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LINGUISTIC AND TECHNICAL COMPARATIVE ANALYSIS OF THE TECHNICAL TERMS USED WITHIN THE SCOPE OF PERSPECTIVE PROJECTION

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Almost twenty years ago, professor Bogusław Januszewski addressed his original publication [6] to the Polish and foreign scientists whose area of interest are, inter alia, the standards applied in technical drawing and projection methods. After reunion of Poland with the EU community, the Polish standardization body PKN (*Polski Komitet Normalizacyjny*) was bound to implement the European standards into Polish market. In 1975, the Commission of the European Community decided on an action program in the field of construction. The objective of the program was the elimination of technical obstacles to trade and the harmonization of technical specifications [9]. The initiative was taken up to establish a set of technical rules for the design and construction works which, in the first stage, would serve as an alternative to the national rules in force in the Member States, and ultimately, would replace them. The need for consistency between national and European standards resulted in the adaptation of the last and subsequent replacement of the old Polish standards with their new versions which have been adjusted to European standards. According to professor Januszewski's opinion [6], prevailing has become the situation that *"each standard's content which should be corresponding to the title, is becoming understandable and clear only to those among the readers who are well trained and competent in a particular subject readers, to those who can read the text rather intuitively than by exact understanding the delivered text*".

A set of newly composed Polish standards had been adjusted to European standards by adaptation of the principles and the application rules. Among the others, there is a series of standards related to projection methods applied in technical projections. In this presentation we will focus our attention on the standard [9]. It needs to be emphasized that the problem arises from the fact that the European standards have not been implemented and adjusted to our terminology but they seem to have been directly translated into Polish language. Terminology that is used in the discussed standard PN-EN ISO 5456-4 [9] on perspective projection is a prove to the earlier thesis. Let us give some examples. At the beginning of [9] we are reading the basic terms that are used in a perspective projection. To our surprise we read such basic the definitions as: *"linia orientacyjna",* i.a. the

*"viewing line **VL**",* which represents the direction of the square diagonal in a 3-D space, *"kąt rzutowania"* which defines the angle between the picture plane and the ground plane. Then we proceed to the Table1. The set of the terms and symbols applied in perspective drawing has been defined here. Many symbolic designations come just from direct translation from English textbooks. At this point of discussion, the question arises why the terms that had been used in the Polish geometric textbook for many years have now disappeared from the standard [9]. To our surprise we read about such notions as *"punkt oddalenia"*, which is nothing more than the point Z_{45} for the square diagonals (Figure 13 in [9]). In the standard [9] we can also read a limited number of definitions and explanations which neither relate to specific figures nor explain particular notions. What's more, the illustrating figures do not explain the methods of perspective drawing construction. Careful reader will neither be able to construct a perspective drawing based on theprovided standard nor to understand the notions used in the numerous pictures without earlier studies of geometry and geometric textbook ([1], [2], [7], [8]).

In this presentation a technical analysis and comparison between the terms and methods of perspective drawing construction which have traditionally been used in Poland ([1], [3], [6] [8], [9]), Germany [7] and the U.S. [2] will be provided.

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