

In this dissertation, *Coordination, Cooperation and Cohesion*, I propose a theoretical and methodological framework for the study of collective interactions and I apply this framework to the study of coordination and cooperation in three experiments, which were conducted both in the lab and in the wild. The dissertation includes an introduction and a conclusion section and four articles the main points of which are discussed in the synopsis.

The introduction summarizes the general framework of the research project, and shortly discusses what cooperation is and how it stabilizes through coordination and leads to social cohesion. Furthermore, it addresses the specific theories and methods I have used in order to investigate the research questions.

The first article, *Collective-Goal Ascription Increases Cooperation in Humans* (Mitkidis, Sørensen et al., 2013), is an investigation of *process vs. goal* in relation to cooperation enhancement. We study whether ascription of a transparent collective goal in a joint action promotes cooperation in a group. The study found that a transparent goal ascription, that is the clear knowledge of the goal of a joint action, is associated with an increase of cooperation in future interactions.

The second article, *Does Goal-Demotion enhance Cooperation?* (Mitkidis, Lienard et al., 2013), is a study of ritualized behavior, and particularly on goal demotion, a subject of great importance in the scientific study of religion. In this article, we investigate if a conspicuous and recurrent feature of collective ritualized behavior, *goal-demotion*, promotes lasting cooperation. We report that goal-directed collective behavior is more efficient than goal-demoted behavior for motivating participants to engage in ulterior cooperation.

The third article, *Extreme Rituals Promote Prosociality* (Xygalatas, Mitkidis, et al., 2013), brings the focus out of the laboratory settings and into a natural setting (Mauritius), by comparing religious rituals that varied in levels of intensity. We found that participation in a religious ritual involving multiple body piercings and physical exhaustion increased generosity compared with a similar ritual that lacked severity, while perceived pain was correlated with generosity both among performers and observers. Furthermore, we report that high ordeal rituals increased superordinate inclusive over parochial identities.

The fourth article, *Beyond Synchrony. Coordinated Hands and Hearts in a Complex Joint Action Task* (Wallot, Mitkidis, McGraw, & Roepstorff, 2013), finds us back to the lab where we used a complex joint action task to investigate how changing the focus *from process to goal* (this time we talk about *product* which is a materialized goal) yields novel insights regarding the interplay of different forms of coordination in real world activities. We show that an increase in the flexibility of agents' roles leads to a lower degree of synchrony. Moreover, this flexibility results in an increase in perceived cooperation as well as an improvement in product performance. We conclude, somewhat surprisingly, that better cooperation is associated with a lower degree of synchrony.

In the introduction I discuss coordination, cooperation and cohesion and place them into a theoretical framework, where coordinated activity is a prerequisite for cooperation and cooperation leads to cohesion. In the first experiment (article 1 and 2) I investigate the role of *process vs. goal* in enhancing lasting cooperation. The second experiment (article 3) gets more into the role of intensity in prosociality, a term that is more general than cooperation and indicates social cohesion. In the last study (article 4) I make a step backwards and attempt to investigate the role of coordination in cooperation and how changing the focus *from process to product* yields novel insights into what successful coordination is and how this facilitates cooperation not only in terms of satisfactory process but also in terms of product performance.

In the *Conclusion*, I summarize and present my general conclusions and acknowledge all my collaborators and assistants in research.