

# The Quest for the Holy Water: Ayutthaya's Ever-Changing Waterways Sequel 1

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**The river of yesterday is not the same as the river of today.  
The river of this moment is not going to be the same as the river of the next moment.  
So does life.  
- The Enlightened One -**

Find hereby a tentative to answer the questions which remained open in my essay "The Quest for the Holy Water: Ayutthaya's ever-changing waterways". The unresolved questions were: when did exactly the Pa Sak River changed its course; and when Ko Chong Lom and Ko Loi were created?

This follow-up of my essay would not have been possible without the help of Mrs Subongkoch Thonthongtip, Director of the Chao Sam Phraya Museum and her assistant Ms Wanlee Krachangwee, who were so kind to lend me some of their spare time and who also brought me in contact with Professor Phayaw Khemnad, former Head of Historic Sites at the Fine Arts Department Region 3, Ayutthaya. The latter is the author of the book "Wat Monthop" (Phra Nakhon Sri Ayutthaya), an extensive document on the still existing monastery, in which he pointed out a text of Phraya Boran Rachathanin (1), on which this follow-up is partly based.

I have to state that what is written in this essay is solely my personal interpretation on the evolution of the waterways in the northeastern corner of Ayutthaya's city island, and this interpretation could as thus be very different from the views of other scholars. Finally, I still do not have all the answers and more documentation is still needed. I welcome always a guiding hand.

In this essay I will look into the different ancient maps of Ayutthaya drafted at the end of the 17th century, some of them still published in the 17th century, others in the 18th century. The maps I choose for this study are the ones of the French missionary de Courtaulin, the German VOC doctor Kaempfer, the French diplomat de La Loubère and the French map maker Bellin. The map study is followed by a consolidation with my personal conclusions.

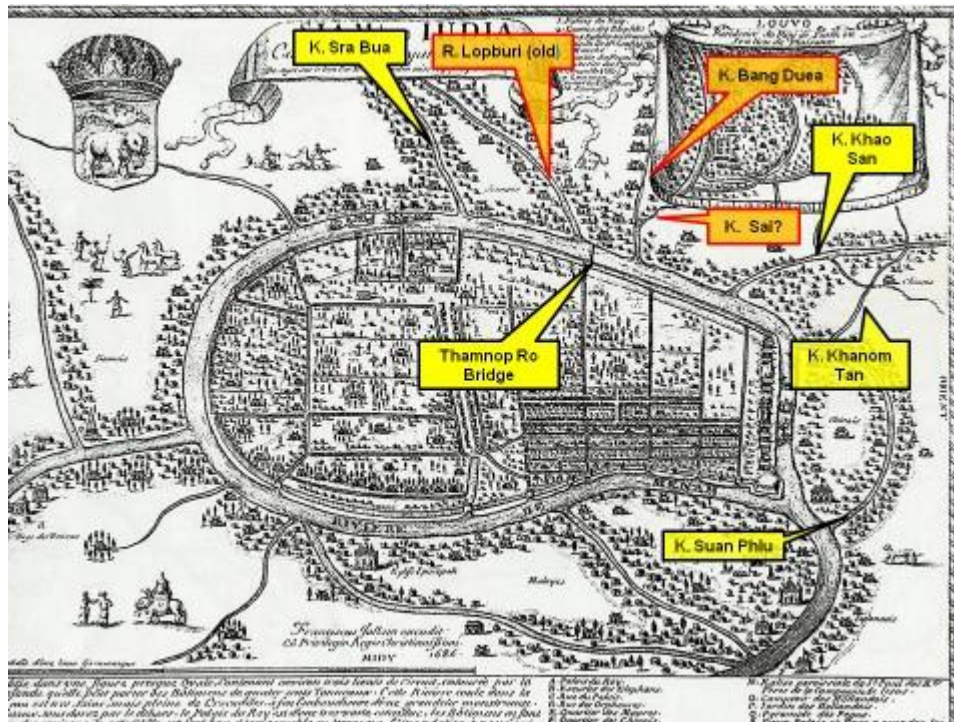
## **De Courtaulin's map**

Jean de Courtaulin de Maguelonne was born at Limoux (Aude). He entered the seminary of Saint-Sulpice in 1660 and left in 1663. After a short stay at the Seminary of the Missions Etrangères de Paris (MEP), he left for Siam on 3 February 1670 and he arrived there in October 1672. He stayed at the St Joseph Mission until June 1674, when he left for Cochinchina. In 1685, Jean de Courtaulin left the mission including the Society of the MEP and returned to Paris. As the new college at Maha Phram was established only in 1680, the sketches must have been made or at least adapted by de Courtaulin prior his return to France. The map was engraved (38 cm by 52 cm) after his return in France on basis of the sketches made in situ. It was published in 1686 by map seller, Franciscus Jollain, the elder (1641-1704). The map is titled "*Siam ou Iudia, Capitale du Royaume de Siam Dessigné sur le lieu Par Mr Courtaulin missre Apostolique de la Chine*". [1]

De Courtaulin's map was likely the first French map of Ayutthaya ever drafted. He indicates in the north-eastern corner of Ayutthaya (Hua Ro area), the old Lopburi River (present Khlong Hua Ro - Khlong Bang Khoat) and a second waterway which split up in two branches. The western branch of this second canal could have been the present (new) Lopburi River (indicated by a series of temples such as Wat Kuti Sung,

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Wat Si Fan, Wat Chumphon, Wat Thale Ya, etc), while the eastern branch could have been a junction canal with the Pa Sak River.



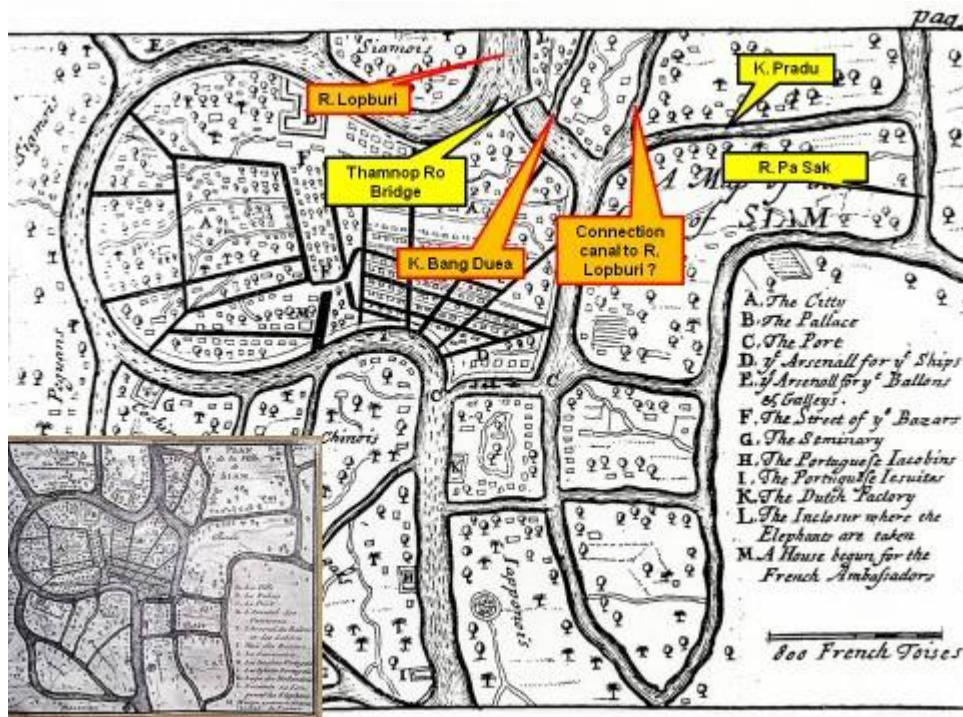
This junction canal could have been Khlong Sai (Eng: Sand Canal) of which Professor Phayaw Khemnad writes in his book “Wat Monthop”: คลองทราย ก็คือ คลองที่อยู่ฝั่งตะวันออกของเกาะหรือแม่น้ำปากปัจจุบัน ตามที่พระยาโบราณราชธานินทร์ อ้างถึงคลองทรายเป็นคลองเล็ก อ้อมเกาะ ผ่านหน้าวัดแคและวัดช่องลมลงวัดนางคำ วัดศรีจำปามาพบกับบริเวณหน้าวิทยาลัยเทคโนโลยีฯ [2], which is translated as: “Sand Canal was a canal situated on the eastside of the island or the Pa Sak River presently. According to Phraya Boran Rachathanin Sand Canal was a very small canal, encircling the island, passing Wat Khae and Wat Chong Lom, and going down towards Wat Nang Dam and Wat Sri Jampa, to meet in the front of the Technological Institute”. (A) To meet, I understand here the Front city canal or Khlong Khu Na.

To conclude: De Courtaulin indicates two waterways: one which is undoubtedly the old Lopburi River (2); the other the present (new) Lopburi River, which I continue to call Khlong Bang Duea. (3) From the last one split off a smaller canal which could have been Khlong Sai which Professor Khemnad mentioned; and at the same time could have been a connecting canal to the Pa Sak River, although this last statement remains purely a guess. There are no indications of any islets on this map.

## De La Loubère's map

Simon de La Loubère (1642-1729) was sent on the second embassy to Siam by Louis XIV to convert King Narai to Catholicism. He arrived in Siam on 27 September 1687. He proved to have been a keen observer in his account on his voyage. His work "Du Royaume de Siam" was first published in 1691 at Paris by Jean-Baptiste Coignard in two volumes. The map, measuring 33.5 cm by 16 cm was reproduced by F. Ertltinger and engraved by Michault. His work was republished by Thomas Horne in London under the title: "A New Historical Relation of the Kingdom of Siam" in 1693. His map was also translated in English but misses the northern part, likely reduced in order to save print space to be able to put several engravings on one page. [1]

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De La Loubère's map is a very rough map, a bit out of axis and as thus deformed. The scale of the map is indicated in "Toises", an old French pre-revolution measurement, and very close to the present numeric scale of 1/300.000. The map points out three waterways in the northeastern sector of Ayutthaya.

The old Lopburi River is clearly indicated north of the Thamnop Ro Bridge. Two other waterways are running in the north-northeastern direction on this map. The canal close to the old Lopburi River must be Khlong Bang Duea (present new Lopburi River), while the third and most eastern waterway is here drawn as a connection canal to the two others, though running in the present riverbed of the Pa Sak River.

I tried to find a match for this river inset in today's geography at a distance of a little bit more than 800 Toises (a bit more than 1.6 Km). At this distance there is only Khlong Satharana, just north of Wat Borommawong, formerly connecting the old and the new Lopburi River, but I have my doubts if it fits the picture.



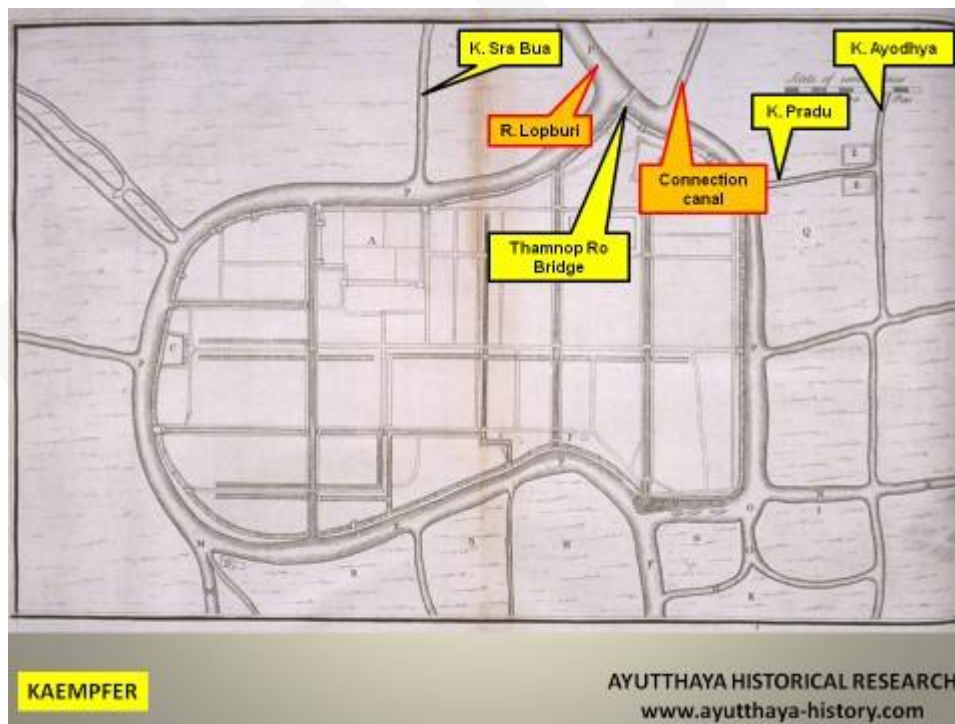
A possible match is the canal one more kilometer further, on the northern edge of Suan Phrik sub-district and as thus Ayutthaya district. In my perception there is although no connection with the Pa Sak River, which runs on de La Loubère's map much more eastwards.

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To conclude: De La Loubère indicates three waterways: one which was undoubtedly the old Lopburi River; the second was Khlong Bang Duea, while the third was seemingly a connection canal to the latter two. There are also no indications of islets on this map.

## Kaempfer's map

Engelbert Kaempfer (1651 - 1716), a German physician, assumed the post of medical officer to the Dutch VOC factory on Dejima in the year 1690. On his way from Batavia to Japan he resided in Siam from 06 Jun 1690 till 23 Jul 1690. The work "The History of Japan ... together with a Description of the Kingdom of Siam" was written after his return to Europe, where he went into medical practice in his native town. It was written in German, but it was the English translation which appeared first in print in London in 1727. The English translation is the work of Johannes Gaspar Scheuchzer (1702 - 1729). In this work we find a most accurate map of Ayutthaya from his short visit to Siam in 1690. [1]

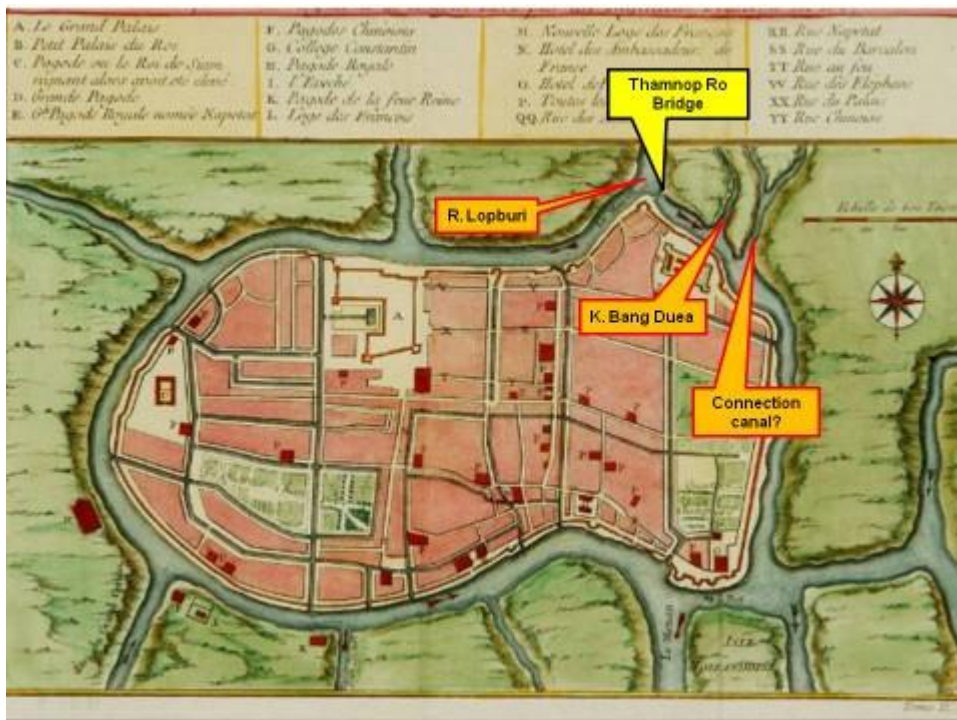


Kaempfer's map is a feast for the eyes. The map is clear (a bit military styled) and technically very refined (Deutsche grundligkeit). The German doctor indicates clearly the old Lopburi River, north of the Thamnop Ro Bridge and a second waterway, which was likely a connection canal to Khlong Bang Duea or the Pa Sak River or to both. Kaempfer shows that in 1690 Ko Loy and Ko Chong Lom were inexistent.

## Bellin's map

The most detailed map was the one of the French hydrographer Jacques Nicolas Bellin (1703-1772). He published in l'Abbé Prévost's "Histoire Générale des Voyages" of 1751 a map of Ayutthaya named "Plan de la Ville de Siam, Capitale du Royaume de ce Nom; Levé par un Ingénieur François en 1687" based on sketches made probably by the French engineer M. de La Mare. [1]

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Bellin indicates the old Lopburi River and two other waterways. One of the latter two must be Khlong Bang Duea, while the third one had to be a connection canal to the Pa Sak River. Also Bellin does show on his map that Ko Chong Lom and Ko Loi were inexistent at the end of the 17<sup>th</sup> century. If you would transpose this map on a today's map, it looks that the present Ko Loi area, was cut in half by the canal. Undoubtedly Bellin and de La Loubère shared the same map source.

## Consolidation

All the above maps cover the period 1685-1690 AD (2228-2233 BE) in the reign of King Narai. The maps of Kaempfer and Bellin were published in the 18<sup>th</sup> century and are of a much higher standard than the two other. The initial mapping data as thus could have been altered in time.

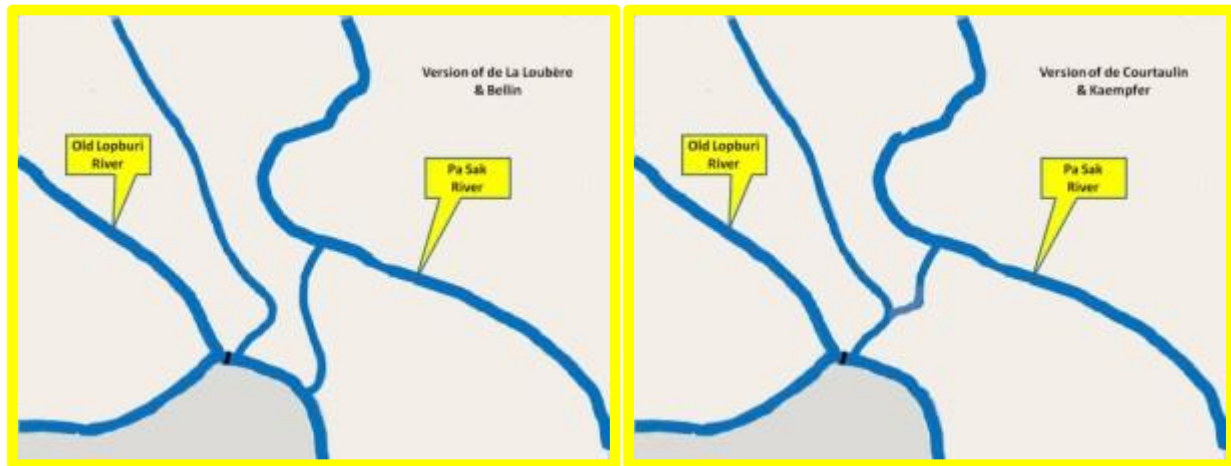
A quick recapitulation of the maps gives us the following: de Courtaulin indicates two waterways of which one is branched; de La Loubère shows us three waterways; Kaempfer draws two waterways, but leaves open whether or not branched and at last Bellin mentions three waterways.

We have as thus two possible versions: The version of de La Loubère & Bellin with three separate waterways and the version of de Courtaulin & Kaempfer with two waterways, whether one of them was branched are not.

My interpretation of the above is, that end of the 17<sup>th</sup> century, the Lopburi River was the main river encircling the ancient city of Ayutthaya. The river split up in front of the former Maha Chai fort in a section running to the west (the present Khlong Mueang) and a section running to the south into the Khlong Khu Na or the Front city canal. The Pa Sak River was not yet deviated, but a connection canal must have existed running into the southern stretch of the Lopburi River, below the Thamnop Ro Bridge. Khlong Bang Duea (the new Lopburi River today) ran into the Pa Sak connection canal. The latter canal should as thus have

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been a part of Khlong Sai or Sand Canal. At this stage there were no formed islets. Ko Chong Lom and Ko Loi were part of respectively the northern and eastern mainland.



The version of de La Loubère & Bellin indicates that Khlong Bang Duea and the connection canal to the Pa Sak River were separated canals running into Khlong Khu Na on different spots. This contradicts Phraya Boran Rachathanin's writings of 1921 AD (2664 BE), in which he stipulates that the reason of the destruction of the embankment in front of the Chantra Kasem Palace was, that the waters of the (new) Lopburi River and the Pa Sak River **together** collided with the waters of Khlong Hua Ro (the southern section of the old Lopburi River) forming a strong whirlpool which undercut the embankment.

... ข้าพระพุทธเจ้าจึงได้ตรวจพิเคราะห์ดู เห็นด้วยเกล้าฯ ว่าเหตุทำให้เขื่อนพังนั้น เป็นด้วยน้ำซึ่งไหลมาจากแควสักกับแควลพบุรี รวมกันพุ่งตรงมากระทบน้ำที่ไหลออกจากคลองหัวรอแล้วเกิดเป็นวนปั่นป่วนไหลพุ่งเข้าเซาะตลิ่งใต้เขื่อนหน้าวัง ... [3]

I have as thus to conclude that only the maps of de Courtaulin & Kaempfer endorse Phraya Boran Rachathanin's writings, as only these maps show the new Lopburi River and the Pa Sak River **together** running into the southern section of the old Lopburi River.

We are now leaving the end of the 17th century and are jumping to Phraya Boran Rachathanin's period in the beginning of the 20th century. The Pa Sak River ran near Ban Ko and passed by Khlong Oom and Khlong Hantra (also called Khlong Ban Ma), its former riverbed. (4)

After Phraya Boran Rachathanin investigated the reason of the destruction of the embankment in front of Chantra Kasem Palace, he ordered to have Khlong Chong Lom dug in order to reduce the whirlpools at Laem Chong Lom (confluence of the new Lopburi and the Pasak River) and the mouth of Khlong Hua Ro (confluence of the just joint rivers with Khlong Hua Ro), which destroyed the embankment in front of Chantra Kasem Palace. The extra canal was dug to divide the incoming waters of the Pa Sak River over two canals, slowing down the velocity of the river and reducing its erosional forces. The exact year of the canal digging is unknown to me but according to Phraya Boran's writings I understood it must have been done somewhere between 1917 and 1921 AD. After the second connection canal was dug, the whirlpools near Wat Tong Pu and in front of the Chantra Kasem Palace reduced.

The digging of Khlong Chong Lom was not sufficient to reduce the hydraulic action of Khlong Hua Ro, the new Lopburi River and the Pa Sak River together, as the mass of water passing in front of the Palace remained the same. Phraya Boran Rachathanin ordered the digging of another connection canal to straighten

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the Pa Sak River and to prevent it to flow in front of the palace grounds. As stated in the beginning of this essay, Khlong Sai was partly a very small canal cutting through the eastern mainland. Phraya Boran used this existing canal and widened it, so that the Pa Sak River changed its course and joined the Khlong Khu Na below Ayutthaya's Ship Building Institute. The newly dug shunt was called Khlong Jek by the local population. (5) [4] As thus a large part of the Front city canal, became the new riverbed of the Pa Sak River.



*(This document will be updated if more documentation can be gathered on especially the exact year of the digging of Khlong Chong Lom and Khlong Jek and the straightening of the Pa Sak River at Ban Ko. This essay can be partly viewed as a power point presentation at: [http://www.ayutthaya-history.com/media/Ayutthayas\\_Waterways\\_Sequel1.pps](http://www.ayutthaya-history.com/media/Ayutthayas_Waterways_Sequel1.pps). Any additional info can be forwarded by mail or via Facebook - discussions)*

## **Footnotes:**

- (1) หนังสือกราบบังคมทูล เรื่องระยะทางเสด็จพระราชดำเนินประพาศ ทรงบวงสรวงอดีตมหาราช ณ พระราชวัง ใน รัชกาลที่ ๖ เมื่อวันที่ ๒๗ มิถุนายน ๒๔๖๓.
- (2) All the maps show the initial Lopburi River, north of the Thamnop Ro Bridge at Hua Ro, the only bridge in the Ayutthayan era connecting the island with the mainland. Khlong Hua Ro – Khlong Bang Khoat flows now in the old river bed of the Lopburi River. A good observer will also find that the elephant kraal was situated on the east bank of the initial Lopburi River. At present it is situated on the west bank of the new Lopburi River, which was in the Ayutthayan era a simple canal. During excavation works near Wat Pho Hom in Pho Sam Ton sub-district, situated on the west bank of the old Lopburi River, a large ship wreck was found as a last witness of the navigation on this ancient river.
- (3) See the essay “The Quest for the Holy Water: Ayutthaya's Ever-Changing Waterways” - [http://www.ayutthaya-history.com/Essays\\_Waterways.html](http://www.ayutthaya-history.com/Essays_Waterways.html).
- (4) When exactly the Pa Sak shunt near Wat Phai Somnarin, cutting through the meander at Ban Ko was dug, remains still unanswered.

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(5) Professor Khemnad explains in his book “Monthop” that the newly dug canal was called Khlong Jek, because the area where the canal was dug belonged to Chinese who cultivated vegetables. “Jek” [Th: เจ็ก] is an old Siamese word for Chinese people. [4]

## **References:**

[1] Mapping Iudea: A Cartographic Exercise - Tricky Vandenberg (2010) - [http://www.ayutthaya-history.com/Essays\\_MappingIudea.html](http://www.ayutthaya-history.com/Essays_MappingIudea.html).

[2] Wat Monthop (Amphur Phra Nakhon Sri Ayutthaya) - Phayaw Khemnad (2010) - Fine Arts Department - 3th Region - page 22.

[3] Ibid - page 21.

[4] Ibid - page 23.