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DISCOVERY OF A NEW GENRE OF ROCK PAINTINGS AT LUOBIAO TOWN, SICHUAN PROVINCE, CHINA

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Abstract. In June 2020, a China-based research team re-examined the hanging coffins and the rock painting sites near Ma Tangba Village, Luobiao Town, Gong County, Yibin City, Sichuan Province, China. In this survey, a new rock painting site was discovered, which has no spatial connection with hanging coffins. This new style of rock painting site is located at the Fen Jingzi site. U–Th dating suggests that rock paintings here were made in the Jiajing period of the Ming Dynasty (1562±158 BP). This U–Th dating is also consistent with the characteristics of the age displayed by the costumes depicted in the pictures and the Chinese characters ‘百父’ (Hundred Fathers), which was an official name in the Ming Dynasty. From judging the Chinese characters ‘雷公在, 诸神踧踖’ (Lord of Thunder is here, the gods beware) and ‘雷神’ (Lei Gong), as well as the word ‘雷’ (thunder) on the paintings, we can assume that this is a rock painting related to Lord of Thunder or Thunder worship.

1. Introduction

Gong County, Yibin City, Sichuan Province, is located in the south of Yibin City and is 1149.5 km². Sichuan is located in southern-central China. Gong County is a mountainous area, high in the south and low in the north, with a long and narrow shape (Fig. 1). The mountains are mainly limestone and purple shale, with obvious karst topography.

The Gong County rock art occurs in the vicinity of hanging coffins sites, deriving from a specific funerary custom of the region. In 1935, D. C. Graham, an American scholar, recorded the hanging coffins and the rock paintings in Gong County for the first time (Graham 1935). In 1946, Shi Zhongjian conducted a two-month investigation of the ‘Hanging coffins of Bo people’ and gave a brief description of the rock paintings (Shi Z. 1982). In 1974, the Sichuan Museum and the Cultural Centre of Gong County jointly excavated ten hanging coffins at Ma Tangba Village (Sichuan Museum 1980). The Chongqing Municipal Museum conducted an archaeological survey of the hanging coffins of Bo people in Yibin City in 1979. It provided relevant statistics on the distribution of the hanging coffins and rock paintings (Jiang 1981). Since then, there have been few investigations, especially professional archaeological investigations about

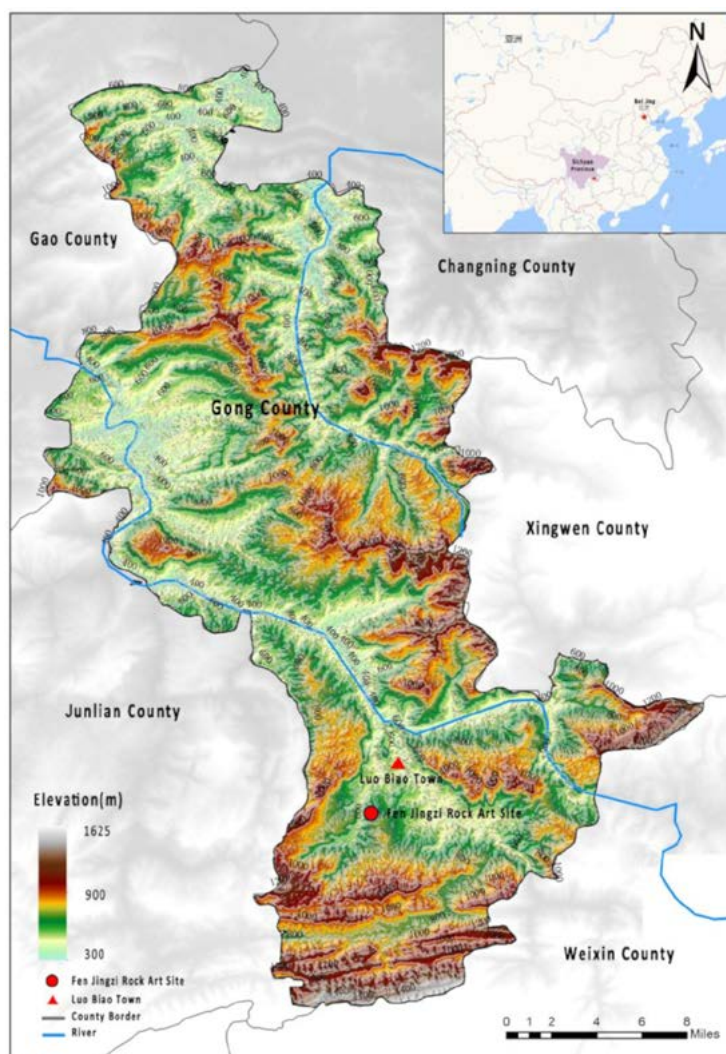


Figure 1. The location of Gong County and the Fen Jingzi rock art site.



Figure 2. The 'pageant scene' from the Nayan rock art site at Tiandeng County in Guangxi. The image 'riding a sedan chair with a hammer in his hand' is supposed to be the image of Lei Gong. The whole panel depicts the ritual of praying for rain. That rain ritual, by parading Lei Gong, is still popular in areas such as Guangxi and Guangdong.

the hanging coffins and rock paintings. Because most of the hanging coffins and rock paintings are located on the high cliffs, some of them 80 m above the ground and some are in cliff caves, and due to inadequate archaeological investigation technology and equipment, comprehensive information about the hanging coffins and rock paintings badly needs to be supplemented.

In mid-June 2020, a research team comprising members of Hebei Normal University, the University of Electronic Science and Technology of China, Yibin Museum and Gong County Cultural Administration Institute re-examined the hanging coffins and rock paintings at Ma Tangba Village, Luobiao Town, Gong County. During this survey, a new type of rock art was discovered, with no spatial connection with hanging coffins. This new genre of rock painting is in the Fen Jingzi site (Fig. 1). In terms of content and painting style, the rock paintings here are different from those connected with the hanging coffins, which usually occur as single images. The themes, style, location (drawn at the foot of the mountain) and apparent narrative plots are quite different from the characteristics of the paintings associated with hanging coffins. Many similar rock paintings have been found in southwest China, such as in Tiandeng County in northern Guangxi, also painted in red ochre. There are numerous images of 'horse riding', 'sedan chairs' and 'soldiers', which seem to depict narrative plots. From the analysis of the costume characteristics of the human figures, these paintings should be of the Ming Dynasty. The image of 'riding a sedan chair with a hammer in hand' is perhaps

the image of Lei Gong (Fig. 2).

We have made a detailed record of the Fen Jingzi rock art site and estimated the age of an associated calcite sample with the method of U-Th analysis.

2. Description of the rock art site and the images

The Fen Jingzi rock art site is located at Ma Tangba Village, at 646 m.a.s.l. elevation. The panel is about 3.3 m high from the ground, 7.2 m wide, and the shallow rockshelter faces northeast. The surrounds of the rock panel are covered by vine vegetation.

Most images on the panel are anthropomorphs and 'horsemen'. Due to natural impacts such as weathering and rock spalling, some images are badly damaged, but the main panel is well preserved. The main panel consists of 29 images (Fig. 3) divided into panel D1 and panel D2.

Panel D1 is located on the left side of the rock face, whose right side is quite clean and covered by moss. The panel was painted with red ochre pigment, and there are five identifiable images, including three anthropomorphs, one zoomorph and some Chinese characters.

Both 'human' figures seem to have their hair in the style of 椎髻 (*zhuiji*, awl bun), in which the hair is pulled up high and fixed with a hairpin. One of them is covered with red paint, and only the head can be observed. The other one is badly eroded by water, and only the forelimbs can be seen. The third 'human' figure is clearer and about 8.1 cm high. Its right arm extends forward, apparently holding an object in its

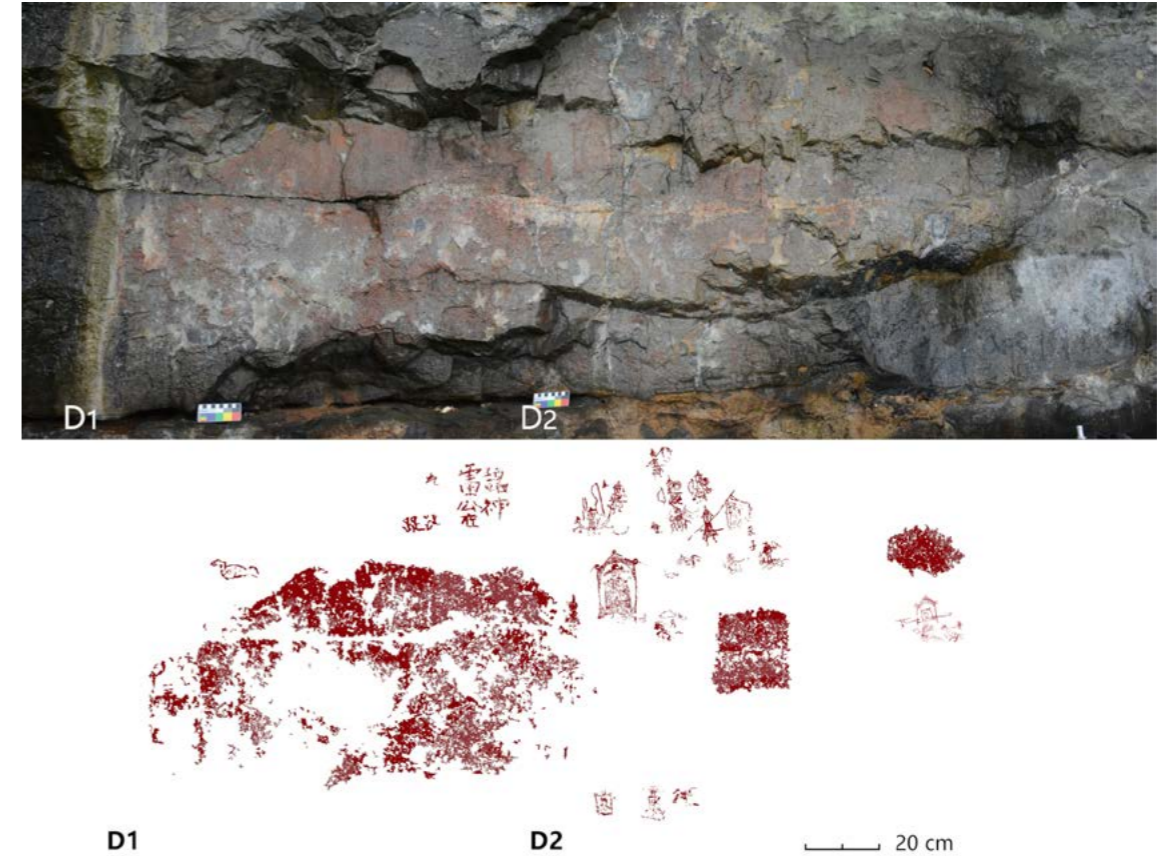


Figure 3. The two panels of the Fen Jingzi rock art site, D1 and D2, and their recording.

hand, and its left arm extends back. The legs are spread, and the right foot appears to be stepping on something.

At the top left of D1, some Chinese characters are written with red ochre and thick lines. They can be read as '雷公在 (lei gong zai, here is the thunder god)' and '诸神踉跄 (zhu shen chuo chou, The gods behave yourself)' (Fig. 4).

D2 is next to the right of D1. There are many cracks on the rock surface, some images are covered by milky calcium carbonate precipitate, and 24 images can be identified. The images include a 'human' riding on a dragon-like figure, 'people riding horses', individual anthropomorphs, a 'bow man', 'drummers', one figure 'carrying a flag', one 'riding a sedan chair', zoomorphs and written characters (Fig. 5).

We will introduce them here in their ordered numbers. No. 1 is a 'man'



Figure 4. Chinese characters '雷公在诸神', '踉跄' from D1 at the Fen Jingzi rock art site.

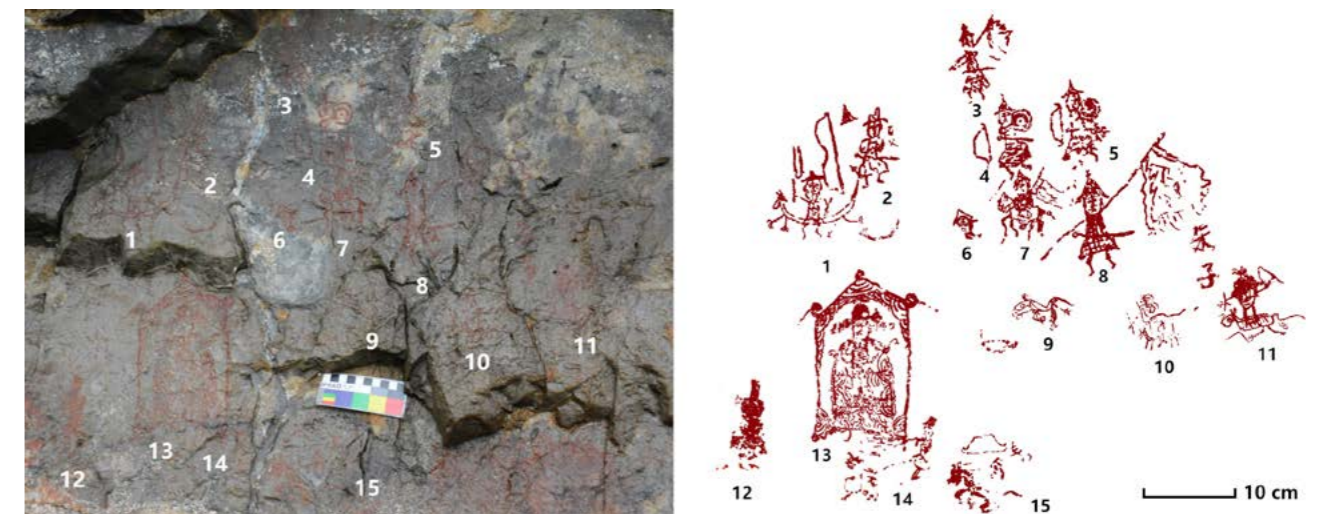


Figure 5. The images of panel D2 in the Fen Jingzi rock art site.

riding a dragon-like creature. The man appears to wear a 斗笠 (*douli*, rain hat made of bamboo), holding in one hand a 'stick' and in the other a 'sword'. The dragon-like motif has two horns, two feet and four claws. No. 2 is interpreted as an official wearing a 乌纱帽 (*wushamao*, hat made of black gauze with a double-winged decoration behind), 'gaiters' on his legs and a 环首刀 (*huanshoudao*, a sword with a ring decorating the end) on his waist. On the right side of his head are two Chinese characters, 百父 (*Bai Fu*, Hundred Fathers), which should be the official position name. To the right of No. 1 is a small dragon-like motif with



Figure 6. Images of the 'official' and 'dragon rider' of the D2 panel in the Fen Jingzi rock art site.

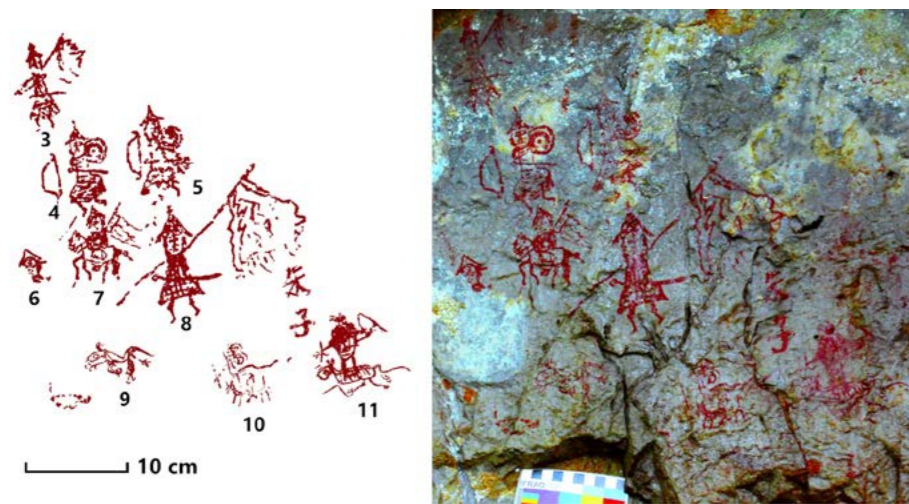


Figure 7. The 'human' images on the D2 panel of the Fen Jingzi rock art site (enhanced with the D-Stretch program; Harmon 2008).

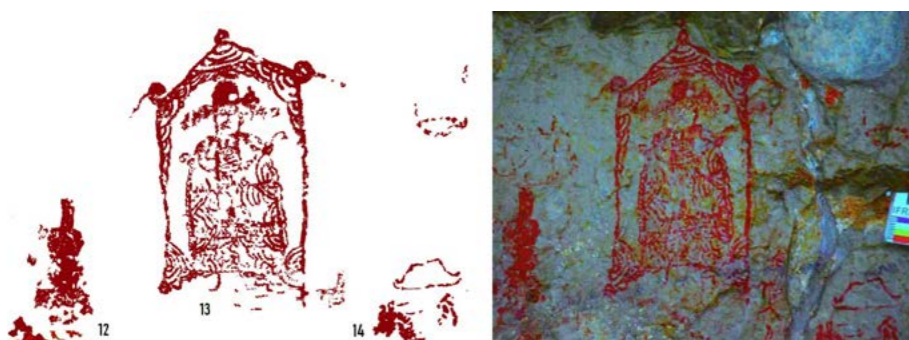


Figure 8. The image of the 'sedan chair' of panel D2 at the Fen Jingzi rock art site (enhanced with the D-Stretch program; Harmon 2008).

no legs, and there are a triangle and a large 'bow' in the group (Fig. 6).

On the right side of the panel, nine figures form a group, from No. 3 to No. 11. No. 3 is a 'man carrying a flag' in his hands, wearing a 'skirt', a 'raincoat', and 'gaiters' on his legs. He has a 'sword' on his waist and a 'bamboo hat' on his head. No. 4 and No. 5 are also 'men' in the same style, wearing 'bamboo hats', waist 'swords', 'coir raincoats', and holding 'drums' in both hands. There are presumed bow images next to them. No. 6 is an anthropomorph with a damaged head, also wearing a 'bamboo hat'. No. 7 appears to depict a horseman carrying a flag, wearing the same garment as the previous motifs. No. 8 is again a walker carrying a 'flag' in his hands. This image occupies the centre of the panel and is taller than others in size. No. 9 is interpreted as a poorly drawn horse. No. 10 is apparently a horseman carrying a flag bearing a Chinese character '雷 (*lei*, thunder)'. No. 11 is perhaps also a horseman, with a whip in his left hand and the reins in his right. Above No. 10 and No. 11, there are two Chinese characters, '朱子 (*Zhu Zi*, name of a famous Confucian of the Song Dynasty)' (Fig. 7).

In panel D2, the largest and most visually dominating images are No. 12 to No. 14, located on the rock panel's lower left. Images No. 12 and No. 14 are badly damaged, but we interpret No. 12 as a kneeling person and No. 14 as a horseman; above the latter is a bow design. No. 13 is assumed to be an official sitting on a sedan chair. The 'sedan chair' is decorated with 'drapery', and the 'official' is thought to wear a double-winged black gauze hat (Fig. 9).

There are two Chinese characters, '雷公 (*lei gong*, thunder god)', written on the left side of the D2 panel. The image is blurred due to a large amount of calcification attached to it, but two Chinese characters are faintly visible below (Fig. 9).

Approximately 5 cm below this panel is another image of a sedan chair, which is 20 cm wide and 9.8 cm high. The sedan chair comprises a pedestal, a frame, a roof and lifting bars. The pedestal is rectangular with a small window. A bird-like animal and another indis-

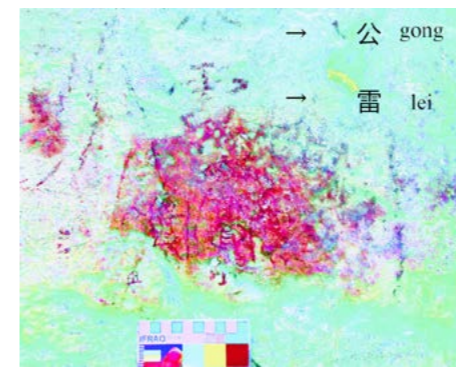


Figure 9. The image of two Chinese characters, '雷公 (*lei gong*, thunder god)', on the left side of panel D2 at the Fen Jingzi rock art site (enhanced with the D-Stretch program; Harmon 2008).

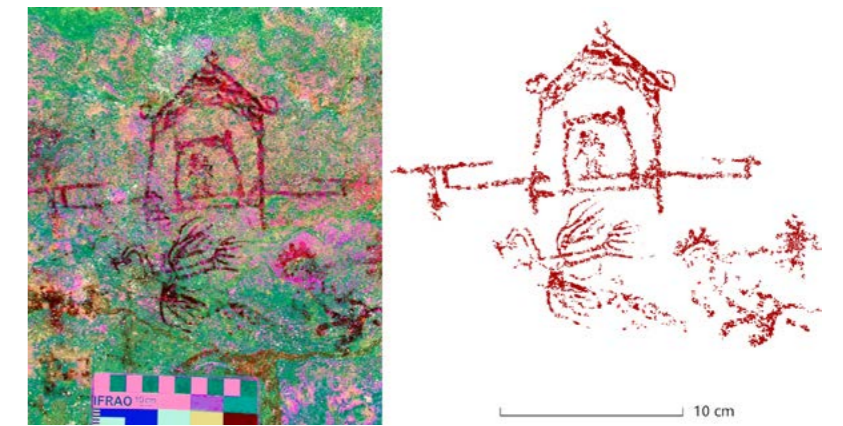


Figure 10. The sedan chair and the 'bird' (enhanced with the D-Stretch program; Harmon 2008).

tinct figure surround the sedan chair (Fig. 10).

3. Discussion of the age of the rock paintings

3.1. The art style and chronological relationship of the Fen Jingzi rock paintings

According to the subject matter, written content and style of the Fen Jingzi rock paintings, we can be almost sure that the period is limited to the Ming Dynasty (1368–1644 CE). The key markers are the Chinese characters '百父', the name of an official position in the Ming Dynasty, and the double-winged gauze cap that shows characteristics of the era. Through the characters '雷公在诸神踉跄 (*lei gong zai zhu shen chuo chou*, Thunder is here, the gods beware)', '雷公 (*Lei Gong*, equivalent to the Norse/Germanic Thor)', as well as the word '雷 (*lei*, thunder)' on the 'flag', we are confident in relating this rock art to the Lord of Thunder or Lei Gong worship. As for the worship of Thunder God, before the Ming Dynasty, we know that this deity appeared in a tangible figure, not just represented by written language. Here, we only have written characters to refer to Lei Gong due to sacrifice reform by Zhu Yuanzhang, the first emperor of the Ming Dynasty. In the early Ming Dynasty, the imperial court carried out the sacrificial reform of '以木主代替神像 (*Yi Mu Zhu Dai Ti Shen Xiang*, replacing the statue with a wooden figure)'. The wooden figure is a piece of wood tablet on which the spirit's name is written. 'Jiang Yin Xian Zhi' (the Chronicles of Jiangyin County), published in the reign of Emperor Jiajing (1522–1566 CE), recorded that the county set up al-

tars for Gods of Wind, Cloud, Thunder, Rain and Mountains to offer sacrifices together with the Chenghuang God):

Three wood tablets will be set up on the altar, in the middle, one for the gods of wind, cloud, thunder and rain, at the left, one for god of mountains and rivers in the county, at the right, one for the god of the city. All the gods put in the temple for sacrifice (Zhao and Zhang 1981: 146–147).

We propose that figure No. 14, the image of a sedan chair in panel D2, depicts the Chenghuang God, who was appointed as the city god by the first emperor of the Ming Dynasty and was mainly responsible for rain sacrifices. As for *Bai Fu*, it was also an official position name in the Ming Dynasty. '勅曰闻之父之教子也十母吏之教民也百父' means that: 'The emperor warned everyone that he heard that the father's role in children's education is ten times that of the mother, and the government officials' role in the education of the subjects is a hundred times that of the father's role in the education of the children' (Ni Wenzhen 1993: 52). That is from where the title *Bai Fu* (Hundred Fathers) came.

Based on the above reasoning, we believe that this is a rock painting depicting the worship of the Lord of Thunder in the Ming Dynasty.



Figure 11. The collection location of the uranium-series dating sample.

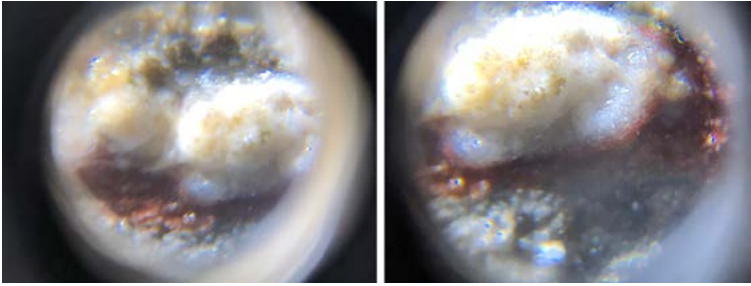


Figure 12. Microphotograph of the stratigraphic relationship of uranium-series dating sample.

3.2. Direct dating of one rock art motif

During this survey, we obtained a calcium carbonate sample from the Fen Jingzi rock art site (Fig. 11). We sent it to the Institute of Global Environmental Change, Xi'an Jiaotong University, for analysis with the U–Th method. This sample was taken from the top of the D2 area, overlaying the 'drummer' in image No. 4 (Fig. 12). There is a considerable amount of milky calcium carbonate deposit distributed on the rock surface of the Fen Jingzi rock art site.

The basic principle of $^{230}\text{Th}/^{234}\text{U}$ dating technology is that the mineral deposits and fossils contain trace radioisotopes and their own decay products to calculate the age (Ye 2003). However, it needs to be cautioned that the method is subject to specific limitations, especially through moisture distortion of the U and Th ratio (Tang and Bednarik 2021). According to the laboratory report, the carbonate precipitate sample is 388 ± 158 years old. By judging this result, we can estimate that the age of the rock art is greater than 1562 ± 158 CE; that is to say, the images could have been painted during the reign of Emperor Jiajing of the Ming Dynasty (1522–1566 CE).

This dating result is consistent with our age analysis based on the rock paintings' subject matter, the character modelling and art style. This age estimation provides a relevant reference for dating other late rock paintings in southwest China.

4. Conclusion

The rock art at the Fen Jingzi site not only provides us with rich information, such as characters and related information for us to speculate about its age and content but also provides calcium carbonate samples for uranium-series dating. This report and research on this rock painting site will be a significant reference and promotion for studying the historic rock paintings widely distributed in Sichuan, Guizhou and Guangxi.

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