A crisis is a shocking and dramatic moment that radically disrupts our ordinary lives. It wreaks havoc suddenly and unexpectedly, leaving destruction and suffering in its wake. As a result, a crisis site produces a disturbing scene: buildings and other material objects are damaged, wounded victims are hurt and in pain, and the tragedy of death causes profound grief. Inevitably, aid will come from all sides, but for many survivors, crises have a lasting impact on their lives nevertheless.

Societies try to reduce and minimize crises, but despite their efforts, crises of all sorts and sizes continue to have major effects across the globe. Even more concerning, crises appear to grow increasingly destructive and unpredictable with tragic consequences for communities and individuals alike. This means that crisis response activities are becoming more important.

Crisis response operations are carried out by frontline personnel of crisis organizations. These crisis professionals intervene to resolve the situation on the ground. Emergency responders (or first responders) rush to the scene of the incident to rescue victims, extinguish fires, control riots, and resuscitate patients. Soldiers engage enemy troops in combat or attempt to bring and maintain stability in volatile settings. And humanitarian aid workers provide live-saving relief and alleviate human suffering during catastrophic disasters. These frontline responders have very different backgrounds and tasks, but all need to urgently react to threatening, uncertain situations. Similarly, all of them face hardships in their work and take considerable risks to help others in desperate need. Their operational activities and experiences are therefore comparable.

One of the most defining aspects of their work is the recurrence of complicated dilemmas: Do I follow preexisting plans or do I improvise? Do I wait for instructions of a superior or take urgent decisions myself? Do I coordinate my activities with other crisis organizations or am I more efficient working independently? Emergency responders,
military personnel, and humanitarians face these dilemmas again and again, but there are no simple solutions. In fact, we know surprisingly little about how frontline responders deal with these crisis response dilemmas. This book aims to address this knowledge gap and offers a comprehensive overview of how frontline crisis responders organize and implement their activities amidst the chaos of crises.

1.1 What Is a Crisis?

Crises have become ubiquitous in recent years, or so it seems. News media report on new crises every day, and the apparent continuous series of crisis situations is by some described as “the new normal.” Yet, this perspective risks an inflation of the word. Crises, by definition, are not ordinary or normal, but disorderly, undesirable, infrequent, disruptive, and confusing. The term is often misused to dramatize circumstances: saying “crisis” is a sure way to attract attention. When societal problems vie over the spotlight, depicting a problem as a crisis suggests that it is more deserving of publicity. A crisis situation may also be invoked or declared to legitimize (otherwise) contentious decisions or even power grabs (cf. Buzan et al., 1998). Politicians and managers can speak of crises to justify autocratic or unpopular measures, and those who contradict them, make themselves suspect of harboring ill will to their country or organization. Such (ab)use of the term may be attractive to opportunistic leaders (Spector, 2019) but also diffuses the concept. This is concerning, because crisis response can only be improved if we have a clear understanding about what the word “crisis” means. Unfortunately, even scholars do not see eye to eye. Part of the problem is that there are many terms that have similar meanings, such as emergency, incident, accident, and disaster. These terms emerged from different research disciplines but have overlapping connotations. While some researchers consider it important to clearly separate these terms, others use the concepts as synonyms. Here, crisis is used as an umbrella term.

A crisis is viewed as any situation that is characterized by a physical threat, uncertainty, and time pressure (see Boin et al., 2016). A physical threat endangers the life or safety of either responders or victims. Uncertainty features in the fact that these situations are often hard to grasp, so that the causes, evolution, and consequences of a crisis are typically unknown and ambiguous. Time pressure, finally, refers to
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the need for a rapid response, because a postponed intervention will likely lead to an escalating impact or cause irreversible harm. A situation must have all three characteristics to qualify as a crisis.

Inevitably, these characteristics raise new questions. People are often not in agreement over whether there is a threat. There have been contentious societal debates over COVID-19, terrorism, and climate change. While some view these phenomena as threats, others remain skeptical or believe there is little need to address these issues. Time pressures and uncertainty, likewise, are perceived and cannot always be easily measured or determined. Nurses in an emergency trauma center are used to urgent work and developed expertise with operating in ambiguous situations, so they will be resilient against stress, but less experienced persons might be rapidly overwhelmed by the time pressure and uncertainty of emergencies. In practice, it is therefore difficult to definitively or objectively label a situation as a crisis. This should not be taken to mean that there is nothing beyond our perceptions or that any crisis declaration is equally valid. From a critical realist point of view, there is a real world, independent from us as observers, even if it can only be accessed through our own fallible observations that are influenced by our social positions in the world. This perspective implies that various constructions of reality can be judged on credibility and legitimacy. Thus, even though crisis understandings rely on our individual perceptions, some situations can be more reasonably and convincingly defined as crises than others.

The definition of a crisis as a threatening, uncertain, and urgent situation enables the inclusion of a variety of empirical cases without becoming overly broad and thereby meaningless. A crisis can range from common medical emergencies and building fires to unique disastrous events, such as the Indian Ocean tsunami, the European refugee crisis, or the global COVID-19 pandemic. Next, crises might primarily pose a risk to ordinary citizens (e.g., a traffic accident) or members of crisis organizations (e.g., an isolated wildfire). A common denominator, however, is that a crisis is an extreme context for those who experience it from nearby (Hållgren et al., 2018).

The selected crisis definition also helps to exclude situations from the study that lack one of the three characteristics of a crisis (i.e., threat, uncertainty, or urgency). First, for a situation to qualify as a crisis, it must pose a direct, physical threat to those affected or the frontline personnel aiming to resolve the situation. Since danger to individuals’
lives and safety is crucial, this book excludes reputational and organizational crises, which only threaten the performance of organizations or the positions of managers (cf. Bundy et al., 2017; Pearson & Clair, 1998). Likewise, in financial and political crises, people’s lives are not directly at stake, so these cases are excluded from the analysis as well. Second, uncertainty is also a necessary condition for a situation to be defined as a crisis, so the selected crisis definition excludes situations that are threatening and urgent, but not uncertain. Some routine emergencies fall within this category. Single-vehicle incidents and scheduled medical procedures are risky moments, which require time-pressured actions, but these situations are also fairly contained and usually quite predictable. Similarly, heatwaves and periods of extreme cold necessitate an urgent response, but the nature of the threat and the type of interventions needed can be anticipated. A complicating factor is that these situations might escalate into crises, particularly when responders have misinterpreted and oversimplified these situations. Still, in most cases, such situations can be addressed by regular, procedural interventions and do not constitute crises. Third, the definition excludes situations in which there is no pressing urgency to act. Limited urgency means that the situation does not require immediate intervention, while high time pressure suggests that a situation will rapidly escalate if actions are not taken instantly. Threatening and uncertain developments, such as the buildup of enemy troops or changes in the natural environment, are worrying trends, but do not demand a reaction in a matter of minutes or hours, so lack the need for a time-pressured response that characterizes crises. Of course, if no actions are taken, these situations will likely produce crises, which demand urgent reactions after all.

At this point, it is also useful to make a distinction between hazards and crises. Hazards are potential sources of damage or harm. A hazard can be contained through pre-crisis measures and policies that keep it from escalating. Hazard management activities can reduce the chances and impact of a crisis in various ways. Flood hazards, for example, can be managed by building dykes, creating floodplains, and prohibiting construction in flood-prone areas. Crisis organizations can also set up warning systems, give timely evacuation orders, and instruct populations on how to act in case of rising water levels. These efforts can avoid a crisis, even when water levels reach unprecedented heights and areas are flooded, because the harmful effects of the extremely
hazardous situation are minimized by pre-impact interventions. Vice versa, floods become problematic if fragile houses have been built in low-lying areas near rivers or seas, if people do not earn enough to have savings for evacuating or storing supplies, and if victims have no access to health care or good sanitation, so that they are susceptible to homelessness, starvation, and epidemics. Crises, therefore, can be viewed as mismanaged hazards. The view on crises as mismanaged hazards also explains why some scholars no longer use the term “natural disaster.” They argue that this mistakenly puts responsibility for disasters on nature. But it is not the natural hazard that causes the disaster. The problem is that poor public policies leave people vulnerable, thereby creating the social conditions that allow a hazard to develop into a crisis (Chmutina & Von Meding, 2019; O’Keefe et al., 1976; Tierney, 2007, 2019). This view also challenges the traditional approach to crises as exceptional, temporary events, which have clear origins, are restricted in time, and can be characterized as disturbing interruptions of normality. Instead, crises are deeply rooted in a society and reflect preexisting societal vulnerabilities that have become normalized in society over time (Roux-Dufort, 2007; Williams et al., 2017). For instance, governmental neglect of hazard management measures in combination with policies that lead to rising socioeconomic inequality create ideal conditions for a disastrous crisis. Regardless of the hazard, the resulting disaster can only be understood in the context of failing public policy in the affected society. Such social roots of crises are important to acknowledge in order to better grasp the nature of crises. A better understanding of crises, in turn, may improve crisis response and reduce dramatic suffering and loss.

1.2 What Is Frontline Crisis Response?

The focus of this book is on frontline crisis response. This means that there are two main boundaries to the book that need to be discussed. First, the analyses in this book are restricted to frontline (or operational) issues, questions, and processes. Most literature on crisis management, instead, is about high-level leaders and decision-makers. In particular, there is ample research on crisis management in political science and public administration literature, focusing on public leaders and the political implications of their decisions (see Allison, 1971; Boin & Hart, 2003; Boin et al., 2016). In addition, many studies
address decision-making by CEOs and other senior managers during organizational crises (see James et al., 2011; Pearson & Clair, 1998; Williams et al., 2017). This strategic focus can be explained by the fact that our attention is usually grasped by the decisions and statements of top-level leaders in times of crisis. As a result, there has been much less attention for frontline responses to crises. Yet, frontline personnel ultimately resolve crisis situations and often run great risks during these operations (Groenendaal et al., 2013; Kalkman, 2020b). Thus, this book focuses on the organization and implementation of crisis operations. It is about the “boots on the ground,” the women and men who get their hands dirty, and the professionals who make decisions on life and death in a matter of minutes or seconds. This frontline focus includes organizational members who coordinate frontline crisis activities. These organizational members are often physically and psychologically close to the frontlines of the crisis and make a real impact, but desk-bound policy-makers and senior decision-makers work at a greater distance from crisis operations and fall outside the scope of this book.

Second, this book is about responses to crises. Crisis response is one of the stages of crisis management. Management of crises begins with crisis prevention or mitigation, which consists of reducing vulnerability to hazards and avoiding accidents or dramatic organizational failures. Next, organizations need to prepare for potential crises by training, exercises, and planning. When a crisis unfolds or has just happened, the response phase aims to minimize its effects through delivering critical, lifesaving assistance, reducing suffering and damage, and resolving the situation. Afterwards, communities or societies go through a period of recovery from trauma and loss as well as infrastructure reconstruction (e.g., Tierney, 2019). While the separation between these stages is clear on paper, they are not always as distinct in practice. For instance, when exactly do organizations shift from crisis preparation to response during an emerging pandemic or a river flood and when exactly does a planned combat mission turn into a crisis to resolve? It can be hard to detail transitions between different crisis phases, but it is usually possible to give an indication of what constituted the response phase. As a general direction, this book specifically focuses on operational dynamics from the moment that a crisis manifests itself and the situation can be characterized as threatening, uncertain, and urgent.
1.3 Why Study Crisis Response?

In practice, crisis response is conducted by a variety of crisis organizations, primarily emergency services, armed forces, and humanitarian organizations. Frontline responders of emergency services include firefighters, emergency medical teams, police officers, search and rescue teams, coast guard personnel, border patrol officers, and dispatchers. Soldiers operate in crisis situations as they are deployed to engage in combat and stabilization operations or provide aid in the aftermath of emergencies. And humanitarian aid workers deliver basic goods and services after destructive conflicts or disasters. For these organizations, crisis response is a primary responsibility, but members of other organizations may also periodically encounter crises, such as operators of advanced technological systems (e.g., aircraft, nuclear power plants) and expedition members in extreme environments (e.g., mountain climbing, space exploration). An interesting aspect about the work of all these frontline responders is that it consists of very hands-on, practical activities, but that many of their occupations are also increasingly professionalizing, so that members need extensive education and training, have much control over their own work, and enjoy considerable prestige (e.g., McCann & Granter, 2019). This professionalization is necessary, because crises are growing more complex, so responders need advanced knowledge and skills to handle them. A core assumption of this book is that all frontline crisis responders, in spite of the differences in organizational and crisis contexts, operate under similarly challenging circumstances (i.e., threat, uncertainty, and urgency), which means that their professional challenges and operational activities can be usefully compared and contrasted.

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There are multiple reasons to study frontline responses to crises. One prominent reason is that there appear to be more and more crises in modern-day societies, even if we correct for the prevalent misuse of the word. To some extent, this is simply the result of growing population numbers, which lead to a rising number of emergencies and also means that more people are affected by large-scale disasters. However, there have also been significant changes in the natural environment (e.g., global warming and biodiversity loss) over the past decades, which increase the likelihood of natural hazards. At the same time, many communities still face poverty, extreme inequality, and failing public
services, leaving people vulnerable to these hazards. The intersection of these processes results in an increasing number and impact of crises. Worryingly, attempts to prevent crises continue to fail and might even increasingly do so. Ideally, governments and organizations intervene before a hazard gets a chance to develop into a crisis and cause harm. Avoiding crises does not only reduce suffering but is often also cheaper than crisis response and reconstruction. Still, crisis prevention and preparation fail in practice, because both activities are very difficult. Charles Perrow (1984) has perhaps most convincingly demonstrated the (growing) difficulties of crisis prevention and preparation in his research on accidents in complex, socio-technical systems. He noticed that there are often incomprehensible interactions between elements in complex systems, which can produce accidents that were not anticipated and are hard to contain once they emerge. Since these systems are also defined by tight couplings, failures reverberate throughout the system, causing new problems elsewhere and resulting in escalating crises beyond the understanding of the humans that are supposed to control the system. Generalizing these insights to society at large, it is very hard (and increasingly harder) for crisis organizations to foresee future crises and preemptively intervene due to the complexity of modern-day societies, so that many crisis plans are symbolic documents at best (Clarke, 1999). Even when prevention and preparation are possible, pre-crisis investments are politically unattractive, because decision-makers prefer to spend scarce resources on other public services that sort more immediate or visible effects. It is not necessarily in the interest of crisis response actors either, since they gain their legitimacy from responding to crises, so fewer crises means less visibility (McConnell & Drennan, 2006). In fact, effective crisis prevention and early neutralization of emerging threats may even facilitate cutbacks on crisis organizations. Paradoxically, public leaders and crisis organizations have therefore little interest in avoiding crises altogether, increasing the need for crisis response operations. There is another reason for studying frontline crisis response: The activity is growing increasingly complicated. Over time, crisis situations have changed in nature and gained new dimensions. Given that our societies are highly interconnected (cf. Perrow, 1984), an incident is likely to have broad repercussions, interact with other dormant threats, and escalate into larger, complex crises (Ansell et al., 2010; Robert & Lajtha, 2002). Political, functional, and
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temporal boundaries are easily crossed in the process, which complicates response efforts. Take the European refugee crisis. For years, Western European states had intervened militarily in Syria, Afghanistan, and Iraq, participating in the conflicts from which people fled away toward these same European countries, which then responded by reinforcing border checks at the EU external border and brokering an EU–Turkey deal to reduce migration numbers but also by expanding reception facilities and policing against violent, anti-immigration protests at home. In other words, crisis response unfolded over a long period of time, across multiple countries, on various political levels, and required interventions by a range of actors to handle its various manifestations. Transboundary crises clearly make responding to crises more complex.

Clearly, crises will continue to affect our societies. With the growing number and impact of increasingly complex crises that are not preemptively addressed, there is an urgent societal need for studying how frontline personnel resolve crises. Studying crisis response practices may help us to better understand frontline response processes and contribute to improving their success. To do so, crisis response success needs to be defined, but the crisis literature is surprisingly silent on the topic of crisis response performance. Certainly, researchers speak about effectiveness when introducing new crisis management approaches (e.g., Ansell et al., 2010; Robert & Lajtha, 2002) or study clear response failures in post hoc analyses (Snook, 2002; Weick, 1993), but they generally refrain from describing how success can be measured in the context of emergency, military, and humanitarian operations. Typically, assumptions about response effectiveness remain implicit. For instance, there is a lot of research on interorganizational collaboration in crises, which builds on the assumption that better coordination and cooperation between crisis organizations will benefit crisis operations (e.g., Comfort & Kapucu, 2006; Moynihan, 2009). Even though this assumption makes sense, there is usually little evidence provided. Evidently, it is difficult to define what exactly successful crisis response entails (Hilhorst, 2002; McConnell, 2020). Some of the confusion results from the fact that evaluators have different conceptions of crisis response goals (see Chapter 12). At the frontline, however, responders do not only struggle with ambiguous goals but also grapple with a range of other challenges in their response efforts. An in-depth, comprehensive study of these crisis response
challenges can serve as a starting point for exploring opportunities for crisis response improvements.

1.4 Dilemmas in Crisis Response

A comprehensive analysis of frontline crisis response begins with bringing together a broad range of crisis studies. The result of this endeavor is surprising: Crisis researchers often reach diametrically opposed conclusions on how to organize and implement crisis response operations. For instance, a top-down hierarchy has proven popular among some scholars (Bigley & Roberts, 2001; Van Wart & Kapucu, 2011), while others have propagated decentralization instead (Drabek & McEntire, 2002; Quarantelli, 1988). In another example, some analysts emphasize cohesion as extremely important to frontline crisis teams (Godé, 2015; Wong et al., 2003), whereas others advocate for heterogeneity and internal debate (Rosenthal et al., 1991; Weick & Sutcliffe, 2001). Scholars, likewise, disagree over numerous other questions related to organizing and operating in crises. Yet, due to the fragmented nature of the literature on crisis response, these contradictions have received little attention. Findings that are published in specialized journals (e.g., emergency services, military, or humanitarian journals) are not always taken up by crisis researchers that focus on other contexts. As a result, the complexity of crisis response is not always acknowledged and there has been little attention for the contradictory suggestions that researchers have put forward over time in different outlets. These contradictory suggestions indicate that frontline members of crisis organizations face persistent dilemmas during their crisis response operations.

Crisis response dilemmas are difficult and contentious choices that frontline responders face when they are reacting to a crisis. Examples include the choices between abiding by organizational norms or following individual convictions, getting emotionally involved or keeping a rational distance, and involving or excluding spontaneous volunteers during the response efforts. These dilemmas do not have straightforward solutions and inconsistent findings can be found in different studies, testimony to the complexity of crisis response work. The fact that crisis response is complex should not be taken as an end-point of the discussion though. It would be a rather disappointing conclusion that rightfully criticizes simplistic answers but also paralyzes the