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PREDICTION OF A SHAPE

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Paper describes continuation of author's scientific work of reading and describing shapes in a real world. The main assumption of this thesis is to find a true relation between shapes and spaces in order to use it during recognition forms.

At first some theoretical considerations has been presented. A question has been raised if it is possible to find a really existing relation between object and a space, which properties of a space at the same time are common to "empty" space and object existing therein.

Further reasoning is dictated by the assumption that: the most popular and affordable for picture of a space is Euclidean space could be understood as a set of points with connections between each other but it could be only an effect of more general rules. In this popular theory quantity of sets and metrics decides on the dimension. Our world have some more factors like: angle, symmetry, continuity, probability, smoothness, topology of sets, numbers of sides, periodicity and convexity. During this work there were performed studies of associations between those elements. That has been observed that all of the above are dependent of another but there was no possibility to clearly claim which of them rules.

The analysis shows the similarity between projection and connections of spatial factors. Moreover it determines a picture of a projected object which is dependent on investigated object, method of projection and a space of perception.

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