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Conceptual Model of Collective Action Affordances of Social Media

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BUILDING A CONCEPTUAL MODEL OF COLLECTIVE ACTION AFFORDANCES OF SOCIAL MEDIA

TREO Paper

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Internet and Web 2.0 technologies provide unique benefits for the organisation of collective action (CA) like much-reduced organisation and recruitment costs (Bonchek, 1995; Castells, 2016), and seemingly removing the problem of coordination of large groups pointed out already by Mancur Olson (1965) who initiated the research on the topic. The crucial role of social media in protest movements worldwide (Hall et al., 2018; Lotan et al., 2011; Ruijgrok, 2017) attracted significant academic interest. Yet, recent research on CA in social media leans towards predictive models that use large datasets of content generated on the platforms to forecast the results of a movement (Cihon & Yasseri, 2016; Yang et al., 2016; Zhang & Pan, 2019). These papers offer little in terms of theory development and often provide simple theoretical models to illustrate the findings. To address this issue, we aim to develop a conceptual framework that will help systematise the discussion of CA initiatives in social media.

In his discussion of the ways to spark the discovery of new ideas in science, Wicker (1985) suggests systematisation of the key concepts and their relationships as a method to stimulate new insights in familiar research problems. Conceptual frameworks can describe whole fields of scientific enquiry (e.g. biology) (Scheiner, 2010), specific theories within a domain (e.g., information behaviour within Information Science (Pettigrew et al., 2001)), cross-disciplinary issues, or focus on a specific problem or process.

The topic of collective action in social media discussed here is a cross-disciplinary phenomenon incorporating concepts from both social sciences and Information Science. Still, the contribution or consideration of the two domains in the academic discussion of the phenomenon is not balanced. Cihon and Yasseri (2016) pointed out that studies of collective action on Twitter suffer from several biases and do not rely on sociological theory sufficiently, focusing too much on the technical aspects instead.

Aiming to address this gap, we describe the first steps of building a conceptual framework of CA in social media. The conceptual framework of the specific phenomenon is useful for illustrating the core factors involved in the process and the adjacent concepts in the environment. It contributes to the common understanding of the topic and enables a systematic approach to investigating it, providing the rationale for developing research questions and hypotheses (Rocco & Plakhotnik, 2009). Moreover, a conceptual framework may aid the development of the theory around the topic in question. As Weber (2012) explains, a theory might make a novel contribution to a discipline, when it (among other things) defines the relevant existing constructs and associations between them more precisely, also specifying the boundary of the field better.

In our case, we aim to build a conceptual framework for understanding the phenomenon of collective action in social media by describing the core concepts, connections, and interactions between the concepts (related to social media and CA as social phenomena) as well as defining the boundary criteria (what is relevant and what is not). Generally, building a conceptual framework for an interdisciplinary phenomenon is a product of theorization based on the analysis of literature in the domains of concern, rather than on the description of the data and the targeted phenomenon (Jabareen, 2009).

The proposed framework consists of the concept space (core concepts with definitions), relations and connections between concepts, and the environment with key external factors, described with the help of the conceptual model presented Figure 1.

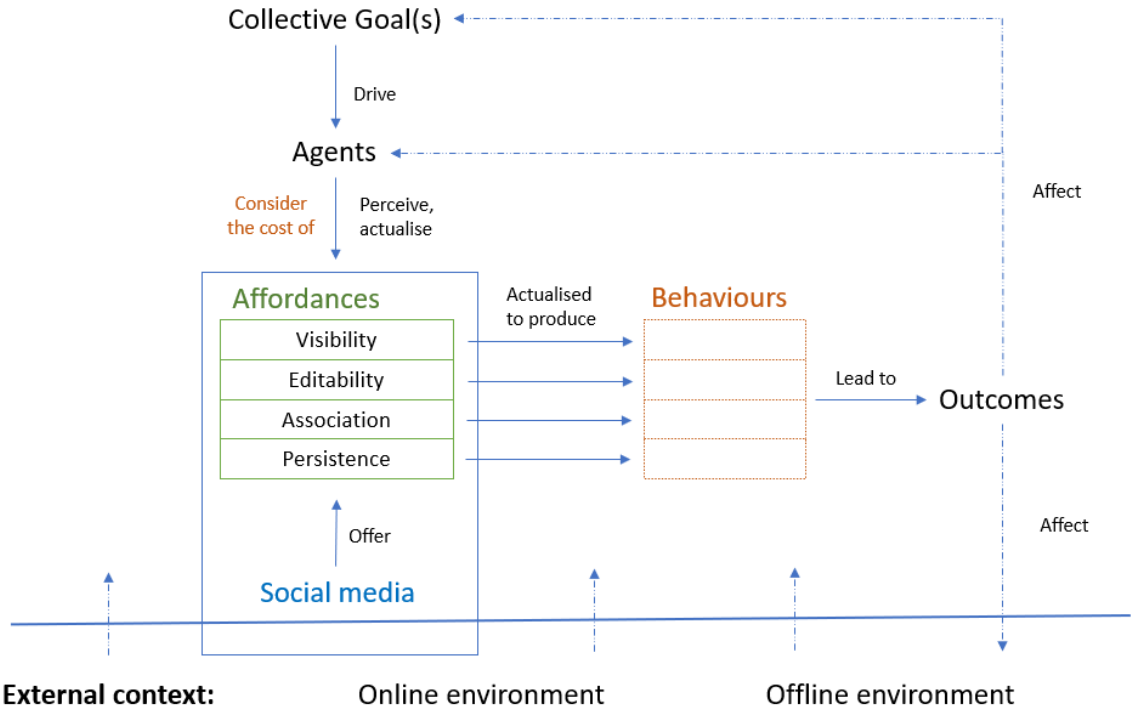

Figure 1. Model of collective action affordances of social media

Core concepts extracted from literature and included in the model are: social media platforms and their affordances, collective action goals, agents engaged in collective action, behaviours and outcomes. External context including both online and offline environments ascribes the borders of the system in question.

To describe the relevant properties of social media platforms without descending into technical details, we adopt the theory of affordances. There are several general *affordances* that all social media share (visibility, editability, association and persistence (Treem & Leonardi, 2013)), but on different platforms affordances can be realised to a lesser or greater degree. When an agent acts on an affordance (actualises it), *behaviour* is produced. The list of available behaviours on a platform depends on the affordances offered by the platform, the actualisation of previous affordances, agent's abilities and goals (Volkoff & Strong, 2013).

Focusing on affordances rather than platform functions allows considering social media in all their variety, rather than concentrating on the individual platforms with specific functionality. As affordances are enabled by the functions but are more general and abstract, the proposed conceptual framework will be applicable to future social media platforms, which may not share the same functions with the social media websites popular today.

A further advantage of our proposed model is that it keeps the human-computer interaction high-level, avoiding the focus on specific functionalities of the system in use. With that, 1) the model is platform-agnostic and is applicable to the whole spectrum of existent social media platforms, and 2) the model allows to focus on sociological aspects of CA. If necessary, however, the model can be adapted to an individual study case by focusing on the specific platform's sub-affordances as well as considering a particular set of agents. To further develop and validate the conceptual framework, we plan to apply it to the description of several real-life CA initiatives.

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