



Dynamics of picture viewing and picture description

Jana Holsanova

Introduction

In his book *Visual thinking*, Arnheim (1969) writes: "... cognitive operations called thinking are not the privilege of mental processes above and beyond perception but the essential ingredients of perception itself. I am referring to such operations as active exploration, selection, grasping of essentials, simplification, abstraction, analysis and synthesis, completion, correction, comparison, problem solving, as well as combining, separating, putting in context" (Arnheim 1969: 13). He draws the conclusion that "visual perception (...) is not a passive recording of stimulus material but an active concern of the mind" (Arnheim 1969: 37). In order to understand the dynamics of the ongoing perception and the cognitive processes involved, I investigate the dynamics of picture viewing and picture description (Holsanova 2001). I connect two disciplines, linguistics and vision research, and combine two methods, spoken language descriptions and eye movement protocols, to cast light on the underlying mental processes.

In the first section of this chapter, I present the data, method and analytical tools of the experimental studies. In the second section, I discuss the results of the empirical studies within the functionalist and information-processing framework. The third section addresses how the observers verbalize their impressions from the picture and how their picture descriptions differ in style. In the fourth section, I consider how the results from the studies contribute to an understanding of the dynamics of the ongoing perception processes – an area on the intersection of artistic and cognitive theories. Finally, in Section 5, I present an eye tracking study on picture viewing and mental imagery. The results are summarized and discussed in Section 6.