Zoroastrianism in Northern Shirvan
(with permission, excerpts from Hamazor Issue 1/2017 pp 8-12, publication of World Zoroastrian Organisation, London, UK)

On October 5th 2016 the building of an Atashgah at the site of an ever-burning natural flame near the village of Khinalig in the Caucasus Mountains of the Republic of Azerbaijan was completed. The structure is the result of the vision and efforts of World Zoroastrian Organization (WZO) and Farroukh Jorat, an engineer and WZO’s member from Baku. This is the story of the realization of Farroukh Jorat’s vision and the building of what may well be the highest Atashgah in the world today.

The village of Khinalig in Guba (Quba) district of Azerbaijan (variants of spelling – Khinalug, Xinaliq) located in deep of the mountains at an altitude of 2200 meters and 57 km from Quba.

5 km far from and 1000m higher (~3000 m total altitude) than Khinalug village located ruins of the natural flame fire temple (“atashgah”). Place of Atashgah is on the Gizil Gaya (Qızıl qaya, “Golden rock”), slope of the Shah-dagh mountain (“Mountain of king”). Eternal flame burns due to a field of methane clathrate (supramolecular compound of methane and water), the clathrate which looks like snow, is easily transformed into water and methane.

In general, Khinalig located in the historical province called Shirvan. Shirvan (or “Sharvan”, or “Shahrban”, Old Persian “xšātrapāwn” – the governor [1]) is a north-east region of the Republic of Azerbaijan and south region of Daghestan (Russia), between the western shores of the Caspian Sea and the Kur River. The earliest mention of this region is in Herodotus’s “History” as the XV satrapia of Achaemenid empire [2]. Also Old Iranian archaeological material was uncovered here [3]. More centuries later Sassanian Emperors built cities and founded military garrisons to strengthen their positions in Shirvan [4]. They founded many cities in Northern Shirvan – Darband (Derbent), Shabran and others.

Ruins of atashgah of Khinalig village

Map of Shirvan of Sassanian times [5]
Darband with its famous walls of Sassanian fortress was the largest city in Northern Shirvan.

Sassanian fortress of the city of Darband (so called “Narin Gala”), bird’s view

There are more than 10 inscriptions on the walls in Middle Persian. One of them is ZNE W MN ZNE 'plbl dlywš ZY 'twrp’tkn 'm’lkl (ēn ud az ēn ābarbar Daryuš ī Ādurbādagān āmārgar) – “This and higher than this made by Dariush, accountant of Adurbadagan (ie Azerbaijan)”. 

Middle Persian (Pahlavi) inscription on the Darband’s wall
According to chronicles, shah Ardashir I Papakan or Khosrov Anoshirvan presented the title of regent of Shirvan to his close relative, who became a progenitor of the pre-Islamic Shirvanshah dynasty [[6, 7, 8].

Sassanian soldiers settled here and their descendants nowadays are known as Tati people. The Tati people are an Iranian people of Shirvan and their language derived from Middle Persian (Pahlavi) and has differences with Farsi. Their self-designation is “Tati” or “Parsi”. (Also the term “Parsi” used by some groups of populations in Afghanistan and best known as the name of Zoroastrians of India. Also the term “Tati” used by some groups of populations in Northern Iran, whose language belongs to North-Western group of Iranian languages.).

Earliest mention of a Zoroastrianism in Shirvan also dates back to the Sassanians, who founded here the fire temples [9]. Mobed Kartir (III c. AD) wrote in “Kabah of Zartusht”:

“...And I also, by command of the King of Kings, put in order those magi and fires which were for the territory outside Iran ... and the country of Armenia and Georgia, and Albania (one of names of Eastern Transcaucasia – F. J.), and from Balaskan to the Alans’ pass (area of Darband – F. J.). And Shahpuhr, King of Kings, with his own horses and men visited with pillaging, firing, and havoc....” [10].

There are also some Zoroastrian toponyms in Northern Shirvan. In the Gakh district of the Azerbaijan Republic, there is a mountain named Armaityi (Armadian), on top of which are the remains of a round firetemple dating from the V-VI century. Among the local people, it is called Peri-Gala (“Maiden tower”) [11].

In 642 AD Arabs invaded in Transcaucasia. Shirvanshah Shahriyar (the ruler of Darband) was converted to Islam. But despite this, Zoroastrianism remained in Shirvan for many centuries.

Local practice of exposing corpses on the mountain tops in the IX century described by al-Masoudi: “When anyone of them dies, they put the corpse on a stretcher and carried into the open place (“maydan”), where it is left for three days on a stretcher ... This practice was common among residents of this city (Darband – F. J.) for 300 years... On the fourth day the they placed the corpse in the rock tombs or in stone boxes (astodan)” [12].

Also there is one dakhma, located near the Buduh village in Quba district of Azerbaijan. This dakhma composed of roughly worked stones and has the main towers and buttress. The height of this dakhma is equal to 8.0 m. The flat top floor of the two cylinders has a frame in the form of a parapet, equal to a height of 1 m. Another dakhma with fragments of human skeletons was found near Sokhyub village in Quba district too. This structure called by the locals as “Dev Gala” (“Devil Tower”), which corresponds to Zoroastrian ideas about dakhma as the assemblage of the devs, because death is seen as the triumph of evil, and the dead becomes sacral unclean, causing a desecration of all living [13].
“In 2000, on the slopes of the gorge “Yeti goilar” attention of Derbent archaeological expedition has attracted a small cave (depth 1.7 m, width 3.6 m, height 1.8 m). Its inspection led to the assumption that it is a dakhma, Zoroastrian burial structure for placement of corpse to complete defilement. Then bones of the skeleton were placed in a small ossuary (astodan).

Derbent dakhma compared with the structures described in Dadestan-and Denig.

In the room at the ground level a long and narrow pit was discovered, surrounded by 10-12 cm strip of clay. It was man, lying on his back in the extended position.

Zoroastrian funerary complex. On the foreground – “House of the Dead”, on the background – dakhma’s entrance in the rock

The layer isolated skeleton from the rest of the room for yashti-sedush and shab-girih performance.

In the corner of the room, next to the first burial, in a small niche in the rock with burnt bricks of XIII-XV centuries (astodan) was found an ossuary with neatly stacked complete skeleton of a man without anatomical bone order.

Interpretation of uncovered burials made it possible to compare the detected structures with described in Videvdat as zad-marg-khane (“house of the dead”), a “temporary grave” before its transfer into dakhma. “House of the dead” of XIII-XV centuries near Derbent is the evidence of a Zoroastrian community in the city”.

Adam Olearius (1599 – 1671) called Caucasus Mountains as “Elburs” and wrote about the sacred fires on Shah-dagh mountain:

Elburs is the part of Caucasus, bordered by Georgia and the area of Tabesseran... Earlier Persians kept their ever-burning fire on Elburs and worshiped it. Now such fires and their worshippers (as reported Teixera and others)... fled to India... [15].
Interesting information about Zoroastrianism in Darband even in XIX century is given by D. Shapiro in “A Karaite from Wolhynia meets a Zoroastrian from Baku” [16]. Avraham Firkowicz, a Karaite collector of ancient manuscripts, wrote about his meeting in Darband in 1840 with a “fire-worshipper”. Firkowicz asked him “Why do you worship fire?” The fire-worshipper replied that he does not worship not fire, but the Creator symbolized by fire called $Q'rt'$. Pahlavi $Q'rt'$ (derived from Avestan kirdar) signifies “creator”.

The original population of Shirvan spoke Nakh-Daghestanian languages. The Khinalig people are an indigenous people of Azerbaijan and speak the Khinalig language, an isolated Northeast Caucasian language.

Territory of Khinalig village was declared by Azerbaijan President Ilham Aliyev as nature reserve.

Despite that, the Khinalig population is Muslim, their religious views are a combination of Islam and Zoroastrian beliefs; fire is the subject of special respect still.
Worshiping pirs and performing ceremonies near them is forbidden and reprehensible in Islam. Nevertheless, even the ruins of Zoroastrian shrines revered by Islamized population of Khinalig until the present day.

The head of the Khinalig archaeological expedition research fellow of the Institute of Archeology and Ethnography of Azerbaijan National Academy of Sciences Dr. Idris N. Aliyev in his “Summary of archaeological excavations in the area of the “Atashgah” gas source near Khinalig village” wrote:

“Atashgah” where the fire burns for centuries located 5 km to the west of Khinalig village. According to Khinalig legends this place is sacred, and even after the adoption of the Islamic religion in the minds of the locals, it is sacred in nowadays. This shrine locals connect with their past, when they were Zoroastrians, and this tradition is kept in the understanding of their past [17].”

According to local legend the name of the last priest was Pir Jomard “who lived 1000 years ago” (in IX-X century).

The problem of preservation of Zoroastrianism is currently associated with a number of factors. Save and progress of Zoroastrian religion should be a spiritual (with the help of the priests) and through the construction of fire temples.

Fire temple is the building of sacred character, spiritual space in everyday life. This is not just an architectural structure, it is a material symbol of Zoroastrianism. Their relationship is indissoluble. Denying the need for preservation and restoration of the temples of fire is denying the Zoroastrian religion itself. I set a goal to restore the forgotten fire temples of the country.

In general, atashgahs with eternal burning natural flames of oil and methane are one of unusual characteristics of Azerbaijan. So far survived several such places. The best known atashgah located near Baku in Surakhani.

The second most famous fire temple is Atashgah of Khinalig. Many people in Azerbaijan heard about it, but few of them have seen it firsthand due to its inaccessibility. The first time I saw it with help of my friend Fariz Abasov.

Fariz Abasov is a journalist from Baku with Khinalig descend. He visited Khinalig many times and made a website and series of photo shoots about this village [18].

Together with Fariz I came to atashgah of Khinalig and see it after a long road.
Ruins of atashgah were as a pile of flat stone slabs with several places of escaped weak flames without a common stream of fire.

Clear construction did not survive, alas. It was decided to rebuild the temple in accordance with the ancient Zoroastrian traditions.

Unlike modern fire temples where the sacred fire is hidden from strangers, in the ancient times Zoroastrians kept sacred fire also in open altars such as chahartaqs.

According to Sassanian tradition, atashgahs in this country constructed as chahartaq – a dome with four arches. Various designs of chahartaqs described in more detail in the article of K. E. Eduljee [19]. Arched walls of the sacred atashgah are symbolic protection from desecration of the sanctuary, and at the same time allows them to spread its sanctity as far as possible.

Design of chahartaqs provides the fresh air flow and traction of combustion products.

Chahartaqs served for people not only as atashgahs (“the places of fire”), but also as a solar calendar. It is known, that the important role in agriculture plays the change of the seasons, which depends on the sun position (vernal equinox is the beginning of the sowing). Determination the days of the most important agricultural dates can be proceeded by periodic monitoring of sunrise using chahartaq as astronomically calibrated structure providing observation of the sun ray at characteristic points.

Despite the relatively simple structure of chahartaq, to date, there are several different versions its structure. Which one to choose? At first, I decided to base on Surakhani chahartag of Shirvan architectural style.
Atashgah of Surakhani with one central and four corner fire exits. Considered as one of the prototypes for atashgah of Khinalig

I sought the advice of our friend, the architect and traveler Jorg Ostrowski from Canada. Jorg Ostrowski is an architect and has been in private practice specializing in design, building and consulting of historic preservation and EcoPlus projects. His newest and biggest project is the transcontinental RecoFit of historic caravanserai along the ancient Silk Road, from Iran to China, to honour and build upon, promote and perpetuate, the “safe havens” of yesterday, and convert them into modern institutes of sustainable peace and international cooperation, human dignity and respect, cosmopolitan understanding, multicultural gatherings and events, foreign exchange and trade, cultural expression and local celebration, scholarly research and applied learning, as a dynamic symbol of a paradigm shift from war to peace with roads and bridges between the west and the east.

Architect Jorg Ostrowski during his expedition in Khinalig

Jorg advised us to take as the foundation of Niasari chahartaq in Iran, because the structure of Surakhani chahartaq adapted to very high pressure of the gas and has the flame outputs once in five places. The gas pressure at atashgah of Khinalig at an altitude of 3 km is much lower than at Surakhani and therefore smarter to build chahartaq with one central fire exit.
Atashgah of Niasar (Iran) with a pedestal and a hemispherical dome. Considered as one of the prototypes for atashgah of Khinalig

To conduct the construction work, it requires drawings of chahartaq with accurate dimensions. Jorg Ostrowski involved Dorna Soroush into this project.

Dorna Soroush is an architect and designer of Iranian origin living in Canada. She received her Bachelors and Master of Architecture form the University of Genoa specializing in urban design. Her Master thesis was focused on the design of library at Yazd in Central Iran. She moved to Canada in 2014, and during this time has worked for several companies under the supervision of Jorg Ostrowski, also at Masinfar as a designer and cost controller for UN refugee DRR housing. Moreover, she has taught cost control at the Southern Alberta Institute of Technology (SAIT) in Calgary.

Architect Dorna Soroush prepared drawings for construction of atashgah of Khinalig

Dorna based on photos of Niasari chahartaq reconstructed its drawing. Atashgah was a chahartaq with stepped arch and a hemispherical dome. It has four holes to improve the exhaust of natural gas combustion products. Due to this the flame of the atashgah will reach up and become more visible from a distance.
Initial drawing of atashgah of Khinalig (by Dorna Soroush)

Places of its supports and inputs in line with the provisions of the sun during the solstices.

Orientation and structure of chahartaq allows to determine the days of solstices and equinoxes (by Dorna Soroush)

One of the prerequisites of the project is to obtain permission from the government to carry out restoration work on ancient monuments. In Azerbaijan, it is responsible for the Ministry of Culture and Tourism, where an application for restoration of atashgah and its drawing was sent.

After a detailed examination Dr. Idris N. Aliyev has approved the idea, but with the changes in its drawing:
1) according to Shirvan architectural traditions, the dome should have a 60° pyramidal shape (as in Surakhani atashgah);
2) to avoid a landslide slope and subsidence chahartaq must have pedestal (as in Niasari atashgah)
3) to avoid flooding of flame by melt snow and water the crater must rise above floor to a height of two feet

Taking into account the latest requirements and site size limits chahartaq should be with somewhat smaller dimensions.

*Draft of chahartaq after expert’s corrections (pedestal, pyramidal dome and elongated fire crater)*

Along with this, I asked World Zoroastrian Organization (WZO) with a proposal to sponsor the restoration work. WZO’s leadership on behalf of chairman Shahpur Captain and Firuz Madon Foundation came forward to sponsor the restoration of the atashgah.

*Shahpur Framroze Captain, WZO’s chairman*

Shahpur Framroze Capitan was born in Karachi, Pakistan, and immigrated to the UK in 1956. He served the Zoroastrian community of the UK and overseas as the president of Zoroastrian Trust Fund of Europe (ZTFE) and Chairman of WZO that he helped found in 1980.

After the decision of the basic questions I proceeded to the selection of the team of builders. There is a museum in Khinalig village. Director of the museum is historian and school teacher Hasan Aghayev, who with great joy took the idea of restoring and offered command of four builders from Khinalig.
Khinalig museum

To build in the mountains is very difficult, and no one else except the mountain people are not handle. Construction works have been started with the help of Hasan at the beginning of August 2016.

Due to the hard accessibility of atashgah building materials and tools were brought from Khinalig through the winding and narrow mountain trails.

Alignment of the site and the laying of the foundation stones is one of the most important steps which influences the rest of the construction.

Making the foundation. Open flame is under the boulder for safety reasons

Making the foundation. Methane exit is under the boulder for safety reasons
The first rows of the masonry dried in a day, then the mason began to build the following rows. To build high walls completely in one day is dangerous, because it can cause the collapse of the whole structure. Masons used plummet to control the straightness of walls.

*Constructing the fourpillars*

For the construction of arches, the mason used an arc-shaped plywood sheet that allowed him to stack the stones in a circle.

*The arcs*

The height of the arches is two meters high, enough for a tall man to pass under them. When the arched walls were ready, we could construct the horizontal overlap with a dome in the center.

*The arches are supported and the roof is being cemented*
The last stage was the construction of the central dome.

The construction of fire crater was the same as tandoor.

After the main stage of the construction guys lit the fire. High and bright flame lit vaults the temple.

It is the highest atashgah in the world known in Middle Ages, and the furthest northern part of the Sasanian Empire.
Atashgah of Khinalig after restoration

We hope to hold an official inauguration of the temple fire in May 2017 with the participation of the Zoroastrian priests.

Farroukh Jorat (name at birth – Akper Aliev, variant of spelling Akbar Aliyev) is an aerospace engineer. He was born in Baku in 1978 and in 1985 moved in Moscow, Russia. He was initiated into Zoroastrianism in Moscow in 2005 by Mobed Kamran Jamshidi and Anjoman Bozorg Bazgasht. Since 2010 he lives in Baku. Farroukh is best known for his contributions to research the history of Zoroastrianism in CIS countries. Life member of World Zoroastrian Organization.

Contact e-mail: farroukh@blagoverie.org
1. *xšaθrapāwn* is the same as satrap (Online Merriam-Webster Collegiate Dictionary)
2. Herodotus, *History*, Thalia, 93
4. V. Minorsky, *A History of Sharvan and Darband in the 10th-11th centuries*
5. Edited fragment of map extracted from Дашков С.Б. Царя царей Сасаниды, 2008 (in Russian)
6. Šervānšāhs, Encyclopædia Iranica, C. E. Bosworth
8. al-Baladhuri, *Book of the Conquests of Lands (Kitab Futuh al-Buldan)*
9. Farroukh Jorat. Zoroastrians of Apsheron: from Sassanians to present days. Online publication by Kaveh Farrokh
10. Royal inscription found on the Kabah of Zartusht. An account of how Zoroastrianism was propagated beyond Iranian territories during the Third Century, and other religions suppressed.
13. Farroukh Jorat. Dakhma in Quba district of Azerbaijan Republic. Online publication on fravahr.org (site is closed)
17. Dr. Idris N. Aliyev. Summary of archaeological excavations in the area of the “Atashgah” gas source near Khinalig village, August 8th, 2016
18. Fariz Abasov’s page at YourShot
19. K. E. Eduljee “Early Chahar-Taqi Fire Houses and Temples”. Online publication