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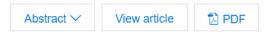
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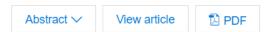
The paradox of the beautiful or the art paradox ≒

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Spiritual and Material Aspects of Eco-villages

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Abstract. Civilizational processes of recent decades contribute to the emergence of large cities. Absorbing villages and towns, they merge into megacities. The urban environment of cities and megacities is characterized by sharp spatial gradations and differences, contrast of volumes, disharmony with the environment. In order to improve the human living environment, the city must be complemented and balanced by a measured and calm, harmoniously combined with nature architectural environment of rural settlements. Close harmony with the environment is characteristic primarily of ecovillages. Living and production activities of the inhabitants of eco-settlements are safely integrated into the natural environment. Communities of ecovillages profess the ideal of equality between man and other forms of life, in which man does not try to dominate nature. The development of eco-settlements based on the preservation of cultural heritage, together with the improvement of the ecological condition of the territories, can partially solve the problem of restoration, preservation and use of architectural and cultural monuments. Such processes are usually possible with the support of relevant government agencies and NGOs. The creation of such eco-settlements has prospects and interests both in Ukraine and in Poland, as on the territory of Ukraine there is a large number of palace and castle complexes with a common history for these two peoples.

Formulation of the problem

Reckless human activities, accompanied by the destruction of natural resources and environmental pollution, have brought the planet's biosphere to a critical state. Preventing the global environmental crisis is the most important task of humanity today. The problem of human survival is a problem that has come with progress. Progress has brought not only a breakthrough in engineering and production technology, but also the deterioration of the ecological state, which is unparalleled in its scale. The problems of ecology faced by the globalized world force us to look for alternatives in the way of life, way of thinking, human behavior. Along with scientific research, discussions, conferences on improving the environmental situation through the use of alternative energy sources, modern farming methods, reducing livestock, etc., there are communities that, united around a common idea, change the world around them, or better say, try to live in harmony with nature.

Analysis of recent researches and publications

D. Simberloff, G. Keflit, Yu.A. Zlobin, T. Geerdal and others addressed the issue of the ecological crisis and ways to overcome it. The problems of revitalization and preservation of traditional architectural heritage were dealt with by a number of scientists, in particular: M.V. Bevz, O.V. Rybchynskyi, R.I. Mohytych. The problem of revitalization of palace and castle complexes is covered in the work of U.B. Polutrenko. The authors of this study propose to combine the problems of ecology and preservation of cultural monuments: the restoration of palace and castle complexes through the creation of eco-settlements on their territory.

Novelty

Eco-settlements based on the preservation of cultural heritage were established in Europe. Their activities allow to partially solve the problem of restoration, preservation, and later operation and use of architectural and historical objects. Given the large number of palace and castle complexes in Ukraine, such an experience can be interesting to follow and, according to the authors, will give impetus to the development of both domestic and foreign tourism. Such projects can unite artists of the Ukrainian and Polish peoples, who have many objects of common culture and history.

The main material presentation

The idea of eco-settlements arose as a protest against rules, norms, standards. Today, the history of eco-settlements goes back to the settlements of religious communities (Old Believers, Amish), who lived in harmony with nature and with themselves, producing products without surplus and consuming it without excess. Another attempt to create eco-villages belongs to the subculture – hippies. Hippies have tried many lifestyles and alternative businesses, including communes, joint ventures, holistic medicine and healthy eating. They paid attention to the environment to emphasize the responsibility of each person to the planet and future generations.

Ecovillages can be considered as integral formations, based on the "tripod table", which balances the practical efforts aimed at creating a social and personal space and an ecologically healthy lifestyle [1].

Ecological settlement is defined by a stable community, whose views are aimed at the harmonious coexistence of nature and man. The main goal of such a community is to create an economically, socially and ecologically sustainable community that lives in harmony with nature with minimal harmful or no environmental impact.

Ecovillage (according to Robert Gilman) is determined by the following criteria [2]: scale; signs of human activity safely integrated into the natural environment; duration.

Settlements should be on the scale of human perception (usually 50 to 500 members, although there are exceptions), which are designed to be full to provide their members with food, production, leisure, social opportunities and trade. The harmless integration of community members into the environment is aimed at supporting the normal development of a person's physical, emotional, mental and spiritual abilities. Studies show that stable villages often do not exceed 30 houses, or about 75 people, which has a positive effect on maintaining a sense of friendly community.

Eco-settlements are characterized by all the signs of human activity in a balanced proportion: work, housing, recreation, social life, which is the imprint of the whole society in miniature. Ideally, the number of jobs in the village corresponds to the working population, but it is assumed that some villagers may work outside it, and, conversely, some jobs will be occupied by people living outside the ecovillage.

The human activities of the inhabitants of ecovillages are safely integrated into the natural environment. The ideal is of equality between man and other forms of life, in which man does not try to dominate nature, but rather finds a suitable place in it. Cyclical use of material resources instead of a linear approach (single use, typical in most cases for industrial society) with the use of recycling, use of alternative energy sources (solar, wind, etc.), non-use of toxic and harmful substances – the characteristics of production of ecovillages.

The concept of the duration of eco-settlements is unlimited in time, as a principle of sustainability, which requires a certain integrity of its members.

According to the socio-economic system, the following types of eco-settlements can be distinguished in the world today: on the basis of worldview principles and philosophical teachings (Rudolf Steiner, Mirra Alfassi, Oberto Iraudi); artistic; generic; modern; settlements-producers of organic products, based on the preservation of cultural heritage.

Ecovillages on the worldview of nonviolence in recent years are quite common. The French community of La Borie Noble has been living according to Gandhi's philosophy for 45 years. The non-violent community founded the settlement of Lanza del Vasto after meeting Gandhi in 1948. The community grows the necessary food and provides itself with household items: bread, cheese, vegetables and ceramics. Silence is the inner state of the inhabitants of an ecovillage.

A typical example of an eco-settlement of esotericists is a spiritual community that settled in northern Italy near Turin. Damangur was founded in 1975 by Oberto Irodi. Many people come to Damangur to visit the "Temple of Mankind" – a unique temple complex, which attracts a large number of tourists with its works of art.

Rudolf Steiner's anthroposophical teachings were a challenge of the time and found their realization in agriculture, art, pedagogy, philosophy, architecture and way of life. Anthroposophical settlements became the first conscious ecosettlements, which were based on a strong philosophical foundation, which presupposes harmony with nature, the

universe and oneself. The highest step of R. Steiner's philosophy was the creation of a visible image of the harmony of man and the universe, which was embodied first in the wooden and later in the concrete Goetheanum.

Artistic ecovillages include Vallede Sensaciones – an ecovillage located in Spain in the mountains of Andalusia, is not really a community, because only the main team lives there permanently. Vallede Sensaciones presents itself as a laboratory where a place has been created that is set up through creative and ecological design to feel the connection with nature.

The principles of sthapatya-veda, feng shui are used to choose the location and create ancestral settlements, as well as biolocation research and ecology, geotectonics, geomorphology, geochemistry, hydrogeology, botany and the state of the soil [3]. Living in such ancestral estates presupposes observance of the statute, which includes abstinence from alcohol, tobacco, consumption of vegetarian food and certain rules of conduct.

The modern ecovillage, which has a prospect to follow, was built by a Latvian millionaire on the outskirts of Cesis. Having bought 30,000 hectares of forest in a hilly area, he built the "City of the Sun", where special rules apply and people lead a completely different way of life as opposed to the inhabitants of urban areas. The rules of the modern eco-settlement do not regulate the personal life of the settlers or their beliefs, they are related to the attitude to plants and animals.

Ecovillages as a producer of organic food are widespread in Canada, they are focused on the production of environmentally friendly products, which are in great demand in the country and, accordingly, generate income.

Eco-settlements based on the preservation of cultural heritage can partially solve the problem of restoration, preservation and later operation and use of palaces and castles, which is often associated with unprofitability of large buildings that are far from highways and developed infrastructure, have no electricity and water supply, sewerage. Revitalization of architectural and urban monuments involves the harmonious reconstruction and change of functional purpose of premises and buildings, creating optimal conditions for their preservation, restoration and use.

The experience of such settlements in Europe already exists. To preserve the castle in Tondorf, the community created an eco-village in it for the noble purpose of preserving the historical heritage. Community members are usually creative individuals who, despite the preservation of a historical monument, need to be realized in a certain atmosphere of like-minded people. The eco-village of Tondorf Castle is located on the northern edge of the Thuringian Forest between the European Capital of Culture Weimar and the capital of the Thuringian city of Erfurt [4, 5].

The community is organized as a cooperative and owns not only the castle in Tondorf in Thuringia, but also 15 acres of land. The settlement does not have strict requirements for lifestyle or spiritual orientation. Approximately 60 residents adhere to the ecological principles of living and productive activities. Large and varied open spaces stretch between the castle's outbuildings, residential and the castle itself, and together with the landscape, form one of the pearls of the so-called "Tuscany of the East" — a cultural landscape that grew over the centuries in the heart of Thuringia [6]. The community has dedicated itself to preserving the castle and related 15-acre property.

The main emphasis in this eco-village is on the revitalization of the castle complex and the revival of the regional and cultural landscape of Thuringia. Accordingly, the castle should be accessible to the general public, and therefore, its territory and premises should be restored to make the cultural heritage known to the public.

In recent years, the community has renovated numerous living rooms, built a catering kitchen and started breeding beekeeping, created workshops for repair work on the Castle Bridge, built the first section of the new water supply network. Several hundred fruit trees and shrubs have been planted.

Cooperative actions of members of the eco-community and private loans were the basis for financing this project [7]. Dividends are also brought by events organized by the eco-community for the general public - festivals, concerts, Sunday cafes and more.

Given the large number of palace and castle complexes in Ukraine and their condition, this experience is a model to follow. Preservation and restoration of architectural and historical monuments through the creation of ecosettlements on their basis, in addition to improving the ecological condition and revitalization of palace and castle complexes, can play an important role in the development of both domestic and foreign tourism and recreation and improve international relations of Poland and Ukraine, which have many objects of common history.

Tereshchenko Palace with a park in the village of Chervone, Andrushivka district, Zhytomyr region, Palace of the Sangush princes in the Baroque style in Izyaslav, Khmelnytsky region (Fig. 1, 2), built in the Neo-Gothic style, von der Austen-Saken Palace with a park in the Kyiv region, Lange Palace in the village of Napadivka, Lipovets district, Vinnytsia region, Skarbek Castle in the village of Zaklad, Mykolaiv district, Lviv region (Fig. 3, 4), the Palace in Tulchyn, Vinnytsia region, the Dakhovsky Palace in the village of Leskove, Monastyrsky district, Cherkasy region, the Muravyov-Apostol's estate in the village of Khomutets, Poltava region, Popov's estate in Vasylivka, Zaporizhia region, Dzhuryn Fortress in Ternopil region could become not only a decoration of Ukraine, but also cultural and

spiritual centers with self-sufficient farms and the basis for the development of recreational and tourist structure of the country and Eastern Europe.



FIGURE 1. Tereshchenko Palace in the village of Chervone, Andrushiv district, Zhytomyr region [7]



FIGURE 2. Sangushkiv Palace in the Khmelnytsky region [8].



FIGURE 3. Lange Palace in the village of Napadivka, Lypovets district, Vinnytsia region [9]



FIGURE 4. Castle of Count Stanislav Skarbek in the village of Zaklad, Mykolaiv district, Lviv region (author's photo)

CONCLUSION

Settlement of eco-communities in old abandoned castles and estates has many advantages both for the development of tourism in the region and for the preservation of the cultural heritage of the country as a whole. These facilities, with proper organization, can become private schools, nursing homes, sanatoriums. The organization of architectural space by communities of eco-settlements around historic buildings will significantly reduce the burden on the local budget and economically revitalize the surrounding areas.

The development of eco-settlements based on the preservation of cultural heritage will help solve the problem of restoration, preservation and use of architectural and cultural monuments, and the common Ukrainian-Polish history of these sites plays an important role in tourism and recreation and international relations.

REFERENCES

- 1. K. Debbie Van Schyndel. Redefining Communityin the Ecovillage Human Ecology Review, Vol. 15, no. 1, 2008, Society for Human Ecology Review, Vol. 15, No. 1, 2008, 13 (12-24).
- 2. R.Gilman. Eco-Villages and Sustainable Communities (1991), Transl. from English, M., 2000 SPb.: Center for Civil Initiatives, 1991. 266 s.
- 3. The concept of creating tribal settlements in Ukraine. URL: http://zku.org.ua/forum/viewtopic.php?t=1572
- 4. U. Unger. Schloss Tonndorf. Das Tor zum Außenhof. Fotos. 2015.

- 5. Gemeinschaft Schloss-Tonndorf. Die Genossenschaft. Fotos. 2019.
- 6. Das Projekt des «Schloss-Tonndorf». Website. URL: https://www.schloss-tonndorf.de/
- 7. I. Chyrytsia. Palace of Tereshchenkos in Chervone: between revival and destruction / Ukrinform. Fotos. 2018. URL: https://www.ukrinform.ua/rubric-tourism/2496885-palac-teresenkiv-u-cervonomu-miz-vidrodzennam-i-rujnacieu.html.
- 8. Sanhushko Palace, Izyaslav (2020, May 06). Wikipedia, the free encyclopedia. Retrieved 03:08, August 13, 2021
- 9. R. Malenkov. Napadivka. Palace of Thor Lange / Ukraine incognita. Fotos. URL: https://ukrainaincognita.com/photos/napadivka-palats-tora-lange.