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Chinese Laborers on a Mining Frontier: The Case of Copper Miners in Northern Luzon, 1856–98

Jely A. Galang*

This paper focuses on the lives and circumstances of Chinese laborers in the copper mines of Lepanto in Northern Luzon from 1856 until the American occupation of the Philippines in 1898. While Filipino laborers were also employed by the Spanish Cantabro-Filipina Company, Chinese laborers were preferred when it came to opening up and exploiting large areas in the “mineral belt” of Luzon. This preference was due mainly to Chinese workers’ mining skills and the availability of inexpensive Chinese labor contracted to open up resource frontiers in Southeast Asia and elsewhere. In addition to these factors, the hazardous nature of mining and the Spaniards’ negative stereotypical view of Chinese as dangerous albeit “necessary outsiders” made the latter the most suitable labor force for mining. The conditions in the mines, and the abuses committed against the Chinese laborers, caused many workers to run away.

This paper has two parts. The first part discusses the importance of Chinese labor in Philippine mining prior to the nineteenth century. It demonstrates how the Spaniards preferred to employ Chinese labor as Filipinos were viewed to lack the skills and enterprise necessary to exploit the colony’s mineral resources. The second part focuses on Chinese laborers in the Lepanto copper mines in the mid-nineteenth century. It describes and analyzes the laborers’ working and living conditions in relation to the prevailing labor hierarchy and system of management implemented by the Cantabro-Filipina Company. It also describes the limited interactions between Chinese laborers and non-Chinese employees in the mines.

Keywords: Chinese laborers, Lepanto, copper mines, Philippine history, Northern Luzon, mining industry

Introduction

Tanso is the Tagalog word for copper.¹⁾ It is derived from the Hokkien word for “copper

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1) In accordance with Philippine President Manuel Quezon’s Executive Order No. 134, issued in 1937, Tagalog became the basis of the country’s “national language,” which is Filipino (Speech of President Quezon on Filipino National Language, December 30, 1937).

wire” (Ang See *et al.* 2005, 220). The “borrowing” of the term demonstrates an aspect of longtime cultural interactions and commercial exchanges between Filipinos and the Chinese of Southern China (Manuel 1948). The word *tanso* also serves as evidence of Chinese labor’s important role in the development of the Philippine mining industry, particularly copper mining. During the nineteenth century, Chinese laborers formed the backbone of the labor force that exploited the copper mines of Lepanto in northern Luzon.²⁾ These laborers were instrumental in all the aboveground and subterranean works and activities involved in the extraction of the metal.

Despite the significant role that Chinese workers played in the colonial mining industry, written works about them are relatively scarce. Salvador Lopez’s (1992) “definitive history of mining in the Philippines,” for example, mentions how the Spanish colonial government and private businessmen deemed it necessary to hire Chinese miners from the 1780s to the 1890s. Lopez’s discussion on these laborers, however, is only tangential to his primary purpose, which is to highlight “the role of [the natives (i.e. Filipinos), and] native technology in the [mining] industry” (Lopez 1992, 8). Similarly, Onofre Corpuz’s (1997) classic work on Philippine economic history only briefly mentions Chinese miners, as the book’s main goal is to elaborate on the Bourbon economic reforms initiated in the late eighteenth century. Edgar Wickberg (2000) mentions mining as an industry that employed Chinese workers, but only in relation to his discussion on why and how the second half of the nineteenth century opened up new economic opportunities for Chinese in the colony.

There are a number of articles that mention Chinese miners, but like the above-mentioned works, their discussions are peripheral to the authors’ main subject matter. Maria Lourdes Diaz-Trechuelo (1965) and Salvador Escoto (1998) provide details on Chinese laborers in the mining industry, but their focus is on the general economic condition of the islands in the 1780s and the economic projects spearheaded by some pioneer Spanish industrialists during the period. Lastly, in her articles on the history of gold mining in Benguet, Olivia Habana (2000; 2001) underlines the industry’s economic, social, and political effects on the lives of the Igorots in the Cordilleras. These works, therefore, expose a historiographical lacuna, which the present paper endeavors to fill in.

Using previously unexplored and underutilized primary materials from various Philippine and Spanish archives and libraries, this paper presents a narrative on the lives and circumstances of Chinese laborers in the copper mines of Lepanto from 1856 until

2) “Luzon,” the name of the largest Philippine island, was derived from early Chinese merchants (called *sangleyes* by the Spaniards) referring to it as *Luzon*, “Island of Gold” (Lopez 1992).

the American occupation of the Philippines in 1898.³⁾ While Filipino laborers, such as Ilocanos,⁴⁾ Igorots,⁵⁾ and Tinguians,⁶⁾ were also employed by the Spanish company *Sociedad Minero-Metalurgica Cantabro-Filipina de Mancayan* (the Cantabro-Filipina Company), which was considered “the most successful of all other mining speculations undertaken on a large scale in [the] colony” (Foreman 1899, 386), Chinese laborers were preferred when it came to opening up and exploiting large areas in the “mineral belt” of Luzon (US Bureau of the Census 1905, 82).⁷⁾ This preference was due mainly to Chinese workers’ mining skills, and the availability of inexpensive Chinese labor contracted to open up resource frontiers in Southeast Asia and elsewhere (McKeown 2011, 62–83). In addition to these factors, I argue that the hazardous nature of mining and the Spaniards’ negative stereotypical view of Chinese as “dangerous” albeit “necessary outsiders” made the latter the most suitable labor force for mining. The shocking conditions in the mines, and the abuses committed against the Chinese laborers, caused many workers to run away.

This paper has two main parts. The first part briefly discusses the importance of Chinese labor in Philippine mining prior to the nineteenth century. It demonstrates how the Spaniards, specifically private businessmen and adventurers, preferred to employ Chinese labor as Filipinos were viewed to lack the skills and enterprise necessary to exploit the colony’s mineral resources. The second part focuses on Chinese laborers in the Lepanto copper mines between 1856 and 1898. It describes and analyzes the laborers’ working and living conditions in relation to the prevailing labor hierarchy and system of management implemented by the Cantabro-Filipina Company. It also describes the limited interactions between Chinese laborers and non-Chinese employees (Spaniards and Filipinos) in the mines.

3) The main sources of information for this paper came from archives and libraries in the Philippines and Spain. I used official Spanish documents from the National Archives of the Philippines (Manila), the Archivo Historico Nacional (Madrid), and the Archivo General de Indias (Seville). Books published during the nineteenth century as well as reports by the *Inspeccion General de Minas* (General Inspection of Mines) were taken from the University of the Philippines—Main Library (Quezon City) and the Biblioteca Nacional de España (Madrid).

4) Christianized groups from the lowland towns of the Ilocos region.

5) The term “Igorots” generally refers to Filipinos born on the Central Cordillera in Northern Luzon. More accurately, the Igorots are divided into six ethno-linguistic groups—Isneg (Apayao), Kalinga, Bontoc, Ifugao, Kankanay, and Ibaloy—who for three centuries resisted assimilation into the Spanish Empire (Scott 1974, 2).

6) Tinguians are the indigenous peoples of Abra Province, in northwestern Luzon (Cole 1915, 3).

7) The term “mineral belt” was coined by American mining prospectors to refer to the Lepanto-Bontoc area, where gold and copper abounded.

The Philippine Mining Frontier and Chinese Labor

The Philippines has abundant mineral resources. Since the beginning of Spanish rule in the sixteenth century, reports from the colony were sent to Madrid detailing the types of minerals and their locations on the islands (Letter from Andres de Mirandola [1574] 1903–7, 223–224; de Sande [1576] 1903–7, 54). The Spaniards soon learned that Filipinos had some knowledge of mining and refining metals but the amount they produced was small compared to what could actually be obtained (*Filipinas* 881).⁸ Notwithstanding this observation, and the desire of some Spanish officials to improve what they considered the miserable state of mining in the Philippines, the colony in the sixteenth and seventeenth centuries continued to depend on metal imports from China (Reid 2011, 21–22).⁹ Chinese traders brought into the islands large quantities of “metal basins, copper kettles and other copper and cast-iron pots; quantities of all sorts of nails, sheet-iron, tin and saltpetre, and gun-powder” (de Morga 1903–7, 179).

It was only in the middle of the eighteenth century, spurred by the Bourbon Reforms in Spain, that serious initiatives were undertaken to open up the Philippines’ mining frontier. With financial means and motivation, under the auspices of the colonial government, some Spanish industrialists initiated the exploration and extraction of natural resources such as timber and minerals in several mountainous regions of Luzon and Visayas (Diaz-Trechuelo 1965, 763–800). One of these pioneer industrialists in search of financial windfalls¹⁰ was Francisco Xavier Salgado, who invested in a number of mining ventures. Through Salgado’s unwavering efforts and adventurous spirit, three iron mines were opened during this period: Mambulao in Camarines, Santa Ines in Tondo, and Angat in Bulacan (Escoto 1998, 273–292).

Chinese skilled and unskilled laborers were absolutely crucial in the working of all these iron mines. The 1753 reopening of the Mambulao mines¹¹ began when Salgado and the Augustinian Recollect Fray Sebastian de San Vicente went to Camarines

8) In this context, the term “Filipino” refers to the Visayans in the central part of the Philippines. The Visayans were the first inhabitants of the islands with whom the Spanish *conquistadores* had initial contacts before the Spanish colonial city of Manila was established in 1571 (Scott 1994, 55).

9) Iron and copper were the two most imported metals from China during that period.

10) I use the concept of “windfalls” as formulated by Walter Prescott Webb (1964, 1–28, 180–202). According to Webb, a windfall is a resource “that comes free and unexpected and of good import.” Windfalls can be categorized into (1) primary, or “those quickly come at, things that could be had with a minimum of investment and little preliminary work”; and (2) secondary, or those which require “a long time element of waiting, and often great expense, too great for the endurance of a distant and impatient investor.”

11) The Mambulao mines had been explored in the 1660s–1690s but had not produced enough iron to cover the expenses incurred in their operations.

with 16 Chinese: two master founders and 14 skilled carpenters, smiths, and colliers (Diaz-Trechuelo 1965, 766, 768). After clearing Angat's forested area, the Chinese laborers carried out the mining and smelting of iron until 1781 (Centeno 1876, 39). Early in 1758, skilled artisans and more than three hundred unskilled laborers worked in the Santa Ines mines (Diaz-Trechuelo 1965, 771–772). By 1772 these mines still had about three hundred Chinese unskilled laborers in addition to 62 Chinese skilled artisans who worked as ironmasters, refinery experts, and ironsmiths (Diaz-Trechuelo 1965, 776).

The strong preference for Chinese labor was due primarily to their knowledge and skill in smelting and smithing (de Salazar [1590] 1903–7, 212–228). In addition, from the pragmatic standpoint of the colonial authorities, the Chinese laborers' work ethic was commendable, particularly when compared to the Filipinos'. These qualities and attributes of the Chinese led Spanish industrialists to import labor directly from China. When occasional disruptions in the importation of Chinese labor occurred—for example, when Governor Pedro Manuel de Arandia expelled all pagan Chinese from the colony in December 1758 and temporarily restricted Chinese immigration—Spanish businessmen resorted to obtaining mine laborers from Parian in Manila, especially before the last Chinese expulsion in 1766 (Diaz-Trechuelo 1965, 774).¹²⁾

It is important to stress that despite their skills and work ethic, Chinese laborers were treated as a marginal group by the colonial authorities. Essentially, they were considered neither part of the colonizers nor part of the colonized (i.e., Filipinos). By virtue of their ethnic origins and affiliations and their socioeconomic status, Chinese laborers were situated at the bottom of the colonial social structure. In this case, in the mid-eighteenth century they could be compelled to work for whatever purpose their colonial masters deemed suitable. For example, some two hundred of them were coerced to labor in the Santa Ines mines in 1765. The government's order to the soldiers was clear: "all the Sangley ironworkers *should be seized* and transported to the mines [italics added]" (de Viana 1903–7, 107). The risks involved in clearing forested areas and the hazards of actual mining were not considered seriously by the Spanish administrators as far as Chinese labor was concerned. In fact, it was the "unhealthy environment" in the Angat and Santa Ines mines that made Chinese laborers suitable for the difficult and dangerous job (Buzeta and Bravo 1850, Vol. 1, 22; Abella Casariego 1883, 7; Escoto 1998, 277).

Abuses were also committed against the Chinese miners, who had to work incessantly for long hours in order to obtain the amount of iron the Spanish capitalists expected.

12) Parian was the Chinese enclave in Manila, established in 1581.

In the Santa Ines mines, workers in the foundries and refineries were forced to work day and night (Diaz-Trechuelo 1965, 776). Angat's Chinese miners had to work without the benefit of machinery.¹³⁾ The strenuous nature of mine work required sufficient food intake and nutrition. However, only a limited supply of food was provided for the laborers. In 1765 the Chinese laborers in Santa Ines were compelled to cultivate the area around the mines to augment the rations provided by the government (de Viana 1903–7, 107). The same directive was imposed also upon the Angat laborers (Centeno 1876, 39). The meager funds available to the colonial government were allocated primarily for the reconstruction of what was destroyed during the British invasion of Manila (1762–64) as well as to better equip the military force to cope with the increased Iranun raiding on the islands.

Due to the terrible labor conditions in the mines, it was common for Chinese laborers to flee. Hence, stricter controls were imposed on their movements and work. These stringent measures were deemed important when the act of running away was viewed within the context of the numerous Chinese revolts of the preceding period. While mine administrators were mostly civilians, managers on site had to be from the military. For example, a Spanish military official functioned as the manager of the mines and supervisor of the Chinese laborers at the Santa Ines mines. This official had at his disposal 25–30 soldiers who made sure the laborers followed the manager's orders and carried out their work efficiently (de Viana 1903–7, 107–108).

Copper Mines in Northern Luzon

As in the earlier period, Chinese laborers were also employed in the copper mines of Lepanto in the nineteenth century. Copper as a “windfall” commodity (Webb 1964, 180, 182) in the mountainous frontier of Northern Luzon was first mentioned during Governor Simon de Anda's administration (1770–76).¹⁴⁾ However, no attempt was made to tap its potential until Governor Pascual Enrile (1830–35) tried to curb the circulation of counterfeit money called *siping* (US Bureau of the Census 1905, 84) by instructing Col.

13) After 1795 the mines were taken over by the businessman Don Domingo Rojas and engineer Don Jose Barco. The two partners expanded the geographic scope of the mines. They also imported machines from Europe to be used in the mines. Unfortunately, due to nearly impassable dirt roads leading to the mines, the machines were not installed and thereby became useless.

14) Webb classified mineral resources such as gold and silver under primary windfalls. However, while Lepanto copper was a mineral resource, it took a long time (about six years) and a huge amount of capital investment before the mines produced ample ores to cover expenses and make a profit.

Guillermo Galvey to tackle the problem.¹⁵⁾ Galvey was also tasked to be on the lookout for copper deposits (Scott 1974, 245). However, specific directives for exploring the mineral resources of the mountains between Cagayan and Ilocos were issued only on March 27, 1834. On January 1–18, 1835, assisted by Aide-de-Camp Jose Maria Peñaranda, Galvey undertook the search for copper (Centeno 1876, 41; Scott 1975a, 129)¹⁶⁾ in the *rancherías* (Meyer 1975, 103)¹⁷⁾ of Gambang, Lamagang, Ampan, and Apayao. These settlements were part of the 60 *rancherías tributarias* (tributary villages) under the jurisdiction of the Political and Military District of Lepanto (see Map 1) (Cavada y de Vigo 1876, 115).

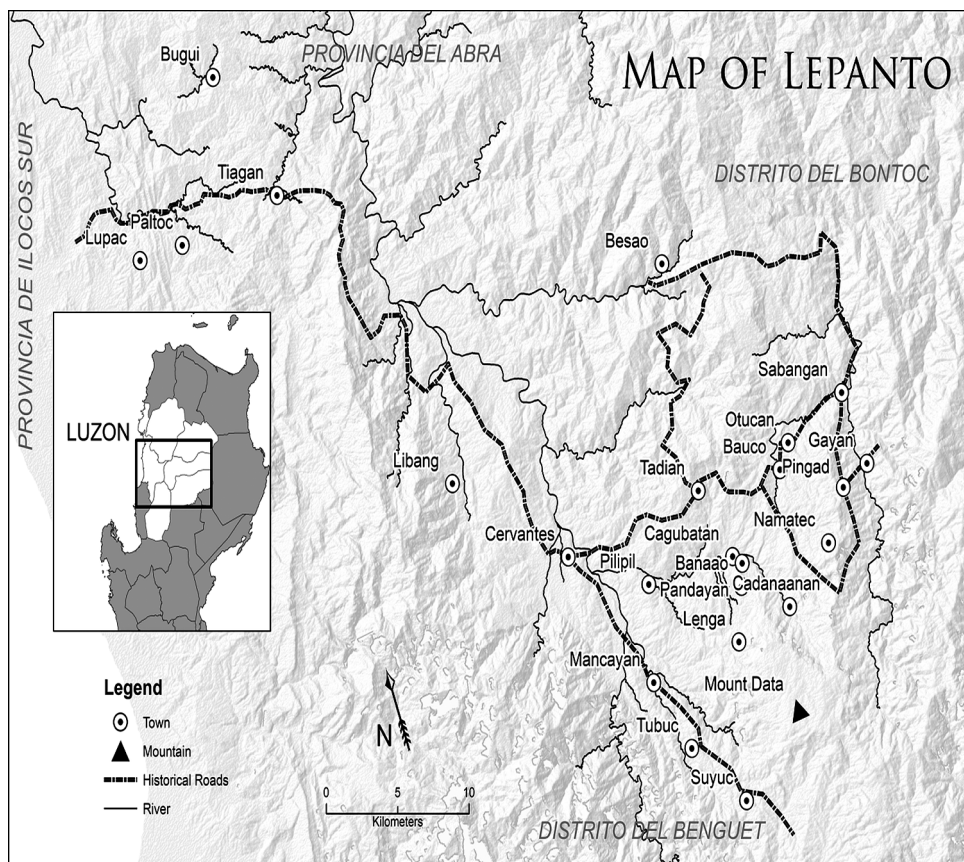
Galvey and Peñaranda not only discovered a “copper region of unquestioned value” (Early Franciscan Missions [1649 (1895)] 1903–7, 301), they also learned that the Igorots of these *rancherías* had been mining copper even before the Spanish colonization of the islands (Santos 1862, 19, 21; Centeno 1876, 43; de Lacalle 1886, 201). The mining engineer Antonio Hernandez, who was sent to the Cordilleras in 1850, learned on the spot how the Igorots mined and smelted ores. According to his report, the Igorots were knowledgeable in extracting and refining minerals such as copper and gold. To open a new mine site, the Igorots constructed pools of water in order to obtain a head of pressure adequate to reveal the mineral deposits, which they split by building fires against the rock. The ores were then roasted with fuel piled up around them. These roasted ores were melted down twice in crude furnaces so that a finer grade of metal could be acquired (*Ultramar* 443, *Expediente* 4).

The Igorots sold the half-worked ores in the lowland Christian towns of La Union and Ilocos. Artisans in these towns used the copper to make utensils and ingots illicitly used as currency (the counterfeit sipings). In most cases, these copper objects were also sold in Manila (Santos 1862, 19). However, from the standpoint of the Spaniards, the Igorots’ “rudimentary” mining and smelting techniques produced low-quality ore and poor amounts of copper. This deplorable situation, the authorities asserted, could be improved with the help of mining experts and the use of machinery (Santos 1862, 19–20).

15) The manufacture of sipings was part of the Igorot copper industry. Extremely rude counterfeits of Spanish copper coins, which were much thicker, sipings were made because of the virtual lack of small change in Lepanto and other parts of northern Luzon. Sipings were valued at a cent and a quarter Mexican, with 4 sipings being equal to 5 centavos. Spanish efforts to curb the manufacture of sipings met with limited success. When American mining prospectors went to Lepanto in the 1900s, they found some Igorots and Chinese engaged in producing the coins, albeit in smaller quantities than what was produced in the nineteenth century.

16) According to Jose Centeno y Garcia, the order for the exploration was issued from Madrid in 1833.

17) A *ranchería* was a small settlement or village of *indios* who had not yet been converted to Christianity. A *ranchería* consisted of not more than 60 houses and not more than 250 inhabitants.



Map 1 District of Lepanto

On March 9, 1837, two years after the Galvey-Peñaranda expedition, the Inspeccion General de Minas was established to promote the mining industry in the Philippines (Santos 1862, 19). The bureau was tasked to undertake mineral and resource explorations in the archipelago, conduct geological surveys in potential mining areas, collect rock samples for investigation, and create an empirical data base for the development of the industry (Santos 1862, 19–21; Abella Casariego 1883, 14–15). The bureau was composed of a corps of engineers under the chief inspector, who was also an engineer (Abella Casariego 1883, 14). It was through the efforts of the bureau's corps of engineers that systematic studies on the copper mines in Lepanto were undertaken. For example, the bureau reported that an estimated 189.78 *quintales metricos* (metric quintals) of copper could be procured from the mines annually.¹⁸⁾ This meant that over 15 years (1840–55)

18) One metric quintal is equivalent to about 100 pounds or 46 kilograms.

the mines could produce approximately 2,846.70 quintales metricos of copper, which was equivalent to 117,000 *pesos fuertes* when sold in Manila (Santos 1862, 19).

The first comprehensive regulations on mining (Reglamentos de Minas) were introduced in 1846 through a decree issued by Governor Narciso Claveria (1844–49) (Centeno 1876, 41). In these regulations, the fundamental goals, the agencies, and the overall processes involved in mining the colony's mineral resources were outlined in detail. The Reglamentos also set out the rights and responsibilities of the colonial state, contractors, miners, and laborers (Rodriguez Berriz 1887–88, Vol. 8, 350–357). Twenty years later, a more detailed mining policy was announced through the Mining Decree of May 14, 1867. As will be elaborated in the following sections, the 1867 Decree clarified certain provisions of the 1846 Regulations, particularly articles specifically about Chinese contract laborers (*chinos contratados*) (Rodriguez Berriz 1887–88, Vol. 8, 375–378), who comprised the majority of workers employed in the Lepanto copper mines.

The Cantabro-Filipina Company

Proposals for the systematic exploitation of the Lepanto mines were submitted to Manila two years after Hernandez's 1850 expedition. On September 5, 1852, Antonio Perea, the military commandant of Cayan, the capital of Lepanto, made a proposal to Governor Antonio de Urbiztondo (1850–53) to exploit the mines in Mancayan. He intended to employ "families of poor but honest laborers" from Christian towns in Cayan and the surrounding pacified areas. The government would assist with the laborers' resettlement by providing the necessary funds for their transportation, building their houses, and procuring draft animals as well as agricultural and mining tools. The initial expenses would amount to 5,000 to 6,000 pesos, but the expected annual yield for each mine (*beneficio*) was 10,000 pesos (*Ultramar* 443, *Expediente* 4). In 1854 the project was approved, and the funds came from the community chest (*caja de comunidad*) (*Ultramar* 443, *Expediente* 4, No. 1; *Ultramar* 435, *Expediente* 33), which Filipinos had been paying as a direct tax (*contribucion directo*) since the beginning of Spanish rule (Plehn 1901, 688–689).

The project began on April 30, 1854, as soon as the Mining Decree to start operations was issued (*Ultramar* 443, *Expediente* 4). However, the lack of Igorot labor willing to stay for long periods of time in the mines, and the lack of additional funds required, brought the state-sponsored operations to a halt. It was then that the Cantabro-Filipina Company, a private Spanish company, stepped in, obtained the mine claims, and continued the work that the colonial government had started.

The system for granting such mine claims began in the middle of the eighteenth century: all interested individuals, groups, or companies could submit proposals to the authorities in Manila. These proposals invariably specified the length of time the proponents intended to operate the mine, provisions on the conduct of operations—including the amount they would pay the government—as well as how to procure workers. Once the government selected the best proposal, which would further the government's interests, the lease was granted (Díaz-Trechuelo 1965, 785–786).¹⁹⁾

The Cantabro-Filipina Company began its operations on March 26, 1856, after Venancio Balbas was allowed, through an agreement between him and the Igorot chiefs of the area, to explore the Santa Barbara mine in Magamban, Mancayan (Santos 1862, 20; Scott 1975a, 129, 135). Despite Balbas's pioneering efforts to exploit the mines, no copper was produced in the early years of operations. In order to find out what was wrong, a special commission, led by Jose Maria Santos, chief engineer of the Bureau of Mines, was sent to Lepanto in October 1859 (*Ultramar* 443, *Expediente* 4). After making his investigations, on November 30, 1861 Santos submitted his "*Informe sobre las minas de cobre de las rancherías de Mancayan, Suyuk, Bumucun y Agbao en el Distrito de Lepanto, isla de Luzon de las Filipinas*" (Report on the copper mines in the villages of Mancayan, Suyuk, Bumucun, and Agbao in Lepanto District, Luzon island) to the governor-general (*Ultramar* 443, *Expediente* 4). The report contained, among other things, important recommendations for salvaging the future of the mines. One of these recommendations was to create a well-structured administration to preside over every aspect of mining operations, from generating funds to employing labor and selling the ore yields (Santos 1862, 64–71). This new administration was created on April 1, 1862 (*Minas de cobre del Distrito de Lepanto (Filipinas)* 1862; *Reglamento interior para la mejor administración de la sociedad Española, Minero-Metalúrgica Cantabro-Filipina de Mancayan* 1862).

Through the capable leadership of Santos and the efforts of the company officials, copper production in the 10 mines of Lepanto gradually increased after 1862 until the peak year of 1870 (Santos 1862, 3–7; see also Scott 1974, 247; 1975a, 104). Table 1 depicts the annual copper production of the Cantabro-Filipina Company in the decade between 1864 and 1874 as reported by Don Jose Centeno y Garcia, chief of the First Corps of Mining Engineers (Jefe de Primera [Administración] del Cuerpo de Ingenieros de Minas). It was only after 1867, more than a decade after full-scale operations began, that the company was able to extract fine copper (*cobre fino*) from the cruder yields of black copper (*cobre negro*).

19) An example of this process was how Doña Maria Isabel Careaga, a contractor in the wine industry, was able to get the lease of the Santa Ines iron mines in Morong in 1781.

Table 1 Copper Production in the Lepanto Mines, 1864–74

Year	Class	<i>Quintales</i>	<i>Libras</i> *
1864	Black copper**	170	73
1865	Black copper	411	69
1866	Black copper	1,194	43.5
1867	Fine copper***	2,464	21.5
1868	Fine copper	3,316	17
1869	Fine copper	3,320	17
1870	Fine copper	4,020	17
1871	Fine copper	3,950	17
1872	Fine copper	1,632	93
1873	Fine copper	2,159	93
1874	Fine copper	1,613	90

Source: Centeno (1876, 45).

Note: * One *libra* is equivalent to about 0.46 kilogram.

** *Cobre negro*.

*** *Cobre fino*.

Recruitment and Employment of Chinese Laborers

The increase in copper production was enabled also by employing more Chinese laborers in addition to those initially hired by Venancio Balbas. According to Santos, who later became the leader of the enterprise seconded to the company from the government (*Ultramar* 443, *Expediente* 4), it was advantageous to hire Chinese laborers as they proved “to be knowledgeable and worked well” (Santos 1862, 34). The Chinese miners were instrumental in improving the “imperfect and inefficient means employed by the savages” (Santos 1862, 19–20). These young and able-bodied men also consistently augmented the small number of Igorots who wanted to be employed in the mine works (US Bureau of the Census 1905, 83).

In July 1856, preparatory work at the Lepanto mines began with the arrival of 120 contracted Chinese laborers (Scott 1975a, 104). Ten months later, another 156 Chinese arrived and were sent straight to the mines (*Ultramar* 436, *Expediente* 4). In 1861 it was reported that the mines had only 140 Chinese laborers (Santos 1862, 60). This number had increased to more than 600 by 1869 (Scott 1975b, 27) and then dropped to 400 by 1870 (Scott 1975a, 104). During the 1875–76 registration (*empadronamiento*), there were only 87 Chinese registered in Lepanto, described as “*mineros y agricultores*” (miners and agriculturists) (de Gracia 1877, 89). The number of Chinese laborers in the mines was dependent upon fluctuations in the price of ore and the amounts of copper produced, the lack of Filipino laborers from the area, the availability of unemployed Chinese mine labor, and the amount of work required. For example, in 1870–71, when copper production was

high, an additional 91 Chinese laborers were contracted to work in the mines (*Cuentas, SDS 18500*). After 1874 their number declined as the company faced serious financial challenges due to the plummeting world price of copper, the prohibitive transportation costs linked to the mines, and the increasing outlays for fuel (Perez 1902, 132; Scott 1975a, 105).

The dialect group affiliation of the Chinese laborers is difficult to ascertain. The archival sources do not indicate whether the laborers were Hokkien (from southern Fujian) or Cantonese (from Guangdong), the two principal Chinese communities in the Philippines. *Chinos* and *sangleyes* were the common Spanish terms used in official reports and correspondence. Despite this limitation, it can be inferred that while the majority of Chinese who came to the islands were Hokkien, it seems that Cantonese called *macanistas* were the preferred laborers for the Lepanto mines. For example, the 156 Chinese laborers imported in 1857 were all indentured in Macao (*Ultramar 436, Expediente 4*). Furthermore, the surnames of the 91 laborers employed in 1871 were all Cantonese (*Cuentas, SDS 18500*).²⁰ One reason for this preference for Cantonese was that certain trades and occupations were dominated by particular speech-dialect groups. In addition to cooking, leatherwork, carpentry, and cabinetmaking, mining was also an industry where *macanistas* had a specialization (de Comenge 1894, 48; see also Wickberg 2000, 177). The arrival of these Cantonese miners began after 1852, when Macao became the redistributive center of the coolie trade in China (Yen 1985, 52–53).

The recruitment of Chinese labor for the Lepanto mines followed the general pattern of the global coolie traffic during the second half of the nineteenth century.²¹ Under the auspices of the “coolie agency system,” young men from South China were signed up for manual work overseas by unscrupulous agents or brokers (*khetaus*), who commonly employed debt trapping, opium drugging, and armed kidnapping to obtain laborers. The fresh Chinese laborers would then be held in barracoons while waiting for foreign agents to negotiate their contracts with the *khetaus*. After the negotiations, the indentured laborers would leave China on ships registered to Western nations (Yen 1985, 36–39, 55). Chinese laborers sent to work at the Lepanto mines were transported to the Philippines with batches of other Chinese bound for plantation work in Cuba, Peru, and other colonies in the Caribbean and Spanish America (Rodriguez Berriz 1887–88, Vol. 11, 186; Meagher 2008; see also Hu-DeHart 1994, 38–54). In 1857, for example, the Spanish ship

20) For a list of Hokkien and Cantonese surnames represented by Chinese clan associations in the Philippines between the 1880s and 1980s, see See (1992, 108–114).

21) It must be noted that from the middle of the eighteenth century until the 1850s, coolie labor was practically non-existent in the Philippines, as a result of Chinese massacres and expulsions as well as the Spaniards’ restrictive immigration policies in the seventeenth and eighteenth centuries.

Asuncion commanded by Capt. Severo de Arritola brought Chinese mine laborers to the port of Santiago, Ilocos Sur, while bound for Cuba with more Chinese coolies who were being transported to Havana. The Cantonese laborers had been contracted in Macao by Don Tomas Balbas y Castro, the first company administrator of the Lepanto mines, through his agent Don Mariano del Pielago (*Ultramar* 436, *Expediente* 4).

It was also possible for company agents to negotiate with Chinese or Chinese mestizo *cabecillas* (employers) in Manila instead of going directly to China, as *cabecillas* also had labor gangs under their jurisdiction. However, if a *cabecilla* had only a limited number of laborers, the agent would seek help from the *gobernadorcillo de sangleyes*. The latter could provide additional labor from among newly arrived migrants who did not have a *cabecilla* to take them in, who were temporarily lodged at the Casa Tribunal de Sangleyes in Binondo (de Comenge 1894, 32, 35–36; de Viana 2001, 148–149).

The length of service and salary of laborers specified in the contract were negotiated between the company agent and the *khetaus* in China, or the *cabecillas* in Manila. Chinese laborers for the Lepanto mines, like the coolies destined for Cuba, were issued contracts before their embarkation from Macao or Amoy. The length of service was normally between one and three years, which could be renewed based on the company's need and laborer's performance (*Ultramar* 443, *Expediente* 4).²²⁾ The laborer's salary was determined by the company. In 1861 a laborer received an annual salary of 36 pesos. In addition, he received 15.43 pesos yearly for his food supply (Santos 1862, 60). In 1871 the annual salary was 10 pesetas, which was given every four months (*tercio*): in January, May, and September (*Cuentas, SDS* 18500). The laborer's entire salary for the first year of employment was transferred by the company agent to the *khetau* or the *cabecilla*, who would deduct all debts incurred by the laborer before going to the mines. A laborer's debts normally included his travel expenses and entry taxes coming into the Philippines, food and lodging at the *cabecilla*'s house or shop-cum-dormitory, and other basic necessities while the laborer was still in Manila. The laborer also received a certain amount from his *cabecilla* before traveling to the mines, as he had to purchase his provisions (except food) from the company's store (Santos 1862, 60; Wickberg 2000, 111–112).

If the contract was signed in China, it was the responsibility of the company agent to prepare all necessary documents for the coolie's travel to the Philippines. The agent would submit these documents to Spain's diplomatic legations in Amoy and Macao. The Spanish consul general would grant travel permits to the laborers and send a dispatch to the Philippines, informing the governor general about the impending arrival of the

22) Three-year contracts were made also between the company and buyers of copper yields from Mancayan.

laborers and the vessel that was transporting them (*Ultramar* 436, *Expediente 4*; see also *Chinos [Manila, 1893–1894]*, *SDS* 13048, S 124).

In the case of laborers coming from Manila, it was the *gobernadorcillo de sangleyes* that requested the governor of the city of Manila to issue the men's licenses to travel and take up temporary residence in Lepanto. The *gobernadorcillo*, with an endorsement from the *cabecilla*, had to vouch that the laborers were law-abiding, paid their contributions on time, and had no criminal records (*Ultramar* 5203, *Expediente 4*, No. 13; see also Rodríguez Berriz 1887–88, Vol. 8, 376). For its part, the company had to pay each laborer's *capitacion* (poll tax) for the entire year before travel and residence permits were granted. A general list of the laborers, including their respective travel and residence documents, was handed over by the company to the provincial governor, who in the case of Lepanto was the politico-military commander of the district. The list was absolutely necessary in order for the provincial government and treasury to track down the number of Chinese laborers required to pay their poll tax and *falla* (redemption fee) after one year of working in the mines (Rodríguez Berriz 1887–88, Vol. 8, 376).

After all the necessary travel documents were obtained, the trip to the mines would begin. The trek to the mountains, which normally lasted two to three days, would begin in a southeasterly direction from Candon, Ilocos Sur. The travellers had to cross "several rivers and use some badly constructed and rugged roads" (Santos 1862, 25–26). Walking was considered the most suitable means of reaching the mines, as riding a horse or being carried on a hammock lifted by native porters was considered dangerous and annoying (Santos 1862, 25–26). Loads were carried by porters (*cargadores*) from Cayan to Mancayan for 2 *reales* and 10 *cuartos* per piece (de Gracia 1877, 59). Horses and buffalo were available, but these animals were used only for transporting machinery and carts loaded with rocks and copper ores (Santos 1862, 61). It was only in the latter part of the 1870s that road construction was undertaken through the efforts of the company. Caution had to be observed, especially when traversing unpacified territories, as "the mountains possessed a hostile and suspicious nature" (Centeno 1876, 41). This character portrayal of the mountains signified not only the geophysical events that could occur but, more important, the possibility of planned attacks by Igorots, who had resisted Spanish encroachment into their territories for more than three centuries.

Working Conditions

Mine work was generally determined by the locations where the Chinese laborers had to work. Exterior work (*obras exteriores*) referred to activities outside the tunnels.

During the early months of opening up an area for mining, Chinese laborers (*barreteros*) had to clear the forests to make the area habitable. They used hand axes to cut down the sturdy oaks, pines, narra, cedar, molave, and camagong that abounded (Santos 1862, 20–21, 26–27, 34; Cavada y de Vigo 1876, 117; de Gracia 1877, 45–46; Scott 1975a, 104). As time was often of the essence, they cleared forests day and night (see de Comenge 1894, 41). After this initial phase, the Chinese had to build and maintain a number of structures, such as the company's administrative offices, firewood stores, various shops, a powder magazine, a rice warehouse and *bodega*, and kilns for making bricks for the furnaces. They also had to construct their own barracks within the confines of the mining compound (Santos 1862, 20–21, 44, 61; Rodriguez Berriz 1887–88, Vol. 8, 376; Scott 1975a, 104).

But the Chinese were hired primarily for the actual mining or related underground works (*trabajos subterráneos*) from 1856 until the end of the company's full-scale operations in 1875 (Santos 1862, 21; Scott 1975a, 138). In 1859 Don Tomas Balbas y Castro reported that more than 1,580 *metros lineales* (linear meters) of tunnels had been explored by the Chinese. This underground work resulted in a yield of 146,000 *arrobas*²³⁾ of copper (Santos 1862, 6). Using crowbars, hammers, and chisels, Chinese *barreteros* chiseled away at the ore face. They also drilled holes and set explosive charges to dislodge the ore (Santos 1862, 44, 60, 61). They would then bring the ore to the tunnel entrances. Igorot women would mill and wash the ore before their men sorted and classified it (Santos 1862, 60; Scott 1975a, 104). In the 1880s, 15–20 Igorot women and some Chinese were usually employed to classify the ores (Perez 1902, 129). Smelting using Mexican smelters was also done by Chinese *fundidores* (foundry workers) (Santos 1862, 60; Scott 1975a, 104).

During the nineteenth century, *kongsi* associations were important in settling and developing the mining frontiers of rural Malaya, southern Siam, and western Borneo. Kongsis were a “form of open government based on an enlarged partnership and brotherhood” (Wang 1994, 4). Their main purposes were to protect the rights of their members, promote economic productivity among them, and resist outside powers that would abuse or mistreat them (Wang 1994). These institutions, however, did not develop in the Philippines, due to the Spanish administration's ban on the establishment of such autonomous “states within the state” (Wickberg 2000, 24). Consequently, management of Chinese labor at the Lepanto mines was in the hands of the company's Spanish administrators and Christian Filipino workers (most probably Ilocanos). The first Spanish officials from the Bureau of Mines assigned to supervise the mines were sent to Lepanto in the

23) As a measure of dry weight, one arroba is equivalent to 11.506 kilograms; when used as a liquid measure, it is 16.1 liters.

Table 2 Personnel Employed by the Cantabro-Filipina Company in the Lepanto Copper Mines, 1861

Officials and Workers	Number
Chief engineer	1
Mines administrator	1
Director of the foundries	1
Major foreman of mines and foundries	1
Mechanical engineer	1
Foreman for Mancayan	1
Foreman for Suyuc, Bumucun, Lupaac, and Agbao	1
Master founder	1
Secondary master founders	2
Master carpenter, stevedore, and mechanic	1
Master carpenter's foreman	1
Store and warehouse keeper	1
Surgical practitioner	1
Master blacksmith	1
Spanish watchmen	2
<i>Indio</i> night foremen	2
Masons	2
Officials to supervise ironworks	3
Officials to supervise carpentry work	5
Tinguan cart drivers and shepherds	20
Chinese underground workers and smelters	140
Igorot laborers	25
Igorot ore classifiers	30
TOTAL	244

Source: *Ultramar 443, Expediente 4, No. 10*. Fomento de las minas de cobre del distrito de Lepanto [Promotion of copper mines in Lepanto District].

latter part of 1859 (Santos 1862, 3). Table 2 lists the personnel employed in the Lepanto copper mines two years later.

Taking into consideration the significant role of Chinese skilled labor in Philippine mining before the nineteenth century, as noted earlier, it is likely that most skilled labor (e.g., founders, blacksmiths) in Table 2 were Chinese even though only 140 underground workers and smelters were specifically identified as “Chinese.” Even Santos, who drafted the *Informe* (report) in 1861–62, including the table, categorically stated that Chinese skilled laborers were indispensable for operating the mines (Santos 1862, 21, 44). Whenever possible, therefore, Chinese skilled workers were employed. They were ranked higher in status in the labor hierarchy, and hence treated better, than the Chinese underground workers and smelters but were still considered lower down the scale than the Spanish administrators and Christian Filipino workers.

Chinese laborers worked in shifts, as mine labor—particularly in the foundries—had to be done around the clock. The copper mine zone was divided into two areas: the

major mine site was located in Mancayan, and minor ones were in the area of Suyuc,²⁴ Bumucun, Lupaac, and Agbao (Perez 1902, 132). More Chinese laborers worked in the Mancayan mines than in the latter mines. However, during the rainy season additional hands were deployed at the Suyuc mines as the neighboring Igorots of Suyuc had to tend their rice and camote crops (Perez 1902, 133, 138). Each group of laborers was supervised by a Spanish watchman (*celador*) during the day and two Filipino foremen (*indios capataces de noche*) at night. Both the laborers and foremen were under the supervision of a Spanish chief foreman who administered the underground works and the foundries (*capataz mayor para minas y fundiciones*).

A typical workday for laborers would start before daybreak with breakfast—mainly rice or root crops, a piece of meat, and vegetables—prepared in their assigned quarters. The rice usually came from the neighboring areas of Mancayan and Suyuc (Perez 1902, 124). However, rice was imported from Ilocos Sur when harvests were poor in the latter part of the nineteenth century due to unreliable weather and climate (Cavada y de Vigo 1876, 117). The Mining Decree of 1867 enjoined mine companies and administrators to establish a large chicken coop and slaughterhouse for reliable poultry and meat supplies, especially when the number of laborers exceeded one hundred, which was the case in the Lepanto copper mines. After breakfast the Chinese laborers, with their mining tools in hand, lined up in front of the administration office; there the foremen counted them, making note of any laborers who were sick or had absconded. Those who were ill were sent to the infirmary, where they were attended to by a surgical practitioner (*practicante de cirugía*) and given medicine. For minor accidents, first aid kits were readily available (Santos 1862, 60–61; Rodríguez Berriz 1887–88, Vol. 8, 376; Scott 1975a, 104). Those with more serious ailments and injuries were brought to either of the two infirmaries in Mancayan and Cayan (Cavada y de Vigo 1876, 116). However, if a sick person was found unfit for work, he would be sent back to Manila and a replacement would be sought at the company's expense. On the other hand, laborers who fled were pursued by Igorot warriors assigned to capture these defiant absconders (Semper 1975, 27).

A brief mention of the salaries of Chinese laborers was made earlier. However, a more detailed discussion is necessary in order to compare what Chinese workers received in relation to non-Chinese workers. The heaviest, most physically demanding, and most dangerous work was assigned to non-Christian Chinese, Igorots, and Tinguians, who also received the lowest salaries among the company's personnel. Commenting on their low salaries, Santos stated in 1861: "I do not think there is an establishment of the same kind with such modest wages" (Santos 1862, 34–35).²⁵ In the same year, the 20 Tinguians

24) Suyuc, the largest of the minor mines, was situated 8 kilometers from Mancayan.

25) "No creo exista establecimiento de igual especie con jornales tan modicos."

hired as cart drivers and a shepherd each received 36 pesos annually, while every Igorot who worked as an ore classifier was paid an annual salary of 24 pesos. On the other hand, the Chinese and Igorot laborers received 36 pesos every year plus 15.43 pesos and 86.4 pesos respectively for their provisions (*abastecer de viveres*) (Santos 1862, 60). The laborers bought their food and other supplies from the company store, which was maintained by the warehouse keeper (*encargado de tienda y raciones*). As noted above, the food allowance was provided by the company but the laborers' other living expenses had to come from their salaries. As was the case in other mining areas in Southeast Asia during the period under consideration, Chinese laborers were encouraged to buy staples from the company store on credit. Normally, their debts were deducted from their salaries before they received them.

By comparison, a Spanish watchman received 140 pesos annually while a Christian *indio* foreman received 96 pesos, which was more than double the salary of a Chinese or Igorot laborer (Santos 1862, 60). This difference in wages suggests that the company took religious affiliation and racial or ethnic identities and attributes into consideration when hiring employees. The crucial skills needed to operate the mines were obviously important, but the Spanish employees, who were at the top of the labor ladder, were not always as qualified as they were expected to be for the work. There were engineers who were hired despite their lack of training and experience. The agents of the Bureau of Mines, who conducted an inspection in the Lepanto mines, reported in 1863 that they saw "with sorrow great errors, which immediately [caught] the eye, committed by fraudulent [Spanish] engineers who, in intelligence and mining knowledge, lag behind those we unduly classify as savages" (*Informe* 1864, 12–13, cited in Scott 1974, 247).

Living Conditions

Chinese laborers built their own barracks adjacent to the mining area. They were not allowed to go outside their compound (Rodriguez Berriz 1887–88, Vol. 8, 376). According to two Europeans who visited the mines in the 1870s, the company's headquarters house (*casa administración*) was erected on a hill above the area where the Chinese barracks were located. Thus, it would be easier for the administrators to watch over and regulate the Chinese quarter (*Reglamento interior* . . . 1862, 30–31).²⁶ Furthermore, two Spanish watchmen were specifically assigned to ensure that no Chinese violated the rule of

26) The Augustinian friar Angel Perez gave only the surnames of these individuals: Señores Prat and Ruiz (Perez 1902, 127). He must have been referring to two shareholders in the Cantabro-Filipina Company: Joaquin Prat and Victor Ruiz Lanzarote.

remaining within their compound. Only those individuals who were sick and no longer capable of working were allowed to return to Manila. These indigent laborers, after getting an endorsement from their respective foremen and certification from the mine's physician, had to also secure a permit from the administrator of the mine. Before the laborers went to work at dawn, roll call was taken by the foremen. Before returning to their barracks in the evening, they were accounted for again, to ascertain whether anyone had escaped or been injured in the mine. These numbers were included in the monthly report given to the provincial or district treasury (*Reglamento interior* . . . 1862, 23). This routine procedure was strictly enforced as the company had to pay a poll tax for every laborer on the list submitted to the treasury, although some laborers were no longer working in the mine due to illness or flight (Rodríguez Berriz 1887–88, Vol. 8, 376).

Chinese laborers worked 25 days a month (Santos 1862, 35). The only break in their annual work routine was the celebration of Chinese New Year in January or February (Foreman 1899, 119). Sundays were reserved for religious observance of the Christian employees, and were deemed an opportune time to proselytize among the “heathen” Chinese, Igorots, and Tinguian laborers (Perez 1902, 134–135). The 1867 Mining Decree stipulated that when a mining site employed more than 250 families, a chaplain should be appointed in the area (Rodríguez Berriz 1887–88, Vol. 8, 376). As early as 1861, the government had requested an Augustinian missionary for the mines—but it was only in October 1874, more than a decade later, that the Augustinian friar Marcelino Ceballos arrived on site. He stayed for just a few months (Scott 1974, 248). Aside from the Chinese, a small barrio of Ilocanos in the mining district also needed religious instruction (Perez 1902, 128). It was only in the late 1880s that the mission of Mancayan was established and permanently administered by the Agustinos Calzados (Font 1892, 105).

Sundays were also set aside for leisure activities, but since the Chinese laborers were confined to their compound, they were content to gamble and play cards and games of chance such as *panguingue* and *monte*, which was their favorite pastime (see de Comenge 1894, 169–170). They also drank a fermented wine called *basi* (*Ultramar* 443, *Expediente* 4),²⁷ especially on occasions like Chinese New Year. They also smoked in order to cope with the cold of the mountainous areas, where the temperature could drop from 10 degrees Celsius to near freezing during the cold months between November and February (Cavada y de Vigo 1876, 116; Perez 1902, 68). Tobacco was readily available either through the contraband trade of the Igorots or supplied by the company (de Gracia 1877, 36). But it was opium that these laborers craved (see de Comenge 1894, 51;

27) These wines were fermented by the Igorots of Suyuc (see Perez 1902, 139). When Antonio Hernandez explored the area, he noted how the Igorots made and drank *basi*, which he described as “*bebida espirituosa de arroz* [rice wine]” (*Ultramar* 443, *Expediente* 4).

Bamero 2006, 63–64). Carl Trocki asserts that opium was an “ideal commodity” for Chinese laborers in colonial Southeast Asia:

Isolated in virtually all-male communities, they lacked most of the amenities of normal life: entertainment, families, women, and medicine. Opium filled these empty spaces, helping the laborers forget their loneliness and isolation, and easing the physical pain that accompanied long hours of heavy work in the tropical heat. In addition, it eliminated the symptoms of dysentery, malaria and other tropical fevers, which allowed them to keep working. . . . Thus, it was arguably in Southeast Asia, not in China itself, that opium use first took hold among lower-class Chinese, for as the British mass-produced opium in India, they found a mass consumer market among the Chinese laborers of Southeast Asia. (Trocki 2011, 89)

Dangerous Mines

Mine work was physically demanding, dangerous, and unhealthy. Chinese laborers had to utilize their brute strength to clear large tracts of forest in order for mining operations to be established and maintained. They had to cut down sturdy trees with axes and handsaws. In the process, they were exposed to the perennial problem of hostile attacks by tribal groups of the Cordilleras, who were described by Santos in stereotypical terms as “primitive,” “savages,” “cruel,” and “inhuman” (Santos 1862, 18, 20). The early Spanish explorers, and later the owners and administrators of the Cantabro-Filipina Company, were well aware of the headhunting expeditions of the Igorots, particularly the Ifugaos, between the 1830s and 1850s. In fact, when Governor Narciso Claveria went to assess the missionary work in the Cordilleras in April 1846, he found the conditions “grim indeed” (Scott 1974, 251, 248).

Below ground, inside the tunnels, Chinese laborers were also exposed to great dangers inhaling air lacking in oxygen and filled with metallic and non-metallic dust. A prolonged stay in the mines could damage the lungs and cause respiratory illnesses. Acrid smoke from candles and torches used inside the tunnels, as well as smoke from gunpowder used in blasting operations, added to the air pollution that affected the health of Chinese laborers (Santos 1862, 61). Mine cave-ins caused by earthquakes and the use of explosives regularly threatened the workers’ safety. Strong earthquakes occurred in Luzon in 1855 and again in 1866 (Sawyer 1900, 397–398). The violent and destructive earthquake of July 1880 hit Lepanto and Abra, leaving a trail of destruction (*Los terremotos de Filipinas* . . . 1880, 30; Centeno 1881, 16).

There were also deadly diseases that threatened the laborers, such as malaria and smallpox. For most Filipinos, the uplands were an avoidable place as the forests were considered to be full of fever, which was the main symptom of malaria (De Bevoise

1995, 142–143). The fevers normally became rampant “after the rains [in September and October], and in woody or marshy areas” (“An Englishman” 1903–7, 78). Guillaume Le Gentil in his travel account noted the impact of the weather on those engaged in mining in Luzon: “It is true that this sort of life shortens the days of these wretched people; as they are perpetually in water, they swell, and soon die” (quoted in “An Englishman” 1903–7, 78).

A smallpox epidemic broke out in Lepanto in 1875 (De Bevoise 1995, 118), and cholera was reported in Mancayan and Cayan in 1870 (Cavada y de Vigo 1876, 116). Illnesses and accidents were common in the mines, as evidenced by the company’s employment of a resident physician as well as personnel to administer the infirmaries in Mancayan and Cayan (Santos 1862, 60; Cavada y de Vigo 1876, 116).

Abuses

Difficult workplace conditions were partly the reason why Chinese laborers were hired by the Cantabro-Filipina Company in the first place. While it was clear that the Chinese laborers were preferred for their skills, work ethic, and relatively low wages (see Santos 1862, 34), they were still relegated to the lowest stratum of the labor hierarchy in the mines. The Spanish attitude toward Chinese miners did not change significantly in the nineteenth century. Coercion and abuses were committed against them both in the eighteenth-century iron mines and in the nineteenth-century copper mines. The 1867 Mining Decree, for example, clearly stated that the Chinese were to be hired to work in unpopulated and unhealthy (*mal sano*) areas of the Philippines in order to develop the country’s mining industry. Local inhabitants could be hired, but only those who were living within the boundaries of the prospective mining area as they were familiar with the site and had already adapted to local climatic conditions (Rodríguez Berriz 1887–88, Vol. 8, 376). Ironically, unlike the Tinguian and Igorot laborers, the Chinese, who did the most physically taxing and dangerous mine work, still had to adjust to their new environment with all its geophysical and epidemic disease-related threats.

Abuses against Chinese workers were not noted even in the Bureau of Mines reports in the early 1860s. Inspections were conducted on a regular basis, but their main objective was to check the condition of the mines and see how to improve the rate of extraction of copper ore. Little attention or regard was paid to the well-being of the Chinese laborers. Furthermore, the geographic distance between Lepanto and the capital, and the near inaccessibility of the mines, presented serious obstacles to the central colonial government, as well as to the *gobernadorcillo de sangleyes* and the Chinese

principalia, to act against the unfavorable conditions.

In order to discern the extent of the abuses committed against Chinese in the mines, one has to read between the lines of the investigation reports. For example, one distinct feature of the Chinese miners' lives was that they were confined within the mining area. As they might "contaminate" the native laborers, especially the Igorot women, they were not allowed to leave the mining site. Even on weekends, when they put their tools down, they were confined to their quarters or around the mining compound. While the 1846 Mining Regulations stipulated that mine owners and administrators had to treat their laborers in a "suitable manner" (Rodriguez Berriz 1887–88, Vol. 8, 354), it was possible that the company had the Chinese laborers work in a relentless manner, particularly during the four-year period between 1856 and 1860, when the mines were still struggling to produce a substantial amount of copper (see Scott 1975a, 104). Because of the hard labor conditions that they had to endure, some Chinese miners resorted to absconding. Those who had spent an adequate period of time in the mines and gained some local knowledge of the area tended to form groups and escape. Individuals who managed to evade the police forces under the jurisdiction of the Political and Military District of Lepanto would flee to the Christian lowland towns of Ilocos and La Union (de Gracia 1877, 37; von Drasche 1975, 42). However, when the German traveler Carl Semper made a trip to the mines in 1861, he learned that the escapes did not always have a happy ending:

Some subject Igorots brought one of these unfortunate chaps [runaway Chinese laborers] back the other day. He had had to till the soil under some unconquered Igorots for several months. They had taken all his clothes and cut his hair according to their style. This had changed his appearance so much that I could only recognize him as Chinese after a close look. (Semper 1975, 27)

Captured Chinese laborers were subjected to disciplinary measures such as cultivating local farms for months without any recompense. The cutting of hair as a degrading punishment is also worth noting, as hair—especially in Chinese culture and tradition—has social and personal significance (see Cheng 1998, 123–142).²⁸⁾ Generally, for the Chinese, maintaining their hair in queue style was an important physical sign of their belonging to the Celestial Empire. For a Chinese fugitive whose hair was cut, the punishment did not only "alter his appearance" but also resulted in an extreme form of moral humiliation (de Salazar [1590] 1903–7, 232; Garcia Serrano [1621–22] 1903–7, 232).²⁹⁾

28) When the Manchus came to power in 1611, they decreed that all Chinese (i.e., Han Chinese) had to wear their hair in queue style, which symbolized the Manchus' success in subjecting the vast population to their control.

29) Before the nineteenth century, the cutting of Chinese queues in the Philippines was an important issue as far as the Catholic fathers were concerned. For Catholics, such an activity was an important manifestation of the Chinese converts' severing of ties with their "pagan" religions and embracing Christianity. Many Chinese, however, continued to resist (*Ultramar* 5203, *Expediente* 4, No. 13).

Strict and unjust treatment compelled some “more robust Chinese” to challenge or disobey mine authorities, both Spanish and Filipino, who supervised their lives and work. This resistance was the main reason why Santos in 1862 recommended that Chinese laborers, especially those assigned to use explosives in the mines, be supervised in a “brusquely imperious way,” as they posed a serious danger (*el peligroso manejo de la pólvora*) to the mines and the other workers (Santos 1862, 18, 44). Abuses were so widespread in the mines where Chinese labor was used that the 1867 Mining Decree specifically ordered the provincial governor to conduct visits to the mines. The provincial governor had to investigate whether the Chinese laborers were doing the exact work stated in their contract with the company. In this way, the Chinese miners would be legally protected from any future abuse (*la protección legal que necesiten por abusos de aquella*) (Rodríguez Berriz 1887–88, Vol. 8, 376).

“On Equity and Justice”

One interesting incident, highlighting the adverse conditions in the mines, involved a petition signed by Chinese in the Lepanto mines and submitted to Governor Jose de la Gandara by the *subdelegado de hacienda* (subdelegate of the treasury office) of Lepanto in March 1869. The petition was filed for two reasons. First, the annual salary of the Chinese miners was inadequate to cover their living expenses, which included their food and other basic necessities. On top of these expenses, they had to pay the capitacion and falla. Second, the Chinese miners felt that they were being treated unfairly compared to native labor, since they were the ones required to do the most difficult and dangerous jobs on site. The Chinese claimed that based on the “principle of equity and justice” (*por un principio de equidad y justicia*), they should also enjoy the exemption privilege with regard to the *polo y servicio* (corvee labor)³⁰ granted to native laborers working in the Lepanto mines. In accordance with Article 61, Section 1 of the 1867 Mining Decree, native and mestizo mine laborers were required to render only half the number of days of the *polo*, or if they paid in cash, they received a one-third discount on the original amount. Hence, each native or mestizo *polista* was required to do forced labor for only 20 days or pay its equivalent, which was 4 escudos annually (Rodríguez Berriz 1887–88, Vol. 8, 376).

30) After the successful Spanish conquest of the Philippines in the late sixteenth century, all able-bodied male inhabitants of the islands aged 16 to 60 years were required to render 40 days of forced labor (called *polo y servicio* or *polo*) to the colonial state. The 1867 Mining Decree extended this policy to the Chinese. However, instead of rendering service, the Chinese were required to pay the falla of 3 pesos. This was in addition to the capitacion they had to pay every year.

In response to the governor's inquiry about the situation on the ground, the commandant of the district of Lepanto stated that native and Chinese labor in the mines undertook the same type of work. This claim was not entirely true, as demonstrated in the foregoing discussion. For example, natives (i.e., the two indio foremen, the Igorots, and the Tinguians) were also hired as mine laborers, but only the Chinese were required to do the actual mining and underground works. The commandant further added that the Chinese miners enjoyed the privilege of paying less capitacion than Chinese who were not engaged in the mining industry (*Ultramar 5202, Expediente 31*).³¹ The appeal in the petition was not granted by the Madrid government, on the grounds that the Chinese in the mines were not subjected to any greater hardships than those imposed on the natives (*los chinos . . . no se hallan obligados a mayores cargas que las impuestas a los indigenas*) (*Ultramar 5202, Expediente 31*).

Despite the rejection of the petition, it is important to note that the colonial government in Manila and the central administration in Madrid had ways to find out what was occurring on mine sites and to address matters pertaining to the miners' welfare. However, one challenge to the implementation of these measures was the alleged connivance between colonial authorities and mine administrators to partly conceal what was happening in the mines. Another problem was irregular and oftentimes delayed inspections by the Bureau of Mines (Santos 1862, 3). Furthermore, even when these investigations were conducted, the sentiments of the Chinese laborers were not fully conveyed because of the lack of leadership among them.

The End of Operations

Copper production began to decline in 1871. There were two possible reasons for this unfortunate event. The first had to do with the increase in copper production in other parts of the world, which affected the demand for Philippine copper, extracted mainly in Lepanto. The discovery and exploitation of copper mines in Great Britain in the late 1850s contributed to the increase in world copper production. In fact, in 1860 Britain's coastal city of Swansea became the world's major copper center, producing 90 percent of the total global output (Alexander 1955). The second reason was that in 1871, the anti-Chinese Governor General Rafael de Izquierdo began his tenure in the Philippines. It was during his term that new restrictive policies on Chinese occupations and residence

31) In accordance with the Royal Decree of December 22, 1850, Chinese who were engaged in mining, fisheries, forestry, and shipbuilding would pay only 5 reales. On the other hand, those who were not in these industries would have to pay more depending on their tax classification.

patterns were implemented. These measures affected the recruitment and deployment of Chinese miners to Lepanto (*Ultramar* 5217, *Expediente* 43).

In 1875 the Cantabro-Filipina Company withdrew from the Lepanto mines, leaving them in the hands of a few Spaniards, who continued small-scale mining operations until the American occupation of the islands. These Spaniards, who were original shareholders of the company, assisted by some Igorot and Chinese miners (Marche [1887] 1970, 124; Scott 1974, 247–248), continued to procure small amounts of copper. Between 1883 and 1887 only 3,200 quintales of copper were produced (Perez 1902, 131–132).

Some Chinese continued to work in the mines. Together with Igorots, they engaged in smithing and minting of counterfeit siping (US Bureau of the Census 1905, 84). Many Chinese who had been in the area for a long time married Igorot women who had helped them in their small-scale mining. A German traveler in 1882 reported that the Igorot and Chinese laborers

break up the fine ore in three or four tunnels, *their wives* sort it out and bring it to the foundries in baskets where it is first roasted with charcoal in an open fire and then melted in a broken-down furnace. The metal is poured into cakes with a ladle, and finally taken to the coast [*italics added*]. (Meyer 1975, 65)

With their Igorot wives, some Chinese laborers also opened retail businesses, while one even ventured into planting coffee in the area (Perez 1902, 125–126).

Conclusion

From the above discussion, it is clear that Chinese miners were crucial to the development of the Philippine mining industry in the eighteenth and nineteenth centuries. In particular, Chinese laborers hired by the Cantabro-Filipina Company for its copper mines in Lepanto between 1856 and 1898 were essential in all types of mine-related activities. Their technical and manual skills and work ethic were the reasons the company employed them. However, the marginality of the Chinese miners must also be noted, especially within the context of the prevailing colonial policy and practices as well as the difficult working conditions in the mines. These adverse conditions and circumstances provided opportunities for both Spanish and native employees of the company to abuse Chinese miners, who were unable to take advantage of the legal mechanisms established by the colonial government for their protection. Their lack of effective representation (e.g., kongsi associations) in the mines administration prevented Chinese laborers from reporting their unjust treatment to the authorities. It is thus not surprising that flight was

common among Chinese laborers. However, there were also some miners who, because of their long residence in the area and their local knowledge, were able to assimilate with the local population. These men married Igorot women and put down roots in Lepanto and neighboring areas.

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