

GEOGRAPHY OF GILGAMESH TRAVELS PART 1: THE ROUTE TO THE MOUNTAIN OF CEDARS

by

Prof. Emilio Spedicato

Summary

In this part of the paper, we consider Gilgamesh trip to the Mountain of Cedars. We claim that such region is to be identified not with present Lebanon, but with Kashmir. We also propose that hubaba was a yeti and that Enkidu may have been the son of a female yeti and of the sumerian hunter who introduced him to Gilgamesh.

Introduction:

THE GILGEMESH epic deals with the adventures of Gilgamesh, king of the Sumerian city of Uruk (biblical Erech). We know, see Pettinato (1992), that the epic in the version in the Assurbanipal library in Ninive consisted of 12 tablets for an estimated total of 3059 lines, of which about 2000 lines have survived. Earlier fragments in different languages, including Hurrian, Sumerian and Hittite, have been found elsewhere. It is possible that the epic was composed by an advisor of Gilgamesh, named Sileqiunnini, see Pettinato (1992).

There are different opinions on the historicity of Gilgamesh, who is listed in ancient tablets as the fifth king of the first dynasty of Uruk, often dated to the period 3500-3100 BC. More recently, following the chronological revision proposed by several authors, starting from Velikovsky (1953), see in particular Rohl (1995, 1998), Gilgamesh has been dated at circa 2500 BC, a date that would put him at about 500-600 years after the Flood, that is reasons based upon the zero year of several ancient calendars, internal chronologies in

the Bible, Babylonian and Egyptian records, and some archeological and dendro-chronological evidence, can be set to the 32nd century BC.

In this paper we will leave aside the question of the historicity of Gilgamesh and of the semigod qualities that he enjoys. Assuming as a working hypothesis that the epic is based upon an actual experience, we propose a new identification of the routes in his two trips, the first one to the "Forest of Cedars", the second one to the mountain "Mashu". We claim that Gilgamesh final destination, Mount Mashu in the epic text, was the mountain range now called Anye Machin in the heart of Asia, a land where quite possibly the Sumerians came from, the land which in the case of a catastrophical flood is the best protected in the whole world from the effects of a global tsunami and of long lasting torrential rains. Gilgamesh tried to reach Mount Mashu by two natural ways, that were later associated with two branches of the Silk Road. The first one, shorter but via difficult terrain and a pass of great altitude, took him to the Karakorum, probably via Iran, Afghanistan, Kashmir, from which he could

have reached Mount Mashu via the Tarim basin region. This approach failed, probably for the extreme difficulty of the Karakorum trails, often closed by landslides and snowslides, possibly also for his failure to acclimatize to high altitude.

THE SECOND route, longer by some 3000 km, allowed access to the heart of Asia by the much easier Zungarian Gates pass, less than 500 meters. Mount Mashu, we claim, is the great sacred mountain range surrounded on three sides by the Yellow River, which is still locally called Maqu (pronounce "Machu"), whose sources are not far from it. The mountain is sacred to the north Tibetan Ngolok people and till the fifties was closed to foreigners. Its name still bears obvious reference to Mashu and to the highest god of the Sumerian pantheon, Anu.

2. The trip to the Forest of Cedars. Numerics and geographical information in surviving tablets

The first trip took Gilgamesh and Enkidu to the Forest of Cedars, in a land called "Lebanon", which is reached overland. Here they killed the "monster" Khubaba and cut a very big cedar to be taken to Nippur. They returned to Uruk via water, navigating a river called "Euphrates". It is commonly assumed that the Forest of Cedars was located in present Lebanon.

THE TRIP is described in Tablets II 184 to V 266 in the Assurbanipal text. For the discussion of the route, we report passages containing numerical and geographical information, taken from the Italian version of the corpus of surviving material given by Pettinato (1992).

1. II, 184--193

Khubaba whose cry is stormy.....who can hear at 60 leagues through the forest trees..... to protect the Forest of Cedars he has been commanded by Enlil and a bodily fatigue takes possession of anyone who tries to enter this forest...

2. II, 221--224

I have made up my mind. I will leave to the far away land where Khubaba lives. I want to face a defy even if of uncertain outcome, I want to explore an unknown way.

3. III, 6-7

Let Enkidu precede you, he knows the way to the Forest of Cedars.

4. III, 48—51

He (Gilgamesh) intends to take the long travel to the place of Khubaba. He will engage a fight of uncertain outcome, he will walk over unknown trails till the day when, after a long way, he shall reach the Forest of Cedars.

**5. IV, 1--6 **

After 20 leagues they took a meal, after 30 leagues they stopped for sleep, 50 leagues they had made in their daily march, a distance of one month and a half they made in 3 days, reaching the "mountains of Lebanon".

6. IV, 78: *Gilgamesh ascended the mountain*

7. IV, 84: *... spit blood...*

8. IV, 87: *was overwhelmed by sleep*

9. IV, 100: *let us go back to the steppes*

10. IV, 91: *why am I so nervous?*

11. IV, 93: *why do I feel so weak?*

12. IV, 207—208: *a difficult trail, that a single person cannot easily take, better to be in two...*

13. V, 2: *they were astounded at the height of the cedars...*

14. V, 5--8: *there were nicely cut trails, they looked at the mountain of cedars, the place where the gods dwell, the sanctuary of Irnini, the cedar was tall and majestic...*

15. V, 5 (Uruk version): *when you (Enkidu) were young, I saw you...*

16. V, 255: *Gilgamesh cut the trees...*

17. V, 258--265: *My friend, the wonderful cedar has been cut, it no more reaches the sky. I want to use it to build a gate, of height 6 times 12 spans, one span of width, the lower and the upper hinges one span. Let it be carried to Nippur by the Euphrates.... they put the trunk in the river, Enkidu guided it, Gilgamesh was carrying the head of Khubaba.}*

Information from tablets found outside Ninive:

18. Yale tablet, 165: *They made axes of 3 talents each*

19. Yale tablet, 170: *Gilgamesh and Enkidu each one were carrying ten talents of weapons*

20. Yale tablet, 193: *The forest extended 60 leagues in each direction*

21. Yale tablet, 247--250: *Let Enkidu lead you, let him check the way, he knows the access to the forest and every trick of Khubaba*

22. Yale tablet, 255: *May he (Shamash) open to you the close trails*

23. Yale tablet, 262--269: *...in the river of Khubaba, as you wish, put your feet*

24. Baghdad tablet 1--2: *Climb the mountains crevasses, the gods have taken away my sleep...*

25. Hittite version: *When they arrived to the shores of Euphrates they made a sacrifice....from there after 16 days they were in the middle of the mountains....then they looked at the cedars..... Gilgamesh and*

Enkidu cut the cedars...when Huwawa heard the noise he got angry and said: who has cut the cedars I have grown?....

26. Huwawa said: *I will lift you, I will carry you up hill, I will hit your head, I will put you in the black earth!*

27. Gilgamesh and Khubaba, 53: *Young men like him, in number of 50, went with him...*

28. Gilgamesh and Khubaba, 82: *The sons of your city who accompanied you should not wait long for you at the foot of the Mountain.*

Remark. The "span" is about 60 cm. The "league", Assyrian *beru*, is the distance walked in two hours, commonly estimated at 10 km but possibly more, 15 km or more.

Identifying the location of the Forest of Cedars

From the above given texts, features of the Land of Cedars are the following:

- It is very far away
- Enkidu knows the way
- The taken overland route was previously "unknown", required a "long wandering" and in the final stage goes through a difficult terrain "which a simple person cannot easily take", where "it is better to be in two"
- The forest is large, extending in each direction 60 leagues: it is located in the "mountain of Lebanon"

- A river crosses the forest; by putting the cedar in the waters of the river one can finally reach Uruk
- The trip can be divided in two stages. The first one, equivalent to 45 days of normal travel, takes the two friends to the "Euphrates river". The second stage in 16 days takes them to the middle of the mountains.
- Khubaba could hear "60 leagues" away; his way of dealing with an adversary was quite peculiar: a hit on the head, lifting him, carrying him uphill, putting him in the black earth.

IT IS USUALLY assumed that Gilgamesh first trip aimed to the mountains of present Lebanon, where cedars are known to have existed since ancient times. The identification of the land with Lebanon seems supported in the text by references to *Lebanon* and *Euphrates*, despite Lebanon is mainly a modern name for a country in ancient times known as Phoenicia or with other names. It is our opinion that this standard identification must be rejected on the following grounds:

- it is in unresolvable conflict with a number of statements in the text
- it leads to a feat which is almost certainly physically impossible
- it is based upon a hasty identification of the names translated, albeit not incorrectly, as "Lebanon" and "Euphrates", with the present state and river in the Middle East
- it does not correspond to a route defined in the text, especially for the terminal phase, as new, very difficult and providing unusual bodily effects.

WE PROPOSE that the Forest of Cedars was located in Kashmir, i.e. in the mountainous region cut by the river Indus and its several affluents. We will more precisely argue that the meeting with Khubaba took place probably just north of the Hunza valley, on the way to one of the passes that lead to the Tarim basin (now a desert bordered by chains of oasis) and hence to China via the Yellow River valley. The Hunza valley, about 100 km long, elevation between 1700 and 2500 meters, is a very special place, with good climate and rich of fruits. Its natural access from Gilgit, about 120 km as the crow flies, was in the past, before the opening of the Karakorum highway, extremely difficult, taking over two weeks, see Bircher (1980). The approaches to the passes at the end of the valley were also very difficult. We will argue that the word translated as "Euphrates" should more meaningfully be translated as the "River of the cows", or possibly the "River of fertility", and should be identified with the Hunza/Indus river, while "Lebanon" should be translated as "Land of milk", this referring to the general high Kashmir region. We propose that Gilgamesh and Enkidu reached the Indus via Iran and most probably via southern Afghanistan, hence via the Khyber pass, reaching their friends at the foot of the Kashmir mountains somewhere between present Peshawar and Rawalpindi, not far from ancient Taxila, possibly at the meeting point of the Kabul and Indus river.

THE 16 DAYS of ascent to the "middle of the mountains" were most probably first along the Indus river, then, after the Indus turns easterly towards Ladakh, along the rivers Gilgit and Hunza. We identify, as said before, the "Middle of the mountains" with the Hunza valley, surrounded by steep mountains, very fertile and productive of cereals, vegetables and fruits (including over 20 varieties of excellent apricots). Till the opening in 1978 of the Karakorum highway, which enters China via the 4602 meters Khunjerab pass, the most used pass, defining the southernmost branch of the Silk Road, was

the Mintaka pass (4709m), the one where probably Gilgamesh was directed. By this way, we surmise, and then by following the Tarim river, Gilgamesh intended to reach the sacred Mount Mashu.

Our proposal is based upon the following considerations:

- The Forest of Cedars. The so called *cedar of Lebanon*, scientific name *Cedrus Libanotica*, presently grows wildly in extremely limited numbers in Lebanon, Siria and southern Anatolia, but its greatest natural habitat, in the variety *Cedrus Deodara*, is Kashmir, see the Appendix. In view of the thesis strongly argued for by Kamal Salibi (1988, 1996, 1998) that the Hebrews previous to their deportation first to Assyrian territory by Sargon II (722 BC), then to Babylon by Nebuchadnezzar (587 BC), were living on the mountains of south-western Arabia (present Asir/Yemen region) and that the Phoenicians too originally lived along the arabian coasts of the Red Sea, it may even be argued that Kashmir, and not Lebanon, was the main source of cedar wood in ancient biblical times. See again Appendix 3 for the fact that *Cedrus Deodara* is the standard timber in Asia for religious works. The timber could be brought to the Red Sea by Phoenicians via the Indus river and the Indian Ocean. Trade of timber is well documented to Sumer from the Indus valley, not necessarily by Phoenicians.

A further argument that the Forest of Cedars was not in Lebanon is its huge size, of "60 leagues", i.e. at least 600 km., in each direction. Such size is incompatible with the small dimensions of Lebanon. The Kashmir region is roughly a

rectangle of over 700 by 500 km, in excellent agreement with the epic statement. It should be noted that Kashmir, now partially deforested, was in ancient times almost fully covered by forests (of course only partly consisting of cedars), thanks to the rains brought by the monsoons. The tree line now approaches 4000 meters.

- The terms *Lebanon* and *Euphrates*. What is usually translated as "Lebanon" is a semitic word that in say the original, purely consonantal biblical text reads as LBN. Now one of the arabic vocalizations for LBN is *leben, laban*, that in Hebraic and in Arabic is a word for "milk" or "dairy products". Thus we are led to propose as a feasible translation for the term LBN in a geographical context the expression *land of milk*. Similarly the word usually translated as "Euphrates" appears in the biblical consonantal text as NHR PRT, where NHR is vocalized as {\it nahar, nahal}, meaning "river", while PRT is usually vocalized as *farat*, following the present way of calling the river Euphrates in Mesopotamia (*nahar farat/furat*). However PRT may meaningfully and without violating linguistic rules be vocalized as PAROT, plural of PARA, Hebraic word for "cows", hence leading to NHR PRT as *river of the cows*, a term perfectly correlated with our proposed *land of milk*. Now cows, while certainly present in Middle East at Gilgamesh time, were not the most common cattle, since the relatively arid land favoured, in Mesopotamia as well as in Lebanon, Palestine and much of Arabia, sheep and goat. Cows and milk are plentiful in India, where climatic conditions are better and where cheese and yogurt are basic staples. Moreover

there is a curious special feature in the animal life in the Hunza valley, namely the presence of a unique type of small cow, about as big as a St Bernard dog, that produces some 4 liters of milk a day, is very useful for transport and can graze on extremely steep slopes. Another possible vocalization of PRT is however PERATH, meaning "*fertility*", a term which has associations with fruit bearing trees and milk producing animals.

The above considerations suggest a new translation for the terms LBN and NHR PRT, tied to a natural feature of the land of extreme importance for living. It may be even wondered if the sacrality of cows in Hindu religion may predate the Aryan invasion of circa 1600 BC, being a surviving element of previous religions.

- The difficulty of the travel. The epic states that the travel was long, difficult and by a previously unknown route. Now reaching Lebanon from Uruk via the shortest way, i.e. by crossing the Sirian desert, would be an almost impossible feat, since the desert lying between lower Mesopotamia and the Mediterranean coast (the *Arabia Deserta* in Ptolemaic maps) is extremely poor in water and was always avoided in classical times. However there is a natural and easy way from Mesopotamia to Lebanon, that adds less than 15% extra mileage, namely following the Euphrates up to ancient Thapsacus, then crossing a mildly undulated land for about 150 km to the Orontes, hence following this river to the mountains of Lebanon. One must also notice that the mountains of Lebanon, maximum elevation

3086m, are easily accessible, with usually smooth slopes. Total distance from Uruk to Lebanon via this route is about 1500 km. Such a distance can certainly be made on foot by a fast walker in two or three weeks, against the six weeks that the epic states were normally needed to reach the foot of the mountain. Notice also the absurd geographical statement, in the usual scenario, that the Euphrates was reached at the end of the first stage of the trip! It is moreover almost certain that the way to Lebanon over land (the only possibility by sea would imply to circumnavigation of Africa....) was known well before Gilgamesh times, since already in Ubaidic times contacts existed between the Mediterranean and the Gulf area. Thus accepting Lebanon as the final destination would wholly remove the aspects of difficulty and novelty that are stressed in the epic.

OUR PROPOSAL is that Gilgamesh tried a new approach via land towards the Indus region. We feel that his final aim was entering the heart of Asia. He failed attaining this goal in his first trip due to the difficulties on the Karakorum trails. At his time the Indus valley civilization (Harappa, Mohenjo Daro...) was in full blossom and contacts via water (by the Indus river and then by coasting the Baluchistan/Iran coast), implying commercial trade, were well developed. So we think it was merit of Gilgamesh to try a new road (and we will discuss later how Enkidu could be a guide). In it not clear from the text precisely which route was taken by Gilgamesh. Thus ours is only an educated guess.

- To the central Zagros mountains via lower Mesopotamia, Elam and the Persian Gates.

- Crossing central Zagros towards Khorasan, ancient Carmania. The road is via mountains never over 3000m, well watered, inhabited already before Gilgamesh by tribes specialized in carpetry and among the first ones in the making of pottery.
- Towards Sistan by skirting the southern side of the Dasht-e-Lut desert. At Gilgamesh time Sistan (ancient Drangiana/Paratacene; also, the land of Rostam, the hero of the Persian epic Shahnameh), an extremely fertile region of about 30.000 square kilometers, was one of the few areas in the world with walled cities of substantial size. One of the main activities in this area was mining, in particular of precious hard stones (turquoise, agate, possibly even copper), certainly an export product. Among the cities we recall Shar-i-Sokhta, with an estimated population of about 10.000 people (Uruk may have had 50.000 people).
- From Sistan there are two natural ways to the Indus valley. The southern one goes via Zahedan, then follows the southern side of the Chagai hills, entering the Indus valley via the Balan pass, about 1000m high, and reaching the river near Mohenjo Daro. The second route follows the river Helmand towards Kandahar, then reaches Kabul via a number of easy passes. Then it follows the river presently named Kabul, in an easterly direction, entering the Indus valley via the Khyber pass, 1067m, finally reaching the Indus near Nowshera.

The starting point for the ascent to the mountains of the Forest of Cedars was probably near the meeting of the Kabul and the Indus. This is also the likely place where

the 50 friends referred to in the *Gilgamesh* and *Khumbaba* text waited for the return from the mountain expedition. The 50 friends most probably arrived via the normal route, i.e. by sea and river, whose feasibility with reed boats was proved by Heyerdahl (1980), see also Severin (1982). Because navigation along the Indian Ocean must take into account the effects of the monsoons, this means that Gilgamesh started his trip most likely around May-June, when his friends could start their voyage. The monsoon from October to April blows from NE to SW, i.e. from the Tibetan mountains towards the southern coast of the Arabian peninsula (such a monsoon is mainly dry), from June to August it blows in the reverse direction, bringing heavy rains. Monsoons are now active only below 4000 meters.

FROM THE proposed point the Indus enters the Hindukush-Karakorum ranges, characterized by deep and steep canyon-like valleys and peaks reaching over 7000 m (e.g. the K2, 8611m, the Nanga Parbat, 8126m, the Rakaposhi). In 1986, on my first flight to China, I flew over the Karakorum in the early morning. Unforgettable was the view of the extremely rugged mountain area under the airplane, characterized by very deep canyons zigzagging through forested mountains. By following the Indus river and its affluents one can reach the heart of Asia via several passes. A natural possibility is by following the Indus, then the Gilgit, then the Hunza rivers, leading to the Mintaka pass, 4709 m, that was mostly used before the construction of the Karakorum highway in the southern branch of the Silk Road.

We can give the following justification for the proposed route:

- Some information about the route had to be generally known by people in the Indus valley, since contacts and trade between the Indus valley and present Xinjiang are extremely old.

- The road is the most direct one to the heart of Asia from the Indus valley. We have the suspicion that the goal of Gilgamesh already in his first trip was to reach the place of Utanapishtim by the shortest way. We will claim in the second part of this paper that the place of Utanapishtim is a sacred mountain near the sources of the Yellow River. Failure to cross into the Tarim basin, most probably for acclimatization difficulties and the impassibility of the trails, often closed due to landslides, led Gilgamesh to substitute the original aim with the killing of Khubaba and the cutting of a great cedar.
- A number of names in the Hunza region share intriguingly the first syllable in Khubaba, indicating a possible common origin and meaning (that presently I am unable to specify). Such are:
 - the names of a pass and river, KHU-njerab, KHU-njerabi
 - the name of the river HUNza; this is also the name of the valley and is the ancient name of the main town, now called Baltit
 - the name of other small town: KHU--dabad, Mor--KHUn....
 - KHU-rukuts, the name of one of the four clans of local population.

We should note that the fact that KHU is often followed by N in the above names suggests, that perhaps the sound of the Sumerian syllable KHU might be closer to KHUN.

Some information on the local population is interesting, even if the present people are probably of later origin. The local people are the Burusho and speak a language, Burushaski, apparently unrelated to any other world language, extremely rich in words defining different states of objects, persons, animals....The Burusho are very strong physically, walk fast over steep trails, have almost zero child mortality, live usually over 100 years, father children at very high age, keep perfect eyesight and hearing till their last days; before the opening of the Karakorum highway, their diet was based mainly on fresh and dried fruits.

- The epic contains a geographical reference to Saria, as a country not far from the Forest of Cedars, usually assumed to mean Siria. We notice that SR can correspond to ZR, which appears in the name of a Hunza valley village, ZARA-bad, and in the first mountain region crossed by the Indus, which is Ha-ZARA.

WE SUSPECT that the Hunza valley, elevation between 1700 and 2500 meters, gently sloping (but with a very difficult access, hence the need of "being in two"), now well cultivated, was the place where Gilgamesh found the great cedar forest, intersected by trails and "taken care of" by Khubaba. Here we suspect the great cedar was cut, to be transported to the foot of the mountains by flotation over the river. The meeting with Khubaba appears to have occurred further on, at higher elevations, since the symptoms indicated in the epic, i.e. weakness, fatigue, strange dreams, loss of blood, sleeplessness, are clear symptoms of mountain sickness. The fact that they affected Gilgamesh and not Enkidu is intriguing and a possible explanation will be offered in a next section. Gilgamesh was a man of low plains and a fast walker. From Hunza valley the trail goes up very steeply, so he may have been unable to acclimatize when he reached elevations over 4000

meters. The failure of crossing into the Tarim basin may be explained, in addition to the physical problems of mountain sickness, by the impassability of the Mintaka pass, due to landslides or snowslides. Since snowslides are often produced just by human high voices, one wonders if the great cries of Khubaba may have resulted in starting a snowslide.

4. Numerics of the first trip

It is stated that the route from Uruk to the river Euphrates, was equivalent to a month and a half (i.e. to about 45 days) of normal travel, but was accomplished in 3 days, corresponding to a total distance of 150 "leagues", or, in Assyrian, "beru".

LEAVING ASIDE the question of how this distance could have been made in three days (we think there is a symbolic meaning behind), we note that 150 beru imply a distance of at least 1500 km but possibly even over 2700 km. Indeed one beru being equivalent to the distance walked in two hours, presumably in the easy flat region of Sumer, it would depend on the speed of the walker. Nowadays a person used to walk can easily make 12 km in two hours; persons well trained in walking, which was the normal way of moving in Sumerian times, could certainly make more than 12 km in two hours, possibly even 18 km. Now the distance "as the crow flies" between Uruk and the Indus/Kabul joining point is about 2400 km. If the 150 leagues should be considered as the shortest distance between the two points, this would give a value for the beru of 16 km, certainly an acceptable value. The actual overland route is not along a geodetic and has unavoidable detours. A reasonable estimate of it would be around 4000 km. Such a distance can certainly be covered in 45 days by trained people who know the way. Gilgamesh and Enkidu, and most of their contemporaries, were certainly well trained in walking over long distances and Enkidu is claimed to have known the way (we will suggest in the next section

why). Now 4000 km divided by 45 makes an average walk of about 90 km a day. That this is not an impossible feat is shown by the following examples:

- Fyona Campbell, see her book *On foot through Africa*, Orion, 1994, in her twenties crossed by foot North America, Australia and Africa (this continent from Cape Town to Tanger, over 17.000 km). In Africa she usually made daily stages of 50 km, in less interesting Australia she often made 80 km a day. She is not a tall woman. She walked about 10 hours a day and spent lot of time in reading, washing, hearing radio news (two people with a jeep were waiting for her), talking and even flirting with her escorts.
- Geronimo, the well known chieftain of the Apaches, used to raid the Mexicans in the rugged Sierra Madre region. He was a very short man. In his biography, see Barrett (1906), he estimates that he usually walked 65-70 km a day during these raids.
- As stated in Polybius (III, 41 and 68) the Romans expected Hannibal to invade from Sicily, hence the main body of the army was stationed near present Trapani, in Sicily. When news came that Hannibal was going to cross the Alps, the army was relocated to Rimini via Picenum in just 40 days, implying an average walk of about 50 km a day. Roman men were usually stocky but short. Moreover Roman soldiers carried heavy weapons and food for 40 days for a total weight certainly exceeding their body weight. Notice also that a whole army cannot move as fast as two persons.
- John Chardin in his *Travels in Persia, 1673-1677*, second volume,

chapter XII, Dover Press, 1988, describes a walking competition occurring in Ispahan every year where the winner walked from 4 in the morning to 6 in the evening, covering a fixed length corresponding to 36 French leagues, i.e. about 180 km, at an average speed hence of about 13 km per hour; he says that people complained the winner was not so good, since in the reign of Sha Sefy the winner had made the walk in 12 hours, at 15 km per hour.

IN VIEW of the above examples, and the fact that Gilgamesh and Enkidu were unusually tall, strong and trained, reaching the Indus river in 45 days by foot was probably a possible feat.

The ascent to the Middle of the mountains where the Forest of Cedars was located took 16 days. The description of the Forest (with good trails, taken care by Khubaba) does not seem to relate to a wild pristine forest on the slopes of steep mountains, but more to a forest somehow managed in an area somewhat flat. We guess that the location of the Cedar Forest was the Hunza valley, over 100 km long, about 10 km wide, gently sloping. The Hunza valley can presently be reached over the Karakorum highway from the Kabul/Indus meeting point in about 600 km (via an older road by the Malakand and Shangla passes in about 530 km). Along ancient trails distance would have been certainly different, and it is difficult to estimate if it was longer or shorter (some ancient trails cut directly through very steep slopes, where modern roads must wind up their way). Assuming a distance of 600 km this would correspond to about 40 km a day, thus a distance per day about half that made in the easier way from Uruk to the Indus; 40 km a day over mountains is certainly a possible feat. The trail from Chilas, near Gilgit, to the beginning of the Hunza valley is very difficult, winding up and downs, since

the river bed cannot generally be followed due to the steep walls of the canyon like valley. Still it does not go over elevations higher than those met in the crossing of the Zagros mountains or on the way from Sistan to the Indus. Hence the mountain sickness symptoms of Gilgamesh described in the epic should not have occurred before arrival to the Hunza valley. Therefore it is likely that the final event, the meeting with Khubaba, occurred at much higher elevations, on the way to the Karakorum passes, probably over 4000 meters. Let us recall that the tree line is now close to 4000 meters and that at Gilgamesh times, a period of climatic optimum, it was possibly higher. A further reason why the meeting with Khubaba must have taken place in the 4000/5000 meters region is given in the next section.

We do not believe that the real aim of the first trip was to kill Khubaba or to cut cedars. We think that the trip had to be terminated on the way to the Karakorum passes for the following reasons:

- the battle with Khubaba was difficult and he was not alone, other similar beings were in the region
- due to mountain sickness and the need to still go several hundred meters higher Gilgamesh felt unable to continue
- most likely, the trail was made impassable by landslides or snowslides.

AFTER THE KILLING of Khubaba a great cedar was cut, to be used for the gate of a temple in Nippur. Most likely the gate would be constructed using single planks. Since the given height of the gate is 72 spans, corresponding to about 43 meters, the cut cedar had to be at least 45 meters long, with a likely average diameter of over 2 meters. Cedar trees in pristine forests could certainly reach this height. Thus the cut cedar volume

would have exceeded 150 cubic meters and its weight would have been at least 100 tons. It was certainly possible to cut such a giant using the huge axes in dotation to Gilgamesh and Enkidu. It would also not have been impossible to roll such a tree into the Hunza river and float it down till the meeting point with the 50 friends, wherefrom it could have reached Uruk along the well known water way used in trade between Meluhha and Sumer. It appears however to this author that it would have been impossible to accomplish this feat if the cedar was cut in the mountains of Lebanon. Indeed, even assuming that the Orontes had enough water and gradient to float it to the closest most convenient point to reach the Euphrates, say to the region of Hama, from there the huge tree should have been hand carried, pushed or pulled for over 100 km of country not precisely flat. This would have meant a weight of at least 2 tons for each man, a probably impossible feat, which could have resulted also in substantial damage to the trunk. Moreover we feel that such a sweaty slavish job would not have been considered appropriate for a person being two thirds divine and for his friends, certainly chosen among the highest ranking families in Uruk. We think that this statement in the text strongly contributes to rejecting present Lebanon as the place where the cedar was cut.

Who were Khubaba and Enkidu?

HERE WE WILL offer a suggestion on the nature of Khubaba, and possibly of Enkidu. We let aside the possibility that the two characters are fictional or mainly loaded of symbolic elements. We try to identify which real creatures they could have been.

According to our scenario the meeting with Khubaba took place in the heart of the high mountains between the Indus, the Tarim and the Amu Darya basins, a region where the three great ranges of Karakorum, Pamir and Hindukush join. That this is a very special

place in history of mankind will be claimed in a forthcoming paper. We also observed that the meeting took place most probably on the way to the Mintaka pass and at an elevation well over 4000 meters, due to the mountain sickness symptoms shown by Gilgamesh. It is important to note that Enkidu did not show such symptoms. Now people in the Himalaya, Karakorum, Pamir regions, and till last century at least also in Caucasus, have strong belief in the existence in their mountains of great bipedal walking creatures with the following features:

- they are tall, often over 2.5 meters, very hairy, with rather short legs but arms reaching the knees; they are endowed with extraordinary good hearing
- they live in caves above the tree line, in the 5000 meters region
- they keep hidden during the day, hunt in the night, especially in misty nights, but are occasionally seen at dusk
- they do not usually attack man nor do they eat human flesh. They eat roots and animal meat. They like yak meat. In the night they approach the fenced places where yaks are kept, jump inside, kill the animal hitting his head with their powerful fist, jump out with the yak under their arms, run overhill and hide their prey under earth or sand to keep it for the next days away of reach of vultures (the meat will actually freeze and keep for several months)
- occasionally they are known to carry off women or men with whom they have sexual intercourse, leading, it is claimed, see below, to offsprings.

These creatures are known with different names, the common name in the west, "yeti", being just a local name in Nepal meaning "the man in the rocks". Among other names we recall *tshemo*, *dremo*, *tschemong*, *meti*, *sciukpa*, *migo*, *kangmi*, *baman*, *jangal*.

MOST PEOPLE think that the stories about the yeti (here we will use this well known name) are product of imagination. This was also the opinion of the great climber Reinhold Messner, till the day, 19th July 1986, when, while trekking the high reaches of the Mekong in south-east Tibet, at dusk he saw not far in front of him a great creature, well over two meters high, moving fast and silently. He was utterly surprised and could not believe his eyes. He moved to the place where the creature had been and there a great deep print was visible in the soft soil, which he photographed. Some minutes later he saw again the creature, moving fast, stopping sometimes, emitting hissing sounds. It had stocky legs and long arms. It disappeared uphill, apparently running with both legs and arms. See Messner (1999).

At the end of the 19th century a female yeti, named Zana, was caught and kept in a semi-domesticated state in the Caucasus village of Tkhuina, as documented in official reports by academicians Porsnev and Maskontsev. She had a huge hairy body, used stones as weapons, could run faster than a horse, was unable to speak but emitted sounds, had extremely good hearing, her face was terrifying with reddish eyes. She learnt to do simple jobs, as collecting wood. She copulated with village males producing babies! As soon as a baby was born, she washed him in the freezing waters of the local river, which resulted usually in the death of the child. Four babies however survived, were taken away from her and developed as normal persons. The last of her children, named Khvit, died in 1954.

It is clear from the above that Khubaba shares with the "yeti" several elements: big

hairy body, extreme good hearing (he hears sounds from at least 600 km; recall that elephants hear at several hundred km distance, whales at over 1000, birds migrating from Arctic to Antarctica probably hear sounds from over 10.000 km; such hearing is in the low frequency range, related to large atmospheric waves produced by macrogeographical structures acting on the atmosphere), and, very intriguingly, the special way of dealing with big preys: a hit on the head, lifting the dead body under the arm, bringing it uphill, hiding it in the soil. It is therefore natural to hypothesize that Khubaba was a huge yeti, one exemplar of a population of human-like creatures acclimatized to high elevations. The persistent stories of yeti-human copulations with production of offsprings, if true, necessarily imply a strong genetic similarity; moreover the story that the children of Zana grew as normal persons implies the essential equivalence of the genetic material, differences thus being behavioral and probably related to the very special ecological niche utilized by the yeti. Here we certainly have one of the most fascinating questions on the origin and the evolution of homo sapiens.

THE ABOVE FACTS moreover suggest that Enkidu, whom Khubaba claims to have met when he was young, might have been the offspring of a yeti, who was able to overcome the cultural gap between "wild man" and man not really because of his love making with the sacred prostitute, but because he had been taken very young by the hunter (who may have killed his parents or found him orphaned). Perhaps and more interestingly the hunter had a yeti "wife", about whom he was loath to speak, so that the real story of Enkidu's first years was not what the epic says. Our last hypothesis, moreover, would also explain how Enkidu could communicate with Khubaba and how he could speak Sumerian, two feats that are left unexplained in the text and that could have no other

explanation if not a miraculous one, or that Enkidu is a totally fictitious being.

THE EPIC states that Enkidu knew the way. Not much is said about the hunter who informed Gilgamesh about Enkidu. Maybe this man was he too a great traveller, moving on the vast steppes east of the Tigris, and on the mountains and plateaus of Iran and beyond. He might already have visited the Karakorum reaches where Gilgamesh went. His feat had clearly to be censored, not to

detract from the glory of the king. That primitive hunters had no problem in walking thousand of kilometers during their hunt for game is a fact. Coronado described the plain Indians following the packs of buffalos from the Gulf of Mexico to inside present Canada. Van der Post wrote that once a Bushman followed a wildbeast he had only wounded with his arrow for an estimated 800 km till the beast collapsed.

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Riassunto 1

In questo lavoro discutiamo il primo viaggio di Gilgamesh, quello compiuto con Enkidu in direzione della Foresta dei Cedri. Proponiamo che il termine geografico usualmente tradotto come Libano si riferisca all'attuale Kashmir, "paese del latte" e ricco dell' albero Cedrus Deodara, tuttora fonte dell' unico legname utilizzato in Asia nelle costruzioni sacre. Proponiamo che Humbaba fosse uno yeti, ucciso nella valle di Hunza, dove riteniamo che Gilgamesh sia passato intendendo raggiungere la regione del Takla Makan passando per il passo di Mintaka.

Appendix: on the cedars in the world

Cedars grow naturally on the vast expanse of land from the mountains of Morocco up to the Himalayas, an arc of over 10.000 km. Cedars are denominated as belonging to different species, but in fact are now considered to be all a same species, which has developed varieties. In fact, the following is a statement from The New Encyclopaedia Britannica (1992): *Distinction between the four species of true cedars are often difficult to define. Interbreeding occurs, and some authorities consider the four to be geographical variants of one species, namely the cedar of Lebanon.* Or, perhaps, the original species was the Cedrus Deodara, see below, that could have been brought to Lebanon by Phoenicians.

Here are some information on cedars, taken from Enciclopedia Treccani, 1953 edition.

- Cedrus Atlantica (Manetti, 1842): grows in Morocco and Algeria, between 1000 and 2000 meters
- Cedrus Brevifolia (Hook, 1880): is found in Cyprus between the villages of Kykko and Irka, elevation about 1300 meters
- Cedrus Libanotica (Linneus, 1831): grows in southern Anatolia and Siria, including Lebanon. Maximum height about 40 meters, but branches can spread to 100 meters, making it cumbersome for timber production. The first Libanotica was brought to England and planted in Chelsea in 1683, was first planted in Italy at the Botanical Garden of Pisa in 1787
- Cedrus Deodara (Roxb, 1832; Laws, 1838, who called it Pinus Deodara): grows in the Hindukush, in Afghanistan and in Beluchistan, between 1100 and 4000 meters, optimal growth occurring between 2000 and 3000 meters. It has leaves longer than in the Libanotica, a straighter trunk and less massive branches (I had one such tree in my garden: it suffered due to the climate of the north Milano region and died after some 20 years of unhealthy life). Deodara's timber is locally called *the wood of gods*. It is used in Asia to build temples and to produce religious statues. Reasons for this privilege may include its reddish colour and the facts that it is insect repellent and extremely resistant to weathering (the zapote tree, whose wood is heavier than water, while cedar is rather light, and which also does not rotten in humid climates, was similarly used in Central America, but is not found in Asia). Notice that Tucci (1978) quotes the existence of supporting wooden beams (type of wood not specified, I would guess cedar) 30 meters long in the Mosque of Calam in the Swat, a Kashmir region. I am not aware of what is the maximum lengths of beams in Asian temples, in particular if there are any corresponding to the length of the cedar cut by Gilgamesh.

Correspondence address:

Prof. Emilio Spedicato
Universita degli Studi di Bergamo
Dipartimento di Matematica, Statistica,
Informatica ed Applicazioni
Piazza Rosate, 2
24129 Bergamo, Italy
Tel.: ++39-035-27-75-14
Fax: ++39 035-24-95-98
e-mail: emilio@unibg.it