

Projects of sustainable development of regions, and education of students of architecture through the European Interreg programmes in the Republic of Croatia

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Abstract

Croatian border areas have great potentials for development owing to the favourable procedures of candidacy for Interreg, the non-repayable loans from the pre-accession funds of the European Union, allocated for the cross-border cooperation. Under these conditions the process of the cross-border cooperation paved the way to a number of incentive projects in the Croatian economy. The process is based on sustainability aimed at reducing economic and social differences among the European regions that emerged as a result of the establishment of the integrated European market.

The declined quality of life in the region calls for urgent building of capacities that will mobilize the population and create opportunities for the local development.

The studies of regional development are also linked with the education of the students of architecture at the Faculty of Architecture in Zagreb. Those activities include a large number of faculties from different universities from Croatia and abroad (Barcelona, Rapperswill and Karlsruhe).

Summer schools as parts of the curriculum of the Faculty of Architecture of the Zagreb University are engaged in long-term researches of the regions and culture of the continental Croatia, trying also to determine its place in the European culture on the basis of the potentials for sustainable development and their recognizability. Each region has its specific local traits, its architectural vocabulary, and cultural particularities that first need to be detected and then evaluated, and eventually employed as foundation of the modern architecture,

using the values of egalitarian, polycentric development as guidance.

Keywords: Interreg, Gorski Kotar, Podravina, education of architects, regional development.

1 The European concept of Interreg as a theoretical framework of this paper

The purpose of the European Interreg projects is to strengthen cohesion in the border areas and regions of the neighbouring countries on the basis of multi-dimensional sustainability: ecological, energetic, demographic, cultural, etc. The curricula of the Faculty of Architecture of the Zagreb University follow and further develop the Interreg initiatives at the Croatian border with Europe, i.e. at the Hungary-Slovenia-Italy tri-border.

In the 2005-2009 period some twenty programmes and projects have been realized in several development areas through the educational work in the summer school. These particular programmes and projects are outlined in Item 4 below as potential initial subjects of the new cross-border development operations in the scope of Interreg. The projects imply structural interventions in space, which will open new opportunities for sustainable development in the fields of tourism, environmental protection, infrastructure, and economy.

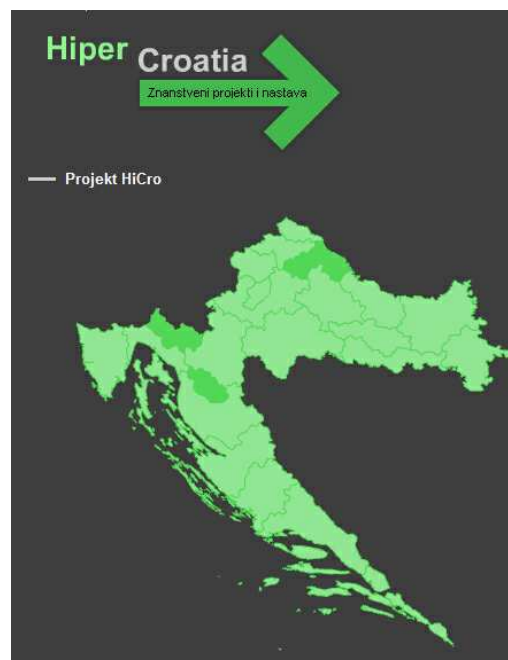


Figure 1: Gorski kotar and Podravina regions

1.1 Methods of work in the international school of architecture

The work at the school developed in three preparatory phases through a multi-layer process of the preservation of the regional culture in the present-time conditions. The anticipated regional culture is founded on Ricoeur's thought from the 1960s, and the subsequent architectural critical interpretation of the cultural identity by Kenneth Frampton (Frampton, 1992, 339). According to Ricoeur, in the future the authenticity of culture will depend on our abilities to create vital shapes of the regional culture, i.e. to create „the creative core of great civilizations that we use as basis to interpret life, as opposed to the civilization of mediocrity.

The first phase involved familiarization with the natural and cultural environment with an emphasis on its authenticity, structure, communication with urban and rural networks. The analyses and procedures were conducted under the theoretical influence of Mislav Ježić (1992.), Denis de Rougemont and Ivan Rogić who points out de Rougemont's concept of the „demand for identification of a region with the purpose of restoring its domiciliary traits“. (Rogić, 1992 a, 28).

The second phase involved analyses of the layers of the cultural and natural landscape, including anthropological and archaeological findings, as well as the artistic topography, geology and spatial geography.

In the third phase an analysis was made of the authentic traits of the territory, conditioned by the preservation of the landscape. An expert valorisation of topics was conducted on several levels, following the theoretical elements set out by the Institute of Advanced Architecture of Catalonia, IaaC (Sanchez de Juan, 2003).

The field work is based on the European initiative of the regional development, the aim of which is to reduce economic and social differences among the European regions that resulted from the creation of the integral EU market. That market caused the strengthening of socio-political and economic centres and the weakening of the remote regions; it forced the European Union to redirect its attention to set regional policies that are aimed at harmonizing its territory. For that purpose the EU sets up structural funds to enable implementation of those policies.

The paper focuses on the area of the cross-border cooperation that is based on the European initiative known as Interreg, III A in the Croatian regions of Gorski Kotar and Podravina the Drava River Basin). The purpose of this cooperation is to strengthen the neighbourhood relations by harmonizing economic, social and cultural development, and also by strengthening cooperation on the protection of environment. Croatia participates in two programmes of the interregional cooperation relating to the European borders: in the programme called “The Adriatic Cross-Border Cooperation” established in 2006, and in “The Neighbourhood Programme Slovenia-Hungary-Croatia”. These European initiatives analyze new possibilities of the economic and rural development of Croatia along its European borders with Slovenia, Hungary and Italy through

alternative concepts of regional development based on the local initiative, in other words “from below”, by integrating the economic, social and cultural features of underdeveloped regions (Maleković, 2002).

The first part of the paper (Chapter 2) provides a survey of active projects of the Interreg initiative, the Adriatic Cross-Border Cooperation and the Slovenia-Hungary-Italy Neighbourhood Programme along the European borders with the Croatian regions of Gorski Kotar and Podravina, respectively.

The second part of the paper (Chapter 3) gives a model of education of the students of architecture and describes author’s experience in the mentioned regions, obtained through the interdisciplinary field work following the curricula of the Faculty of Architecture of the Zagreb University. This chapter also deals with the development projects worked out by the students in the regions of Gorski Kotar and Podravina. The following professional and educational institutions took part in the educational programme of the Faculty of Architecture of the Zagreb University: Fakultet für Architektur – Karlsruhe, Hochschule für Technik – Rapperswil, and the local member-institutions of the Zagreb University: Department of Geography at the Faculty of Science and Mathematics, the Faculty of Agronomy, the Department of History at the Faculty of Philosophy, the Institute for Art History in Zagreb, the Institute for Social Studies Ivo Pilar, and the Department of Art History at the Faculty of Philosophy of the Rijeka University.

2 A survey of active projects of sustainable development in the Croatian regions of Gorski Kotar and Podravina

The principles of social and economic interconnecting the regions-related policies of the European Union are built in the draft strategic plans of Croatia’s development. Their implementation is of vital interest of Croatia, because the initiatives are directed towards the most underdeveloped regions and structures of the society. In preparation are two strategic plans: the Strategy of the Regional Development, and the Strategy of the Rural Development, both worked out in line with the fundamental European documents.

The Strategy of the Regional Development offers guidelines for a balanced development of regions and Croatia’s easier access to the European integration funds. Its purpose is to reduce the trends of unbalanced development, at which particular attention is paid to the strengthening of underdeveloped regions. These are primarily the regions with unfavourable geographic conditions, such as the mountainous areas, including that of Gorski Kotar, the border areas, and the islands. The loss of value of certain regions resulted from urban, social and communal deficiencies that made way to depopulation, which is one of the gravest problems of the rural areas in Croatia. The declined quality of life in the region calls for urgent building of capacities so as to mobilize the local

population and create opportunities for the local development (Koščak, 1999, 59).

The draft strategy of the rural development is focused on three goals: increase of competitiveness of agriculture and forestry, improvement of the quality of environment and landscape, improvement of the quality of life and providing support to the rural economy.

The document Strategy of the Rural Development mentions the pronounced imbalance between the land surface and the number of inhabitants. As much as 92% of the land surface of the Croatian national territory is classified as rural (according to the OECD, 150 inhabitants per 1km²; 46% of the population lives in rural areas, whereas 54% of the population lives in urban areas that constitute only 8% of the total land surface).

The starting point of the Strategy is the European model of the local development Leader (Liaison entre action de développement de l'économie rurale) (Štambuk, 2002), at which the European Union attaches importance to the rural development and places it among the priorities for creating political and economic prosperity.

The requirements set by the EU within the scope of the accession process give Croatia an opportunity to develop its neglected regions.

2.1 The existing Interreg programmes in the regions of Gorski Kotar and Podravina

All development programmes were created within the scopes of two Interreg initiatives. The first refers to the Slovenia-Hungary-Croatia Neighbourhood, and a total of 64 projects have been accepted; the second, the Adriatic Cross-Border Cooperation, includes 92 accepted projects. Owing to its specific geographic position, the region of Gorski Kotar implements programmes from both Interreg initiatives: the Slovenian-Croatian initiative at the border in the north, and the Adriatic Cross-Border Cooperation initiative in the south, along its coastal border with Italy.

Below details are provided about the three projects accepted through tenders, including two relative to the region of Gorski Kotar, and one relative to the region of Podravina.

2.1.1 Programmes in the region of Gorski Kotar

The first two projects relate to the World of the Kupa River and Amamo, at which the World of the Kupa River relies on the cooperation between Slovenia and Croatia, whereas Amamo relies on the Italian-Croatian cooperation.

The third project, the one relative to Podravina, deals with the construction of a bicycle lane from Legrad to Pitomača as part of the Croatia/Hungary Interreg programme.

Of 65 approved projects within the scope of the Interreg initiative, the Slovenia-Hungary-Croatia Neighbourhood Programme (from the bilateral agreement between Slovenia and Croatia), a total of four programmes relative to the Gorski Kotar border have been approved:

Project The World of the Kupa River on the preservation of the Kupa. It anticipates participation of the Slovenian Kostel Municipality and the Brod Moravice Municipality in the Gorski Kotar region. The programme is intended to shape a new tourist product that offers healing of the body, spirit and soul, at which natural and cultural qualities are the basis of the economic and social prosperity, in addition to the preservation of natural resources and the biosphere as the basis of the identity of the region in terms of landscape. The World of the Kupa River project also includes elements of eco-tourism that relies on the eco-production promoted at the local farms.

Project The Green Beauty elaborates the infrastructure required to preserve the Kupa River.

Keep Waters Clean is a project launched in collaboration of the town of Čabar in Gorski Kotar and the town of Cerknica in the Slovenian region of Notranjskokraška. It covers the region rich with natural and water resources, such as the freshwater Cerknica Lake with its ornithological diversity.

Programme Amamo is a result of the cooperation between the Italian and Croatian regions, in other words of the Interreg initiative The Adriatic Cross-Border Cooperation. Amamo evaluates typical mountainous products of its region as innovative and high-quality products, e.g. berries and the local liqueur enriched with herbs. The project also evaluates and integrates the natural and cultural traits of the region as a contribution to a wider tourist offer. It is imperative that the Amamo project be expanded with the activities focused on the development of health tourism, given the favourable climate conditions (including the phenomenon of permeation of the mountainous and maritime climates). The economy that has been based for centuries on the local natural resources is also the foundation of the future development that anticipates the development of forestry, wood industry, cattle-breeding, traffic, and tourism.

2.1.2 Programmes in Podravina resulting from the Hungary-Croatia cooperation

The Koprivnica-Križevci County has realized nine Interreg projects along the border. They were submitted by different legal entities, including: The Drava River Park, The Three Rivers Tourist Bicycle Lane, and the Panonian Palette.

The projects were launched within the scope of complementary thematic and tourist programmes intended for the cultural and tourist development of the region. At the same time, the implementation of the programme results in the strengthening of the cultural and educational cooperation of the twin towns. Other projects in the County and towns involve new technologies aimed at providing protection against natural disasters along the Hungarian/Croatian border. In addition, preparations are being made for the projects of regulation the river flaws, and also projects on how to improve the production in agriculture and cattle-breeding.

3 Development of a teaching model in education of students of architecture

The Faculty of Architecture of the Zagreb University organizes field work through its summer schools as part of the regular curriculum between two semesters. Such curriculum can be integrated into, linked with and passed on the regular master studies.

The professional profile of the participants in summer schools is both local and institutional. Among them are domestic and foreign universities, cultural institutions, and specialized experts in different fields.

The fieldwork programmes both in Gorski Kotar and in Podravina articulate local initiatives for the rural development of the Croatian border regions. The programmes are implemented through architectural and spatial planning studies of the wider area (mapping), followed by elaboration of architectural programmes of the locality in question.

In Austria, Italy and Slovenia the European Union launched a project of the International Bicycle Lane interconnecting Austria, Slovenia and Italy by the lanes along the Drava River, from its origin in Italy (Toblach) and all the way to Croatia, where it joins the Danube. The initiative was realized shortly after that, but not beyond the Croatian border. Croatia and Hungary called for the completion of the concept of the International Bicycle Lane project by extending it to the river's estuary. At the initiative of the County and some individuals, in 2001 a project was launched on the local level, and was completed soon after, of the Drava River Bicycle Lane from Legrad to Pitomača as part of the national route and at the same time, as part of the International Bicycle Lane along the Drava River. The Croatian route thus interconnected the existing routes in the direction of Slovenia and Hungary. Hungary expressed interest in the cooperation all along its southern region and it took over the project of the Drava Bicycle Lane from Legrad to Pitomača as foundation for the launching of the Interreg mirror project Three Rivers Tourist Bicycle Lane. The objective of the project was to develop a variety of tourist attractions along the Drava River and at the same time promote elements of the natural and cultural heritage by a network of bicycle lanes

Cataloguing, i.e. mapping of the territory relies on the theoretical work of the IaaC (Torres and Grau, 2003). In terms of methodology, the case studies of Lika and the interior Istria (Štambuk, 1998; Lay, 1998.) can be taken as examples of the mapping of territory, only they do not have exactly the same contents.

When the multi-disciplinary field work is completed, all existing and new elements are incorporated in space as new values, and as such they are built in the development projects. Once the elements of a certain territory are classified, they are interrelated; the spatial planning/architectural programmes are then implemented through a synergy of mutually superimposed values. As a result, the territory is modernized, but always with heightened awareness of the protection of resources and sustainability of development. The process of implementing spatial planning/architectural programmes includes redefining and reshaping of a territory. Once the planning documentation is analyzed, as well as the strategic documents relative to the rural and regional development, new shaping elements are incorporated in the territory.

3.1 Podravina Region

At the start of the field work, the programme is focused on the development of tourist attractions along the Drava River by shaping the bicycle paths from Legrad to Pitomača. The paths have been realized through local funds with the aim to affirm natural and cultural heritage interconnecting the territory of the Drava River Basin. The existing path appreciated linearly the Drava basin. Upon the analysis of the situation, an in-depth interconnecting was planned for the Drava River Basin, which would include Bilogora Mt (Maderić, 2006.) Four locations were selected in the general area, which have insufficiently utilized but interesting tourist potential and resources: thermal waters, protected landscapes, vineyards, places of historic interest, etc. The four points of reference, having the tourist and economic potential of new destinations, support the Drava Basin are: Legrad, Torčec, Koprivnica/Hlebina and Ferdinandovac (Feletar and Feletar, 2008.)



Figure 2: A view of Podravina region

3.1.1 Student project of low density tourism

The low density tourism project was put forward for the entire Podravina region. It implies structural interventions which open up new possibilities in the development of tourism, project of environment, economy and infrastructure. The proposed project is meant as a transverse between continental Europe and the Adriatic. In terms of architecture and spatial planning these are hybrid tourist units positioned as needed near small towns within the protected area of the Drava River. Three types of intervention are proposed in the project low density tourism: holiday apartments in the manner of Podravina traditional architecture, group accommodation in attached modular units having the structure of traditional elements, and miscellaneous resting places along the Drava River being the meandering temporary structures that subtly frame the landscape.

3.2 Gorski Kotar Region

Miscellaneous aspects of infrastructural, urban and rural, networks were also discussed in the region, and the economy based on four developmental fields: agriculture, manufacturing and wood industry, and cultural tourism. In 2006 and 2008 studies were conducted within the teaching programme of the Faculty of Architecture of the Zagreb University. In 2008 twelve developmental

programmes were studied for the four above-mentioned areas, and in 2008 eleven programmes were analyzed.

The intervention is to be applied in medium and small size towns. According to professor Marinović-Uzelac, in late 1960's and in 1970's the urbanization power of medium-size towns was doubted and this kind of thinking considerably contributed to the weakening of Croatian regions.

During the field work, developmental programmes were looked into for the towns of Delnice, Brod Moravice, Mrkopalj as the centre of winter tourism, and Čabar as the centre of woodwork industry. A traffic study was made on internal connectedness between the network of towns and villages in Gorski Kotar and the broad connectedness of the micro-region with larger centres such as Delnice, Rijeka and Zagreb. A detailed study was made for the municipality of Brod Moravice focusing on a small area along the Kupa River canyon with four villages: Gornja Lamana Draga, Donja Lamana Draga, Goršeti and Kavrani.

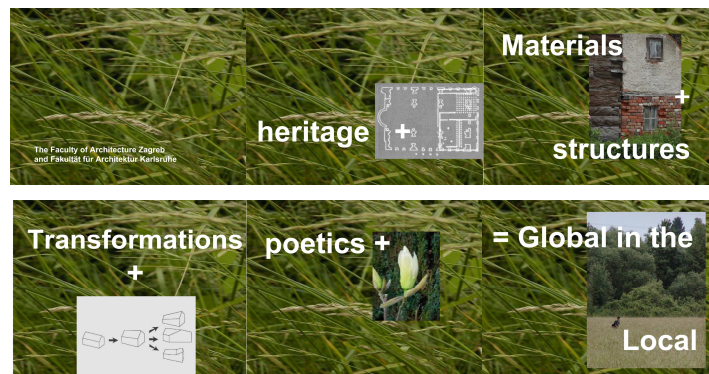


Figure 3: Methods of work in the region

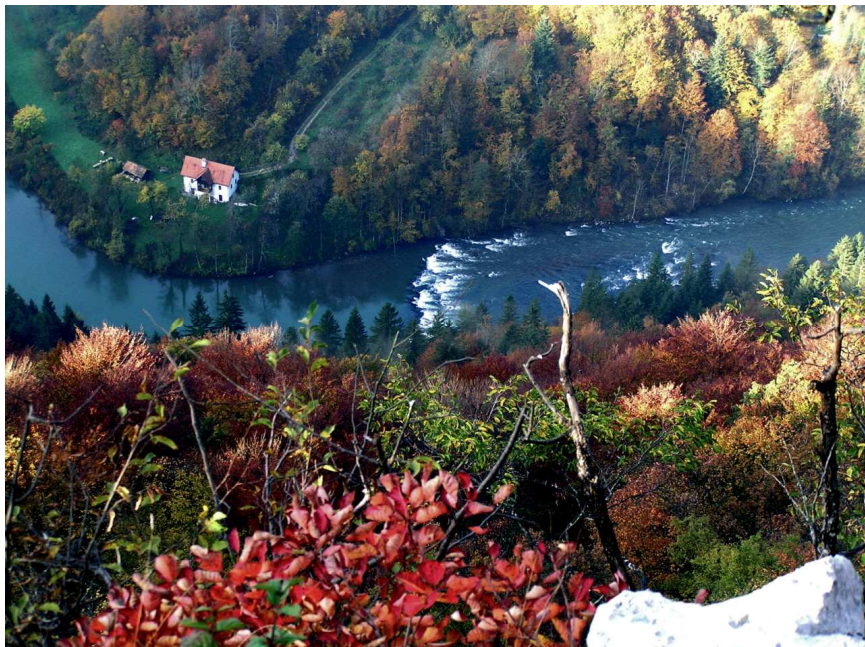


Figure 4: A view from Kavran rocks

3.2.1 Gornja Lamana Draga, Donja Lamana Draga, Goršeti i Kavrani

These villages without any road communications with the municipal centre are isolated from parent country and practically uninhabited. Having been neglected in development, they gradually oriented themselves to the more accessible side of the Republic of Slovenia.

The potential of the villages along the Kupa River is in the agricultural development with an emphasis on ecological farming focused on creating a regional brand through Pre-accession Funds of the Interreg initiative.

The description of the developmental programmes, studies and works of the teaching programme of the Faculty of Architecture of the Zagreb University can be found on www.hicronet.net

In the first phase the study proposed the recovery of the existing architectural buildings without any interventions, i.e. erecting new structures. The Kupa River, linking the four villages, is used for sports activities, and the existing mountain paths along the top of the canyon are also included together with the resting sites and trekking destinations in the vicinity of the villages. Within the comprehensive initiative, the revival of ecologically oriented farming in the village of Goršeti and the renewal of old abandoned vineyards on the slopes towards Brod Moravice may be launched. In the initial phase the technical part

would include new infrastructure for irrigation of agricultural spaces by means of rain collectors.

The second phase is going to encourage revitalisation and reinterpretation of the Kupa River Basin and the four villages. A construction is planned of a scientific centre for the rural development of the general region, activation of agricultural and viticulture potentials and the setting up of a green exchange. The wood industry in the heart of Gorski Kotar complements the littoral Kupa River Basin.

In 2008 a 10-kilometre gravel road was built along the Kupa connecting the villages along the river with the municipal centre. This intervention yielded results which are seen as small steps such as renewal of homes, setting up of small farms and the like.

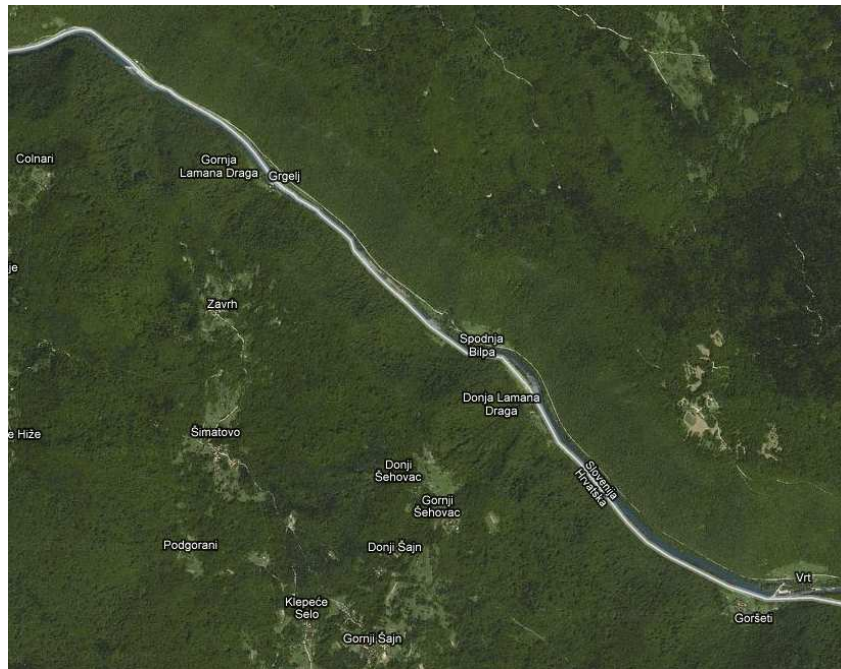


Figure 5: Geographic position of villages

4 Results and conclusions

Croatia's inclusion into the European Union has particularly intensified the significance of regional development which is at the core of the European interest. A large number of activities in economic, social and cultural development is structured around regional connections, especially the border

areas, in order to harmonize the entire European space. In this process, the rural regions are the least developed in Croatia, and they are systematically studied within the teaching programme of the Faculty of Architecture of the Zagreb University. The work and study are organized by regions which resulted in cataloguing i.e. mapping of Croatia – a multidisciplinary processing of the spatial layers in regions.

Each layer has its local specificities, architectural vocabulary, cultural characteristics which need to be detected in order to evaluate them and use as a foundation for contemporary developmental, architectural and spatial planning interventions. In this evaluation, conventional interpretations of the traditional and local development are to be avoided; instead, the values of egalitarian and polycentric development of a region need to be accentuated.

The area has its interior hierarchy of relations and developmental elements. Architecturally, this involves colour, rhythm, dimensions, material, relationship between the interior and exterior, use of lights, relationship between a home or an urban whole and the ambient, logic of a form, morphological orientation to protect from the climatic features. This order is obliging, but at the same time it does not cancel the individuality of a subject which shapes the spatial organisations, but rather motivates them for complex intervention in the landscape. Modern architecture appears as a product that has all incoming information of a certain territory and its memory, interpreting them freely. The final product need not explicitly point to specificities, but can value them freely trying to preserve natural and cultural heritage. Contemporary events in politics, economy, communications and all other aspects of social reality bring about changes which alter existing values, but many elements remain and repeat themselves in different formats. In the processes described in terms of globalisation and transitions, it is necessary to identify mechanisms that enable sustainable development of communities and cultures.

The teaching methods of architects, within the regional development, are based on multi-layered approach ranging from immediate field inspection to highly professional programme processing. The topics which open up through a teaching process are launched locally ensuring the authentic approach towards the issues of the development of Croatian regions.

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