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HOW TO DEFINE THE ARCHITECTURAL SPACE – PHYSICAL MODEL

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The paper analyses the way of describing architectural space in a form of physical model with perpendicular projections and it presents selected designing tasks carried within the subject Descriptive Geometry for the first semester of studies at the Faculty of Architecture.

The basic notations of architectural concepts are media of communication between a designer and a client. However, they present a mental model that rises from thought model and is to be materialized as an architectural work.

In the domain of the subject of descriptive geometry offered at the Faculty of Architecture, the academics are often faced with a problem of 'a new' approach to the space, especially a way of its formation and mapping as well as an adequate and the most suitable way in the context of the innovative building technologies. We are sure that while following the traditional methods of forming objects based on projections, an aspect of forming models should be emphasized, which is of particular interest when dealing with the ongoing tendency of developing design concepts based on an approximate structural model.

Construction of architectural models brings many benefits: better understanding of structures, ideas, function and form of the objects. It fulfills the ultimate goal for students i.e. coherent creation of the sense of simultaneous coordination of various operations – composition, structure and aesthetics proportions.

In the educational process of future architects at Polish universities the use of physical models as a tool for development is neglected, especially when compared to the emphasis that is placed on their virtual equivalents. We forget how many advantages can work on the model bring. Obviously, they play the most important role while accompanying architectural projects, however, when introduced to the curriculum of such subjects as Statics of Buildings or Descriptive Geometry they give invaluable teaching benefits. 'The difficult art of building mock-ups is not only to reduce reality. Art has its own rules and presenting construction of the object is merely the pretext'. [3]

There is also an issue of the subject responsibility to develop the skills of using traditional tools for the preparation of engineering drawings. 'If the ultimate goal of architecture is to build, it is

drawing which starts this initiative, and at the same time informs about constructing – it is in fact a record which determines spatial and visual correlations and maps them in geometric and graphic terms. [...] The architectural presentation, theoretical principles of geometry allow visual transfer, which is an accurate representation of things. Geometric projection conventions, based on metric rules and the formal definition of architecture form essential elements of the transfer. Such projections suggest: orthogonal, axonometrc and perspective views, which in drawing design are daily used.' [6]

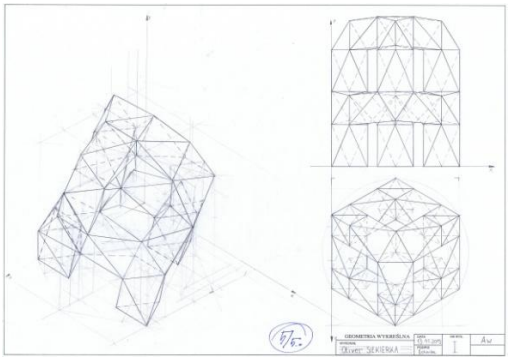

Fig. 1 Orthogonal and Axonometric Projections – designing tasks carried within the subject Descriptive Geometry for the first semester of studies at the Faculty of Architecture

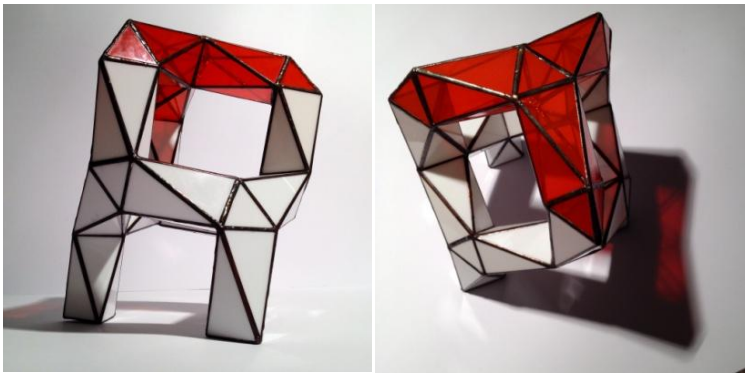

Fig. 2,3 Model – designing tasks carried within the subject Descriptive Geometry for the first semester of studies at the Faculty of Architecture

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