"Gießener Abendgespräche Kognition und Gehirn"

Mittwochs, 18.00 bis 20.00 Uhr, Raum F009

23.10.2013

"Why good thoughts block better ones: The mechanism of the pernicious Einstellung (set) effect"

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The Einstellung (set) effect occurs when the first idea that comes to mind, triggered by familiar features of a problem, prevents a better solution being found. It has been shown to affect both people facing novel problems and experts within their field of expertise. Here I will show that it works by influencing mechanisms that determine what information is attended to. Having found one solution, expert chess players reported that they were looking for a better one. But their eye movements showed that they continued to look at features of the problem related to the solution they had already thougt of. The mechanism, which allows the first schema activated by familiar aspects of a problem to control the subsequent direction of attention, ensures a speedy response in familiar situations, but it can lead to errors when the first thought that comes in mind is not appropriate. This mechanism for biasing attention may contribute to a wide range of biases both in everyday and expert thought –from confirmation bias in hypothesis testing to the tendency of scientists to ignore results that do not fit their favoured theories.