Philosophers such as Michael Bratman, John Searle, and Raimo Tuomela have proposed analyses of the concept of collective intention and collective action. Each of these authors recognizes that collective actions require that the agents possess appropriate beliefs about the other agents’ beliefs. Their accounts also make recourse to other features of collective action and intention, including the structure of the group to which the agents belong, as well as the existence of compatible plans which the agents follow in carrying out the collective action.

This paper argues that a suitably modified version of Ariel Rubinstein’s “Electronic Mail Game” provides an informative model of collective action that helps us to analyze the concepts of collective action and collective intention. The electronic mail game, we argue, is an appropriate model for this purpose because it emphasizes the role played by interactive knowledge – that is, knowledge that one agent may have about the knowledge possessed by other agents. Interactive knowledge comes in various degrees, which range from David Lewis’s sense of ‘common knowledge’ – in which (every agent knows that)\(^n\) p for all values of \(n\) – to mere ‘mutual knowledge’ (in which every agent knows that p, but may be unaware of other agents’ knowledge of p). In particular, the electronic mail game demonstrates that there are conditions in which only full-blown common knowledge is sufficient for collective action.

By introducing complications into the electronic mail game, we can identify the strategic features that are responsible for various epistemic requirements for collective action. We argue that the strategic problem faced by the agents determines what level of interactive knowledge they require if they are to successfully coordinate their actions and intentions. Furthermore, once we better understand the role played by interactive knowledge in generating collective action, we are also able to recover other facts about collective action that have previously been assumed in the analyses found in philosophical action theory. We conclude that interactive epistemology is the right tool for understanding the concept of collective action.