

Phi Alpha Theta Pacific Northwest Conference, 8–10 April 2021

Kole A. Dawson, Boise State University, graduate student, “The Amungme and the Environment: Environmental Justice History and Consumerism”

Abstract: The Amungme are one of hundreds of Papuan people groups who lived in the Indonesian province in New Guinea for thousands of years. This group subsisted in their environment by hunting, cultivation of small crops, and practicing pig husbandry. In the late 1960s, seeking foreign capital to boost the nation’s economy, the president of Indonesia signed a contract with Freeport McMoRan Copper and Gold. Freeport began mining in the early 1970s, eventually opening one of the world’s largest gold mines. Excavating sacred Amungme sites, Freeport’s massive pollution to the land and water destroyed the indigenous people’s environment both spiritually and physically. The Amungme protested the destruction of their land and livelihoods, speaking out against abuses connected to the mining operation. Environmental justice history is a growing analysis in environmental history, and the Freeport-Amungme conflict has yet to be analyzed through this lens. This paper will seek to demonstrate through this lens that it was not only the mine that was responsible for the degradation of the indigenous people’s lives, but consumers worldwide spurred the need for largescale excavation in the search for ore. Freeport turned the Amungme’s environment into a wasteland, with consumerism driving the force of this pollution.

The Amungme and the Environment:
Environmental Justice History and Consumerism

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Phi Alpha Theta Conference 2021

April 9-10, 2021

BOISE STATE UNIVERSITY PHI ALPHA THETA CHAPTER

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A deep, disfigured star-shaped cavity with geometric shades of yellow and grey bores into the earth in a vast misty valley surrounded by lush, green, jagged peaks reaching over 16,000 feet in elevation. Waterfalls sliding softly down emerald slopes fall gently on the crooked path leading up the mountain. Roads grind their way through the rough shape, weaving an endless maze where enormous trucks make their way to and fro day and night, carrying heavy burdens to high alpine valleys teeming with wildflowers and blue crystal lakes. The trucks dump their loads into the colorful meadows, then haul back to the crater for more. A mill grinds day and night, searching for precious ore that the world demands. A white-capped monolith watches quietly as the surrounding peaks that were once sacred are laid to waste.

Freeport McMoRan Copper and Gold—a mining company based out of Phoenix, Arizona— along with PT Freeport Indonesia (Freeport), subsidiary of the parent company, is the legal owner of this wasteland in the province of Papua, Indonesia. The contract of work that Freeport signed with Indonesia “guaranteed the right of Freeport to acquire the land and other property in the mining area and to resettle the indigenous population from their original homes but contained no requirement that Freeport pay compensation, or consult with local inhabitants about its activities.”¹ The original landowners, the Amungme, were paid in tobacco and goods—hardly reasonable compensation for the enormity of what was being traded.² Traditionally, the Amungme hunt, gather, grow pandanus and sweet potatoes through slash-and-burn agriculture, and raise pigs.³ Yet according to the Indonesian government’s 1960 Agrarian Law, any land that is not being used by permanent agriculture or villages is state property.⁴ In the eyes of the state the lands and resources were exploitable.

The Amungme lived for thousands of years in what many call the “stone age.” Traditionally, the Amungme’s economy was one of trade, using stone—for axes and adzes—salt,

seashells, and pigs. They lived in “small, scattered hamlets next to their sweet potato gardens, shifting location within the clan territory” with their gardens. Dr. Kal Müller—liaison between Freeport and the Amungme—and Yunus Omabak estimated that before the arrival of the mine in the Waa Valley, there were approximately 200 Amungme. As of 2008 there were 8,000 Amungme living in the valleys around the mining concession.⁵ According to the 2010 census, Tembagapura, Freeport’s mining town near Grasberg, comprised 16,917 people.⁶ The new population included miners, their families, and other Papuans who moved to the area to benefit from the mine.⁷ When the miners arrived, the Amungme were soon to be challenged by modern consumer culture.

The surrounding peaks held sacred value to the Amungme, of which many lay in the mining concession. The gold and copper mine in operation today, Grasberg, was called “Uangmabuk Ningkok, or fern mountain.”⁸ They regarded these areas with care and reverence and believed their ancestors were watching them. Thus, having mines placed within these sacred areas carried deep meaning for the Amungme. Their concerns for their degraded mountains were spiritual as well as environmental, and in order to analyze their history requires an environmental justice history lens.

Environmental justice history is a younger analytical lens in the environmental history of mining. In her work with the Diné (Navajo) and uranium mining, Traci Brynne Voyles linked settler colonialism to environmental racism, labeling the process of uranium mining “wastelanding,” as “the indigenous body in pain is the ultimate symbol of colonial progress and modernity, indigenous land laid to waste is its territorial corollary.” The colonizer then sees the land and bodies as “pollutable.” Not only did she include this wastelanding process to include the physical, such as environment and human bodies, but “worldviews, epistemology, history, and

cultural and religious practices.”⁹ Although Voyles’s concept of wastelanding is a powerful analysis of settler colonialism and its link to environmental racism, it is not the purpose of this paper to argue that Indonesia’s relationship with Papua is a colonial one. However, the concept of wastelanding is nevertheless useful because it conjures up a similar (if not true) relationship between a powerful industry, a marginalized population, their lands and their beliefs, rendering them pollutable. Yet there is more to corporations’ exploitation of raw materials than industry.

Some environmental historians linked consumerism to the destruction brought by mining. Historian Timothy LeCain pointed to a strong link between the two. He contended that because the boundaries between ore and consumer product are blurred, the sources of our technology are easily forgotten.¹⁰ In his research on the commodity of tin, Corey Ross approached mining from a global and colonial perspective, tracing the ways tin connected the globe in the colonization of Southeast Asia by the British. He argued that the colonizer’s cultural views about the colonized landscape leads to environmental and economic exploitation.¹¹

Scholarship exists on the environmental and cultural degradation of the land and indigenous culture in Freeport’s mining concession, yet there is an absence of discussion of environmental justice. In any discussion of Freeport, the Amungme and the environment must be included, as they are part of the mined land. The multinational corporation has come to see the Amungme and their lands as pollutable. As a result of Freeport’s presence, the Amungme have been left with a wasteland, their ideological values and bodies now victims of global consumerism.

Papua was found to be rich in resources soon after Indonesia gained control from the Dutch colonizers in the 1960s.¹² Logging (illegal and legal), mining, fishing, oil extraction, and palm oil plantations were some of the biggest drivers of the economy in the province.

Mining was one of the largest driving forces of Papua's economy and Freeport was the largest employer in the province, employing approximately 7,500 workers by 2004.¹³ The first mine, Ertzberg, was once the world's largest above-ground copper deposit.¹⁴ An even greater reserve, Grasberg, was found to be rich in gold and copper later in 1988 in the nearby mining concession.¹⁵ Chris Ballard of Australia National University called it the "jewel in the crown of provincial development for Irian Jaya, accounting for 88 percent of the province's non-oil exports."¹⁶ In 2016, it was reported to be worth \$100 billion.¹⁷ Papua remains today one of the nation's greatest assets, and therefore, detrimental to the economy if lost, as "Indonesia clings fiercely to Papua as one of the greatest sources of wealth."¹⁸ The Amungme's subsistence living and deeply held beliefs stood in stark contrast to the wealth and industry of Freeport.

The creation story of the Amungme speaks to the historical sacredness of the valleys they occupied before Freeport began its work. It describes the sacrifice that a mother of two sets of twins made to ensure their survival from a drought. She asks them to kill her to save themselves and throw her divided remains in the four cardinal directions.¹⁹ When the children completed the task, the landscape physically transformed into the landscape that exists today, creating rich soils with crops, rugged mountains, and rivers. The story is worth quoting in full:

That night, while they slept, nature went wild. There was a big rain storm, as though water being poured from the sky...At dawn, strange things happened. Their humble hut had turned into a big, beautiful house, and their garden full of flowers were blooming in full color. Crops were abundant and ready to be harvested. To the west, they saw a wide field spreading across the horizon. The field was also full of crops. Some were ripe, the others newly grown. When they cast their eyes to the east, they saw the same picture. To the north, the direction of the spring of the river Bella, they saw mountains stretching up from east to west, with their peaks standing tall against the sky. From the tops of those mountains, water sprang from fresh clear pools, between the rocks, which formed creeks and rushed downward. At the foot of the mountains were the forests, where species of birds flew around, enjoying the beautiful morning. The kuskus sunbathed along the branches of the trees. Looking south, they saw flat land that was so vast that they could not see where it ended.²⁰

At the mother's last request, the twins intermarried and produced offspring, and "it is their offspring who then became the ancestors of the present Amungme tribe."²¹

The Amungme perceived the landscape as their mother. The highest mountainous area was symbolic of her head, sacred land that was uninhabitable for humans where no one ventured out of respect for the mother. The land below that was where the Amungme lived. This region was where they hunted, gathered, grew their crops, and raised their pigs. It was also where they built their huts and where their villages lay. It was here in this habitable zone that represented their mother's breast and belly that nourished them. The lower zone was the dangerous zone, where they did not dare linger for long except to hunt or fish, representing the genitals and legs of the mother. This area was unhealthy—a place to die, filled with malaria, disease, and other dangers that are not present in the mountains. Yet, this lowland was the area that many Amungme were relocated over time as Freeport began its work. Now many must live in the land that their mythology specifically expressed was dangerous and the "end-stream of all evil."²²

The Amungme's sacred beliefs stood starkly against the context of Freeport's industrial activities. Since the Amungme saw the land as themselves, the destruction of their mountain was tantamount to the destruction of their sacred mother. Conversely, the company and the government saw the resources as commodities to exploit, and this exploitation took the form of the earth-moving act of mining, with all its environmental consequences.

Overburden and tailings were the two main waste products of the mining operations at Freeport.²³ Tailings were dumped into the Ajkwa River system that carried it downstream to the Modified Ajkwa Deposition Area. The dumping of tailings into the river increased from 1988 to 1996 from 19,400 tons to 125,000 tons per day. As of 2006, this deposition area consisted of 56 square miles of the Ajkwa Floodplain, which damaged and changed the ecology of the area

drastically.²⁴ In 1995 before Freeport built levees to contain the floodplain, the flooding from the tailings in the lowlands had destroyed over 33 square kilometers of forest.²⁵ It forced relocation of local populations and destroyed their gardens, fishing, and hunting grounds.²⁶

The Amungme were also adversely affected by overburden dumping in their valleys. As of 2006, Freeport was dumping 500,000 tons per day of overburden into a waste dump in the Wanogong River.²⁷ According to Freeport expert Denise Leith, the company had been treating the rock in order to precipitate the metals from the overburden, but it was polluting the lake as of 2001. In 2000 the piled overburden slid down into the lake, creating a massive fifty-foot wave that crashed by Banti village, killing several contract workers, forcing Freeport to relocate the village to higher ground. That same year, in Tsinga village, the water turned blue as a result of copper concentrate.²⁸ The river silting and overburden dumping into the Amungme's rivers and valleys was a point of contention between Freeport and the Amungme.

The Amungme consistently protested the mine's presence from the start of the mining operations. When Freeport began drilling the rock in Papua to test the copper concentrations in 1967, hex sticks resembling crosses were placed around the work site by the Amungme as taboo symbols, warning that it was forbidden ground, meaning that the land was sacred, and not to be disturbed. When the Western drillers left, the Amungme destroyed their former camp.²⁹

In January 1974 Freeport held a meeting with the Amungme and made an agreement that the Amungme signed, allowing Freeport to mine Ertzberg and build Tembagapura, the company town in the highlands, in exchange for infrastructure to be built on behalf of the local people.³⁰ Yet according to Ballard, the Amungme intended to oppose the mine at the meeting but felt they were being intimidated by the Indonesian military that was present as mediator. As the Amungme realized that they were increasingly excluded from the mine site, they rioted in 1976

and in 1977 and removed two policemen from one of their villages. In retaliation, the military strafed their villages several times, killing approximately 30 Papuans in the exchange, and two more settlements were destroyed. What followed were intermittent clashes between the Amungme, the military, and Freeport every few years.³¹

Yosepha Alomang, or “Mama Yosepha,” an Amungme tribal leader and member of LEMASA, gained a name for herself in protesting against Freeport. She staged several demonstrations: She destroyed imported food when Freeport refused to buy their local fruits and vegetables, and in 1991, lit a fire at the airport in Timika to protest the military violence and Freeport’s presence.³² She won the Goldman Environmental Prize in 2001 for her work in protesting environmental damage and human rights abuses against her people in connection to the mining operations.³³

Another prominent Amungme also publicly protested Freeport’s presence. In 1996, Tom Beanal, a member of the Presidium of WAHLI—an Indonesian environmental group—and former legislative government council member, filed a lawsuit against Freeport along with Yosepha Alomang in the mining company’s home state of Louisiana for \$6 billion for human rights and environmental abuses with WAHLI’s help. Beanal claimed the company had “violated international law by causing environmental damage, participating in human rights abuses, and committing cultural genocide.”³⁴ Beanal also travelled internationally, speaking out against the company’s environmental destruction. In 1997 at Loyola University he stated in a speech, “gold and copper have been taken by Freeport for the past 30 years, but what have we gotten in return? Only insults, torture, arrests, killings, forced evictions from our land, impoverishment and alienation from our own culture,” calling his people “strangers in our [their] own land.”³⁵

Wastelands actively ruined not only the land, but the culture of the Amungme. As he said, they became strangers in their own land.

In the early nineties the Amungme finally met some success when their suffering gained worldwide attention, and therefore put pressure on Freeport to act. Freeport responded to criticism of its lack of responsibility towards the indigenous populations and its environmental abuses and worked to solve these problems. They began community development programs such as the building of hospitals and schools as well as an increased interest in conservation and a reclamation plan for the site. However, these efforts were met with mixed reactions on the part of the local population. In 1996 Freeport attempted to appease the Amungme by offering a One Percent Trust Fund to the local tribes. It was an agreement that would give seven tribes one percent of profits from the mine to be dispersed among the original landowners.³⁶ Many Amungme then rejected the Trust Fund saying, “with the help of God we shall never [succumb] to the offer of bribes, intimidation or [be] dishonestly induced into accepting PT. Freeport Indonesia’s ‘Settlement Agreement’.”³⁷

Freeport made a strategic move and in 2000, CEO Bob Moffett and Beanal signed a Memorandum of Understanding after Beanal’s lawsuit was dismissed. The agreement allowed three projects to move forward, including employment for Papuans, an agricultural, aquaculture, and livestock project, the building of an office for LEMASA and tribal elders, and the beginning stages of a “Tiga Desa,” (Three Villages) program.³⁸ Freeport granted \$248,000 to the Hamak Foundation (Human Rights Foundation of Anti-Violence) which is headed by Alomang to build an office and training facility to educate, train and fund a workshop in 2002 to promote human rights for women and children.³⁹ Yet Alomang refused the grant, saying that Freeport was trying to trick her by “using human rights. This is how they do it with their sweet language. This is

how they buy up Papua’.”⁴⁰ Some Amungme labelled Freeport’s operations an “economic colonization by capitalists in contravention of our national economic system,” taking issue with the reality that they are destroying “the very means of our existence,” driving “us out of our ancestral lands, to impoverish us and kill us on our own territory.”⁴¹

Many Papuans called the exploitation of their resources the “theft of their heritage.”⁴² The Amungme are not the only Papuan tribe suffering as a result of the exploitation of their resources. Kees Lagerberg and Jim Elmslie both argued that the oppression and exploitation of resources resulted in the formation of a national identity among Papuans, contributing to their resentment of Indonesian sovereignty.⁴³ Elmslie stated, “unless they re-establish political control over their lands and resources, their future is bleak.”⁴⁴ Kjell Anderson stated, “the alienation of...Papuans, from their culture...the forced removal of indigenous peoples from their means of both food and cultural production is a direct threat to their physical survival.”⁴⁵

Before Freeport began their activities in the mining concession, the Amungme lived a life of subsistence in the land their sacred mother created for them. With Freeport’s arrival came modernity, hospitals, infrastructure, a cash economy, and increasing contact with the outside world. However, the Amungme’s lands were severely polluted and they were relocated to areas that were unhealthy, stricken with malaria, and laden by further globalization. In fighting for their land and rights, they were subjected to torture, killings, and relocation. As a result, the breakdown of their own culture occurred rapidly. In analyzing Freeport’s history, it is necessary to include the environment in all discussions of technology and innovation involved in extracting metals. Furthermore, the Amungme and the environment were woven tightly into a tapestry, as their connection to the land was physical, cultural, ideological, and spiritual. Environmental justice is an important lens in which to view Freeport’s and the Amungme’s history. Yet when

we follow the trail from production to consumption, it branches out past industry and into the hands of many.

Consumerism is a powerful force driving the “mass destruction” of the earth and the mass destruction of the environments upon which indigenous people depend. Today humanity is consuming amazing amounts of copper, which is the secondary, yet abundant, ore being mined at Grasberg. According to LeCain, copper is no longer used in electric power lines, however, it is still used in wiring in housing, plumbing, motors, household appliances, and, most strikingly, in cars—more than 40 pounds of copper per automobile.⁴⁶ In China alone, the demand for copper increased from 0.71 pounds of copper per person to 8.1 pounds per person from the year 1974 to 2007.⁴⁷ Yet there is a way to shift our thinking of technology and the products that we consume.

Environmental historian William Cronon argued that we need to see nature as not just that which is untouched by the human footprint, but to see nature through the lens of culture. To integrate ourselves with nature instead of dichotomizing it between the pristine and the blemished will enhance our perspective in order to integrate nature into our lives, preserving it for the future.⁴⁸ Serious consideration is needed to change the way we see nature and how our consumption patterns alter the environment dramatically, and to see technology—the “artificial” nature—as nature just as we see a stream or a mountain range.

Freeport’s was led by the demand for gold and copper in which they exploited the land for profit. The Amungme were a subsistence culture dependent on the environment who fought for justice for their lands and their culture. They held an important place in the history of environmental justice with their agency as they fought the owners of one of the largest gold mines in the world, just as our consumerist actions can shift the demand for ore that is destroying our planet.

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- ¹ Adérito De Jesus Soares, “The Impact of Corporate Strategy on Community Dynamics: A Case Study of the Freeport Mining Company in West Papua, Indonesia,” *International Journal on Minority and Group Rights* 11 (2004): 121.
- ² Ballard, and International Institute for Environment and Development, *Human Rights and the Mining Sector*, 24.
- ³ Soares, “The Impact of Corporate Strategy,” 123; David Paull, Glenn Banks, Chris Ballard, and David Gillieson, “Monitoring the Environmental Impact of Mining in Remote Locations through Remotely Sensed Data,” *Geocarto International* 21, no. 1 (2006): 36.
- ⁴ Kal Müller, *The Amungme* (Indonesia: Lembaga Pengembangan Masyarakat Amungme dan Kamoro, 2014), 89.
- ⁵ Müller and Omabak, *Amungme: Tradition and Change*, 27-8.
- ⁶ “Indonesia: Papua Province,” City Population.
- ⁷ Müller and Omabak, *Amungme: Tradition and Change*, 27-8.
- ⁸ Müller, *The Amungme*, 90-4.
- ⁹ Traci Brynne Volyes, *Wastelanding: Legacies of Uranium Mining in Navajo Country* (Minneapolis: University of Minnesota Press, 2015), ix, 6-11.
- ¹⁰ Timothy J. LeCain, *Mass Destruction: The Men and Giant Mines that Wired America and Scarred the Planet* (New Brunswick, New Jersey: Rutgers University Press, 2009), 21, 5.
- ¹¹ Corey Ross, “The Tin Frontier: Mining, Empire, and Environment in Southeast Asia, 1870s-1930s.” *Environmental History* 19, no. 3 (2014): 454.
- ¹² The province is located on the western half of the island of New Guinea, situated north of Australia. It is now divided in two: Papua (consisting of most of the island) and West Papua (which is in the Northwest, in the “Bird’s Head”—for it is in the shape of a bird—of the island). For the sake of clarity, “Papua” and “Papuan” will be used for the remainder of this paper. Historically it has had the name(s) of Dutch New Guinea, West New Guinea, Irian Jaya, West Papua, and now West Papua and Papua. There is talk of creating two more provinces as well. Freeport’s concession area and the mines are located in Papua.
- ¹³ Prakash Sethi, David B. Lowry, Emre A. Veral, H. Jack Shapiro, and Olga Emelianova, “An Innovative Voluntary Code of Conduct to Protect Human Rights, Create Employment Opportunities, and Economic Development of the Indigenous People,” *Journal of Business Ethics* 103, No. 1 (Sept 2011): 8.
- ¹⁴ *Ibid.*, 2.
- ¹⁵ Mealey, *Grassberg*, 71; Paull, Banks, Ballard, and Gillieson, “Monitoring the Environmental Impact,” 36.
- ¹⁶ Ballard, and International Institute for Environment and Development, *Human Rights and the Mining Sector*, 23.
- ¹⁷ Susan Schulman, “The \$100bn Gold Mine and the West Papuans Who Say They Are Counting the Cost,” *The Guardian*, November 1, 2016. <https://www.theguardian.com/global-development/2016/nov/02/100-bn-dollar-gold-mine-west-papuans-say-they-are-counting-the-cost-indonesia>.
- ¹⁸ Carolyn D. Cook, “Papuan Gold: A Blessing or a Curse? The Case of the Amungme,” *Cultural Survival Quarterly* 25, no. 1, (2001): 44.
- ¹⁹ Tom Beanal, *Amungme: Mababarat Negel Jomebei-Peibei* (Jakarta: Wahana Lingkungan Hidup Indonesia, 1997), 87-92.
- ²⁰ Beanal, *Amungme: Mababarat Negel Jomebei-Peibei*, 90-91.
- ²¹ *Ibid.*, 92.
- ²² *Ibid.*, 92-93.
- ²³ Tailings (97% of the ore processed) are finely ground residue. Overburden is the waste rock moved to reach the ore.
- ²⁴ Paull, Banks, Ballard, and Gillieson, “Monitoring the Environmental Impact,” 36-8.
- ²⁵ Leith, *Politics of Power*, 168.
- ²⁶ Leith, *Politics of Power*, 171.
- ²⁷ Paull, Banks, Ballard, and Gillieson, “Monitoring the Environmental Impact,” 36-8.
- ²⁸ *Ibid.*, 171-75.
- ²⁹ Müller, *The Amungme*, 198-99.
- ³⁰ *Ibid.*, 89, 203-4.
- ³¹ Chris Ballard, and International Institute for Environment and Development, *Human Rights and the Mining Sector*, 24-7.
- ³² “Persekutuan Perempuan Adat Nusantara Aliansi Masyarakat Adat Nusantara,” *The Journey of Perempuan Aman: An Overview of Indigenous Women Participation During Five Congresses of the Indigenous Peoples of the Archipelago 1999-2017*, trans. by Albertus Hadi Pramono and Dian Abraham (Jakarta: Perempuan Aman, 2017) <https://perempuan.aman.or.id/wp-content/uploads/2019/01/The-Journey-of-PEREMPUAN-AMAN1.pdf>.

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- ³³ Leith, *The Politics of Power*, 14; The Goldman Environmental Prize (website), accessed March 3, 2020, <https://www.goldmanprize.org/recipient/yosepha-alomang/>.
- ³⁴ Müller and Omabak, *Amungme: Tradition and Change in the Highlands of Papua*, 180.
- ³⁵ Tom Beanal, "Tom Beanal's Speech at Loyola University in New Orleans," *Corpwatch: Holding Corporations Accountable* (Project Underground, May 19, 1997), <https://corpwatch.org/article/tom-beanals-speech-loyola-university-new-orleans>.
- ³⁶ Soares, "The Impact of Corporate Strategy," 136.
- ³⁷ Abigail Abrash, "The Amungme, Kamoro & Freeport: How Indigenous Papuans Have Resisted the World's Largest Gold and Copper Mine," *Cultural Survival Quarterly* 25, no. 1 (April 30, 2001): 38.
- ³⁸ Sethi, Lowry, Veral, Shapiro, and Emelianova, "An Innovative Voluntary Code," 2.
- ³⁹ Alison Guerriere, "Freeport Funds Human Rights Program." *American Metal Market* 109, no. 93 (2001): 7.
- ⁴⁰ Josepha Alomang, interview, "Endless Extraction: Mining and Community Responses," *Making Contact*, National Radio Project, Oakland, California, 20 June 2001 <http://www.radioproject.org>, as quoted in Leith, *Politics of Power*, 15.
- ⁴¹ Abrash, "The Amungme, Kamoro & Freeport," 38.
- ⁴² Kees Lagerberg, *West Irian and Jakarta Imperialism*, (New York: St. Martin's Press, 1979), 7.
- ⁴³ Lagerberg, *West Irian*, 152-153
- ⁴⁴ Elmslie, *Irian Jaya Under the Gun*, 70, 8, 7.
- ⁴⁵ Anderson, "Colonialism and Cold Genocide," 18.
- ⁴⁶ LeCain, *Mass Destruction*, location 2980-2988, kindle.
- ⁴⁷ *Ibid.*, location 2988, kindle.
- ⁴⁸ For Cronon's argument on nature and culture, see William Cronon, "The Trouble with Wilderness: Or, Getting Back to the Wrong Nature," *Environmental History* 1, no. 1 (1996): 7-28.

BIBLIOGRAPHY

Primary Sources

Books

Beanal, Tom. *Amungme: Mababoarat Negel Jomebei-Peibei*. Jakarta: Wahana Lingkungan Hidup Indonesia, 1997.

Mealey, George A. *Grassberg: Mining the Richest and Most Remote Deposit of Copper and Gold in the World, in the Mountains of Irian Jaya, Indonesia*. New Orleans: Freeport-McMoRan Copper and Gold, 1996.

Articles

Ballard, Chris and International Institute for Environment and Development. *Human Rights and the Mining Sector in Indonesia: A Baseline Study* (2002).

http://www.dhaatri.org/rimm140508/Documents/indonesia_hr_baseline.pdf.

Paull, David, Glenn Banks, Chris Ballard, and David Gillieson, "Monitoring the Environmental Impact of Mining in Remote Locations through Remotely Sensed Data," *Geocarto International* 21, no. 1 (2006): 33-42.

Publications

Beanal, Tom. "Tom Beanal's Speech at Loyola University in New Orleans." *Corpwatch: Holding Corporations Accountable*. Project Underground, May 19, 1997,

<https://corpwatch.org/article/tom-beanals-speech-loyola-university-new-orleans>.

Catholic Justice and Peace Commission of the Archdiocese. Brisbane, May 1, 2016. *We Will Lose Everything: A Report on a Human Rights Fact Finding Mission to West Papua*,

<https://cjcpcbrisbane.files.wordpress.com/2016/05/we-will-lose-everything-may-2016.pdf>.

Freeport McMoRan: PTFI 2017 External Environmental Audit, *2017 External Environmental Audit Executive Summary of PT Freeport Indonesia*,

https://www.fcx.com/sites/fcx/files/documents/sustainability/audits/PTFI_ExternalEnvironmenta%20Audit2017.pdf.

"Persekutuan Perempuan Adat Nusantara Aliansi Masyarakat Adat Nusantara." *The Journey of Perempuan Aman: An Overview of Indigenous Women Participation During Five Congresses of the Indigenous Peoples of the Archipelago 1999-2017*. Trans. by Albertus Hadi Pramono and Dian Abraham. Jakarta: Perempuan Aman, 2017, <https://perempuan.aman.or.id/wp-content/uploads/2019/01/The-Journey-of-PEREMPUAN-AMANI.pdf>.

Newspapers

Al Jazeera (Doha, Zatar)

The Austin Chronicle (Austin, TX)

The Guardian (London, UK)

Magazines

American Metal Market (New York, NY)

Websites

Freeport-McMoRan

The Goldman Environmental Prize

Secondary Sources

Books

Elmslie, Jim. *Irian Jaya Under the Gun: Indonesian Economic Development versus West Papuan Nationalism*. Honolulu, Hawai'i: University of Hawai'i Press, 2002.

Lagerberg, Kees. *West Irian and Jakarta Imperialism*. New York: St. Martin's Press, 1979.

LeCain, Timothy J. *Mass Destruction: The Men and Giant Mines that Wired America and Scarred the Planet*. New Brunswick, New Jersey: Rutgers University Press, 2009.

Leith, Denise. *The Politics of Power: Freeport in Suharto's Indonesia*. Honolulu: University of Hawai'i Press, 2003.

Manuel, Jeffrey T. "Efficiency, Economics, and Environmentalism: Low-Grade Iron Ore Mining in the Lake Superior District, 1913-2010." in eds. J.R. McNeill and George Vrtis, *Mining North America: An Environmental History since 1522*. Oakland: University of California Press, 2017.

Müller, Kal and Yunus Omabak. *Amungme: Tradition and Change in the Highlands of Papua*. Jakarta: Freeport Indonesia, 2008.

Müller, Kal. *The Amungme*. Indonesia: Lembaga Pengembangan Masyarakat Amungme dan Kamoro, 2014.

Voyles, Traci Brynne. *Wastelanding: Legacies of Uranium Mining in Navajo Country*. Minneapolis: University of Minnesota Press, 2015.

Vrtis, George, and J.R. McNeill, "Introduction," in eds. J.R. McNeill and George Vrtis, *Mining North America: An Environmental History since 1522*. Oakland: University of California Press, 2017.

Articles

Abrash, Abigail. "The Amungme, Kamoro & Freeport: How Indigenous Papuans Have Resisted the World's Largest Gold and Copper Mine." *Cultural Survival Quarterly* 25, no. 1 (April 30, 2001).

Anderson, Kjell. "Colonialism and Cold Genocide: The Case of West Papua." *Genocide Studies and Prevention: An International Journal* 9, no. 2 (2015): 9-25.

Cook, Carolyn D. "Papuan Gold: A Blessing or a Curse? The Case of the Amungme." *Cultural Survival Quarterly* 25, no. 1, (2001).

Cronon, William. "The Trouble with Wilderness: Or, Getting Back to the Wrong Nature." *Environmental History* 1, no. 1 (1996): 7-28.

Ross, Corey. "The Tin Frontier: Mining, Empire, and Environment in Southeast Asia, 1870s-1930s." *Environmental History* 19, no. 3 (2014): 454-79.

Sethi, Prakash, David B. Lowry, Emre A. Veral, H. Jack Shapiro, and Olga Emelianova. "An Innovative Voluntary Code of Conduct to Protect Human Rights, Create Employment Opportunities, and Economic Development of the Indigenous People." *Journal of Business Ethics* 103, No. 1 (Sept 2011): 1-30.

Soares, Adérito De Jesus. "The Impact of Corporate Strategy on Community Dynamics: A Case Study of the Freeport Mining Company in West Papua, Indonesia." *International Journal on Minority and Group Rights* 11 (2004): 115-142.