The Bainiu Mines 白牛厂 in Ninglang District 宁蒗县

Records and questions

No mine of this name appears in the records up to the mid-19th century. *Diannan kuangchan tulue* records the Dongsheng Mines 東昇廠 as branch mines of the Debaoping copper mines (子廠), opened in 1831.1

Archibald Colquhoun recorded an encounter on his journey of 1881, with a delegation of what he understood to be the Yongbei silversmiths who came to meet him in Dali to ask for technical advice with suffocating gases.2 The mention of the distance as seven day-stages north of Dali is suggestive of the Dongsheng Mines. The gazetteer of 1904 also records the Dongsheng mines, apparently as productive in the 1830s and as a problem to social stability in the late 1840s.3

He Zongzhang 贺宗章 (dates unknown), who wrote down his recollections of titbits from the past at some point in the final years of the Qing period, mentions a highly productive mine in Yongbei, vaguely dated to the 1840s.

The identification of the productive silver mine in Yongbei that appears as the Yongshe Mines with the site now known as Bainiuchang is based on the massive slag heaps here, together with the fact that no other site is known in the jurisdiction of the former sub-prefecture. Geological explorations of the late 1980s and 1990s document deposits of copper, lead, zinc and some other metals, with silver and some lead present in the area of Bainiuchang.4 The modern findings reveal an unusual low presence of lead in a site of historic silver exploitation.

The historic records suggest a site that was probably not exploited on a larger scale before 1830 and may have been productive either for a short period in the 1830s or worked relatively continuously to the end of the 19th century.

Fieldwork by Yang Yuda 杨煜达 and Nanny Kim, 28-29 March 2011

Supported by: Mr. Yang Jianhua 杨建华, headmaster of the middle school at Jinmian

Main informants: Mr. Sha 厦 of Bainiuchang village, Mr. Xiao Changhuan 肖昌桓 and Mr. Pu Zhonghui 浦仲慧

2011. 3. 28.

Despite forecast rain, the weather stayed dry. Headmaster Yang Jianhua (34 years old) had contacted Mr Sha (48 years old) of Bainiuchang village as well as the headmaster of the middle school at Hongqi, the administrative village north of Ninglang. In the morning, we drove up from the wide Ninglang valley (at about 2200 m) to Bainiuchang, which is at about 2600 m in a wide basin under the main eastern ridge.

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1 Wu Qijun 1844, 104-5.
2 Colquhoun 1883, 259-60.
3 *Xuxiu Yongbei zhiliting zhi* juan 2 and juan 3. The gazetteer survived in two imprints of 1901 and 1904.
4 Hu Shouquan et al. 1988 ; Huang Shouquan et al. 1996.
The mines

Along the dirt road the range is mostly soft sandstone and debris, further up the surface rock is limestone. Only the top of the ridge is wooded.

On the ascent, Mr. Sha pointed out a grave that he remembered to have an inscription. The site was just below the track, but covered by the stones that the peasants working the fields had picked out of their fields. The spot is called Panba 盘坝. At first we were inclined to leave it at that, but the stele appeared carefully executed, so eventually we removed the stones and recorded the inscription. The grave dated to 1886 and belonged to Zhu Wenzhong 朱文仲 who was born in Taoshuping 桃樹坪, a village in the copper mining area on Hongwangshan, between the Maolu and the Dashuigou Mines (now Yinmin). He came to the “Dongsheng Mines 东昇厂” as an adult during the (1863-1875), achieved some wealth, and was commemorated by his sons and grandsons. His first wife died at a place referred to a Baoping in Yongbei 永北厅属宝平. With high probability, this was a shorthand of Debaoping (probably modern Baoping). Since Taoshuping was in the Dongchuan mining area and Debaoping a major copper mine, Mr. Zhu was almost certainly involved in copper mining in some way.
We reached Bainiu village at 2 pm and visited the slope above the village and the descent into the valley to the north, where several sites were under exploitation.

Bainiu still has some 500 families, the majority are Yi. The slope above the village, which consists mainly of recently harvested potato fields up to the low cliffs of the ridge, is dotted with slag dumps. Many are bare from vegetation, some partly covered under the dry fields.
Several small mines are operated close to old galleries, apparently mainly worked for gold.

Near the track that ascends the northern shoulder above the village, we were shown a vertical shaft that might have served as a ventilation shaft. Near a few houses, we met Mr. Mi Lengmo 米冷莫 (50 years old). He told us that his ancestors were black-boned Yi from the Liangshan area in Sichuan and former landlords of Yujia village. His great-grandfather would have moved here, and at the time the Dongsheng Mines were jointly administrated with Sichuan province. The mining bosses were eight brothers, the living member being Zhou Yunkang 周元康. Mr. Mi mentioned a mine or cave with a statue, where people from the valley used to come to pray. We clambered down an instable slope to find a small natural cave a little way down into a side valley that clearly was unrelated to mining and beyond the old mining area. The name of the cave was Miaozi dong 庙子洞. There had in fact been at temple, and according to local legend a beautiful woman’s voice had been heard in the cave, which therefore became a place of worship. Further along the valley a couple of mines are operated.

Several old or traditional mining galleries were visible in exposed rock near dumps and in mountain side above the village. Due to the cave expedition, we had no time to investigate the southern part of the slope above the village.
The interviews:

In the late afternoon, headmaster Zhang of the middle school had arranged for us to meet two informants, Xiao Changhuan 肖昌桓 (83 years old) and Pu Zhonghui 浦仲慧 (76 years old) told us what they remembered of the mines in former times. The party secretary of Hongqi and the headmaster of the school also knew of former conditions. Mr Pu had a recently restored genealogy, according to which the family originated from Nanjing and came to Xuanwei in the late Ming. In TZ 4 (during the Muslim wars), the family, which by this time lived in Dongchuan, left for Sichuan, and eventually ended up in Ninglang around 1905.5

Mr. Xiao:

The Bainiu Mines go back some 100 or 200 years; they were operating at the time when the Yuanmingyuan was burnt [during the Second Opium War in 1869], and given up before the Xinhai Revolution [1911]. Back then, the Li family were the tax masters, and they had a large residence, which is no more. The family is still living in the area, though no longer important. A prefect Liu of Yongsheng 永胜 used to administrate the mines, but there were riots during the Taiping Rebellion and the mines gradually deteriorated. Descendants of prefect Liu can still be found in the area.

There are a lot of graves around the mines, all these are miners who died and were buried there. Along the stream quite a lot could still be found.

The Bainiu Mines actually used to be the Dongsheng Mines. Miners came from Yunnan, Guizhou, Sichuan and other places. The grain all came from the valley, also maize and potatoes.

The mountains around here all used to be wooded, but the trees were cut to burn charcoal. There used to be charcoal kilns everywhere.

Most Han Chinese in the valley moved in in the late Qing.

Mr. Pu:

My ancestors came from Yintian prefecture in Nanjing 南京应天府 in the 14th year of the Hongwu period

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5 Pu Zhongjin 浦仲今, “Pushi jiapu liuchuan” 浦氏家谱流传, handwritten manuscript, dated 2003.
[1381]. They first settled in Xuanwei 宣威. This would have been 19 generations ago. 6 generations ago they left Xuanwei. They fled from a famine, all the way here, my grandfather reached here in the Xuantong years (1909-1911), towards the end of mining.

From Xuanwei they moved to Xiaomijiao in Huize, then to Huili, Xichang, Yanyuan, You suo, Miyihe, Chenjiawan (会泽小米脚——会东——会理——西昌——盐源——右所——米依河——陈家湾; the last three locations are in Ninglang district). We have a genealogy [which we later were allowed to copy].

Mr. Xiao added here: My family came from Dechang in Sichuan 四川德昌; they were eight brothers who arrived when the mines prospered. My ancestor four generations ago was the third brother. At that time, there were great trees on the mountains, and they had great pillars in Hongqi. When my family came to this plateau, they sometimes went up to work in the mines, and sometimes they burnt charcoal.

Headmaster Zhang put in: My family came 5 generations ago from Sichuan, according to our genealogy from Nannuhe village in Huaping 华坪楠木河里; they came over to burn charcoal.

Mr. Xiao continued: There used to be a legend: In the third month someone came to sell peaches, and lots of miners came out to buy and eat them, and then the mine suddenly collapsed, and all those who had not come out were buried inside. That is why only one foot of the white ox could be dug out, the rest is still in the mountain.

There is also a story about how the Zangs found rich ores: They dug and dug for a long time without success. Then somebody got the runs, and he went to a spot out of sight to relieve himself and right there found rich ores.

At the time, because of all the charcoal kilns and the smelters, black smoke was everywhere and ducks could not fly across the mines.

The mines were worked from people from outside the area. There is a saying that at the time of empress dowager Cixi, the British worked them and paid taxes to the government. Furnaces used windboxes, so large that a man could just reach around with his two arms; they were round and worked by teams of 6 or teams of 12. (一抱粗, 一米二周长, 圆形, 长六尺, 六人或者十二人拉。)

How the ores were extracted? Basically by underground mining, the yellow mud cakes [lead oxide cakes?] left from smelting gold [sic!] were all carried out from old mines on the backs of men.

The ore was pounded up by mallets. The silver smelting furnaces were about the same size as brick kilns now.

I have still seen tax master Li when I was young, he looked like an old official, with a white beard. His father, who was tax master before him, I have not seen. They had a lot of silver, and the tax master’s son smoked opium, and that is how the family was brought down. At the time, a large tract of land along the river belonged to them, and it was pawned out to the Eighth Elder Zhang 张八老爷. At the time of the grandsons the family went further downhill, but they still had their house. The beams in the house were locked so that it could not be taken apart — otherwise they would have sold it. The earth walls were a metre thick, with bamboo poles inside for strengthening.

All silver produced by the mine smelters had to be handed over to the tax master. The guest master was in charge of all the areas.

Caiyuanzi 菜园子, Lazidong 辣子洞 and Luobudian 萝卜甸 were three villages that exclusively produced vegetables for the mines. The area on the plateau all sold vegetables.

Even some people in Yongning 永宁 and Yanyuan 盐源 burnt charcoal to sell. There is a saying that they gambled in the mines and used dung sieves to sieve the silver, they used torches to light the mining galleries and sold things inside. Inside they used oil lamps, with a wicket of cotton thread.

Mr. Pu further explained:

The people on the plateau originally all were Pumi 普米 and Lisu 傈僳, Han Chinese lived along the foot of the mountains, only in the Republican period did the move down into the plateau.

When we were children, we used to wear hemp clothes and sheepskins. We planted and wove the hemp ourselves. At the time, cotton came from Lijiang and Yongsheng. It took 6 days to get to Lijiang and four to Yongbei, 3 to Yongning, 4 to Yanyuan. Each and every village raised horses, the landlord families had several, the ordinary families just one, and only the poor had none.
Teacher Cha 查, who had heard what we had come for, told us that an ancestor of his used to be an accountant at the Bainiu Mines and that his grave was there. The family had come from Nanjing and would have arrived with the British.

2011. 3. 29.

Before heading back, we paid some more visits to informants, partly on the basis of the information of the evening before.

Mr. Zhou was of poor health and could not be interviewed.

Mr. Zhang 张 (78 years old):

My family came to Ninglang 4 generations ago, and first settled at Beiqu 北渠. My ancestors are from Ji’an prefecture in Jiangxi 江西吉安府, and had moved to Lingshui in Sichuan 四川陵水. My father’s grandfather was Zhang Wenzhen 张文贞, he had killed a man in Sichuan, and therefore fled to Ninglang. By grandfather was Zhang Zaifeng 张在凤.

Zhang Wenzhen came from Lingshui to the Bainiu Mines and became a simple worker. Later he became a tax master. At the time, there were many prosperous mines. When Zhang Wenzhen had become rich, he used eight mules to carry silver ingots back home. At Beiqu he had a house with three courtyards build and a room in the back was full of silver ingots. After the Xinhai Revolution (1911) the Long-haired rebels struck the Taiping, 70 of them came over from Sichuan, passing through Ba’erqiao 八二桥. They came over for the landlords, and when they heard about the rich Zhang family at Beiqu, the came over and robbed them. The house was left empty, and the family never recovered.

At the time, there were over 1000 adits worked (jian 尖) in the mines, and the tax master collected money by the adit. Zhang Wenzhen was tax master for the entire mine, every day he brought eight mule loads down. The silver was collected at the smelters. The adits were worked from people who came from other provinces, ore carriers were mostly locals. They worked as simple labourers. Charcoal burning and transporting was also largely done by locals. At the time, Erpingchang 二坪厂 and Yaoshan 药山 were full of charcoal kilns. Smelters mostly came from other provinces.

The man who worked an adit was the boss 老板, his workers were called “hammer hands” 锤手. Workers at the smelters were called “old guests” 老客 and did as told by their bosses. Ore was called hong 矾, huang 荒 is gangue rock and soil. They entered the adits and carried out the ore, then it was selected, the good ore was picked out, poor ores were left. The ore had to be pounded to the size of walnuts to be loaded in the furnaces. The windboxes of the furnaces were very large and worked by eight men.

The Bainiu Mines were formerly called Dongsheng Mines, it used to be the only name.

There used to be several ten-thousand in the mines, up on the mountain all was covered in houses. Slags covered everything, they took some to build roads.

The long-haired rebels burnt the house. When my grandfather died, my father was nine years old. My father died in his 71st year, he was born in the year of the tiger [1914], some 20 years ago [the chronology does not quite work out, as Mr Zhang stated his own age a 78.] The long-haired rebels had the slogan “the upper classes owe us money, the middle classes have nothing to spare, the lower classes come with us, we pay you 8 yuan every day” (上等人差我钱，中等人莫找闲，下等人跟我走，一天给你八块钱。)

The father of Zhou Yuankang 周元康 was village head in the Republican period 乡长).

The family name of my great-grandmother was Feng 冯, and she was also from Sichuan. They lived in Beiqu and had a lot of money. There were five brothers and they were called the “five immortal kings” (五仙王). They were the landlords of Beiqu, all the land across the district was theirs, they even owned land in Yanyuan. One of them was killed in Yanyuan, and their family fortunes went down.

My grandmother’s name was Wang, and my grandfather had three brothers. He was the youngest. There still are descendants of the second brother.

After the Bainiu Mines were abandoned, the Erping Mines 二坪厂 flourished. There used to be a market at Erpingchang, an everybody went there.
The Bainiu Mines in Ninglang District

Bainiu chang village and the slag dumps (red area)
Results:
The still mostly undisturbed slag dumps number by the dozens. The count based on the google satellite image of 2010 (?) is 46. The lead content in these slags is very low, for this reason re-smelting has not been economically viable so far. The amount testifies to smelting on a very major scale. The grave inscription confirms that the mines were still operating and profitable in the period after the mid-19th century civil wars. The oral histories and family traditions confirm that the mines were important in the 19th century, probably most productive in the first half, that an official representative used to reside near the mines, that the tax masters were the most prominent and wealthy representatives of the mining community. The information on the charcoal burning indirectly reflects the intensity of mining, as well as the possibly imaginary stories of gambling dens and markets lighted by torches inside the mines. The findings confirm the records by He Zongzhang and Colquhoun. The slag dumps suggest an overall output considerably above our expectations based on the records.