

# From Thinking to Acting: Anticipation and Reaction

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While in the early history of AI reasoning processes were thought to be the most important ingredient of intelligence, nowadays the notion of determining the right action has become the predominant notion. Of course, reasoning and deliberation is still important since it guides action selection processes. Nevertheless, a new trade-off between deliberation and anticipation on one hand and uncertainty and reactivity on the other hand has to be found. I will demonstrate this development using examples from the robotic systems developed in our group, which are able to play robotic soccer against other robots, which play foosball against humans, and which act in rescue scenarios in order to locate victims.