Editorial

Hello, Readers. This time around the honour of writing the editorial is mine. I usually make too many comments, and Prof. Juvanec challenged me to write instead of speak. He was right. Now, I politely ask for your reading time and consideration.
This year's first number of the magazine is out. It contains several articles quite different in terms of content, and each of them interesting in its area of interest, as well as reports on the work of the researchers at our faculty. What the texts have in common are reflections and interpretations pertaining to reciprocal causal consequences between human and other factors.

The first item is an article by Academy member **Andrej Kranjc** entitled **THE KARST REGION – NATIONAL AND WORLD HERITAGE** in which the author presents the regional characteristics of the Karst/Kras, with particular emphasis on its historical significance, given that two internationally established terms originate from it: karst as a universal notion, and 'doline' for a sinkhole. Karst as a 'landscape' is not meant as the earth's surface, but also what is underneath, what we call the karst underworld. This is what essentially differentiates it from an 'ordinary' landscape, where we do not think about what is hidden under the surface. When discussing the Karst, we sooner or later come to thoughts of water, which substantially influences the form of the karst landscape above and under the surface. The author calls attention to the current threats to the Škocjan Caves, the Karst/Kras Region and the Karst/Kras aquifer from increased pollution as much as all kinds of construction and alterations which do not adhere to the principles of sustainable development or the spirit of the UNESCO World Heritage Convention. The author warns that deletion from the UNESCO world natural heritage list is irrevocable. Collaboration among professions, responsable services and others is necessary, as the issues are neither abstract nor projected into remote future

Kaja Pogačar and **Metka Sitar** in their article **TYPOLOGY OF CROSS-BORDER URBAN AREAS** write about cross-border cooperation in spatial design and about the formation of urban hubs. The article provides an overview of specific urban formations through the presentation of selected cases of cross-border regions and, in addition, aims to open some new issues with regard to the context of Slovenian border regions. On the basis of their morphological, economic, and social characteristics, a range of urban types, such as cross-border agglomerations, urban exclaves, bi-national border cities etc. will be identified and analysed from various aspects of spatial development. Although there has recently been a remarkable upsurge of activities and interests in the regions and areas along the borders regarding the formation of border regions and cross-border processes, they usually remain quite rigidly within specialised disciplinary fields, i.e. economy, geography, and sociology. The authors' findings make sense, as the EU came into being because of shared economic and political ideas. Only when these links are well strengthened may other movements occur. In the meantime, we architects will increasingly reach for new smart materials.

In their contribution **SMART MATERIALS AND THEIR APPLICATION IN ARCHITECTURE**, our colleagues **Ljudmila Koprivec** and **Martina Zbašnik-Senegačnik**, present smart materials. These are new materials which will change the structure of building claddings and their operation in a revolutionary way. Using prime examples, they well underpinned their reasoning. The theme is fresh and promising. The fact that our colleague Koprivec carries out practical work in the development department of the Trimo plant is of some significance. Such departments are currently true centres of excellence, where ideas and projects are being generated. For those who do not know, at the end of the past year our colleague received an award for a most original and innovative idea for a woven façade. Congratulations! The gist of the architectural thought evidently remains unchanged: it is people who conceive and form.

And my contribution is about how a settlement is 'woven' in the article **VIDOVIČI AND THE CULTURE OF SPACE DESIGN**. The text is predicated on excellent collaboration and the implementation of team work alongside the interstate agreement between the Republic of Slovenia and the Republic of Croatia. Vidoviči is a settlement above Martinščica on the island of Cres. The settlement is a good example of a coordinated combination of different morphological units. The residential section gradually gives way to agricultural plots enclosed by walls. Dry-stone enclosures formed by merged plots stand out in this area and include simple farm outbuildings. Spatial and architectural qualities are embraced in the overall integration of the structures, in terms of functionality and the uniformity of materials such as stone and wood. In terms of the organisation of the entire settlement, Vidoviči is a good example of an overall division and design of space: from the view of the bay to the typological division of structures, to the well-considered exploitation of the corridor network between enclosures, Vidoviči represents a good example of comprehensive segmentation and spatial design also from the viewpoint of anthropology. Perhaps some of you will head for the seaside to see the place. I warmly recommend it.

From the realm of stone and wood of the preceding text, the contribution of **Lara Slivnik** entitled **BUILDINGS WITH IRON AND STEEL STRUCTURES IN SLOVENIA** takes us to a comprehensive review of buildings with iron and steel structures which have been built in Slovenia. There is a detailed presentation of the more important iron structures in Slovenia: the first cast-iron bridge in Ljubljana, skeleton structures of industrial shops, iron structures of the Gorenjsko railways; and steel structures: the pavilion at the Ljubljana Exhibition and Convention Centre, Tivoli Hall, Narta Studio, several structures designed by architect Milan Mihelič, the winter swimming-pool in Tivoli Park, a pavilion at Laško. I am glad the text is not confined to an outline, but meaningfully summarises the essence of the lack of such buildings in Slovenia. Steel structures are demanding to build as they require considerable design knowledge and precision in implementation. A well conceived computer model of space can save us a lot of work. Besides it is also important thatthere is excellent collaboration between the architect and a statics engineer.

A basis for a good structure, complying with the designer's starting points and meeting the carrying capacity needs, is a good perception of space. This is the area discussed by our young colleague **Domen Kušar**. In his contribution **OSCILLATING CONCEPTIONS OF SPACE OF ARCHITECTURE STUDENTS** the author presents modes of testing and gauging these conceptions. He utilises the so-called mental rotation test (MRT), which is meaningful in terms of methodology, and yields comparable results. So far, the results have confirmed the already known and proven differences between the sexes. Some 1,554 students of both sexes participated in the research. The results of the introductory tests from 1999 to 2008 showed very minor fluctuations in the level of spatial conception. But the results achieved in the autumn of 2009 exhibited a substantially worse conception of space, which was statistically characteristic of the male population only. The author speculates on some possible reasons. He concludes by stating that further investigation will be needed to learn whether this is merely a temporary deviation.

A sufficient conception of space is the topic of the contribution from our colleague **Janusz Rębielak** from Poland. It bears the title **STRUCTURAL SYSTEMS FOR MODERN ROOF COVERS**. Emphasis is placed on crystal space structures with large spans. The author presents the tetrahedron as the most suitable form for composing into various integrated wholes. In oval or circular structures, crystal space structures are satisfactorily stiff and stable. The author finds that the componibility of these space structures is also economically viable. Also, elegantly realised space structures possess an aesthetic quality, which may be another spur for wider use in contemporary architecture. This contribution, too, cannot ignore the fact that an architect's concept of space can be implemented only through good collaboration with a statics engineer.

Alongside the articles, the first number also allocates space for our colleagues' reports on their investigations and involvement in research projects. After leafing through these reports, I may summarise my experience by saying that the colleagues are active and diligent. I wish to highlight the resonating work of Prof. Juvanec, who with his conscientious, and at times Sisyphus-like recording of vernacular architecture, enables people to uncover their own pearls. While we are under threat of having the Škocjan Caves deleted from the UNESCO world natural heritage list, our Croatian neighbours will have their Starogradsko polje entered on the list. Reviewing the application documentation, it becomes evident that among five reliable documents, two originate from our colleague. These are documentation for Trim, on the island of Hvar, and the web site Stoneshelter.org. It is my honour to collaborate with the Professor. Colleagues from across the border will express their thanks in the near future as the sites were entered on the UNESCO list just one year ago.
Time will show the course of future research. With its clear orientation toward the glorification of things foreign, ARSS increasingly encourages participation in interstate and other European projects. In order to continue our success, we all have to make an effort and focus our thoughts, and work on collaboration and strengthening team work. Work outside strictly the educational sphere or only within a narrowly delimited research area is not enough. Dedication to work and diligence are also proved by the brief presentations of our teachers' activities at international congresses and conferences.

A footnote: there are fewer collective articles than in the preceding number, which is good. Articles reveal collaboration and team work, but articles are usually written by one author, another reads it, adding something, and a third one...
Well, you had better read the contributions.

Dr. Domen Zupančič