

GROUP IDENTITY, CULTURE, AND COLLECTIVE INTELLIGENCE

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The human capacity to imitate is considered a critical component in the dissemination, and therefore existence, of culture (Axelrod 1986, Tomasello 1999). While it is not the only mechanism by which culture can spread from person to person, it is almost certainly the primary channel through which language, social norms, and cultural or technological innovations come to be shared within a group of people. For technological innovations, the process of diffusion through imitation clearly can benefit the group (Mason, Jones & Goldstone 2008, Mason & Watts 2012). Why, then, does culture follow the same pattern?

In part, this may be a result of the challenge in differentiating beneficial behaviors from idiosyncratic behaviors without costly trial and error, so it is more efficient to simply imitate everything. While this is plausible and quite possibly true for many cases, it cannot fully explain the dynamics underlying imitation and the diffusion of culture—for instance, the imitation of clearly costly behaviors like self-mutilation.

Prior work has pointed out that culture is critical to collective intelligence, because it is the embodiment of others' knowledge—the process that accumulates partial solutions to frequently encountered problems (Hutchins 1996). To use this accumulated knowledge effectively, however, requires mutual experiences and shared mental models. Critically, a group must also have common goals to act collectively, which for many groups is necessary for their survival.

Thus, while imitation is necessary for the spread of technological innovations and culture, a common group identity is necessary for collective cognition and action. In this talk I argue that other fundamental psychological mechanisms create and facilitate a common group identity, shared mental models, and common goals of the group, and are therefore also fundamental underpinnings of collective intelligence and collective action.

The existence of a group depends critically on the group members belonging to the group, and its importance to the group is underscored by its importance to individuals: the “need to belong” has been called a “fundamental human need” (Deci & Ryan 2000), and group identity is central to the self-concept (Hogg, Abrams, Otten & Hinkle 2004). The desire to affiliate with similar others—homophily—is also strong and universal (McPherson, Smith-Lovin & Cook 2001). This drive leads people who share a common culture, and therefore a common understanding of the world and orientation to problems,

to come together. Those signals of group identity allow fast identification of common culture, facilitating fast collective cognition and action. People's desire to clearly signal their group membership is very strong, and imitation of those signals from others who do not share one's culture can lead to the abandonment of those signals (Berger & Heath 2006).

In sum, there are many well-identified psychological mechanisms that serve to bring people with similar cultures—and therefore similar perspectives on and understanding of the world—into cohesive groups that can think and act collectively towards common goals.

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