

## EVOLUTION, NEUROSCIENCE, AND PROSOCIAL BEHAVIOR IN DISASTERS

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Sociologists have known for some time of the widespread incidence of prosocial behavior in the aftermath of disasters (research summarized in Rodriguez, Trainor, and Quarantelli 2006). They have also criticized the role of media in spreading “disaster myths” which include the idea of widespread anti-social behavior (Tierney, Bevc, and Kuligowski 2006). In this essay I will investigate the evolutionary theory and neuroscience needed to account for such prosocial behavior, as well as to discuss the political entailments and consequence of media framing emphasizing if not inventing widespread antisocial behavior.

The basic political theory perspective is the following: far from showing a Hobbesian nightmare of atomized predation in the wake of the failure of the state, the overwhelming evidence of prosocial behavior in disasters shows the fragility of the atomization practice of contemporary neoliberal capitalism. It’s not that the state is needed to keep a precarious social contract together so that otherwise “naturally” atomic individuals will not prey upon each other; it’s that the state is needed to enforce policies that foreclose the prosocial behavior that would otherwise emerge (Ostrom 2005) and that does in fact emerge in disasters.

With regard to evolutionary theory, the paper will review the debates around altruism and group selection (Sober and Wilson 1998) as well as the debates specific to primate prosociality and its implications for understanding human prosocial behavior and its relation to morality (Joyce 2006; De Waal 2006).

With regard to neuroscience, the paper will review standard affective neuroscience treatments of fear and panic (Le Doux 1996; Panksepp 1999) and on mirror neurons and empathy (Gallese 2001). The idea here is that fear and panic are individualizing while empathy is socializing. Evolutionary neuroscience will reveal that although socializing empathy is the default setting (which now needs disasters to reveal itself, given atomizing neoliberal practices) atomizing panic trumps empathy via an extra affective charge in certain specific and highly intense situations (such as fire in enclosed spaces). The extra affective charge of panic makes it more attention-grabbing; in other words, we are evolutionarily primed to pay more attention to panic behavior in conspecifics than to socializing empathic behavior, as that is the norm or default setting. This extra affective charge is used by media to elicit attention to reports that emphasize if not invent panic and anti-social behavior in disasters.

Although the above is a good general framework, it needs some nuancing. Some media coverage of disasters emphasizes prosocial behavior, celebrating it as evidence of common humanity underneath “political” or “social” divisions (rarely thematized, it must be said, as “class”

divisions). However, the Katrina coverage was notable for its credulity with regard to rumors (disproved within a month or so) of anti-social behavior that in retrospect were little more than shameful racial stereotypes of violent and sexually aggressive African-American males. So it often depends on whether the “right kind” of victims of disasters is being portrayed. Nonetheless, the general framework proposed above does hold for much if not all disaster coverage.

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