In *The Unthinkable: Who Survives When Disaster Strikes – and Why*, (2008) author Amanda Ripley presents a unique look at humans in the midst of disaster. Her focus is not on disaster preparedness, nor the aftermath of catastrophe, but on the survival arc. This arc consists of three stages of human experience during a disaster: denial, deliberation and decision. Ripley provides the reader with compelling stories from survivors, research from experts, and accounts from her personal experience to describe the physiology of fear and panic. Ripley does offer hope that, by understanding the human experience at the time of disaster, training can be improved for responders and civilians alike.

*The Unthinkable* consists of three parts, in correlation with the three stages of the survival arc. Each section includes compelling stories from a variety of survivors, including natural disaster, plane crashes, shootings and terrorist attacks. Ripley also experiences simulated disaster first-hand to add to the credibility of *The Unthinkable*. Interviews with scientists, psychologists, first responders and historians further give reliability to these tales.

Denial is the first stage of human experience when faced with disaster. Here, filled with dread, victims procrastinate or underestimate the risk. The second phase of the survival arc is deliberation. Physiology causes changes in the brain and body while the victim debates his next move. “The decisive moment,” a phrase Ripley borrows from a French photojournalist, describes the third and final phase of human experience when disaster strikes. It is this moment of decision that separates the survivors from the not-so-lucky, like the 1977 plane crash survivor who grabbed his wife, leapt out a hole in the fuselage, and turned to see most other passengers still sitting in their seats as fire engulfed the plane within minutes. This and so many other stories from survivors lend a personal touch to the glum topic of disaster. The reader is compelled throughout *The Unthinkable* to think about what their own reaction and response would be.

Ripley further immerses herself into the real feelings of being in a disaster situation by experiencing simulations. Rather than simply interviewing flight safety experts or firefighters, she personally participates in simulations to assess her own reactions and responses. The lesson learned from Ripley’s experience in the plane crash at sea simulation, for example, is that self-esteem is an important attribute for survival. Training people to take action while under extreme stress imparts resiliency. By increasing confidence, fear will be reduced, and performance will be enhanced (p. 70).

Reaction and response to disaster is physiological and is not unique to humans. Ripley equates human reaction and response to other animals. It is no coincidence that hours prior to the 2004 Indian Ocean tsunami, elephants and other wild animals headed for higher ground (p. 138). What are these animal instincts? In chapter three, “Fear,” Ripley tells the story of U.S. Ambassador Diego Asencio during a rebel attack. This narrative in particular vividly combines the first-person account and the scientific research to portray human fear as primal. Asencio’s sensation of hair standing on end may be related to “the flashing of feathers in birds or fin extensions in fish – all of which aid in the survival of those creatures” (p. 58). Human reaction and response to disaster also mimics the animal response of playing dead. Chapter seven, “Paralysis,” describes the seeming hypnotis
in the face of fear – of both animals and humans. The remark of a student in the midst of a campus shooting sums it up: “If he thinks you’re dead, he won’t kill you” (p. 167).

While these first defenses are primal, humans are unique in that “we can learn from experience” (p. 70). Unfortunately, “emotions trump reason” (p. 59). The positive physiological changes, such as the constriction of blood vessels to limit bleeding in case of injury, or the “bionic boost” hormones give muscles, are often not as strong as the natural negative effects, such as a loss of the ability for complex thinking and a profound alteration of the senses (p. 58). In the case of human reaction and response, the results also depend on physical fitness and gender. Ripley discusses how these base responses are different for people who are overweight and how they differ among men and women.

Another common animal instinct is groupthink. Primatologist Frans de Waal relates that when chimps sense danger, they band together and even embrace, perhaps to intimidate the enemy while at the same time calming themselves. Think also of a school of fish, a flock of birds, or a herd of sheep. Although there is strength in numbers, Ripley points out that groups need a leader (p. 130). A strong leader can make quick decisions, seems calm and credible and earns respect from the group. As stated by primatologist de Waal, “hierarchy is more efficient than democracy” (p. 130). While groupthink under a strong leader can be beneficial in a disaster, some group situations actually cause the disaster. Here, Ripley cites an annual stampede during a pilgrimage in Mecca and stampedes at the opening of new IKEA stores. Rather than productive groupthink, panic ensues. Investigation into when, where and why panic will strike a group is underway to try to avoid these types of disasters.

Amanda Ripley’s book *The Unthinkable: Who Survives When Disaster Strikes – and Why* is provoking and engaging. By weaving together stories from disaster survivors, scientific research and her own simulated experience, Ripley describes the survival arc: denial, deliberation and decision. The physiological effects are analogous to many other animals, yet dependent on physical fitness and gender. Anyone can increase their odds of surviving disaster by training in advance to react and respond with reason rather than emotion.