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A DIGITAL IMAGE AND GEOMETRY

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The paper presents the basic errors that appear in papers related to digital image, aimed at showing non-existent objects. Visualisation itself, made by the computer program, depends on the parameters set by the user. If these parameters are chosen properly, the final result is similar to what can be seen with the physical model. Insofar as the geometric attributes are not misrepresented, this is quite accurate representation of geometric form. It is different, when the visualisation is to be combined with other elements, such as background in the form of a digital image of the environment in which the object is located. In this case, the characteristics of the image or images at all stages of the formation of visualisation should be taken into account. First, it applies to parameters such as: lighting, perspective, interaction between elements visualised and digital elements from image or different images [1], [2], [3], [4], [5]. Visualisations have to convince an investor and other decision makers to the solution. Thus, it should be made with due care and faithfully reflect the object to be. This is particularly important in the case of buildings used for many years and those which costs of construction and production are high. Errors occurring in visualisations can be divided, among other, into accidental and intentional, leading to show the object in such a way (contrary to the reality in which it will occur) that can lead to the approval of the design and its implementation. Once a real object is created, everyone slowly gets used to it, though it may significantly differ from the visualisation. But by such "getting used to" one does not return to the visualisation, which was an argument in favour of this and not another concept. The question, whether knowing what a finished object looked like, the decision to implement it could be different, remains open.

Literature

1. Bartel Kazimierz, *Perspektywa malarska*. T. 1 [*Perspective in painting, Vol. 1*], Warszawa, PWN, 1960.
2. Bartel Kazimierz, *Perspektywa malarska*. T. 2 [*Perspective in painting, Vol. 2*], Warszawa, PWN, 1958.