

Resumé

Tibor Alexy: Objective Conditions of Improvement of Damaged Inner City Parts.

The creative process of actualisation of urban structure is to a great extent influenced by objectively acting urbanisation regularities. The paper characterises some of the transformation and interaction regularities, their creative use is determined by the quality of the interference to the changing city structure. The transformational regularities of intensification, integration, homogenization etc. are analysed together with the interactional regularities of structure articulation e. g. polarisation, different urbanity, gravitational effectiveness etc. Recognising of this urbanisational regularities enables to formulate conceptual principles.

Silvia Bašová: Identity of Vernacular Settlements.

Regional identity and harmony of the traditional village were enabled by the continuity of inheriting knowledge and information for many generations. In the end of 20th century industrialisation and the modern movement caused loss of this continuity and disorientation in the rural life, separation of work and housing, town villas inspired the village architecture. Local and regional identity of rural settlements was lost, only a few traditional villages survived - they needed conservation and reconstruction. Tradition can be not only a direct inspiration for architecture of regional style, but in a transformed shape it can influence also other architectural styles. Revitalisation of rural settlements can have different forms, its most important elements are interest of inhabitants and finding of a new local and regional identity.

Jozef Brath: Theoretical and Creative Principles and Methods of Image Forming of Pedestrian Zone Parterre.

The starting point of improvement of city environment is the restructuralisation of traffic system, including creation of pedestrian areas. Urban, architectural and historical analysis

are the base for their designing. It is necessary to find solutions for suitable connection of pedestrian areas and traffic systems, to create new aesthetic quality, to connect pedestrian nodes with valuable architecture, to complete area with "urban furniture". Pedestrian zones consist not only of streets and squares but also of courtyards, passages and public gardens. The interest of society is very important for organisation of pedestrian area design and realisation process. The presence of pedestrian zones improves the environment of the city.

Peter Gál: Optimization of the Development of Settlements and their Surroundings

The relation between the settlement and the surrounding countryside significantly influences the quality of the environment on a region-wide scale. The development of this relationship has brought many negatively acting marks on the environment, which may influence the further development of its quality. The dynamic social changes, generating the important transformation of the economic sphere, create the necessary preconditions for the innovation of the relationship between the settlement and the surrounding countryside. Revealing the laws to optimize the relation between the densely built-up area of a seat and the surrounding countryside is a method of harmonizing the environment with a full-value application of natural elements. The precondition for successful research is the interdisciplinary style of work and the co-operation of architects with other experts, who influence the shaping of the environment.

L'ubica Ilkovičová, Ján Ilkovič: Architecture of Production Activities in the Rural Area.

The connection of agricultural production and rural settlements is projected to the organisation of the rural area. These interactions are economical and social, they concern jobs as well as housing. The current trends present return to the life with nature, to the continuity of vernacular architecture. New forms of production enrich the village structure and improve the social situation. Smaller size of these new works enables greater variability,

their scale is near to the traditional scale and structure of rural settlements. They enable to create nodes of architectural composition, giving a chance for regionally specific architectural and town-planning forms.

Peter Kardoš: Non-conventional Methods of Interpretation of Urbanistic and Architectural Creative Process.

The study summarises cultural parameters of the forming of city structure as well as the importance of continuity of its development. It also shows the permanent dynamics of the changes of spatial structure - architect's duty is to anticipate and secure the needs of inhabitants. The contribution of the method of spatial modelling by designing alternative solutions in the pedagogical process is demonstrated on the base of experience with the spatial endoscopy as a non-conventional simulation technics in architecture and town-planning. The necessary technical equipment and the characteristics of the laboratory of simulation are described in the next part together with the demands on the model and with the procedure of dynamic spatial experience of the observer. The mentioned method and technology are illustrated with the graphical outputs of the endoscopic simulation, the possibilities of digitalisation and multimedial presentation are indicated too.

Ján Komrska: Social Care and Town-Planning.

Social care and town-planning are different activities but they have common items and they can enrich each other. The article is dealing with this common items from the architect's viewpoint. Town-planning is a social service for the society, a few years ago fully under state control. But social state is an utopia, the socialistic one is even a pathological formation orienting its care to a schematic man and segregating the less ideal individuals. That results in a monotonous and anti-human environment. The democratic state prefers integration, visions are verified in discussions, participation of inhabitants is an important concept in the open society.

Henrich Pifko: Principles of the Sustainable Urban Development

The study is discussing those principles of sustainability which are relevant for town-planning. The current problems of cities are analysed looking for possibilities of their fixing in urban structure, traffic concept, resource saving, prevention of pollution, integration with the nature etc. A vision of sustainable city is presented here: it has to be liveable, saving, healthy and just. Proposals for the urban development in harmony with environment are hinted at the end and the examples of environmentally friendly settlements are marginally mentioned too.

Ľubica Vitková: Urban Stability from the Viewpoint of Commercial Facilities.

Study of urban stability shows that the special concern given to the problems of the commerce in urban structures is derived from the dominance of this functional element in the system of facilities and from its ability to put together economical, urbanising and social functions. That all enables to influence urban stability to a great extent. Economical essence of the commerce in a market economy and shift of the economical gravity center to the tertiary sector bring not only positive effects but also problems and contradictions to the urban structure. Fixing of these problems needs special attention.

Matúš Pavlík: The Methods of Determination of the Directions of the Principal Plate Moments

Two graphic methods of the determination of the directions of the principal moments of an isotropic plate are described in the paper. The isoclinic method utilizes the geometrical locuses of points, in which the direction of the principal moments corresponds with the direction of raster lines. It is necessary to obtain several patterns of the moire interference fringes before the complete system of isoclinics can be constructed. The method of the discreet points demands only two patterns of the moire fringes.