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**Abstract paintings, objects and actions: how to promote geometrical understanding**

The paper presents the description and the analysis of an activity carried out in kindergarten, with children who are 5 years old. The starting point is a painting of Wassily Kandinsky, titled "Soft Hard", and its reproduction made by the pupils, following particular tasks prepared by the teacher. Different pedagogical and psychological studies about visual perception deal with laws of visual data organisation. They show that visual perception may hinder the ways of seeing figures; in other words, young pupils observe certain figures rather than others in a picture. With reference to the 4-8 years old children's reading of images, which are present in a painting, some pedagogical studies show that in presence of abstract art paintings, pupils show a "referential need" to identify a likeness, to find out which objects there are in a painting. Starting from this assumption, in collaboration with a kindergarten teacher, I planned an activity based on the copy of each geometrical shape present in the Kandinsky painting chosen as well as its reproduction, by gluing the shapes on a sheet of paper. From a mathematical point of view, this activity involves not only concepts such as "top and bottom" or "forward or back", but also symmetry and geometrical transformations as rotations and similarities, as well as the mutual positions of geometrical shapes on the space of the paper. The analysis of the results produces interesting information about children's approach to geometrical understanding.

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