ABSTRACT
There has been a huge mystery related to the extent of travel of the Chinese sailors led by Admiral Zheng He (郑和) of the Ming Dynasty in the early 15th century. Did they actually navigate across the Atlantic Ocean to reach the Americas? If so, how many times did the Ming Treasure Fleet explore the Americas? This paper presents an in-depth analysis of a 1597 novel An Account of the Western World Voyages of the San Bao Eunuch (《三宝太监西洋记通俗演义》 or abbreviated as 《三寶太監西洋記》) by the Ming historical novelist Luo Maodeng (罗懋登). The analysis involves carefully eliminating certain fanciful depictions and correcting some errors in Luo’s narratives. Then, by identifying Zheng He’s whereabouts before he seemed to have vanished from history at the last-known location of his fleet recorded by Ming historian Zhu Yunming (祝允明) and later reconfirmed by Xi Longfei, Yang Xi and Tang Xire, the entire paths and estimated timelines of Zheng He’s voyages to the Western Ocean given by Luo Maodeng are clearly exposed for the first time: the Ming sailors crossed the Atlantic Ocean from the Indian Ocean to reach as far as Cahokia, the ancient American Indian city, in the central Mississippi Valley, during their 6th and 7th voyages in 1423 and 1433, respectively. These timelines occurred more than 60 years before Christopher Columbus set foot in the Americas, and over 100 years before Hernando de Soto led the first European expedition to cross the Mississippi River. These findings also gain support from comparing the 1418 Chinese World Map with the map of 1602 Kunyu Wanguo Quantu (《坤舆万国全图》) or Complete Geographical Map of All the Kingdoms of the World, that had used information from Chinese maps drawn between 1428 and 1432.

The current findings have achieved the following goals: first, they clearly support the “historical value” of Luo’s novel; second, they help to clear some puzzling features in ancient Western maps, in which a number of "unknown" areas were mapped out before the Age of Discovery; and third, they shed new light on future Zheng He research and may usher in a rewriting of the existing history books.

Keywords: Zheng He, voyages, Americas, Luo Maodeng

1. INTRODUCTION
The extent of the epic voyages of the Ming Treasure Fleet led by Zheng He (see Figs. 1 and 2) has sparked a continuous and lively worldwide debate. (http://www.1421exposed.com; Andro, 2005). It all started when Gavin Menzies...
published his first book *1421: The Year China Discovered the World* in which he claimed that Chinese Admiral Zheng He had circumnavigated the globe, in the process “discovering” most of the world. (Menzies, 2002). Specifically, the debate covers unsettled issues such as: Did the Ming sailors explore America during their 7th and last voyage? What were Zheng He’s whereabouts during this final voyage?

One school of thought is represented by the renowned Zheng He scholar Yijun Zheng in China, who believes that Zheng He died in the Indian Ocean near Calicut on his way returning home. (Zheng). But no one has proved the death of Zheng He even though some of Zheng He’s relatives or close friends also participated in Zheng He’s voyage(s).

The second school of thought can be represented by Pingping Chen who believes that Zheng He completed his 7th voyage, returned to China and later died there. (Chen, 2014). But why is there only Zheng He’s cenotaph in China and not his real tomb? Hence, even Chen Pingping admits that Zheng He’s death year and death place remain unsolved issues, and all the guesses are hypothesis are still waiting for the discoveries of Zheng He’s real tomb, inscription and reliable historical records.

The third school of thought can be represented by Gavin Menzies who believes that during the 7th voyage, Zheng He divided the Ming fleet and sailed with some units to points further west. (Menzies, 2008).

The fourth school of thought can be represented by American writer Louise Levathes. After reading Luo Maodeng’s 1597 novel, she thought that during the 7th voyage Zheng He’s fleet left Mecca on a southwesterly course and experienced a fantastic journey in the underworld without giving further information on what happened to his fleet at the end of that voyage. (Levathes, 1994).

However, none of the above researchers has offered strong evidence to support their viewpoints, this research area remains wide open.

The current paper presents an in depth analysis of Luo’s novel from a fresh angle and reveals a different story which sheds light on resolving this mystery and will bridge the gap in our understanding of this important part of history.

**Objective of the Study**

The current analysis takes a step-by-step approach in resolving this mystery by analyzing Luo Maodeng’s 1597 novel *An Account of the Western World Voyages of the San Bao Eunuch*. (Luo, 1597). Fig. 3 shows the cover page of this novel. Extracting valuable historical information from Luo’s novel has been daunting and challenging for both the Chinese and the non-Chinese researchers, since the narratives were written in classical Chinese, not modern Chinese and the more than 750,000-character text is full of fanciful stories mingled with an overwhelmingly large number of ancient Chinese legends and historical events. Besides, very unfortunately, after the 7th voyage, the Ming government suddenly issued an edict prohibiting all future voyages, and ordering the destruction of the remaining great ships; it then also became a taboo to talk or write about the Zheng He voyages. Even a historical novelist like Luo Maodeng had to conceal the truth behind a veil of fiction, in particular imaginary geographical names. This gives the impression that his book does not directly describe a voyage on Earth, but rather in the sky among the stars, so it was not at all apparent from Luo’s story that Zheng He went to America. But through relentless in-depth analysis, and close comparisons with existing records whenever possible, the current author was able to extract valuable historical information from Luo’s narratives on Zheng He’s navigational routes and timelines during his 7th voyage.

The analysis finds that, in general, Luo’s sailing descriptions are brief, but give
good estimates for navigational times from port to port or country to country in comparison with other existing Chinese records. However, certain fanciful and lengthy war episodes must be ignored. The result reveals that Chinese sailors explored the central Mississippi Valley in 1423 and 1433, respectively, during their 6th and 7th voyages to the Western Ocean. These timelines occurred more than 60 years before Christopher Columbus set foot in the Americas (1492), and over 100 years before Hernando de Soto led the first European expedition to cross the Mississippi River (1539-1542).

The current analysis brings us vividly back in time to describe how the Admiral’s final far-reaching voyage plausibly ended in the ancient American Indian city of Cahokia, in today’s Illinois. Such finding resolves the confusions in the existing literature and schools of thoughts, and presents for the first time a reasonably estimated navigational route and timeline for the Ming Treasure Fleet to reach the Americas. Contrary to the general belief, Zheng He’s voyages to the “Western Ocean” were not limited to the Indian Ocean, but also extended to the Atlantic Ocean.

Fig. 1: Zheng He (1371-?)

Fig. 2: A Zheng He Ship Compared to a Columbus Ship

Fig. 3: Cover Page of Luo’s Novel
2. ANALYSIS
Exposing the Routes and Timelines of Zheng He’s Fleet during the 7th Voyage
The author first compares and confirms the whereabouts of Zheng He’s fleet extracted from Luo Maodeng’s 100-chapter novel with the historical records of the Ming dynasty. (Zhu). Then, the author identifies the whereabouts of Zheng He at the last-known location of his fleet as the southern part of Sri Lanka, and the date was November 28, 1432. There he ordered the squadron led by eunuch Hong Bao (洪保) to sail to Calicut (his next call), and the squadron led by eunuch Wang Jinghong (王景宏) to go to Hormuz. This last location, identified before Zheng He disappeared from official historical records, is also in agreement with the latest research findings obtained by analyzing The Charts of Zheng He’s Voyages (《郑和航海图》). (Xi, Yang & Tang, 2004). This location is specifically noted, since Luo’s novel is the only existing record which detailed Zheng He’s whereabouts after he left this location.

In extracting the navigational information for Zheng He’s own fleet, one has to carefully eliminate certain fanciful depictions in Luo’s narratives to avoid misestimating the length of time of the fleet’s stay in a port or country. These depictions are exaggerated war episodes that allegedly took a few weeks or a couple of months for Zheng He’s military to put down, but actually did not take place and cannot be verified with known Chinese historical records. After eliminating these, the entire paths and estimated timelines of Zheng He’s own fleet to the Western Ocean before and after leaving Sri Lanka given by Luo Maodeng can be clearly exposed as shown below.

During the 7th Voyage, Zheng He’s Fleet Explored 29 Countries and Met Envoys Sent by 11 Other Countries (Country Names Followed by * in the Following List)

In short, after leaving Hong Bao and Wang Jinghong near Sri Lanka (the 23rd country in the above list), Zheng He’s own fleet explored several countries in India, along the east coast of Africa, in the Arabian Peninsula, in the region of Hormuz, in Mecca and finally in the heartland of North America. A division of the exploration work was a common practice for the Ming Treasure Fleet during their voyages to the Western Ocean. The complete long list of the timelines of Zheng He fleet’s navigation from country to country and its explanation will be included in a forthcoming English book. (Wang, 2018).

Zheng He Visited Tianfang/Yun Chong—Mecca in Today’s Saudi Arabia
In order to determine where Tianfang/Yun Chong (30th in the above list) was in Luo’s narrative, one must thoroughly analyze the architectural features, the minarets, the Kaaba, the worship stone (the Black Stone), the well, and the shape and parameters of the tomb of a mosque which is described in greater detail by Luo in his novel than in any other Chinese records. The author concludes that Luo’s country of Tianfang/Yun Chong referred to Mecca in today’s Saudi Arabia while the mosque was Mecca’s Sacred/Great Mosque. But Luo made a serious mistake in estimating the sailing time
from Port Aden to Port Jeddah (near Mecca) as 3 months, while the more realistic length of time should be around 11 days as estimated by comparing it with the treasure fleet’s sailing time from Calicut to Port Aden known in Chinese records (Ma, 1451). After this major correction, the estimated earliest date of arrival of Zheng He’s crew at Mecca was around March 22-23, 1433, and the estimated earliest departure date from the nearby Port Jeddah was around March 23-24, 1433. After pilgrimage at Mecca as a sincere Muslim, Zheng He was determined to sail in the westward direction to reach the end of the Earth.

**Ma Huan Trade Delegation Visited Tianfang/Mo-jia—Kairouan in Today’s Tunisia**

The author also makes a thorough examination of *Ying Yai Sheng Lan* (《瀛涯胜览》) or *The Overall Survey of the Ocean's Shores* written by Ma Huan, in which he described how he and six other sailors made a voyage to the country of Mo-jia from Calicut (ordered by Hong Bao soon after his squadron arrived at Calicut on December 10, 1432). (Ma, 1451). The voyage took about 3 months, indicating they encountered favorable winds, otherwise it could take longer. (Huang, 1520). This gives important evidence that the 5th year of the Xuande period, 1432, was not the first time that the Ming sailors went to Mo-jia Guo. However, Luo Maodeng did not mention this trip in his novel, perhaps because this voyage was ordered under Hong Bao’s command, not Zheng He’s.

The result after analyzing this country’s mosque reveals that Ma Huan’s Tianfang/Mo-jia referred to today’s Kairouan in Tunisia and the mosque was its Great/Ubah Mosque. This finding also supports the viewpoint of Yee Di Lam. (Lam, 2012). The estimated date of arrival for the Ma Huan trade delegation at Kairouan was some day in March 1433. The delegation returned to Calicut near the end of 1433 when Wang Jinghong already led his and Hong Bao’s squadrons back to China a few months ago. This distinction of Luo Maodeng’s Tianfang/Yun Chong from Ma Huan’s Tianfang/Mo-jia, clearly resolves the long-standing confusion about who actually visited Mecca and who did not, and when and how long this specific trip lasted during the 7th voyage. In fact, Luo’s novel is the only existing Chinese record that was able to distinguish Tianfang/Yun Chong from Mo-jia. He did not call Mo-jia Tianfang, instead, he said that Mo-jia was first “a wilderness land”.

**Sailing Westward for Over 6 Months, the Treasure Fleet Landed on the North American Coast**

Starting from Port Jeddah around March 23-24, 1433, Zheng He’s fleet sailed days and nights into the ocean non-stop in the general westward direction for nearly 100 days without seeing land. This ocean could not be the Red Sea or the Mediterranean Sea since both are surrounded by land. Then the fleet sailed for 2 more months in dark clouds and wild dense fog (in the area where the Gulf Stream originating off the tip of Florida meets the cold Labrador Current that flows from the north; see Fig. 4). Then another month passed before a scouting boat hit a yellow grass-covered cliff (possibly near Newfoundland and the Labrador coast, or near the Gulf of St. Lawrence; see Fig. 5) and halted the navigation of the fleet. The author’s estimated time was around late September or early October, 1433.

Luo used brief paragraphs to describe the entire journey, but left no doubt that this was a very difficult trip that tested the endurance, skill and spirit of the Chinese sailors; and moreover, his short and concise narratives on the weather conditions, visibilities and so on gave clear indications that the Chinese sailors had just completed a trans-Atlantic navigation.
Fig. 4: World Oceans Currents Map (US Government Information; Wikipedia); Red (Warm Current), Blue (Cold Current), Arrow (Current Direction)

Fig. 5: Newfoundland & Labrador Coast
1: Witless Bay near Newfoundland; 2: Labrador; 3: Strait of Belle Isle; 4: Gulf of St. Lawrence; 5: North Atlantic Ocean; 6: Labrador Sea; 7: St. Lawrence River; 8: Lake Ontario; 9: Cape Breton in Nova Scotia

From the Gulf of St. Lawrence to Fengdu—the Ancient American Indian City—Cahokia
The author shows that from the neighborhood of the Gulf of St. Lawrence, Zheng He’s crew arrived at Fengdu in the late fall of 1433 (see Fig. 6) (in Chinese legend,
Fengdu Ghost City is a large complex of shrines, temples and monasteries dedicated to the afterlife located on the Ming mountain in Fengdu County, Chongqing municipality, China. But Luo’s Fengdu was actually the ancient American Indian city Cahokia in today’s Illinois—now the world's largest prehistoric cultural ruin to the north of Mexico—a UNESCO designated World Heritage Site shown in Fig. 7. (Nickless, Bonner-Nickless & Wang, 2015). By chance, Zheng He’s scout Wang Ming (王明) encountered his long-missing wife Liu Shi (刘氏) in Fengdu/Cahokia. Through their emotional conversations, Luo revealed that Chinese sailors were also in Fengdu/Cahokia on October 13, 1423 (in Lunar Calendar), approximately ten years ago during their 6th voyage.

Fig. 6: Part of North America with: 1) Cahokia; 2) Illinois River; 3) Mississippi River; 4) Ohio River; 5) Missouri River; 6) Great Lakes Area

Fig. 7: Cahokia Mounds

Ancient Chinese World Maps Also Support the Finding that Chinese Sailors Explored the Central Mississippi Valley during Their 6th Voyage
Fig. 8 shows the 1418 Chinese World Map. (Liu, 2009). The North American portion on the upper-right side of the figure does not show the Mississippi River. Fig. 9 is a portion of the North America map of Matteo Ricci’s 1602 Kunyu Wanguo Quantu. (Lee, 2012). It does show the Mississippi River correctly and even indicates portions of the Ohio and Illinois Rivers, although none of these rivers were given a name. But the Missouri River was absent.

Lee argued that Matteo Ricci revised the European maps he had with information from Chinese maps drawn between 1428 and 1432, a period which was after Zheng He’s 6th voyage but overlapped with the early stage of his 7th voyage (the author has shown earlier that at this stage of the 7th voyage, all the squadrons were still dutifully conducting their exploratory tasks in the Indian Ocean).

The author thinks that this was quite plausible, since none of the European maps before 1602 shows the Mississippi River and/or its correct location for Matteo Ricci to copy. He was in China and could copy information from Chinese maps. But the year 1418 was in the middle of the period 1417-1419 of Zheng He’s 5th voyage. Could the Chinese sailors have had the opportunity to explore the central Mississippi Valley before the end of their 5th voyage? Mingshi (《明史》) or History of Ming recorded that the Ming Treasure Fleet visited the country of Mu-lan-pi (木兰皮) during the 5th voyage. (Zhang). There have been at least two plausible guesses on where Mu-lan-pi might be located: first, in today’s Namibia in West Africa. (Lam, 2006); second, in the border area between the Patagonia Plateau and the Pampas in South America. (Liu, 2009). However, neither would point to the region near the Mississippi River. Hence we can basically exclude the possibility that the Ming Treasure Fleet explored the Mississippi Valley during its 5th voyage.

The existing Chinese historical records show that the Ming Treasure Fleet did not reach the Mississippi Valley in any of the previous voyages (the 1st to the 4th), and the Western maps before 1602 also do not show the Mississippi River and its tributaries. This lends strong support to the viewpoint that the Chinese sailors explored the Mississippi River region during their 6th voyage in the early 1420s, so that the Chinese cartographers were able to draw, between 1428-1432, these rivers on the map precisely where they should be in preparation for future voyages. Hence, Luo’s revelation appears to be correct in that the Chinese sailors explored the central Mississippi Valley during their 6th voyage.

Fig. 8: 1418 Chinese World Map
Fig. 9: 1602 Kunyu Wanguo Quantu Shows the Mississippi River (Outlined)

3. CONCLUSION AND OUTLOOK
By analyzing and comparing Luo Maodeng’s narrative with ancient and modern Chinese records, the author has succeeded in exposing the routes and timelines of squadrons led separately by Zheng He after he departed from Hong Bao and Wang Jinghong during their 7th voyage to the Western Ocean. The author also has followed Luo’s narratives closely to trace the whereabouts of Zheng He’s fleet after an unexpected landing at the coast near the St. Lawrence Bay, and all the way to the heart of North America, including their vivid exchanges with the Native Americans. Contrary to the generally-held viewpoint that the Ming Treasure Fleet never sailed beyond the East Coast of Africa, the author let the evidence and history presented here speak for themselves: the Ming sailors explored the central Mississippi Valley during their 6th and 7th voyages, in 1423 and 1433, respectively, more than 60 years before Columbus set foot in the Americas, and over 100 years before Hernando de Soto led the first European expedition to cross the Mississippi River.

The author’s presentation is as much a testimony to Gavin Menzies’ seminal work as a thought-provoking pointer to potentially much stronger historical ties between the Middle Kingdom and America than commonly thought. As for the 7th voyage, the author’s findings do not support Admiral Zheng He’s death near Calicut in early April 1433 on his homeward journey. (Zheng). Nor do they support another belief that Zheng He returned to China in 1433 and later died there. (Chen, 2014). In actuality, Luo Maodeng’s Fengdu was not the underworld in the eyes of Louise Levathes, but the ancient American Indian city Cahokia in today’s Illinois—now the world's largest prehistoric cultural ruin to the north of Mexico—a UNESCO designated World Heritage Site.

Now, with a new perspective, the current in-depth analysis of an ancient Chinese novel written in the late Ming Dynasty has allowed us to extract realistic navigational
routes and estimated timelines of Zheng He’s fleet to the Americas. All these efforts construe a much larger and different story which may become the first step in bridging the gap in our understanding of the ancient China-America history and the era before the Age of Discovery. The great contributions made by the Ming sailors should not be overlooked. They deserve a proper place in history. And more research work and more archeological findings around the world are called for to extend this work and to answer the question: did the Chinese sailors “discover” most of the world?

A 7-cm diameter plain brass medallion with the inscription “Authorized and awarded by Xuanande of Great Ming” given to Zheng He by the Xuanande Emperor for the 7th voyage to the Western Ocean was unearthed 4 inches under the surface in the inland area from the American east coast in the early 2000s. (Lee, 2009). History is expressing itself in its own ways!

4. REFERENCES
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