Project 1:

In the influential book Representation reconsidered, philosopher William Ramsey (2007) notes: “It has become almost a cliché to say that the most important explanatory posit today in cognitive research is the concept of representation. Like most clichés, it also happens to be true.” According to the computational-representational theory of mind (CRTM), thinking is the manipulation of discrete, language-like symbols according to explicit computational rules. In humans this is said to be a language of thought. This radical theoretical concept has been challenged by recent accounts of situated cognition. Although all situated accounts argue against the classical language of thought approach of Fodor (1975), theories of situated cognition have supporters from both, the computational/representational and the anti-computational/anti-representational camps. Dynamicists like Chemero (2009), for instance, defend a decidedly anti-computational/anti-representational version of extended cognition (see also Barrett 2011); in contrast, Wilson’s (1994) “wide computationalism" and Clark’s (2008) “extended functionalism” are unequivocally computational/representational. In a similar vein, while some proponents of embedded or ecological approaches to situated cognition, for instance in the area of vision research, explicitly reject traditional computational/representational approaches (Gibson 1979; Noë 2004), Others modify the latter approaches by integrating environmental resources (Ballard et al. 1997). Thus, theories of situated cognition range from computation/representation friendly (Alsmith & de Vignemont 2012; Prinz 2009) to explicitly anti-computational and/or anti-representational (see Thelen et al. 2001; Brooks 1991; Pfeifer & Bongard 2006). Questions to be tackled in this project thus are: To which extent can descriptions of cognition be adequate if we dispense with representations? Or do we have to invoke (stable) internal representations to account for one of the four key phenomena? If yes, which functional roles should representations play? This philosophical PhD project aims to evaluate the notion of mental representation and its explanatory power in the light of the paradigm of situated cognition. The task will be to develop a viable notion of representation that is both conceptually sound and suitable for explanations in the cognitive sciences. The working hypothesis is that a notion of representation is needed but that an adequate account of mental representations describes them as context-dependent, dynamic, action-oriented and created on the spot.