

# ***SUSTAINABLE ADAPTATION OF HERITAGE THEATER BUILDINGS OF GYUMRI***

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*Nowadays sustainability is a key issue, worthy for attention to study in the urban developments of Gyumri. Article studies two adaptation cases of former theater buildings included in the heritage list: the People's house of Alexandropole and the Sevyan Club Building. Sustainability of the above mentioned adaptation projects is analyzed according to a modern sustainability theory, which states that sustainable building must have natural, cultural and technological images. Analyzes show that cultural image is clearly expressed as it is part of preservation regulations for the heritage buildings. Natural and technological images are not manifested in the projects properly. Study shows that heritage buildings' adaptation in Gyumri has strong cultural image, while the other two images are not considered as project targets usually. To achieve more sustainability in architecture and environment some actions towards natural and technological images' reinforcement must be taken on A regulatory level as for the cultural.*

**Key words:** *sustainable buildings, adaptation, theater, functional transformation, sustainable practice, heritage adaptation, preservation.*

Public buildings and spaces create the visual perception of cities, streets while creating social and cultural environment around the physical one. Physical environment, consist of buildings, which express the local culture and are proofs of history. Representing high importance in many aspects, public buildings must be preserved or adapted for new function. Langston mentions, while comparing projects social, economic and environmental profits, it is possible to say that adaptation projects are more sustainable, then the new ones [1]. In this context it is surely important to give importance to new building's sustainability, but what is more important 80% of the buildings that will exist in 2050 is already constructed [2].

Gyumri (previously Alexandrapole, Kumaryri) is second largest city of Armenia, known as city of arts and crafts and is famous of its vernacular architecture, similar to Western Armenian cities, Mush, Kars, Van and etc. [3]. Unfortunately city was heavy destroyed by 1988s earthquake, which destroyed nearly all the north western part of newly independent republic [4]. Despite, the rehabilitation of the city was always an actual issue, some remarkable changes occurred after 2017, when prime minister took the responsibility to restore the historical Kumayri Historical Protected Heritage Area [5]. Beginning with the restoration and renovation of Rustaveli Street, it followed with other projects. In the March 2018, new train cabins were put on Yerevan-Gyumri train line. To which followed an initiative to organize official events of Independence Day in Gyumri, bringing thousands to the city.

Gyumri is attracting its visitors with its unique architecture and buildings, from which most were damaged because of earthquake. Public buildings have much more influence on tourists and visitors than the residential ones, because they have opportunity to visit them and interact with them. Transformation of that buildings can bring much more than just tourists. Therefore main problem in the article is to analyze two heritage public buildings' adaptation projects, to understand how sustainable the general movements are.

Objectives are the analysis of their sustainable images regarding cultural, technological and natural images. Bearing in mind how T. Williamson, A. Radford and H. Bennetts describe images of sustainable architecture.

“In the natural image, the key to architectural sustainability is to work with, not against, nature; to understand, sensitively exploit and simultaneously avoid damaging natural systems. ...The cultural image portrays a distinct and meaningful genius loci of which architecture is a part. It mirrors an anthropological view that promotes keeping people culturally in place, combined with a belief that ‘the local culture knows best’. Sustainability means protecting and continuing this genius loci, and working within the limitations and possibilities that this require. ...The technical image forefronts hard ‘facts’, and particularly the measurable ‘environmental facts’ of the constituents of air, lighting and noise levels, resource consumption, etc., along with equally measurable economics.”

According to them in the natural image main concerns are the environmental place, ecosystems, health and balance. For the cultural image dominant concerns are the genius loci, cultural place, people, difference and cultural sustainability. Both the natural and cultural images have local influence horizon. Dominant concerns for the technological image are the technologies, global environmental impact, cost-benefit analysis, risk management and its influence is viewed in global horizon.

Method. In one part article uses case study method, for another it is review of a project. Two heritage public buildings, former theaters' adaptation projects are being analyzed to find out sustainability approaches implemented in the projects. Sustainability will be analyzed by Williamson et AL's suggested theory of images, according to which sustainable buildings must have natural, cultural and technological images [6]. First project is the People's house of Alexandropole which is already completely transformed and the second is Sevyan Club Building which is yet in the planning period. To provide logical continuation, first, the case study of the People's House is analyzed, later a review of a planned project is done.

People's House of Alexandropole – Tumo Center for Creative technologies.

The People's House of Alexandropole, is one of the historical theater buildings of the city, built in the historical part, next to the city park. It built in the 1850s, has undergone various reconstructions, changing its functions from the People's Palace into the a Television Corporation, the Builders' Palace, and so on. The building is famous for the premiere of Armen Tigranyan's "Anush" opera in 1912. It withstood two earthquakes and one fire, and has reached our days in a dilapidated state.



Picture 1 - Location of People's house/Tumo Center for Creative Technologies

In 2017 adaptation works started in to transform former theater building into Tumo Center for Creative Technologies (TUMO), which was opened in 2020. Tumo is a free educational institution, which operates in different cities of Armenia, as well as in Paris, Beirut, Moscow, Tirana, and Berlin. There are 4 operating centers in Armenia, in Yerevan, Stepanakert, Dilijan, Gyumri, and in the cities of Sevan, Gavar and Berd the centers are replaced by transport containers - TUMO boxes. The projects of TUMO Koghb and Masis communities are currently in progress. The architect of Tumo Gyumri, Koghb l. Masis is the world-famous architect Bernard Khoury, who designed the interior of the Center in Yerevan [7, 8].

Only the eastern and southern facades of the original building have been preserved, the rest, including the interior, except for the walls surrounding the stage, have been demolished, and a new three-story building has been built in its place. According to project manager Anais Sansonetti, specialists from Italy were invited to consult on the facade restoration, as a result of which the main entrance facade was restored in the same whitish color. The new additions are colored in bright red. The two main entrances of the building are from the west and east, the last one opens one floor below, from where the flow of students is organized, and the west one serves for administrative purposes and public events, from where people can enter the cinema hall. In the place of the previous stage hall, a stepped hall was implemented, which is the main educational platform, sometimes giving the opportunity to hold spectator events using the stage. The roof of the first floor leads from the back entrance to the "amphitheater" - a large area of the roof with outdoor stairs, which allows to carry out various public outdoor events. Here, on the slabs, there are large glass windows, which open into the hall area inside, providing natural light. All is taken under a raised flat roof, which is completely finished with reflective metal sheets, which reflects the building l. surroundings.



*Picture 2 - People's House Buildings' adaptation to Tumo Center for Creative Technologies*

The architect of adaptation project noted that the approach is not to restore the building by making it a "transvestite of the past" or leave it as a "living corpse", but to add a clearly separate new layer to the existing ones. At the same time, he notes that the additional layers should not replace the old ones, but should complement them. The director of the center, in turn, notes that it would have been easier to build a new building, but the history of the building, its central location, in the park led to the idea of transforming the building [9,10].

Sevyan Club Building – Experimental Art Center.

Built in 1926, Gyumri Railmen's Culture Palace, better known as the Syan Club was one of important cultural centers of Gyumri. It is located right on the square in front of railway station. The building was operating till the 1988 earthquake, and even after

that it continued to operate for two years. Later, due to the fire it was damaged and gradually abandoned and deserted. The building, despite being included in the list of monuments of national significance, has remained in a semi-ruined state full of garbage for 30 years. Only in 2019, Gyumri Municipality decided to provide the building to the "Ballet 2021" Foundation, which will transform the former Palace of Culture into an experimental art center. [11, 12].

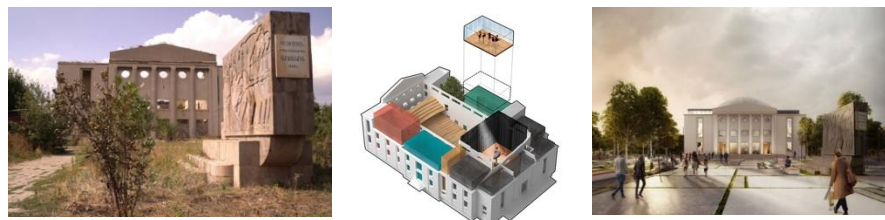


Picture 3 - Location of Sevyan Club/Experimental Art Center

During the adaptation project it is planned to keep the original main facade of the building, certain parts from the external walls and the interior. The author of the new project is the Canadian-Armenian architect Azat Shishmyan, and the local coordinator is the "Storaket" architectural studio. Architect tries to create a dialogue between the old and the new, because there will be modern art inside the old walls, with modern architecture, which must connect the past and the present. The building will have a theater consisting of two stages for 500 people, three dance studios, a conference hall, a library, an exhibition hall, a souvenir shop-cafe and a garden.

Inside the existing walls, it is planned to construct an oval-modern structure, which will connect preserved parts of the building. It will give an opportunity to passers-by to see the creative environment of the center, as well as to see the city from the dance studios. Inside the center, Ferdinand Manukyan's "Dance of the Sassounians" mosaic will be preserved.

The authors of the project, including world-famous Armenian choreographer Rudolf Kharatyan, want to create a center that will connect the world with Armenia and Gyumri, which will become a research center for the humanities movement, study the Armenian identity and development potential [13].



Picture 4 - Adaptation of Sevyan Club Building to Experimental Art Center

Analysis. Comparing the transformation projects of the two buildings according to the three images of sustainable architecture, it is possible to say that following the example of Tumo Gyumri, the transformation of the Syan Club building can be carried out with great success, having a predominantly cultural image of local history, spirit, time differences and cultural developments. The architecture of the buildings clearly emphasizes the chronological of the buildings, creating a connection between the past and the present, thus becoming more acceptable to the society.

Apart from the cultural image, the buildings at the micro level may not have a clear technical image, but on a larger scale, it is clear that the transformation of the two buildings stimulate revival of the physical environment of the buildings, promoting its development and creating new socio-economic opportunities. However, in both projects there is no general response to the reduction of negative impacts on the environment through renewable energy or other resource-saving measures. This kind of measurements were not even considered.

The transformation project of the Sevyan Club, has no reference to natural image and its aspects, which, in opposite is clearly emphasized in Tumo Gyumri. Particularly in selection of its location near park, which not only allows people to spend time in the park, but also its amphitheater provides a unique solution to balance the lifestyle of students and visitors, replacing the closed physical space with an open one.

Conclusion. The transformation of public buildings in Gyumri can become an effective tool for creating a more sustainable environment. The discussion of the above-mentioned buildings shows that the preservation of the external image is a common phenomenon, which is a clear expression of the cultural image of sustainable architecture. The transformation of cultural buildings while preserving the historical image also leads to social changes, including some points of the technical picture, such as economic activity, but the technical picture shows the lack of steps to reduce the negative impact on the environment, as well as by creating a healthy environment for the employees, the beneficiaries, and the residents of the city.

Attention to the abandoned historical buildings directs the developers to the preservation of the buildings or parts of it, which assures the cultural image of sustainability. Perhaps this is because of strict regulations of historical buildings preservation. For technical and natural images, it is necessary to guide the developers to take steps towards those images, particularly in the field of energy efficiency and resource savings. Importance and implementation of both technical and natural images can be fostered by municipality by tax and state fee exemptions for developers, meanwhile trainings can be provided for local general contractors, architects. At least some limitations or strict regulatory requirements can be represented as in the case of heritage preservation.

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