

**Professional scientific sessions for art, architecture and urban planning Thursday evenings**

**Held in: Conference hall of Herampey Consulting Engineers**

**Date: 13.03.2017**

**Title: Military architecture in East, from Achaemenians to Seljuks.**

**Speakers and panel members: Mr. J. C. Voisin.**

Presentation of Mr. Voisin: He has a doctorate degree in history and archeology of middle centuries. He has studied the history of the fortifications in middle east and central Asia. From 1995 to 2000 he was the chief of the French cultural center in Beirut, working at the same time as invited professor of middle age archeology in Beirut Saint Josef University. He has been in Herat-Afghanistan, as cultural consultant and from 2008 to 2011 he has been working as cultural attaché in French embassy in Iran. He is member of Nantes-France middle age laboratory of archeology, member of Saint Josef University history and archeology annals committee. He has published many books and scientific articles, regarding the fortresses and defensive structures in southern Turkey, Syria, Afghanistan and Iran. During the last years he is spending his time in France and Iran, continuing to travel in Iran to study the Sassanid fortification systems.

Talking about the Iranian military architecture Mr. Voisin said that many studies regarding the matter has been realized and during the speech he will present some of its aspects. Talking about Iranian architecture he said that it was clearly different from European but also from Lebanese or Afghan military architecture. This kind of architecture experience change during the different periods. Mr. Voisin said that information is collected from different sources and sometimes the testimony is collected from designs remained on a terracotta vases.

The first case that Mr. Voisin talked about was the Hassanlou hill near the city of Oroumieh-Iran. The remaining of the construction belongs to 1000-1500 B. C. that has been built in a very precise and strong way. Other constructions are from the period of Urartu, when the structures were made by the use of giant stone pieces, north of Orumieh lake.

During the Acheamenian era most of the constructions were stone made, of course using different manners. In Takhte Jamshid and Pasargad we can assist to this kind of constructions. After this period the military architecture becomes more and more complicated, occupying vast spaces, like the fortress near Myianeh that occupies an area of 40 hectares. Another example is the Zahhak fortress that is one of the best models of Ashkanian military architecture. During the Sassanid era the constructions are brick made, like the Bam Arg, or the Corn of Belqis, in Kordestan, that has 10 meters high walls, and cylindrical towers every 20 meters.

Mr. Voisin explained that the Sassanid built in two ways, using stone in the mountainous areas and bricks in the plateau. During this period about 2000 fortresses were built, near the Silk Road. They also built water reservoirs near the fortresses, that provided water for 2000 persons for two weeks, in case of emergencies like war or besiege. Near Bishapour we have fortresses made of small stone pieces, that testify the presence of Roman prisoners, that new this type of

constructions' rules, the fortresses could resist the earthquakes, and were copied in Europe 700 years later.

In Seljuk era stone and wood were used together, like the Saro fortress or the fortress of Gherd Koud, that during the Mongols invasion was besieged for three years and finally occupied by the enemy. The characteristic of this period is the multiplicity of the towers, that were smaller, and the use of tunnels (also for water provision), that made the communication possible.

One of the biggest examples of military architecture is in Mansour Kouh that had a water reservoir that permitted the besieged people to escape from the fortress.

Mr. Voisin explained that the fortresses were built to resist the earthquakes, through the use of wood or the construction of ditch, and brick walls that were 3 meters large.

In the case of Pashtou fortress in western Azerbaijan, that hasn't any defensive structure and the communication is made possible through numerous stairs, but probably this structure wasn't a fortress, probably it was a Zoroastrian temple.