

**Prof. M. Arch. PETER GABRIJELČIČ, Professor Emeritus, University of Ljubljana, Faculty of Architecture, Slovenia**



Peter Gabrijelčič was a longtime dean and professor at the Faculty of Architecture in Ljubljana. He was a visiting professor at numerous universities: in Belgrade, Skopje, Podgorica, Graz, Milan, Birmingham, New York, Oslo, Stockholm, Grenoble, Venice, Lugano, Trento, Trieste, Lisbon and Oxford. Since 1997, the owner of the architectural office Arhitektura and since 1997 the city architect Ptuj. For his work he received several important national and international awards and received numerous awards at national and international competitions in the field of design, architecture and urbanism. During many years of cooperation with fellow designers, he is co-author of many bridges seen in Slovenia and abroad. Among others, the Ada Bridge over the Sava in Belgrade. He is a writer of numerous professional and scientific articles and a member of domestic and international academic and professional associations. Peter Gabrijelčič is Professor Emeritus of the University of Ljubljana.

### **Innovations as a product of artistic and scientific research**

Innovations have always been the driving force of the economic and general development of society. They often occur randomly, but today we know mechanisms that encourage the emergence of innovation. We can create conditions that encourage innovators and researchers in their work.

I wish to draw attention to the now neglected role of artistic creation as an important form in the research process, and to the much needed collaboration and integration of all forms and levels of research. European bureaucracy has proposed to unify the criteria and forms of research work in all technical and social sciences. This is a big mistake and a loss for the international competitiveness of Europe. I believe that innovators must, in their growth, support both intellectuals with the ability of abstract thinking, as well as professionals in a specific field. This universal ability of thinking will enable broader employment flexibility in our own and other fields and provide a »common ground« of communication and connection with other disciplines. To achieve this, the innovators will need "creative peace" where a free transition through project tasks from the lower to the higher levels of abstraction is possible. This is a process of maturity that cannot be skipped if we want to shape inquisitive, and inventive critical thinkers, as well as socially and professionally motivated intellectuals and designers. In addition, we need researchers who will be able to connect both poles of creative research devoted to basic (including purposeless) research in both spheres. In both scientific and artistic (lateral) fields.

Do we truly need two kinds of research in the work of innovators: scientific and artistic? Vertical, scientific thinking is consecutive thinking, lateral thinking skips from one thing to another. Vertical, scientific thinking makes us take one step further at a time. Each step is a continuation of the previous one and the link between them is strong. The validity of a conclusion is measured with the correctness of the steps taken to arrive at the conclusion. In lateral thinking, the steps are not consecutive. We may jump forward, to a new point, and only then fill in the gap behind. Due to the different and, indeed, complementary nature of both approaches, it is beneficial in practice to link both types of experience in one person or in a team, which leads to synergy and encourages innovation in both research poles.