**Catastrophe compassion:
Understanding and extending prosociality under crisis**

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ABSTRACT

How do people behave when disasters strike? Popular media accounts depict panic and cruelty, but in fact, individuals often cooperate with and care for one another during crises. I summarize evidence for such “catastrophe compassion,” discuss its roots, and consider how it might be cultivated in more mundane times.

A surprising response to calamity

In the aftermath of Hurricane Katrina, news reports suggested the natural disaster had quickly been followed by a human one. Unchecked by law enforcement, New Orleanians had apparently committed countless brazen crimes. The *New York Times* described the city as a “snake pit of anarchy, death, looting, raping, marauding thugs.” [1]

These harrowing stories shaped authorities’ reaction to the crisis—for instance, deploying the national guard to “take control” of the city, rather than focusing on humanitarian relief. The stories were also inaccurate. Though crime did occur in New Orleans following Katrina, victims by and large remained peaceful, and many helped one another [1-3].

For decades, social scientists have documented two narratives about human behavior during crises. The first holds that following disasters, individuals (i) panic, (ii) ignore social order, and (iii) act selfishly [1, 4, 5]. This cluster of beliefs characterizes popular media accounts of disaster, as well as lay forecasts. In one study, members of the public generally agreed with statements including “when there is an emergency, crowd members act selfishly,” and “when there is an emergency, social order breaks down.” Agreement further tracked support for “coercive” handling of disaster by authorities, such as keeping the public uninformed [6, 7]. Interestingly, police officers—who presumably have more experience with people in crisis—were significantly less likely to agree with these statements [7].

The second narrative comes from historical records. Far from rendering people antisocial and savage, disasters produce groundswells of prosocial behavior and feelings of community. In their wake, survivors develop communities of mutual aid, engage in widespread acts of altruism, and report a heightened sense of solidarity with one another [2, 8-13]. Unaffected people, too,

descend on scenes of disasters to volunteer, as well as flood them with donations and volunteers, a phenomenon known as “disaster convergence” [2, 14].

I will refer to positive social behaviors in the face of negative circumstances as *catastrophe compassion*. Catastrophe compassion is widespread and consistent; it follows earthquakes, war, terrorist attacks, hurricanes, and tsunamis, and—now—a pandemic . As COVID-19 spreads, communities around the world have created “mutual aid spreadsheets” to help vulnerable neighbors [15] and billions of people have engaged in physical distancing to protect public health—perhaps the most populous act of cooperation in history. Consistent with its prosocial nature, one recent study found that people expressed greater intent to follow distancing when it was framed as a way to help others, rather than protect themselves [16].

In addition to being prevalent, catastrophe compassion appears beneficial. Prosocial behavior exerts positive effects on helpers—including increases in happiness and decreases in stress and loneliness. Following disasters, mutual aid also tracks increases in positive collective outcomes, such as social connection, solidarity, and shared resilience [17, 18].

Roots of catastrophe compassion

Psychologists have pinpointed a number of mechanisms that might underlie catastrophe compassion. One pertains to the powerful nature of *social identity*. Each of us identifies with multiple groups, for instance based on our generation, ideology, and profession, and commonly expresses loyalty, care, and prosociality towards members of our own groups [19-21].

Social identity is also malleable. You might be an Ohioan and a tuba player, but those identities will vary in salience depending on whether you’re at band practice or a Buckeyes game [22]. Even new identities created in a lab can take on importance, and shift one’s tendency to act

prosocially towards people in novel groups [19, 23, 24]. Identities also tend to matter most when they contain certain characteristics, including shared goals and shared outcomes.

When disasters strike, victims might suddenly be linked in the most important *de novo* groups to which they've ever belonged. Strangers on a bus that is bombed might experience a visceral, existential sense of shared fate, and might thus quickly not be strangers any longer—but rather collaborators in a fight for their lives. As described by Drury *et al.* [17, 25], an elevated sense of shared identity is indeed common to disaster survivors, and a potent source of cooperative behavior.

A second source of catastrophe compassion is *emotional connection*. Empathy—sharing, understanding, and caring for others' emotional experiences—predicts prosocial behavior across a range of settings [26-28]. Consistent with this connection, a recent study found that individuals' empathy for those affected by the COVID-19 pandemic tracked their willingness to engage in physical distancing and related protective behaviors, and that inducing empathy for vulnerable people increased intention to socially distance [29].

Emotional connection can also comprise mutual sharing of affect across people [30-32]. After disclosing emotion-laden experiences and attitudes with each other, individuals tend to feel more strongly affiliated to one another [33-36]. Such disclosures are also a powerful way to recruit supportive behavior and regulate their emotions through social interactions, for instance “buffering” their stress during difficult times [37-39]. However, individuals often avoid disclosing negative experiences—for instance because they imagine others will judge or stigmatize them—and thus miss out on the benefits of affect sharing [35, 40, 41].

Disasters thrust people into a situation where their suffering is obviously shared with others. This could in turn lower psychological barriers to disclosure, thus creating opportunities

for deeper connection, mutual help, and community. Consistent with this idea, Pennebaker *et al.* [42] found that in the wake of the 1989 Loma Prieta earthquake, individuals frequently talked about the disaster and its effects on them for about two weeks. Paez *et al.* [9] found a similar elevation in emotional conversations among Spaniards following a 2004 terrorist bombings in Madrid. They further found that that sharing one week after the attacks predicted increases in solidarity, social support, as well as decreases in loneliness, seven weeks later.

Extending catastrophe compassion

As Solnit [2] observes, although few people would *want* a disaster to befall them, many survivors look back on disasters with a surprising amount of nostalgia. Floods, bombings, and earthquakes are horrific, but in their aftermath individuals glimpse levels of community, interdependence, and altruism that are difficult to find during normal times. Then, normal times return, and often so do the boundaries that typically separate people.

Might catastrophe compassion outlast catastrophes themselves, and if so, how? Some suggestive evidence emerges from the study of *individuals* who endure personal forms of disaster—adverse events such as severe illness, family loss, and victimization by crime. Such adversity often generates increases in prosocial behavior, which Staub and Vollhardt [43, 44] have termed “altruism born of suffering.” Positive effects of adversity appear to extend in time. For instance, Lim and DeSteno have found that individuals’ experience of lifetime adversity tracks their willingness to help strangers [45, 46]. In their studies, adversity also tracks individuals’ ability to avoid “compassion collapse” by maintaining empathy towards even the suffering of numerous victims [47].

Interestingly, this latter effect is partially explained by an increased sense of efficacy (i.e., the belief one can make a difference) among people who have endured high levels of adversity. Further, experimentally inducing people to believe in their own prosocial efficacy increases their compassion in the face of mass suffering [47]. Though speculative, it is possible that during disasters, people witness their own prosocial efficacy firsthand, because the others they help are highly visible—neighbors, friends, victims on whom a spotlight has been shone. As such, highlighting prosocial efficacy in non-disastrous times, by making the targets and effects of helping more visible, could extend individuals' willingness to help beyond disaster contexts.

One way to do this is to reify and formalize communities of disaster survivors, so that they can remain visible to each other, and salient to survivors' identity. Many such communities already exist—for instance in peer counseling associations that connect and support people who have endured addiction, or lost loved ones to war, or been victims of assault. Entire cultures, too, often use rituals and practices to commemorate shared historical traumas as a way of bonding individuals across generations [48-50].

Another way to extend catastrophe compassion is to simply remember it, and what it reveals about human social behavior. When people believe others will “go rogue” following disasters, they are expressing one flavor of a more general, dim view of their fellow citizens. Individuals tend to be unduly cynical about human nature, for instance demonstrably overestimating the extent that people are driven by self-interest [51, 52]. Cynicism tracks decreases in psychological well being [53, 54] and damages various forms of interpersonal interaction [55, 56]. It can also become self-fulfilling, for instance when people conform to a selfish norm they erroneously believe others are following [51, 57].

As Drury [25] writes, “...in much of everyday life, particularly in Western and neoliberal societies, people are overwhelmingly positioned as individuals acting on the basis of personal self-interest... the repeated finding that people, in fact, act collectively in events where personal self-interest is threatened requires explanation.” For all the suffering they produce, disasters also provide a counterpoint to such cynicism. They present people with a view of ourselves that might surprise us—driven by “otherishness” rather than selfishness during crucially important moments [58, 59].

A way to honor and extend catastrophe compassion is to not be surprised by it any longer, but instead to realize prosocial behavior is common, and thus expect—and demand—it from others and from ourselves.

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