³⁷ BArch R 1001/1480, p. 165.

¹³⁸ BArch R 1001/1480, p. 165.

¹³⁹ BArch R 1001/1480, p. 169.

¹⁴⁰ BArch R 1001/1482, p. 96.

6.3.3 Corporate scouts

The Rogers expedition also highlights the relationships between governments and corporations in Western colonization. Rogers and Copeland obviously understood that they were to guard information about their geologic work at Otavi—in fact, suspected failure to do so appears to have been the reason for Copeland’s recall. On 27 February 1893, Copeland denied the Board’s accusations that he had leaked information about the Otavi copper to a “Mr. Wilson”. He offered to resign if they had lost faith in him, saying:

I am in no correspondence with any other person or persons as regards this Company, or am I in the *habit* of giving information of my business affairs to any one while I am, as you say, a servant of the Company, or even ever afterwards.¹⁴¹

They apparently did not believe him. Rogers noted in his diary on 31 March 1893 that the Board had recalled Copeland.¹⁴²

Rogers remained on guard against leaks. On 23 June 1893, he wrote the Board that his wife had mailed him a copy of the *Financial News*, which included this reporting:

FRESH DISCOVERY OF COPPER IN DAMARALAND. – Cape Town, April 6th – Information has been received here from the Mining Engineers of the South-West Africa Company announcing the discovery in the Company’s territory of an extensive out-crop of copper ore a few miles north of the Otavi Mines in Damaraland.

Rogers denied that he or any of his miners were the source of the leak: “I emphatically and entirely repudiate any complicity”.¹⁴³ He reported that he had mentioned the Tsumeb discovery to Copeland, though, “but no details were given”.¹⁴⁴

Interestingly, this guarding of corporate knowledge extended to withholding it from the government as well. Technically, SWACO was operating with Germany’s authorization in German-claimed territory. Germany had established a Mining Commissioner’s Office in 1889, and, in August 1892, Gustav Bernhard Duft took over as commissioner (Schneider 2000, p. 2).

For Rogers, though, it was obvious that his loyalty was to SWACO. On 23 June 1893, Rogers wrote the Board that Duft had requested Rogers send him monthly reports on the mining developments in Otavi and Tsumeb, along with representative specimens. Rogers asked the Board to advise what he should disclose to Duft.¹⁴⁵

That Rogers worked for SWACO, not the government, was clearly the intention of the Board. One Board member wrote in a 15 March 1894 letter:

Rogers has been quite right in withholding information even from Mr. Duft, without our distinct authority . . . we are also quite prepared to furnish the Mining Department in Africa with a monthly report of such matters as may be deemed to be of general or scientific interest . . . but we decidedly object to acquaint the Mining Department with matters which are simply of a business character.¹⁴⁶

6.4 The pivotal role of local guides

One of the most common themes in 19th-century colonial geology is the critical role of local guides—and how, despite their importance, these guides were almost invisible in geologic reports. This is well-illustrated by the Rogers expedition, who were constantly finding themselves lost: “. . . the small and only map supplied me in London [being] entirely useless for this work”.¹⁴⁷

¹⁴¹ BArch R 1001/1480, p. 186.

¹⁴² BArch R 1001/1482, p. 170.

¹⁴³ BArch R 1001/1482, p. 76.

¹⁴⁴ BArch R 1001/1482, p. 75.

¹⁴⁵ BArch R 1001/1482, 75.

¹⁴⁶ BArch R 1001/1587, p. 73.

¹⁴⁷ BArch R 1001/1480, p. 49.

Even when Rogers or Copeland didn't mention guides, they were often there, behind the scenes. At one point in his reporting, Copeland spent a few hundred words detailing their trek, and added, at the end: "the bushman had led us as straight as he could". But for that offhand remark, the reader would never have known a Hailom guide was leading them.¹⁴⁸

In addition to simply showing them the way, the African guides kept the expedition alive. To reach Otavi, the expedition took wagons (driven by African wagon-drivers) across the dry Central Namibian Plateau. Rogers and Copeland were dependent on their guides to find them water, often by digging down to make short-term wells.¹⁴⁹ They were also dependent on African drivers and animal tenders to drive the oxen and wagons, to care for oxen, and to repair the wagons when they broke down.

And, of course, they needed locals to show them where the copper and mines were. On 20 December 1892, when Rogers first encountered Otavi copper, he wrote in his diary only: "Mr. Eslick and I proceed to the mines on horseback, a native guide accompanying us".¹⁵⁰ Later, he wrote: "The entrance [to the Otavi mines] on the south western side is by a very narrow passage, and it would be a difficult thing for any stranger to find it, unless shown by someone else".¹⁵¹ And, another day, his guide being hungover: "Having no interpreter, and not knowing the road, I have no alternative but to wait. . .".¹⁵² And, again, later: "I can only follow whithersoever I am led".¹⁵³

6.4.1 John Kruger

Neither Rogers nor Copeland named any of the local guides who brought them to Otavi or showed them copper deposits—except one: John Kruger.

The spellings of Kruger's name were impressively inconsistent. Rogers sometimes called him "Creiger",¹⁵⁴ sometimes "Kruger",¹⁵⁵ sometimes "Kreiger". In the space of one paragraph, he called him "Kreiger" and "Creigur".¹⁵⁶ In a letter, Samuel Maharero called him "Jack Kreiger".¹⁵⁷ Copeland called him "Mr. Creer, a half-bred native",¹⁵⁸ "Young Krugere",¹⁵⁹ and "Mr. Jack Krugere".¹⁶⁰

By Rogers' account, John Kruger was the son of a famous mixed-race ('Baster') hunter who had come from Griqualand. This was probably Johannes (Jaq) Kruger, who, from at least the 1860s, ran an elephant hunting camp at Karakuqisa (northeast of Otavi; Gordon 1984, pp. 200–201). Jaq Kruger also had had close ties to the Herero and Nama: Samuel Maharero's father had placed Kruger and Kambazembi in charge of his operations in the Otavi area, and Gewald (1999, p. 25) wrote that Jaq Kruger had had "a large following of Nama and Damara horticulturalists and hunters". Rogers reported that John Kruger's father was now dead; evidently, John Kruger had inherited at least some of his father's position and connections.¹⁶¹

Despite his status as an outsider, Kruger appears to have been, operationally, the most influential person in the Otavi area. His holdings at Gaub (near Grootfontein) were apparently extensive; in a December 1893 raid, a group of Ovambo stole 300 of his sheep and goats and killed five Hailom, presumably in his employ.¹⁶² Rogers reported that Kruger had sub-chiefs

¹⁴⁸ BArch R 1001/1480, p. 122.

¹⁴⁹ For example, BArch R 1001/1480, p. 111.

¹⁵⁰ BArch R 1001/1480, p. 112.

¹⁵¹ BArch R 1001/1480, p. 116.

¹⁵² BArch R 1001/1480, p. 155.

¹⁵³ BArch R 1001/1480, p. 164.

¹⁵⁴ BArch R 1001/1482, p. 42.

¹⁵⁵ BArch R 1001/1482, p. 116.

¹⁵⁶ BArch R 1001/1482, p. 68.

¹⁵⁷ BArch R 1001/1482, p. 104.

¹⁵⁸ BArch R 1001/1480, p. 179.

¹⁵⁹ BArch R 1001/1482, p. 182.

¹⁶⁰ BArch R 1001/1482, p. 187.

¹⁶¹ BArch R 1001/1482, p. 164.

¹⁶² BArch R 1001/1482, p. 117.

working for him,¹⁶³ and “subordinates”.¹⁶⁴ After Rogers’ departure, in August 1895, Kruger would sign a treaty with colonial governor Theodor Leutwein, wherein the Germans recognized him as captain of the “Bushman” and Damara living in his area, though he was neither Hailom nor Damara (Gordon 1992, p. 49–50).

Kruger was instrumental to the success of Rogers’ expedition: he was Rogers’ main source for copper outcrops. The most significant of these was the Tsumeb ‘Green Hill’ (with the ‘Hottentots’), but Kruger showed him many others throughout the northern Otavi area.

Even beyond sourcing copper, though, Kruger was integral to the survival of the Rogers expedition. He and his network of followers patrolled the region, and reported important changes to Rogers (for example: don’t take the wagons when you go to Grootfontein this week, the ground is too flooded).¹⁶⁵ He acted as translator, reading Dutch and English, and speaking those in addition to the local languages.¹⁶⁶ He was an important supplier of meat, regularly selling them oxen for slaughter.¹⁶⁷

Arguably, though, Kruger’s most important role in the Rogers expedition was his status as facilitator between the many communities using the Otavi region. Like his father, Kruger had strong connections with the Herero, Ovambo, and Hailom. Kruger frequently brought news about local events to Rogers, and tried to smooth over the near-constant challenges that various groups brought to Rogers’ presence. He acted as a cultural interpreter for Rogers, explaining the expectations and customs of the Herero, Ovambo, and Hailom who Rogers encountered—and at least once preventing violence as a result of cultural misunderstanding.¹⁶⁸ Despite the fact that Kruger did not work for the Rogers expedition, Rogers apparently expected him to advocate on their behalf. At one point, Rogers got angry at Kruger for not telling a group of Hottentots that the Herero had given him permission to work in Otavi.¹⁶⁹

Despite the enormous assistance he provided, Kruger regarded the Rogers expedition with suspicion. Rogers noted: “John appears very reluctant to show me other deposits”.¹⁷⁰ Kruger was reportedly annoyed that Rogers did not treat him “as a big chief”,¹⁷¹ and asserted his own right to decide who was on the land, telling Rogers once: “If Samuel and Kamabathembie tell you to work, I tell you to ‘trek’, and this is my land; I am Chief here”.¹⁷²

It is perhaps not surprising that Kruger would evidence frustration with Rogers; Rogers treated him as a servant. He only ever named Europeans in his letters by “Mr.” or “Mrs.”, but he frequently referred to Kruger as “John”. He seemed to expect Kruger to operate on behalf of the expedition, despite the fact that SWACO was not paying Kruger. Kruger was operating in an area being used and claimed by Ovambo, Herero, Damara, Hailom, and Germans; he could not have been thrilled about the arrival of another claimant. His willingness to help the expedition was probably related to Samuel Maharero’s support of Rogers.

6.5 Racial prejudice

Because 19th colonial geologists were often the first formal expeditions into newly Western-claimed territories, their assessments of the communities they encountered had weight. Rogers was, at that time, the only source of on-the-ground information for SWACO and the German Colonial Authority in the Otavi region. His assessments of water availability set the expectations

¹⁶³ BArch R 1001/1482, p. 154.

¹⁶⁴ BArch R 1001/1482, p. 169.

¹⁶⁵ BArch R 1001/1482, p. 163.

¹⁶⁶ BArch R 1001/1482, p. 155.

¹⁶⁷ BArch R 1001/1482, p. 202.

¹⁶⁸ A son of Herero Chief Kamabatoni had felt insulted by one of Rogers’ men, and demanded payment for the insult. Kruger acted as an intermediary, explaining both the nature of the insult and of the payment to Rogers. BArch R 1001/1482, p. 84.

¹⁶⁹ BArch R 1001/1482, p. 172.

¹⁷⁰ BArch R 1001/1482, p. 169.

¹⁷¹ BArch R 1001/1482, p. 185.

¹⁷² BArch R 1001/1482, p. 191.

of the company in terms of water for mining, a labor force, and settlers. His assessments of copper quality set expectations of mineral wealth. His assessments of the people he dealt with set German and British expectations about how to treat them—and those assessments were skewed by the racial prejudices and cultural ignorance common for European expeditions of that time period (for example: Stanley 1909, p. 297; Galton 1853, p. 42; Pico 2019).

Rogers usually cast the African communities he interacted with as pitiful. He frequently referred to them as “poor ignorant races”¹⁷³ or “despised and down-trodden race[s]”.¹⁷⁴ Of the Hailom, he wrote:

[They] are rather low in the scale of civilisation and intelligence, and are looked on with contempt by the other races. . . . The poor Bushmen are a downtrodden race, and to a man of sympathy can only be looked on with pity and sorrow.¹⁷⁵

He also often portrayed them as dangerous, “angry and savage”,¹⁷⁶ “unreasoning and irresponsible”,¹⁷⁷ and “as treacherous as possible”.¹⁷⁸ At one point, he wrote the Board:

. . . I cannot shut my eyes to the fact, our position is not at all a pleasant one. We are 400 miles inland, surrounded by suspicious and sometimes hostile races, whose begging proclivities are equal to their innate ignorance This is, doubtless, the universal penalty that civilization has to pay for footing in the midst of primitive semi-savage races.¹⁷⁹

He frequently portrayed them as a lower life form than Europeans: “Their habits are of the usual negro type. Nothing much to do, they live dirty and squalid lives . . . much to our disgust”.¹⁸⁰ Another time, he wrote: “. . . these poor people are born, exist, and die in the usual filth and dirt which seem to be the natural element of these rudely civilized beings”.¹⁸¹ These assessments set SWACO expectations for who they would be interacting with around Otavi land and copper.

Rogers’ assessments of the communities he encountered as “dirty” and “squalid” likely reflect his own prejudices—and broader European prejudices of the era—more than reality. Europeans in the colonial era often characterized non-European communities this way; in the case of African communities, sometimes citing homes made from clay, thatch, and other locally-available materials as evidence of “dirtiness” (see, for example, Newall 2020, pp. 1–15). Bashford (2004, p. 11) ties European colonial narratives of “dirty” Indigenous peoples to “the cultivation of the white self”—a way of reinforcing racial divisions.

Rogers’ prejudices endured despite an early encounter he had with Chief Manasse, in which the chief asked him:

Who told you to treat Damaras like dogs or slaves? Who is it that is trying to bring trouble on you, and is making cause for trouble between you and my people? Who told you to make such a difference between my people and yourself? Be very careful how you speak to my people. It is not now as it was in former days. I will punish all those who are trying to bring trouble. I will fight against all those will fight against me and my people. It is my country, and we expect to be fairly dealt with.¹⁸²

Rogers wrote of this encounter: “The reason and common sense evinced by the Chief was a matter of surprise to most of us”.¹⁸³

¹⁷³ BArch R 1001/1482, p. 102.

¹⁷⁴ BArch R 1001/1481, p. 101.

¹⁷⁵ BArch R 1001/1480, p. 118.

¹⁷⁶ BArch R 1001/1482, p. 95.

¹⁷⁷ BArch R 1001/1482, p. 133.

¹⁷⁸ BArch R 1001/1482, p. 90.

¹⁷⁹ BArch R 1001/1481, p. 44.

¹⁸⁰ BArch R 1001/1480, p. 51.

¹⁸¹ BArch R 1001/1480, p. 44.

¹⁸² BArch R 1001/1480, p. 62.

¹⁸³ BArch R 1001/1482, p. 14.

His prejudices did not appear to be altered by his guides, either. Despite his absolute reliance on his guides, Rogers consistently failed to follow local guidance. Rogers complained about the native's huts, but, upon trying to assemble his own hut, found that the trees in that region were totally unsuitable for his past building methods. He wrote that, if he built another hut, he would build it in the same way the natives built theirs.¹⁸⁴ Similarly, Rogers frequently condemned the locals for not planting gardens, a critique typical for Europeans used to Northern hemisphere soil enriched by Quaternary glacial loess, not the leached soils of former Gondwana landmasses (P. F. Hoffman 2023, personal communication). Rogers then tried to grow his own. After a year and two failed gardens, he reported it was impossible on account of the ants carrying away the seeds, locusts attacking seedlings, the lack of water (followed by heavy rains that wash away seeds and soil¹⁸⁵), and the poor soil quality.¹⁸⁶ His letters do not provide evidence that he learned anything from these experiences about local environmental knowledge.

7. CONCLUSIONS

The Rogers expedition conducted the first geologic mapping in the Otavi area, and laid the groundwork for both future geologic work and mining throughout the region. Rogers mapped the Otavi Syncline, and the units that are now distinguished as the Tsumeb Supergroup. He accurately identified the broad zone of mineralization through the Otavi Mountain Land, and conducted the first substantial European mining at Gross Otavi, Komat, and Tsumeb. His hydrological insights in the karst terrain of Otavi and at the Etosha Salt Pan were also the first European mapping of those in the region.

The expedition also illustrates important themes in the roles 19th century colonial geologists played in Western colonization. The expedition was continuously negotiating permissions from local African leaders to access the land and copper they needed, and variously leveraging, claiming, and denying British and German colonial authority as part of the bargaining. Ultimately, they were reliant on the permissions of the local communities for access.

The expedition was also completely reliant on local guides. The guides led them from Walvis Bay to Otavi, showed them (often after expensive negotiation) where the copper deposits outcropped, and kept them supplied with water and game. The most influential of these—John Kruger—also acted as a facilitator between the expedition and the various communities in Otavi, preventing violence and keeping the expedition safe from environmental threats.

Despite the expedition's complete reliance on these African guides, Rogers and Copeland's letters reinforced racial and cultural prejudices. Their communications back to the SWACO Board of Directors portrayed the communities they interacted with as pitiful, often menacing, and definitively less human than Europeans. These were the first official reports SWACO received about the people in this territory.

Rogers and Copeland also understood themselves to be scouts for more than just geology: they were scouting the area for future European settlers. They reported back on water availability, agricultural potential, and—importantly—on the potential of local people as laborers. They also attended to land and mineral rights, which they saw through a distinctly European lens, even though the local communities were continuously advocating for their own rights to the land and copper.

One final theme of 19th century colonial geology that the Rogers expedition illustrates is how many roles these geologists could be demanded to play—and how unprepared they could be. Neither the SWACO Board nor the German Colonial Authority had prepared Rogers for the intense political and cultural situation he was walking into, a deficit that he remarked on in one of his letters:

¹⁸⁴ BArch R 1001/1480, p. 162.

¹⁸⁵ BArch R 1001/1482, p. 55.

¹⁸⁶ BArch R 1001/1481, p. 103.

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I cannot for a moment think the Company at home knew the actual state of matters here, or they would never have sent the expedition without first advising its members of the state of affairs.¹⁸⁷

Rogers was not expecting to be a diplomat, negotiator, spy, and colonial administrator—he was just there to map the rocks. But, because of the centrality of geologic resources in Western colonization, he was forced to play roles he was not expecting, and for which he was entirely unprepared. The Rogers expedition was the wedge SWACO used to start levering control of Otavi away from local communities—and Rogers was a most unprepared and unsuspecting tool.

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ARCHIVES

This article is based on research from the German Federal Archives, abbreviated in footnotes here with its code: BArch.

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