

A New Discovery of Xu Xiake's Whereabouts in Zhejiang Province from the Perspective of Digital Xu Studies

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Abstract

By extracting the tracing information of Xu Xiake's travels to Zhejiang Province recorded in his *The Travel Notes of Xu Xiake*, this research constructed his tracing database by using geographic information system technology, and carried out detailed spatial analysis and visual expression of Xu Xiake's travels. This research resolved two controversies. First, when Xu Xiake visited Zhejiang Province for the second time in 1616, he went into Kaihua (Anhui Province) from Changshan. After visiting Huangshan Mountain, he traveled across Tunxi to Changshan, then went through Jiangxi into Fujian Province. Second, on his way home after visiting Tiantai Mountain and Yandang Mountain for the third time, Xu Xiake and Xu Zhongzhao parted at Shangyu and went to Siming Mountain alone.

Keywords: Xu Xiake, spatial analysis, visualization of whereabouts, Siming mountain

1. Introduction

Xu Xiake was born on January 5, 1587, and died on March 8, 1641. He was known as a famous traveler, geographer, and writer in the Ming Dynasty. From a young age, Xu Xiake set his goal of traveling worldwide. He traveled many times in his life, covering 21 provinces in total, and retained the 600,000-word *The Travel Notes of Xu Xiake* (Xu Xiake, 1987). Xu Xiake made several trips to Zhejiang Province from 1613 to 1636 which were recorded in five travelogues: *First Journey of Tiantai Mountain*, *Journey of Yandang Mountain*, *Second Journey of Tiantai Mountain*, *Second Journey of Yancang Mountain*, and *Journey of Zhejiang*. *Journey of Wuyi Mountain*, *Journey of Jiulihu Lake*, *Journey of Fujian 1* and *Journey of Fujian 2* these four travels also record his journey, which transit Zhejiang Province to Jiangxi Province and Fujian Province.

There was much research about *The Travel Notes of Xu Xiake* and his travels to Zhejiang Province. Wu Yaomin proposed that Xu Xiake had visited Zhejiang Province seven times (Wu Yaomin, 1998). He believes that Xu Xiake's first time traveling in Zhejiang Province was in 1613. Before starting the trip to Tai and Dang, he also crossed the sea to visit Putuo Mountain (Luoja Mountain), and on his way home, he also visited Shimen (Qingtian) and Xiandu (Jinyun). The second time was on his way to Fujian (Anhui), and the third, fourth, and fifth trips to Zhejiang were also on the way to Fujian. Xu made his memorable trip to Tai and Dang for the sixth time. The seventh visit was to Yuhang, Lin'an, Tonglu, Jinhua, Lanxi, Quzhou, and Changshan, recorded in *Journey of Zhejiang*. Wu Yaomin also raised two research gaps, one is at what time Xu visited Siming Mountain, and the other is the possibility of his journey to Jingshan Mountain and Tianmu Mountain.

Gan Weiping believed that Xu Xiake's travels in Zhejiang were extensive, deep, multiple and large periods (Gan Weiping, 1998). He also sorted out the Zhejiang scenery mentioned by Xu Xiake in his travels and the chronology of Xu Xiake's trips to Zhejiang. In 2006, Lv Huailin studied when Xu Xiake went to Siming Mountain alone. He believed that after Xu Xiake stayed at Banzhu Cottage in his Diary (*Second Journey of Tiantai Mountain*), Xu Zhongzhao started from Banzhu Village (Xingchang County, Zhejiang Province) to

Xiling Town to withdraw money and stockpile food while Xu Xiake went to Siming Mountain alone (Lv Huailin, 2006). In 2010, Lv Huailin put forward a new view, pointing out that Xiling is not in Xixing town (Hangzhou), but in the Laoxiling area in the upper reaches of Yinjiang River (Lv Huailin, 2010). Chen Huajian believed that Xu Xiake visited Tai and Dang twice in his whole life, and it was possible for him to visit Siming Mountain by the way (Chen Huajian, 2004). Wu Qiulong researched Xu Xiake's trip to Tai and Dang, and believed that Xu Xiake started from Jiangyin (Jiangsu Province), his hometown, passed Xiling (Hangzhou) to visit Xu Zhongzhao. After that, he went to Siming Mountain alone. When Xu Xiake came back from Siming Mountain, he gets some red orchid flowers in bare feet, and then visited Tai and Dang with Xu Zhongzhao together (Wu Qiulong, 2002).

As above, it is found that the research of Xu Xiake's travels in Zhejiang Province is mainly based on the study of the historical name changes. The literature, such as *The Epitaph of Xu Xiake* (Chen Hanhui, 1987), *Biography of Xu Xiake* (Qian Qianyi, 1987), local chronicles all can help us analyze the date, route, and location of Xu Xiake's travels. However, research perspectives such as multidimensional elements, including time, space, and attributes rarely appear in previous studies. And the combination of macro-elements and micro-elements should be studied. Scholars also have different opinions on the specific process of Xu Xiake's journey of Siming Mountain.

2. Methodology

The digital humanities become an emerging research paradigm, and with the development of GIS technology, we can explore more details about Xu Xiake's travels. By integrating relevant spatial information through the construction of databases and visual expression, we can solve some problems that could not be solved by text analysis of *The Travel Notes of Xu Xiake* solely. Yuan Hang proposed to apply the concept of digital Earth and develop digital Xu studies in 2001 (Yuan Hang, 2002). Xu Jianchun *et al* regarded the the Information System of Xu Studies as an important part of Xu studies (Xu Jianchun, Ding Hongjian & Yang Shufeng, 2002). Since then, Li Ruoyin *et al.* designed a popular science electronic map- Xiake Xing (Li Luoyi, Ten Fei & Cang Xuezhi *et al.*, 2010), and Jiang Ling *et al* built the Xu Xiake GIS system (Jiang Ling, Tang Guoan & Zhang Fang *et al.*, 2012).

There still have some controversial opinions about Xu Xiake's travel path. By extracting the tracing information of Xu Xiake's travels to Zhejiang Province recorded in his book, our research constructed the tracing database by using GIS technology. This paper carries out detailed spatial analysis and visual expression of Xu Xiake's seven trips to Zhejiang Province, and then proposes a new opinion based on the perspective of digital Xu studies.

Firstly, construct Xu Xiake's tracing database, including his tracing, journey, and text. The database contains multiple dimensions, including space, time, and attributes. Secondly, using the tracing database to conduct coupling analysis of time dimension, space dimension, and attribute dimension through time orientation, spatial positioning, and semantic analysis. Confirming first tracing node by matching place's past name and present name in the text. Thirdly, identify the attribute information (distance, transportation, elevation, landform, vegetation, landscape, architecture, etc.) between two adjacent nodes according to the text description. Identifying the tracing route by comparing the information data between the text tracing line segment and the actual geographic layer. Finally, confirming the path on the geographic layer through connecting multiple tracing routes end to end (Yangfan Yang, 2020).

3. Findings

Xu Xiake visited Zhejiang Province mainly by walking and boating. This paper counts Xu Xiake's journey under different transportations and road conditions from day to night, except traffic jams, visiting friends, rest, and other conditions.

Using the spatial analysis function of the Xu Xiake's tracing database, the actual mileage of each trip, and the average daily trip was calculated. The results are shown in Table 1: (1) Xu Xiake traveled 50 kilometers per day along the Beijing-Hangzhou Grand Canal; (2) Xu Xiake up streamed along the Qiantang River 50 kilometers per day in average, which was comparable to the speed sailing in the Beijing-Hangzhou Grand Canal; (3) The average daily journey distance along the hilly valley and river plain was 57 kilometers; (4) The average daily journey of hilly mountain road is 32 kilometers. Through literature research and GIS tracing analysis, we can know more details about Xu Xiake's travels to Zhejiang Province.

Table 1. Xu Xiake's journey to Zhejiang

Year	Date(lunar)	Journey	Road Conditions	Actual Journey /kilometers	Daily Speed /kilometers	Average Daily Speed /kilometers

1630	7.17-7.21	Jiangyin (Jiangsu) to Wulin (Zhejiang)	Waterway, canal	252	50	50
1636	9.26	Dingjiazhai Village to Wudancun Bang	Waterway, canal	52	52	
1636	9.27	Wudian Village Bang to Caocun Village	Waterway, canal	49	49	
1630	7.24-7.28	Wulin (Hangzhou) to Longyou	Waterway, Qiantang River	262	52	50
1636	10.6	Tonglu to Dongguan (Jiande)	Waterway, Qiantang River	45	45	
1636	10.7	Dongguan to Lanxi	Waterway, Qiantang River	46	46	
1613	4.9-4.10	Tiantai County to Baao (Huangyan)	Overland, Hills and valleys	114	57	57
1636	10.3	Songmuchang (Hangzhou) to Quanzhang (Linan)	Overland, river plain	57	57	
1632	3.15	Chalukou (Ninghai) to Huadingshan (Tiantai)	Overland, Hills and mountain roads	33	33	32
1632	4.18	Huguo Temple (Tiantai) to Banzhu (Xingchang)	Overland, Hills and mountain roads	31	31	

3.1 Xu Xiake's Journey to Kaihua County

Xu Xiake went out again in 1616 when he was 30 years old and his trips were recorded in the *Journey of Baiyue Mountain*, *Journey of Huangshan Mountain*, and *Journey of Wuyishan Mountain*. Ding Wenjiang wrote in his book *Mr. Xu Xiake's chronology*, that according to *The Travel Notes of Xu Xiake*, Xu Xiake arrived in Xiuning (Anhui) on the 26th day of the 1st lunar month and entered Anhui Province from Zhejiang. (Ding Wenjiang, 1987). Shexian (Anhui) and Tunxi (Anhui) are located upstream of Xin'an River, so Xu Xiake can sail upstream to the Qiantang River and the Xin'an River. Wu Yaomin believed that Xu Xiake went from east to west, from Zhejiang Province to Anhui Province, and passed from Shexian (Anhui) and Tunxi (Anhui) to Xiuning (Anhui) (Wu Yaomin, 1998). Due to the construction of the Xin'an River Reservoir in 1960, the hydrological environment of the upper stream changed dramatically. Although it is possible to reach to Shexian (Anhui) from Qiandao Lake today, it remains to be further studied whether he can reach Shexian (Anhui) by boat in the Ming Dynasty. Zhuang Yuehe believed that Xu Xiake went from Zhejiang Province to Anhui Province through Changshan (Jiangsu)- Kaihua (Zhejiang) -Majin (Kaihua) -Xiuning (Anhui) route. Xu Xiake probably went from Anhui Province to Jiangxi Province via Zhejiang Province through this route since the post road from Majin (Kaihua) to Xiuning (Anhui) was the best route for Anhui merchants to enter Zhejiang Province (Zhuang Yuejiang, 1998).

Xu Xiake kept a diary from the 26th day of the first lunar month to the 11th day of the second lunar month, but there were any records for the following nine days. After visiting Huangshan Mountain, he went through Tangkou Town, Fangucun Village to Dongtan. On the 11th day of the second lunar month, he went out the south gate of Chong'an and began his journey to Wuyi (Wuyi) Mountain.

Wu Yaomin believed Xu Xiake traveled from Zhejiang Province to Fujian Province via Jiangxi Province during these nine days, he went through Changshan (Jiangsu) to Yushan (Jiangxi), then went to Shangrao by boat, after that he went to Wuyi Mountain (Wu Yaomin, 1998). However, Wu Yaomin did not explore how Xu Xiake traveled from Huangshan Mountain to Changshan. This paper puts forward two hypotheses: Xu Xiake went from Dongtan to Xiuning via Shexian on 12th day of the second lunar month. Xu Xiake probably took a boat down the Fuchun River, passed Chun'an (Zhejiang), Lanxi (Zhejiang), Quzhou (Zhejiang), and Changshan (Jiangsu). The other is Xu Xiake went from Dongtan to Xinning on 12th day of the second lunar month. Then he walked

southward, through Kaihua (Quzhou) to Changshan (Jiangsu). There were hilly mountains with an altitude of 1,000 meters, as well as relatively gentle hilly valleys on his way to Changshan.

We set two possible paths on the GIS spatial layer, and draw a conclusion from the geographic information as below. The first waterway has a total distance of 381 kilometers, it took 7.6 days to reach Jiangshan according to Xu Xiake's speed of 50 kilometers per day. The second land route is 143km, which took only 2.5 days at 57 kilometers per day in the valley and 4.5 days at the speed of 32 kilometers per day in the hills and mountains.

In addition, the distance from Changshan to Chong'an is 174 kilometers, which took at least 3 days to arrive according to Xu Xiake's travel speed. Considering it's Xu Xiake's first time to travel Jiangxi Province and Fujian Province, it is quite possible for him to travel around the Jiangxi Province and Fujian Province. So it will took at least 11 days to reach Changshan (Jiangsu) and Chong'an by boat, which is inconsistent with the nine days recorded in *The Travel Notes of Xu Xiake*. It can be inferred that Xu Xiake also traveled from Zhejiang Province to Anhui Province through Changshan (Jiangsu)- Kaihua (Zhejiang) -Majin (Kaihua) -Xiuning (Anhui) route, since he could visit scenic spots of Qianjiangyuan, and so on.

3.2 Xu Xiake's Journey to Siming Mountain

When Xu Xiake was 46 years old, in 1632, he traveled with his family brother Xu Zhongzhao. His itinerary is recorded in *The Second Journey of Tiantai Mountain* and *The Second Journey of Yandang Mountain*. This was Xu Xiake's sixth trip to Zhejiang Province, and there were four blank periods in his Travel Notes. The first period was from lunar March 21 to lunar April 16, there was no evidence he has traveled Yandang Mountain twice. The second was where did he go after stay at Banzhu Hostel from lunar April 19 to lunar April 27 has not been explained. Ding Wenjiang finds Xu Xiake should be in Chen Hanhui's home in Xiao Hanshan, Linhai County. Wu Yaomin also agreed with this view, and he believed that it was Chen Hanhui who guided Xu Xiake to visit Yandang Mountain once again. In addition, Chen Zhu quoted Xu Zhongzhao's saying, there's no difficult to travel a place within easy reach, in his book *The Epitaph of Xu Xiake*. Linhai is not far away from Yandang, so Xu Zhongzhao, who was with Xu Xiake at Chen Hanhui's home describe it was, a place within easy reach. The third blank was how did Xu Xiake get to Ninghai. According to *The Travel Notes of Xu Xiake*, Xu Xiake should take the Beijing-Hangzhou Grand Canal to Xiling (Hangzhou), then turn the East-Zhejiang Canal to Ningbo, and then via Fenghua to Ninghai. The fourth blank was on lunar May 28 after he via Dajing whether Xu Xiake along visit other place on his way back home. In Chen Zhu's *The Epitaph of Xu Xiake*, he wrote: I asked Xu Xiake, Will you visit the peak of Yandang Mountain? which makes Xu Xiake itch to have a go. The next day, before dawn, Xu Xiake knocked out of my room and said: I am visiting Yandang Mountain now. I'll share the travel story when I was back. After ten days, he went back (Chen Hanhui, 1987). Thus, Xu Xiake had visited Yandang Mountain three times, then went through Dajing, and finally arrived at Chen Hanhui's home in Xiaohanshan. After that, Xu Xiake bade farewell to Chen Hanhui and traveled by boat with Xu Zhongzhao from Ningbo along the East-Zhejiang Canal. They parted in Shangyu, Xu Xiake traveled alone to Siming Mountain, and Xu Zhongzhao went to Xiling. Five days later, Xu Xiake returned to Xiling and get some red orchid flowers in bare feet. Therefore, it can be confirmed Xu Xiake visited Siming Mountain when he was on his way back after the third time he visited Tai and Dang. There are some evidences:

First, in Chen Zhu's *The Epitaph of Xu Xiake*, Chen Hanhui praised Xu Xiake as such a brave man because Xu Xiake visited Yandang Mountain once again just for his advice. When Xu Zhongzhao heard this, he said: it's a place within easy reach ... climb the Luofu Mountain, carry the plum tree in the mountain... I still remember when I was staying at Xiling, Xu Xiake crossing the Cao'e River to Siming Mountain alone. Five days later, he came barefoot with red orchid flowers and praised the unparalleled inscriptions on precipices (Shanxin Shichuang). Xu Xiake was such a bold man and can keep his words (Chen Hanhui, 1987). Xu Zhongzhao shares some other stories of Xu Xiake's bold and says that Xu Xiake can keep his words. It can be inferred Xu Xiake has promised to pick orchids on the Siming Mountain and send to Chen Hanhui.

Second, Xiling is Xixing, it was called Xiling during 220-581 AD. Xixing ancient town was once the gateway of East and West Zhejiang Province. It has been known as the first stop into eastern Zhejiang Province, and the fortress of Ningbo, Shaoxing, and Taizhou City with the developed transportation and dangerous terrain. It was also called Gu Ling because Fan Li, an official of the State of Yue, built a wall there to resist the State of Wu. Qian Liu, the king of the State of Yue, changed Xiling to Xixing because Ling means Tomb and it's ominous. Although it was called Xixing after the Tang Dynasty, the name Xiling was still used until the Ming Dynasty. Suppose Xu Xike started from Xiling, took the East Zhejiang Canal to Shangyu, and then along the Cao'e River to Zhangzhen town, the whole distance was 106 kilometers. He needed two days according to the speed of 50 kilometers per day, then he disembarked and walked alone to Siming Mountain. The whole distance was 41 kilometers, according to a speed of 32 kilometers per day he needed more than one day to reach Siming Mountain and visited the Shanxin Shichuang scenic spot. Xu Xiake was attracted to visit Siming Mountain, so he must want an in-depth investigation rather than a quick glance. Therefore, five days won't be enough for Xu

Xiake to go Siming Mountain and back.

Third, in Chen Zhu's *The Epitaph of Xu Xiake*, Xu Zhongzhao mentioned Xu Xiake get some red orchid flowers in bare feet, but the flower Zhulan worth a deeping research. After inquiry, Zhulan is mostly grow in the grass on the top of the mountain, under the forest next to the valley, or under the wetland, or other moist areas, distributed at an altitude of 400-2000 meters. Siming mountain is the origin of Zhulan flower. Zhulan blooms from May to July, and the return date of this trip was when Zhulan blooms in May.

As mentioned above, Xu Xiake went to Siming Mountain alone in May 1632, on his way back Tang and Dang. He arrived in Dajing on the 8th day of the fifth lunar month, then he went to Linhai Xiaohanshan to visit Chen Hanui again on the 9th day of the fifth lunar month or so. After that he went west along the East Zhejiang Canal, arrived at Shangyu on the 8th day of the fifth lunar month at the earliest without any break (the whole distance was 262 kilometers, it tooks five days according to 50 kilometers per day speed by boat).

Xu Xiake was eager to visit Siming Mountain because of the beautiful scenery he had never heard, as well as it's the flowering season of Zhulan. Xu Zhongzhao did not want to peer, so they agreed to break up in Shangyu, Xu Zhongzhao went to Xiling at first. Xu Xiake promised Xu Zhongzhao to bring some orchid flowers when he came back from Siming Mountain. After that, Xu Xiake took a boat and started his journey of walking alone from the Cao 'e River to Siming Mountain. Five days later, Xu Xiake returned to Xiling and brought Xu Zhongzhao Zhulan and praised the unparalleled inscriptions on precipices (Shanxin Shichuang scenic spot). Shangyu was 33 kilometers away from Zhangzhen town, it took 0.66 days to get to Zhangzhen town by boat. The distance between Zhangzhen Town and Siming Mountain was 41 kilometers, it took 2.56 days to go there and back. It took 2 days from Zhangzhen town to Xiling. Therefore, it took 5.22 days from Shangyu to Xiling in total, which is in line with *The Trvavel Notes of Xu Xiake*.

4. Conclusion

This paper applies the spatial analysis and visualization function of Xu Xiake's tracing database, and clarify the ambiguities of previous studies. Here are the findings:

- 1) Xu Xiake has been traveled the whole city in Zhejiang Province seven times from 1613 to 1636. Xu Xiake traveled mainly through the Beijing-Hangzhou Grand Canal, the East Zhejiang Canal, and the Qiantang River waterway. And he traveled 50 kilometers per day by water, walked 57 kilometers per day in river valley and plain, and 32 km per day while in hills.
- 2) Xu Xiake probably visited Zhejiang Province for the second time in 1616. He might travel from Changshan (Jiangsu) to Anhui Province via Kaihua (Zhejiang). After visited Huangshan Mountain, he might cross Kaihua (Zhejiang) to Changshan (Jiangsu), from Changshan into Jiangxi Province, and Fujian Province.
- 3) Xu Xiake visited Zhejiang Province for the sixth time in 1632. On his way back from Tai and Dang, he broke up with Xu Zhongzhao at Shangyu, and then Xu Xiake went to Siming Mountain alone along the Cao'e River. He met Xu Zhongzhao at Xiling five days later, and brought Xu Zhongzhao Zhulan as a gift.

This paper also shows the feasibility and importance of digital and spatial analysis methods for the survey of ancient books, especially ancient geographical books.

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References

- Chen Hanhui, (1987). *Epitaph of Mr. Xu Xiake in Xu Xiake, Xu Xiake's Travel Notes*, pp. 1993. Shanghai, China: Shanghai Classics Publishing House.
- Chen Huajian, (2004). *Xu Xiake's whereabouts in Shaoxin, in Tang Wenquan, The second continuation of Xu Xiake in Zhejiang* (pp.148-153). Beijing, China: China Land Press.
- Ding Wenjiang, (1987). *Mr. Xu Xiake's chronology, in Xu Xiake, Xu Xiake's Travel Notes* (pp.8). Shanghai, China: Shanghai Classics Publishing House.
- Gan Weiping, (1998). *Xu Xiake as Traveling saint in Zhejiang, in Shi Zai, Xu Jianchun & Chen Liangfu, Xu Xiake in Zhejiang* (pp.133-149). Zhejiang, China: Zhejiang Education Publishing House.
- Jiang Ling, Tang Guoan & Zhang Fang, (2012). Geomatics World. *Exploration and research of Xiake GIS*, 4, 6-22.

- Li Ruoyin, Ten Fei & Cang Xuezhi, (2010). Geomatics World. *Design of Electronic Map of 'Xiakexing' for Popular Science*, 3, 74-78.
- Lv Huailin, (2006). *The time and route of Xu Xike's traveling to Siming Mountain alone*, in Tang Wenquan, *The third continuation of Xu Xike in Zhejiang* (pp.356-361). Beijing, China: China Land Press.
- Lv Huailin, (2010). *Xike's meeting place with Zhongzhao should be in Xilin*, in Yao Binzhong, *Research on Xu Xike*, No21 (pp.163-170). Beijing, China: Geology Press.
- Qian Qianyi, (1987). *Biography of Xu Xike*, in *Xu Xike, Xu Xike's Travel Notes* (pp.1998). Shanghai, China: Shanghai Classics Publishing House.
- Wu Qiulong, (2002). *A study of Xu Xike's travel*, in Shi Zai, Xu Jianchun & Chen Liangfu, *The continuation of Xu Xike in Zhejiang* (pp. 65-79). Beijing, China: China Land Press.
- Wu Yaomin, (1998). *First exploration of Xu Xike's whereabouts in Zhejiang Province*, in Shi Zai, Xu Jianchun & Chen Liangfu, *Xu Xike in Zhejiang* (pp.16-33). Zhejiang, China: Zhejiang Education Publishing House.
- Xu Jianchun, Ding Hongjian & Yang Shufeng, (2002). *Review and Reflection on Xu studies in the 20th century*, in Shi Zai, Xu Jianchun & Chen Liangfu, *The continuation of Xu Xike in Zhejiang* (pp.29-42). Beijing, China: China Land Press.
- Xu Xike, (1987). *The Travel Notes of Xu Xike's*. Shanghai, China: Shanghai Classics Publishing House.
- Yangfan Yang, (2020). *A New Research Method of Xu Xike's Travels based on Historical Geographic Information System—a Case Study of Zhejiang Province*, *Journal of Social Science and Humanities*, 2, 30-35.
- Yuan Hang, (2002). *Digital earth and digitization of Xu studies*, in Shi Zai, Xu Jianchun & Chen Liangfu, *The continuation of Xu Xike in Zhejiang* (pp.139-143). Beijing, China: China Land Press.
- Zhuang Yuejiang, (1998). *Xu Xike loves Jianglang Mountain*, in Shi Zai, Xu Jianchun & Chen Liangfu, *Xu Xike in Zhejiang* (pp.218-222). Zhejiang, China: Zhejiang Education Publishing House.

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