Veronica Vaida, Eugen Vaida, Andreea Napradean

**Hands-on Training Through the Ambulance for Monuments Project**

**Formación práctica con el proyecto: Ambulancia para Monumentos**

**Formação prática através do projeto: Ambulância para Monumentos**

**Abstract | Resumen | Resumo**

In a race against time, the “Ambulance for Monuments” project is seeking the salvation from collapse or irredeemable decay of hundreds of endangered built-heritage treasures in Romania. One of the initiative’s main aims is informal education for young professionals through hands-on training. This is a kind of education which is lacking not just in Romania but in many Eastern European countries. Most of the volunteers are students and young practitioners from the fields of architecture, restoration, urban planning, engineering, archaeology, history, cultural tourism, etc., seeking to expand their knowledge and soft skills, acquiring competencies and meta-competencies while participating in a large interdisciplinary project.

En una carrera contrarreloj, el proyecto “Ambulancia para Monumentos” intenta salvar del hundimiento o de un irremediable deterioro cientos de tesoros del patrimonio edificado en Rumanía. Uno de los principales objetivos de esta iniciativa es proporcionar una educación no académica a jóvenes profesionales mediante la formación práctica. Existe una carencia de este tipo de formación no sólo en Rumanía, sino también en muchos otros países de Europa Oriental. La mayoría de los voluntarios que participan en este proyecto son estudiantes y profesionales jóvenes de los campos de la arquitectura, la restauración, el urbanismo, la ingeniería, la arqueología, la historia, el turismo cultural, etc., que quieren ampliar sus conocimientos y habilidades interpersonales, así como adquirir competencias y metacompetencias mientras participan en un ambicioso proyecto multidisciplinar.

Numa corrida contra o tempo, o projeto “Ambulância para Monumentos” procura salvar do colapso ou da deterioração irremediável centenas de tesouros do património construído na Roménia que estão em vias de extinção. Um dos principais objetivos desta iniciativa é a educação informal de jovens profissionais através de formação prática. Trata-se de um tipo de educação em falta não só na Roménia, mas em muitos países da Europa Oriental. A maior parte dos voluntários são estudantes e jovens profissionais das áreas da arquitetura, restauração, planeamento urbano, engenharia, arqueologia, história, turismo cultural, etc., que procuram expandir os seus conhecimentos e habilidades interpessoais, adquirindo competências e meta-competências enquanto participam num grande projeto inter-disciplinar.
Project

"Ambulance for Monuments" was launched in 2016 by Asociația Monumentum with a view to preserving Romania's built heritage. In a race against time, the project is seeking the salvation from collapse or decay of hundreds of endangered listed buildings through a large network of heritage organizations. It carries out emergency interventions with volunteers, experts, students, enthusiasts, amateurs, and trained craftspeople, always with the support of local communities and authorities. Most of its activities involve replacing damaged roofs, rebuilding walls, providing proper drainage, and stabilizing mural paintings. At the heart of the project in each region is an "intervention kit": a truck full of tools, construction equipment, and materials. Over its seven years of existence the Ambulance has established close private-public cooperation and a sustainable restoration model for public historic buildings through the training of young experts and laypeople, raising awareness in communities about cultural identity, using local materials, and engaging local workers.

1: The Ambulance team meeting in Cuștelnic, Mureș county, 2019 (Flaviu Gabriel)
2: Volunteers and ecclesiastical visitors at the Orthodox Church of Șona, Brașov county, 2022 (Asociația Monumentum)
The Ambulance was launched with the support of the Anglo-Romanian Trust for Traditional Architecture and later of The Prince’s Foundation – chaired by His Majesty King Charles III – for the purpose of preserving Romanian built heritage. It was conceived as an umbrella project for several organizations, like a franchise system, in order to give independence to grassroots initiatives to be implemented by a network of NGOs all over Romania. It covers 60% of the country and is expanding rapidly from year to year. Since 2016 there have been 100 interventions on local, national, and World Heritage sites (ongoing projects), such as churches, mills, stately houses, train stations, historic fortifications, etc. Asociația Monumentum assists in the establishment of new organizations, provides them with tools and a truck, and helps them seek funding for their projects. Each organization raises additional local funds for project implementation.
The great achievement has been the creation of a successful sustainable intervention and funding model in which local and regional authorities cover most of the costs of materials; private companies and donors fund additional materials and equipment; communities work alongside volunteers, hosting and feeding them; volunteers and craftspeople do the labor; and the media are used at the highest level to promote the message of stewardship for heritage.

The project has sought solutions for problems found across Eastern Europe: lack of heritage education for civil society, lack of specialist practical skills and knowledge, loss of authenticity and poor-quality restorations, abandonment of public historic buildings by communities due to a low sense of self-worth, or loss of identity and knowledge of culture and history under pressure from globalization and ephemeral values.

The selection criteria for an objective are a weighted average of the historic structure’s cultural value, its state of decay (the urgency of the work), and the degree of local community involvement.

Recipe

The recipe which made this model work and be scaled up to a national level involves a reasonable balance of tasks across four stakeholders contributing to the preservation of built heritage according to their capacities: the community offers housing and food; the owner/local government bears most of the cost of construction materials; experts research the buildings, planning and coordinating site work; and the NGO manages logistics and coordination. This is working especially well in cases such as churches, which are seen by communities as focal points of cultural identity and cohesion.
Aims

The project has five interconnected aims:

1. **Urgent care** (a “hat and shoes” for listed historic buildings)
   
   In the past 30 years, since the fall of the communist regime, many historic buildings have been neglected and abandoned by their owners and by local communities, and the state has lacked the means to preserve them. The Ambulance was a response to an impending cultural disaster: the possible loss of hundreds of buildings of vital historical importance to Romania. Its interventions have sensitively preserved the substance and authenticity of buildings while maintaining their diversity of expression in the local context. The new materials used are compatible with the historic ones, and its interventions are reversible.

2. **Hands-on training** (informal education for young professionals)
   
   Occupational development through hands-on training. This is a way of providing non-formal education which is lacking not just in Romania but in much of Eastern Europe. Most volunteers are students and young professionals wishing to develop their knowledge, soft skills, competencies, and meta-competencies (e.g. project management, fundraising) while participating in a large interdisciplinary project.

3. **Community engagement** (awareness-raising and action by local community members)
   
   The sustainable preservation of historic buildings would not be possible without the active involvement of local communities. With the support of the Romanian-American Foundation, the Ambulance is currently conducting research and developing methodology with a view to raising community engagement in the future maintenance, conservation, and adaptive reuse of heritage sites.

   Working mainly on public buildings was a premise for engaging communities on a wider scale. Hundreds of mayors, priests, local councilors, and other community representatives have taken up tools and joined forces with volunteers in a race against time to prevent the loss of their heritage. This has focused the attention of communities on their heritage as they rediscover a sense of cultural identity and self-worth.
Reflections | Reflexiones | Reflexões

Nailing of shingles by the community in Breb, Maramureș county, 2018
(Asociația Monumentum)

Community in Breb by their wooden church, Maramureș county, 2018
(Asociația Monumentum)

The community at Făgăraș gathering for an event after the restoration of the synagogue roof, Brașov county, 2021
(Fundația Comunitară Țara Făgărașului)
4. Preserving and recovering intangible heritage (discovering and reusing traditional building skills and technologies)

Young craftspeople are encouraged to work in restorations with the help of older craftspeople, who are invited to transmit their skills and knowledge.

5. Fostering philanthropy / policymaker engagement (site visits and peer-to-peer learning for local authorities)

Young people from the towns concerned, community members, and policymakers are invited to volunteer to work or to donate funds for materials or to provide food and lodging for the craftspeople and volunteers in an effort to create synergies between the Ambulance and the public and to reach new audiences for heritage in non-traditional sectors.
**Intervention Approach**

No intervention is like any other. Each worksite is used to generate opportunities which may become vectors of the intervention. When approaching a restoration, we consider the availability of local resources, the environmental impact, the potential for circular economics (re- and up-cycling of old materials), training opportunities, traditional knowledge to be leveraged, and the cost-benefit balance.

**Hands-on Training**

Since volunteers are an important component of the Ambulance project, vocational training of students and young specialists during interventions is one of our key themes. Every year in March the registration platform for volunteers is opened for 15-20 projects. Participation of women is encouraged – against difficulties and prejudices due to outdated mentalities, mainly in rural areas, as construction is a traditionally male endeavor – and currently there is 75% female participation on worksites. Most volunteers are students from the fields of architecture, restoration, urbanism, engineering, archaeology, history, cultural tourism, etc.

Romanian universities unfortunately address the practical side of students’ education only superficially, and the week or two of practical activity included in annual programs does not suffice for students to acquire the knowledge they need to become practitioners able to tackle projects. So Ambulance interventions every summer are one of the few opportunities they have to supplement their theoretical learning. In addition to the lively atmosphere on sites where they network with other students with similar interests, they also meet specialists from complementary fields, work alongside craftspeople, get to know the problems of the community, learn how an intervention works through its various stages, and execute joints or other such details which they would otherwise have approached only theoretically.
Young people in Romania have few chances to develop practical vocational skills. After the 1990s the traditional sequence of knowledge transfer from master to apprentice, father or mother to son or daughter, etc., came to an end. This has been partly due to the ease of access to new materials, along with a gradual loss of traditional crafts. Today, especially in rural areas, youngsters are looking to break away from tradition and to get into less manual trades or Western European jobs in which they will earn more, while those who lack a high-school or university qualification have no alternative vocational training options. There used to be arts and crafts schools for learning trades (carpentry, sculpture, pottery, weaving/tailoring, etc.), but in 2009 they were all closed down.

The construction of new buildings and the restoration of existing ones are joint endeavors, their success relying on close collaboration between all involved: beneficiaries, financiers, designers, practitioners, communities, researchers, and policymakers. In-situ collaboration between craftspeople and students and between students and the community leads to an understanding of the problems faced by each stakeholder and of their limitations, and ultimately to realistic proposals, thereby making up for the shortcomings of university education. It also contributes to the development of the soft skills and meta-competencies needed by future project coordinators and leaders. In the Ambulance project, seven years after its establishment, there are already dozens of young professionals – former volunteers – involved in project management and even coordination. One such is Andreea, co-author of this article.

Students are generally interested in a wide range of experience in various restoration methods, so they go from one intervention to another in order to acquire more knowledge and experiment with different materials and techniques, such as the following.

**Wooden Coverings**

With the infusion of national and European structural funds allowing big companies to operate all over the country, a standardization of timber cladding emerged, on the principle of the cheapest shingle. Thus, from north to south and west to east, we find the same Maramureș fir shingles. The Ambulance has sought to counteract this cladding practice, adopted also by small companies, through in-depth studies providing a basis for a return to the diversity of wood species used in the past – to the variety of shapes and typical local configurations.
Ceramic Coverings

The roofscapes in hilly and lowland areas have greatly changed over the past 30 years due to the emergence of industrial tiles from large factories. Small local or itinerant ceramic tile and brick works have all but disappeared. The quality of the new tiles is questionable, their shape differs, and they have barely any patina of natural aging. Asociația Monumentum has managed to set up two tile and brick kilns to supply the Ambulance with materials. Most of the tiles and bricks required are reused from nearby properties.
Thatched Coverings

Thatched roofs, perishable by nature and requiring constant maintenance, are still to be found in a few areas, especially the Apuseni Mountains. These are high roofs pitched at an angle of more than 60°. The rye from which they are made is no longer grown in Romania, except in the small plots of village museums that need them for their own restorations. Straw roofing may be in sheaves or loose, with both types requiring a wide cane support at the base, and the straw is tied to the carved beech beams with wild vine or the like. The thatch is supported vertically by birch branches, and the straw roof ridge has to be completed in two days, before it sags.
Carpentry

Carpentry involves the greatest challenges in Ambulance interventions, on one hand because we aim to preserve as much historic timber as possible, while on the other, in some cases one must cut back the sound part of the wood in order to make a joint that meets the structural requirements. A traditional craftsperson tends to replace a damaged element altogether due to not knowing the techniques of joining and completing elements in the manner of a restoration technician. Hence the challenges. Many historic vernacular roof structures are designed at the lower limit of strength, so additional reinforcement is needed. Sawing and chiseling along the grain involves the greatest challenges. The European-type push-cutting saw makes a flared cut that results in a twisted shape.
Masonry

The most common bond for brickwork is of the English type, and a random rubble or roughly squared Scotch bond is used for stone walls. Most such masonry is built with simple clay mortar, but major medieval buildings were built in early stages with lime mortar. In some areas, as foundation for wooden churches one finds a base of dry limestone. In some projects the workshop starts with primary stonework, from extraction in the pit to splitting. This depends on the time and craftsmen available.

A volunteer drawing tie plates based on the shape of the storks to be seen in these parts, Braşov county, 2022 (Asociația Monumentum)

1: Forging tie plates in the blacksmith's shop, Brașov county, 2022 (Asociația Monumentum)
2: Tie plate mounted on a traditional blue house in Șona, Brașov county, 2022 (Asociația Monumentum)
Blacksmithing

Blacksmithing seems to be participants’ favorite workshop, but we rarely find a local forge. Each village used to have one, but once horsepower disappeared, most of these vanished. When we find one, the bellows have normally been replaced by an electric blower. Our smithing is confined to making simpler items such as spikes (large nails), clamps, or tie plates.

More information about the Ambulance project here: http://ambulantapentrumonumente.ro/

Biographies

Veronica Vaida
Veronica is an architect with an interest in promoting traditional architecture and a simple and sustainable lifestyle. In 2013 she moved to the Transylvanian countryside, where she coordinates Asociația Monumentum projects, the Ambulance for Monuments being the most prominent one. She is also involved in preserving the cultural landscape of rural areas by supporting and promoting tangible and intangible heritage. She also likes to cook and dance.

Eugen Vaida
Eugen was born in 1981 in Transylvania in the multicultural village of Altâna, and studied architecture in Bucharest. He owns a vast ethnographic collection, as founder and president of the Romanian Network of Private Rural Ethnographic Collections and Museums. He founded the Ambulance for Monuments in 2016 and now, on behalf of the Romanian Order of Architects, coordinates architecture guideline documents for contextual planning in all villages in Romania. Eugen Vaida is a well-known supporter of architecture summer schools and is director of The Prince’s Foundation in Romania.

Andreea Napradean
Andreea is a young architect with an interest in traditional crafts and green architecture. After completing her architecture studies in 2019, she decided that a standard architecture firm would not cater for the professional practice she had in mind. She got involved with Ambulance for Monuments as a volunteer, at first out of curiosity, and is now a part of the team, working with craftspeople, volunteers, and communities and enjoying the project’s dynamic nature. She was involved in the process of identifying craftspeople for the Map of Romanian Craftsmen, a project conducted by OAR (Ordinul Architectelor din România), with the aim of registering those who still practice or have the knowledge to practice traditional/green building crafts.