

GEOGRAPHY OF GILGAMESH TRAVELS, PART II: THE ROUTE TO MOUNT MASHU

by

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Summary

In this part of the paper, we consider Gilgamesh trip to Mount Mashu. We identify this mountain with the Anye Maquen range, close to the sources of the Yellow River, sacred to the local Ngolok population. We propose that Gilgamesh reached this mountain via the Zungarian Gates.

1. The second trip. Numerics and geographical information

THE SECOND TRIP aims to reach mount Mashu, the dwelling place of Utanapishtim (in Assyrian; Ziusudra in Sumerian), a man who survived the Flood and who was granted granted immortality by the gods. Gilgamesh hoped to get from Utanapishtim the secret for immortality. He did not get it (we may hint that the secret is the one that locally survived till the time of Marpa, the teacher of Milarepa).

In the following we give the surviving information from the Gilgamesh texts in Pettinato (1992).

TABLETS from Assurbanipal library:

1) IX, 5-9: I wander by the steppes. I am going to the place of Utanapishtim, the son of Ubartutu. I am moving fast towards this place. In the night I have reached a mountain pass. I have seen lions, I was scared

2) IX, 36: The name of the mountain is Mashu

3) IX, 55-59: Who are you who came by far away roads, who wandered till you got to my presence, crossing with difficulty ever fast flowing watercourses?

4) IX, 132-134 : You, Gilgamesh, do not be afraid! I open for you Mount Mashu, cross without fear the mountains and the hills!

5) X, 1 : Siduri, the hostess who lives far away at the shore of the sea..

6) X, 43-47: Why do you look as someone who has travelled over long distances? Why does your face show signs of hot and of cold wheather? Why do you wander only covered with a lion skin?

7) X, 76-91: Gilgamesh insisted: Please, hostess, which is the direction to Utanapishtim? Give me accurate directions. If necessary, I will cross the sea, otherwise I

will take the way by the steppe.

8) Gilgamesh, there has never been a boat for the crossing, no one in memory has ever crossed this sea. Only Shamash can cross it... The crossing is difficult, fraught of dangers, in the middle there are lethal waters that make navigation impossible. How, Gilgamesh, can you cross this sea? Once you get to the mortal waters, what will you do?

9) There is however, Gilgamesh, the boatman of Utanapishtim, his name is Urshanabi. You can find him cutting trees in the woods, near the stone "stela"

10) X, 156-160: Gilgamesh, take an axe, go to the wood, cut planks of 30 meters length, work them smooth, bring them to me

11) X, 166-170: Gilgamesh and Urshanabi entered the boat and began the voyage. A route of one month and a half towards the land of..... they made in three days. Then Urshanabi arrived at the waters of death

12) X, 259-261: I have killed bears, hyenas, lions, leopards, tigers, deer...

13) XI, 194-195: Now let Utanapishtim and his wife be like gods. Let Utanapishtim dwell far away, at the mouth of the rivers

14) XI, 257-258: Gilgamesh and Urshanabi enter the boat. They free the boat and begin the [return] voyage

15) Berlin/London tablet, 100-104 : So Gilgamesh spoke to Surshanabu: Gilgamesh is my name. I have come from Uruk, from the Eanni, I have wandered by the mountains. I have made a long way towards the rising Sun

16) Berlin/London tablet, 115-119: The stones "stela", Gilgamesh, are my guide, so that I avoid the waters of death. In your fury you have broken them. I keep them with me, so that they can guide me

17) Hittite version: The god of the Moon (Sin) said: bring the two lions you killed to the city, bring them to the temple of Sin

18) Hittite version by J. Friedrich (1930), quoted by Sitchin (1980): After crossing the death waters with Urshanabi, they were in Tilmun, aiming to the Mashu mountain in a straight way, in the direction of the far away great sea. On the way there was the town Itla, sacred to the god Ullu-Yah.

2. Identifying the route of the second trip

ACCORDING to the scenario proposed by us, Gilgamesh trip took him to the heart of Asia, to Mount Mashu, that we will identify, close to the sources of the Yellow River, with a huge mountain range still sacred to the local population, the Ngolok tribe. Then he returned to Uruk by water, first following the Yellow River (for about 4000 km), then coasting the eastern-southern side of Asia, for at least 15.000 km. Thus Gilgamesh succeeded in performing a voyage of truly epic dimensions.

Gilgamesh reached mount Mashu by a route about which some information had to be available. The distance travelled in the second trip was about 3000 km longer than by the route he had attempted the first time. Now however he did not have to go through the almost impassable high ranges of the Karakorum. The route took him through wild and almost unpopulated steppes, fraught of difficulties in term of quick sands, salt flats and lack of sweet water. We think that without the guiding help of Urshanabi he would have been lost after the about 5000 kilometers that had taken him to the "sea" where he met Siduri, the custodian of the tple of Sin.

It is perhaps interesting at this point, before unveiling the final destination, to introduce a digression on how the routes proposed here came to my mind. I first read Gilgamesh epic

in the Penguin edition, in 1971, when I was visiting the University of Essex in UK for research in numerical optimization.

Already at that time I had doubts about the real destination of Gilgamesh trips. Several years ago, having reread the epic in the 1992 book of Pettinato, I looked in the great Italian Enciclopedia Treccani (almost twice the size of the Britannica), about cedars of Lebanon. To my delight I found out that they grow in the variety *Cedrus Deodara* in Kashmir. Since the Indus basin and Mesopotamia at Gilgamesh time were in well documented contacts via water, it made sense to hypothesize that not only Kashmir had to be a well known source of cedar timber, but that reaching and exploring that region might have been an interesting goal – personal and even political, in view of incipient trends towards forms of "imperialism" – to a strong willed, intelligent and physically powerful person as king Gilgamesh.

THE IDENTIFICATION of Mount Mashu came suddenly to my mind on a day of May 1999, while I was reading Sitchin's "The Stairway to Heaven". At the point where Sitchin, whose source is mainly the Hittite text in Friedrich's translation, describes how Gilgamesh, after crossing a mountain pass, saw a water extent, near which there was a city with a temple dedicated to Sin, I closed the eyes and visualized the map of central Asia. It dawned to me that the water expanse, certainly not a sea but a large lake, had to be the Balkash lake, which, as will be discussed soon, fully satisfies the features in the text. Then I thought what Mount Mashu might be in this geographical context, and the answer flashed back immediately, the product of a geographical and anthropological information I had memorized a couple of years before from a book by Leonard Clark. Of Leonard Clark, possibly with Heyerdahl the greatest explorer of the 20th century, I had read and reread in my teens the fascinating book *The rivers ran to east*, describing his explorations in Amazonia. Reading his less known book

The Marching Wind, led me to the proposed identification of Mount Mashu.

Let us now discuss the route that we propose to Mount Mashu. Our guess is very natural once the "sea" with the temple of Sin and Mount Mashu are identified.

Let us first discuss the "sea" with the temple of Sin. The text calls it a "sea", and the local Kirghiz actually call it "sea" (their word for sea being just "Balkash"), but it is actually a large lake. Notice that what we call "Caspian sea" is also a large lake, the remnant of a previous very large lake, hence in a sense a "sea", that included at least also the Aral lake, as the Atlas of Ptolemy shows, see the critical edition by Pagani (1990). We claim that Gilgamesh reached this "sea" after a very long way, in a mainly easterly direction, along which he was attacked by wild beasts and had to cross large rivers always full of water. The "sea" appeared just after crossing a mountain pass. Going beyond the sea appeared to be difficult, the steppes around were also appearing difficult, making Gilgamesh feel depressed. Near the "sea" there was a city with a temple dedicated to Sin, the god, *inter alia*, associated with the Moon.

WE IDENTIFY the above "sea" with the Balkash lake on the following grounds:

- It is certainly far away from Sumer, about 4000 km as the crow flies, probably well over 5000 km by the route taken by Gilgamesh, where many detours and false starts had to occur.
- It lies in a rather flat basin, elevation around 350-400 meters, which is surrounded on the north and west side by a chain of hills (the Khaisaghin Daban hills in the north reach 1559 meters, the Chu-Ili hills on the west reach 1053 meters). On the south-east, beyond the mainly flat

gently sloping delta of the Ili, there are the quite high Tien Shan mountains, reaching almost 5000 meters.

- The lake is fed mainly by a river coming from the fertile green Fergana valley among high mountains, where the city of Alma-Ata is located. The river has the intriguing name *Ili*, easily associated with the semitic EL, one of the main gods.
- The waters are salty, undrinkable by man, so salty that only small fish live in the lake. It has a tormented coastline, it is surrounded by marshes, quick sands and salty deposits, over which it is extremely difficult to move by foot, either for man and for camel, see Hedin (1943) for the claim that these areas, called *scior* in central Asia, are avoided by everyone. Around the shores there are woods. The lake has sources of sweet water on his bottom, that apparently have contributed in reducing the high salinity noted in the 19th century to a more moderate salinity, especially in the southern part (industrial pollution is now poisoning the lake).
- From a description of the lake at the end of the 19th century by Grégoire (1876) we have the following information (to be probably updated in the sense of a decreasing size of the lake, the phenomenon of drying up of inner lakes being common worldwide and being probably related to the fact that such lakes were filled over their normal capacity during some catastrophical flooding event, the Noah-Utanapishtim flood being one of such likely events):
 - the lake is 530 km long, at most 85 km large, area 22.000 square kilometers; the lake around 1950 was very shallow, max depth only about 11 meters
 - present elevation (Times Atlas, Comprehensive Edition, 1974) is 339 meters over sea level. Just east of Balkash two smaller lakes are found aligned in an easterly direction: lake Sasykul, elevation 334m, and Alakul, 340m. In case the water level in the Balkash would increase by about ten meters, these two lakes would join with the Balkash, as appears it was the case from maps in atlases of the 18th century, then giving rise to a lake over 800 km long but no more than 100 km wide
 - the form of the lake is arcuate, rather half-Moon like
 - if the level of the lake would reach the isoipse 500 meters, quite a possibility in the event of a great flood, it would give rise to a water expanse with no outlet to the ocean and a size of about 150.000 square kilometers. We do not know how was the elevation of the Balkash at Gilgamesh time (but see below). We guess, in view of the drying up tendency of inner lakes, that it was significantly higher than now, the lake could have had the characteristic half Moon shape before the Flood, making it sacred to the god Sin; an increase of the water level to the isoipse 500m, for instance, about 160 meters higher than now, would completely change its shape.
 - the name of the lake is indicative, in the linguistic analysis that we will propose, of a relation with the god Sin, to whom perhaps the lake was

sacred in view of its peculiar half-Moon shape (if not at Gilgamesh time, before the Flood).

LET US NOW discuss our proposal about the meaning of the name BALKASH. We have been unable of getting literature information on the etymology of that name, that for the Kirghiz is now synonymous of "sea". Our proposal is that the name BALKASH is the contracted form of a more ancient BALKASHIN. To my delight I have found that atlases and geographic dictionaries up to the mid 19th century call the lake BALKASHI, one step closer to the proposed BALKASHIN. Now there are no linguistic problems in the equivalence BALKASHIN = BALKASIN, that we see as a word composed by three meaningful monosyllabic words, namely BAL - KA - SIN, for which we claim the validity of the following translation: *Sin, Lord of the people*. The references to Sin and the term Lord are obvious. The main point is the validity of the identification KA = PEOPLE, that is addressed in the Appendix.

Having thus identified the "sea" with the temple of Sin with the Balkash lake, we can now make an educated guess on the first stage of Gilgamesh trip, from Uruk to the Balkash lake.

FROM THE HITTITE text in Friedrich translation, but not from the corpus in Pettinato, the trip appears to have started when Enkidu was still alive, and by sea, on board of a boat named MA-GAN. The boat sank near the coast of MA-GAN, with Enkidu dying in the accident. Then Gilgamesh continued the trip alone overland. Sitchin identifies Magan with Egypt, while most scholars identify Magan with the easternmost coast of the Arabian peninsula, i.e. Oman and part of the Emirates, in view of the fact that copper was among the exports of Magan and that bronze age mines of copper have been found in the mountains of Oman. If the Hittite version used by Sitchin

is correct, then we may think that Gilgamesh again intended to reach the heart of Asia by the Karakorum passes tried before, reaching the Kashmir mountains not by the overland route explored in the first trip but by the more usual way via the Indian Ocean and the Indus river.

Moreover we claim that MAGAN, also read as MAKAN, is neither Egypt nor Oman, but a land including the southern coast of the Iranian plateau, the ancient Gedrosia, a vast extremely dry expanse of valleys, plateaus and low mountains, that Alexander insisted to cross on the return from India, for reasons that are not clear in the surviving reports of his adventures (Arrianus, Curtius Rufus, Plutarch, perhaps not unrelated to a memory of the feat that we are now proposing Gilgamesh accomplished). This region, while difficult and even now sparsely populated, is not a complete desert. Now mainly inhabited by Baluchi people, divided between Iran and Pakistan, in classical times, as reported in that superb navigational reference book that is the *Periplus of the Erythraean Sea*, had a number of ports and a coastal population, the Ichthyophagies, that survived on sea life (some of them even had cows, that were fed with dried fish: the flesh of these cows tasted of fish, according to the report of Nearchos, quoted in Arrianus book on India; thus we see that feeding proteins to cows predates our times!!). The present local name, attested as I have checked at least in atlases of the 18th century, is MAKRAN (sometimes also spelled as MEKRAN, MUKRAN). The name MAKRAN has obvious similarity with MAGAN/MAKAN, a fact reinforced by the observation that the sound KR does not belong to the Sumerian phonama. Moreover the name MAKAN appears in the 18th century great D'Anville Atlas as a region in the present Kara Kum desert, which comprises much of Turkmenistan, north of Khorasan. In view of references to a people called Maka in several inscriptions found in the excavations of Persepolis after second world war, located in the east, and of other

considerations that will be developed in a forthcoming paper, we claim that MAGAN/MAKAN should be identified with the eastern part of the "great Iran" to which Shanameh refers, comprising much of present Turkmenistan, Khorasan, Sistan, Baluchistan and Makran.

WHETHER OR NOT the second trip of Gilgamesh began by boat, the "sea" with the temple of Sin was reached overland. The likely route is the following.

- First from Uruk to Sistan. This could have been done via sea and then crossing the Makran region, along one of the valleys that certainly allowed the precious hard stones and the copper mined or worked in Sistan to reach the Indian Ocean for trade to the east and to the west. Notice also that there are important copper mines in Birjand, just about 150 km north-west of central Sistan, that possibly were already exploited in bronze age time, therefore voiding the claim that Oman was Magan because of the presence of copper in Oman, and that recently translated Accadian documents refer to metal specialists sent to eastern Iran to get hold of copper. Or the trip could have been made overland, possibly even by same route taken in the first trip.
- From Sistan the natural way to the Balkash, not less than 3000 km, skirts the western side of the mountains of Afghanistan and Pamir, in a basic direction north-east. On this way Gilgamesh had to cross a few really large rivers, certainly not fordable and rich of water the whole year around, including the Amu Darya (literally *The sea of Amu, Adamu?*; classical Oxus, meaning *The great water*), the Syr Darya (classical Jaxartes/Araxes, meaning *The sea of lions*) and, finally, the Chu

river. The epic states that Gilgamesh was attacked by dangerous animals along the way. Leopards and hyenas are still found in the area; the famous Aral tiger became extinct around 1950 and was common along the Amu Darya even in the Termez region still before Second World War, see McLean (1949); lions were common in classical times.

- LET US NOW discuss the second stage of the trip, from lake Balkash to Mount Mashu. As observed before and as additionally discussed below, at Gilgamesh time lake Balkash was almost certainly much larger, with a length close to 1000 km and a width possibly over 100 km on average. We do not know where the temple of Sin was, certainly close to the ancient higher shore, so at some distance of the present shore. A look at the map of the Times Atlas of the World, Comprehensive Edition, 1974, suggests that Gilgamesh, who presumably had coasted the western side of the Tien Shan (Mountain of the Sky), may have crossed the Chulili hills in the pass where both a road and a railway exist now, near the towns of Khantau and Burubaytal, hence approaching the lake at its southern shore. At his time the lake probably filled much of the Zhusandala steppe, that extends east of the present southern side of the lake. As is the case for many flat bottomed lakes in central Asia, navigation is often extremely dangerous due to the low level of the waters. Once a boat gets stuck in the muddy bottom, putting it again in motion may be an almost impossible task, because the soft bottom, essentially consisting of quick sands, is extremely dangerous for anyone who would jump in the waters trying to push the boat.

The above navigational problem first suggested to me that the "stone stelae" that looked so important to Urshanabi and that Gilgamesh had broken, might have been magnetite, and could have been used as a compass (recall that compass comes from China, and that many elements of Chinese culture and science have their original source in the heart of Asia). This would also explain why Urshanabi was still able to navigate using apparently fragments of the broken stelae, since they of course would still maintain their dipole characteristics.

THERE IS however an even more interesting possibility. If the water level of lake Balkash at Gilgamesh time was about 150 meters higher than now, the lake would extend into Zungaria flooding the Zungarian depression and the pass called *Zungarian Gates*, a corridor about 80 km long, 10 km wide, with very steep mountains walls, appearing from Shuttle photographs just as a clear vertical cut in the mountains (let us recall the biblical statement that *at the time of Peleg the earth was divided....*) and would almost reach the present city of Urumchi. Thus there would have been a connected water basin, most certainly of salt water possibly originated from the Arctic Ocean via a huge tsunami associated with the Flood. It would have had an extension of several hundred thousand kilometers, given by a much larger Balkash connected with the flooded Zungarian basin. Under these conditions one had to navigate the flooded Zungarian gates to enter present Xinjiang.

NOW THE ZUNGARIAN gates are a very special geographical structure, characterized not only by steep walls where trails were probably not existing and (presently at least) by lack of sweet water, but they are extremely windy, so much so that caravans in the past tended to avoid them when they had to reach Kirghizistan and Khazakistan from Xinjiang, preferring to pass by the longer and more northerly way of Chuguchak, through the Tarbagatai hills, see Lattimore (1929,

1995). In view of the difficulty of navigating the flooded Zungarian Gates, with their strong winds and presumably also strong and turbulent currents, it is possible that the big stones used by Urshanabi were the so called "drag stones", i.e. flat large stones that tied with a rope to the boat were used to increase the drag of the boat, hence to stabilize it against winds and currents. Such stabilizing technique is known from Herodotus to have been used by people navigating the Nile when strong northerly winds from the Mediterranean made navigation impossible even by following the natural Nile current; the boatmen in such a case dropped large stones and so were able to navigate as under normal conditions. The technique is essentially even now used by fishermen in the Bosphorus, who have no problem in navigating to an easterly direction by following the upper current from the Marmara Sea towards the Black Sea, and are able to navigate to the westernly direction against such a current by dropping a chest full of stones that catches the lower cold current from the Black Sea towards the Marmara Sea. It should finally be noted that several huge specially shaped anchor stones have been found in the Kazan/Uzengili region near Mount Judi of last century Armenian maps in eastern Turkey, where a structure has emerged in 1948 that might be the remnant of Noah's Ark, see Fasold (1988); in this context Fasold, a marine expert dealing in recovery of foundered Spanish vessels in the Caribbeans, has proposed that the stones were drag stones stabilizing the ark against the strong winds and rough seas of the Flood.

FINALLY notice that evidence that the inner basins of central Asia were in fact huge lakes, as we have above proposed in connection with the Balkash-Zungarian system, has recently been given by the Turkish geomorphologist Erol on the basis of satellite pictures, see Ryan and Pitman (1998).

Now near Urumchi, precisely on the northern side of the Bokhda-Ula (or Bogdo Ola, *sacred mountain*) range, there is a huge solfatara, with a perimeter of some 25 km at the beginning of the 19th century, see Marmocchi (1856), where large amounts of poisonous gases are emitted, killing every being, birds included, that would attempt to cross the area. The gases would escape from the waters and might kill anyone on a boat. We are presently unable to ascertain the actual coastline of the Balkash at Gilgamesh time, but the phenomenon here described would provide a perfect explanation of the "waters of death" described in the epic. Another phenomenon that may have characterized such an extended Balkash would also have been the low visibility associated with the dust carried by the winds, very strong in Zungaria, making the availability of a compass very important.

3. Mount Mashu and the return to Uruk

ACCORDING to a recent proposal by Temple (see *Hera Magazine*, n.1, 2000), Mashu means *the place where the sun rises in the orient*. This interpretation fits perfectly with our scenario and the considerations that will be put forward in a forthcoming paper about the original land of the Sumerians. Now, to introduce our identification of Mount Mashu, let us recall some war events of the 20th century.

At the beginning of 1949 the armies of Mao Tsedong were already in control of the whole eastern part of continental China. On the western part Tibetans in the south still hoped they could keep their autonomy, while in the north, along the corridor Xining-Lanzhou, a muslim army led by general Ma Pufang tried to stop the advance of a Chinese army led by Lin Biao. The muslim army was quickly dissipated, and Xinjiang returned under the firm control of Beijing. The way was then opened for the Chinese army to enter Tibet, via the eastern, by warriors inhabited, Kham and Amdo regions. During

the few months when the Ma Pufang army still hoped to stop Lin Biao, Leonard Clark, an American military envoy by Ma Pufang, tried to ascertain whether it would have been possible to continue resistance against the Lin Biao troops from the northern Tibetan territory. Clark made a recognition of northern Qinghai, particularly of the Tsaidam Basin, rich of rivers and lakes, including two lakes, Gyaring Hu and Ngorin Hu, formed by the Yellow River at about 100 km from its multiple sources. This region was inhabited by a Tibetan tribe called the Ngolok (also spelled as Gu-Lok, Go-Log, Mgo-Log), who still practiced the ancient Tibetan pre Buddhist religion named Bon-Po, and who were excellent horsemen and fighters.

THE TERRITORY of the Ngolok included a great mountain range sacred to them and closed to foreigners. The range is over 300 km long and, except for the northern part, is surrounded by the Yellow River that defines its border for over 800 km. The name of the mountain is so given in the following atlases:

- ANYE MAQEN SHAN, in the Atlas of People's Republic of China (APRC) and in the 1992 National Geographic Atlas (Maquen is pronounced as Machen)
- AMNE MACHIN Range and ANI MACHING Shan, in the quoted 1974 Times Atlas
- AMNIE MACHIN, in the Grande Atlante Geografico, M. Beretta and L. Visintin editors, Istituto Geografico De Agostini, 1927
- AMNIA MACHER, in the book *Dach der Erde*, Berlin, 1938, quoted by Messner (1999). In Richardson (1998) the mountain is spelled as A-MYES RMA-CHEN and the local name of the Yellow River is spelled

as RMACHU

The Yellow rivers, which braces most of the range, has also a special local name, written as follows:

- MACHU, in The Times Atlas, 1895 (no local name is given in the 1974 edition)
- MAQU (read as above), in the APRC Atlas.

NOW WE CAN linguistically accept the equivalence between MAQU=MACHU with the Gilgamesh epic word MASHU, especially since these wordings do not completely characterize the exact local pronunciations, which moreover certainly has local variations and changes in time. The term ANI, ANYE (ANY-E ?, E turkish-like dative suffix?) is intriguingly suggestive of the Sumerian name of the god ANU, the head of the Sumerian pantheon. Changes from I to U are linguistically well documented, e.g. in the well known *iotization* undergone by modern versus classical Greek and in some transitions from Arabic to Farsi in personal names (e.g. ADHUB becomes ADHIB, HAMUD becomes HAMID..). Hence on linguistical grounds the sacred mountain of the Ngolok can be equated with the sacred Sumerian Mashu, a relation reinforced by the additional reference to ANI=ANU. Thus we may conclude that the sacred mountain of the Ngolok fits the basic requirements for an identification of Mashu (a sacred place; a place in the east; a place named Mashu) and we propose, using also Temple's claim, the following translation of the name/names of the sacred mountain:

ANYE MAQUEN = ANU MASHU = the place of god Anu, where the Sun rises

WE MIGHT even infer the identification ANU MASHU = NIMUSH, Nimush being the name of the mountain where Ziusudra (alter ego of Utanapishtim in the older versions of the epic) landed his boat, thus

confirming the assertion that we made elsewhere (Spedicato, 1991) that Noah and Ziusudra are distinct survivors of the Flood, by them experienced in quite far away lands, Noah in eastern Anatolia, Ziusudra in the heart of Asia. That many boats were built to survive the Flood and that more than one of them survived the event is stated in Talmud and in Midrashim, and additionally in the Koran.

Having thus identified the final destination of Gilgamesh second trip, let us make an educated guess on his route from the Zungarian Gates.

1) In a general east-east-south direction, for about 3000 km, pointing to the "great sea" in the Hittite text translation by Friedrich, that we can now identify with a real great sea, namely the Pacific Ocean

2) Skirting the northern side of the Tien Shan for about 500 km. This part of Zungaria has several oasis and rivers and at Gilgamesh time was probably even more rich in water than now. Notice that the name Zungaria comes from the Mongolian JA'UN-GHAR and corresponds to the Chinese PE-LU, which is Northern Road.

3) Crossing into the Turfan depression by way of an easy pass where the city of Urumchi is now located. The Chinese name of Urumchi is TIWA or TI-HOUAS (see Atlas Classique de Géographie, Monin, Paris, 1839-1840). Allowing by metathesis the change TI in IT and noting that W = HOUA is a liquid vowel, essentially a consonant, we can claim the virtual identity of TIWA with ITLA, thereby retrieving the information in the Hittite text according to Friedrich. Notice moreover that the present name Urumchi may be considered equivalent via the allowed transition from R to L to ULUMCHI, ULUM being intriguingly similar to the name of the god ULLU to which the place was sacred, according to the Hittite text, CHI meaning in mongolian

"place" (*place of good grazing* is presently considered to be the meaning of the word Urumchi).

4) Reaching Dunhuang, about 1000 km to the south-east, by way of the great oasis of Hami and Anxi. Notice that Dunhuang is an historically very important town, famed for the One Thousand Buddhas, but more importantly for the invaluable cache of some 60.000 scrolls by chance found hidden behind a wall in a monastery around 1920, many of them about 1500 years old, among them the first documents found written in Tocharian, a previously unknown new indoeuropean language.

5) From Dunhuang there are several routes into the Tsaidam Basin and then to Anye Maqen, a distance of about 1000 km. It is a region of elevation between 2000 and 3000 meters, rich of marshes, lakes, rivers, game and minerals. Lakes should be noted (or so were at the time Clark saw them) for the incredible transparency of their waters, allowing to see their bottom at great depths, and for the beauty of big richly coloured fish, never disturbed or eaten by the local population. This region, as is true for most of Tibet, is also full of aromatic medicinal plants. The area is also rich in rare minerals, including uranium ore. Perhaps these special features may explain certain "esoteric" details characterizing the region where Gilgamesh met Utanapishtim.

FROM ANYE MAQEN the return to Uruk can be accomplished over water. First by following the Yellow River, which is a rather peaceful river, without the dangerous gorges and currents found for instance in the Yang Tze-Kiang. Then by coasting China, Indochina, India and Makran to Uruk via a short stretch of the Euphrates. Certainly a rather long trip, some 15.000 km, but without any real great difficulties, the main danger after Gilgamesh time for this trip coming

from piracy, a profession certainly not yet developed at his times.

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- the corpus of all Gilgamesh texts provided by Pettinato
- the Hittite text version of Friedrich in Sitchin (our itineraries differ from those proposed by Sitchin)
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- the information on Anye Maqen came via my aunt Amelia Risso and my late uncle Umberto Risso's unquenchable thirst for books, among which I found the book by Clark
- the information on the solfatara near Urumchi comes from Mariuccia Risso's inspection of the Marmocchi's four volumes, bought years ago by my uncle Umberto Risso.

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Appendix: on the meaning of KA

It is now believed by many language specialists, in the aftermath of the seminal work done by professor Joseph Greenberg of Stanford University, that all human languages descend from a single original language, paralleling the recent discovery, by sophisticated genetic analysis (of mitochondrial DNA and of the Y gene), that all present humans descend from a single woman and a single father, who lived an estimated circa 200.000 years ago. The work of Greenberg has led to group the existing and the known extinct languages in different levels of families and superfamilies, one of which, called the Afroasiatic family, includes hamitic, sitic, indoeuropeans, turkish and other previously defined families.

Here we claim that the syllable KA should be related to an afroasiatic word
vowel - K - vowel with the general meaning of *people, clan* on the basis of the following arguments:

- the great anthropologist Luca Cavalli Sforza, of Stanford University, spent many years researching a tribe of Pygmies living in Cameron; as many other tribes, these Pygmies called themselves AKA, a word meaning simply "people"
- there are four main tribes in Ghana who speak a common language, whose name, AKAN, means "of the people"
- a very interesting tribe of hunters lived on a sacred mountain at the border of Uganda, Sudan and Kenya. It was led to extinction when the British prohibited their ancestral way of life based on hunting. They called themselves IK, presumably meaning "people", albeit the meaning of this name is not given in Turnbull (1972), the anthropologist who studied them. This tribe had anthropometric features unrelated to those of the surrounding Bantu tribes and a language apparently close to that of ancient Egyptians
- the word IK means "clan" in several dialects of the Berbers and in Guanche
- the Khazars had two leaders, one, the Bek, involved in administrative matters, another, the Kagan, involved in religious matters. Now the acceptable equivalences KA-GAN = KA-HAN (a Hebrew name) = CO-HEN (a high priest in Levi's tribe) = KA-HN (the king of Mongols) = CAC-ANUS (the latin name used by Paulus Diaconus with reference to the chiefs of the Avars, by him related to the Huns) seem all to have the same original meaning, that we interpret as AN = divine light, KA = of the people, in perfect correspondence with the actual role associated with these names
- perhaps the original meaning of the term Inca is IN-CA=AN-CA, = *divine light of people*
- the Afghani are divided into differently named tribes, but share, or at least shared till about half of 19th century, the common name Aklai = AK-LAI, where the exact meaning of LAI is not clear to me (perhaps by metathesis it is related to AK-EL, i.e. "divine people", "people of the gods"); in a future paper we will argue that the land where Sargon II relocated most of the 10 tribes deported from Samaria was Afghanistan/Kashmir, hence explaining the proposed origin of the word Aklai and the presence of many clearly hebraic words in local topography and in the Pashtun language

- one of the tribes living in Swat (a mountain province of Pakistan, whose name derives from sanscrit Suvasto, country of the beautiful buildings) is called locally Assaka, the Assakenoi of the Greeks, see Tucci (1978). Now ASSA (prascrit) = ASVA (sanscrit) = ASPA (old Persian), means "horse", implying, with our interpretation of the word KA, the expressive meaning *people of the horses*. It is known that the Chinese called the invading Mongols of Gengis Khan the *People of the Horses*. In Spedicato (1997) it has been argued that the real meaning of the word Hyksos, the fierce warriors that invaded Egypt at the end of the 13th dynasty, is also *People of the horses*, from HYK = AK and SOS = SUS (hebrew) = HORSE. In the framework of this interpretation we can also propose that the Saka people who invaded Sistan were the same as the Assaka, and even that such a meaning is behind the name Kazakh (an eastern Kazakh tribe is still named Sachs).

Riassunto 2

In questo lavoro discutiamo il secondo viaggio di Gilgamesh, verso il monte Mashu, sede di Utnapishtim, l' uomo sopravvissuto al diluvio e che ottenne dagli dei il dono dell' immortalita'. Identifichiamo il monte Mashu con il complesso montuoso chiamato Ani e Machen, presso le sorgenti del Fiume Giallo, tuttora sacro alla locale popolazione degli Ngolok. Proponiamo che Gilgamesh abbia raggiunto tale regione passando per l' Iran orientale (che identifichiamo con il sumero Magan/Makan) e per le Porte di Zungaria, navigando con Urshanabi il Mare della Morte, da noi identificato in un mare interno comprendente l' attuale Balkash nonche' parte della depressione di Zungaria che al tempo di Gilgamesh, circa 2500 BC, era in gran parte coperta di acqua.

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