

Whose disaster? Disaster response as a conflicted field between cooperation and competition

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ARTICLE INFO

Keywords:

Spontaneous volunteers
Disaster management
Conflict lines between official and non-official disaster responders
Hurdles for cooperation
Bourdieu
Germany

ABSTRACT

Disasters reveal solidarity as well as contestation in many different aspects. This article deals with the increasing significance of spontaneous volunteers (here non-official responders to disasters) and the resulting impacts on the established population protection system in Germany. Considering respective changes and differences, it explores subliminal and manifested conflicts among official and non-official responders. Based on a survey among disaster officials (n = 1957), qualitative interviews (n = 12) and workshop outcomes, the findings reveal competing opportunities to participate in disaster response, clashes of logics of disaster response practice, challenges in task distribution, and points of friction due to shared public recognition. This article uses a Bourdieusian lens to analyze these obstacles to cooperation against the background of habitus-related role expectations, shifting dispositions, newly emerging demands for official disaster response, and altered volunteering reward patterns and attractiveness. It concludes with a discussion on underlying hurdles for cooperation among different disaster responders, changing social norms as the significance of non-official volunteers increases, cascading effects of different conflict lines, and effects of societal dynamics on disaster response systems.

1. Introduction

In the midst of a disaster, different kinds of actors respond and at times interact with each other. Disaster responders include emergency service career officers and permanent volunteers, members of relief organizations, disaster-affected people themselves, and the general public. Engaged citizens are often the first on site to provide first aid and assistance, and they are also those who stay after official emergency services leave [1,2]. From the perspective of official disaster management, the engagement of non-official disaster responders – often referred to as spontaneous volunteers – can lead to various opportunities, but also a number of challenges and risks [3–5].

Non-official disaster volunteerism, that is, people helping their fellow people without affiliation to official emergency response/population protection agencies and organizations, is not a new phenomenon, and has seen changes in quality and quantity [6,7]. With the emergence of the internet and social media, online information and imagery can be shared in real-time, which encourages ad-hoc disaster volunteering beyond one's proximal surroundings [3]. Likewise, there are new self-coordination and communication opportunities for collective, spontaneous action as well as means for integrating external volunteers into official emergency organizations' activities [1,8–12].

Different countries have experienced distinct watershed moments of spontaneous mass volunteering which contributed to the

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visibility of non-official disaster responders [13]. For example, in the USA, more than 30,000 unaffiliated helpers responded to the World Trade Center attacks in 2001. Similarly, in Australia, the so-called Brisbane Mud Army comprised over 50,000 volunteers after the 2010–2011 floods. In the German context, despite earlier encounters between official and non-official responders [14], the topic of non-official disaster volunteers received increased attention in the contexts of the 2013 river floods, the refugee situation in 2015 and 2022, the SARS-CoV-2 pandemic, and the 2021 flash floods, and also with the civil security research funding program “Förderlinie Zivile Sicherheitsforschung” [15–19]. The rising significance of non-official disaster volunteers in crisis and disaster response in Germany is contested, especially as it challenges official response perspectives and procedures. Non-official disaster volunteering promotes non-traditional responses, and different kinds of expectations, and also raises new questions and challenges [20].

Concerning the impacts of emerging non-official actors in crisis response on the established population protection response system in Germany: which associated changes and differences may lead to conflicts and impede cooperation? In order to answer this question, we analyze the German disaster volunteering context and combine findings from qualitative and quantitative research to explore how underlying conflicts materialize in the narratives promoted and perspectives held by official operational and administrative actors on non-official volunteering. Building on Bourdieu’s practice-theoretical concept of social exchange relations, the article explores institutionalized and role-related factors that may lead to tensions between official and non-official responders and have an impact on the attractiveness of official volunteering. We find that a Bourdieu-inspired lens on volunteering habitus, capitals, returns, and distributions can 1) further our understanding of how emerging volunteering actors impact the whole system of disaster volunteering and response, and 2) explain tensions and frictions in cooperation among different groups involved in volunteering. In particular, this theoretical perspective allows studying obstacles to cooperation, alterations of social norms within disaster situations, cascading effects along different conflict lines, and societal dynamics irrespective of disasters.

2. Literature review: conflicts between official and non-official disaster response

Early on, US-American disaster research on spontaneous behavior examined aspects and attempts to control or suppress convergent movements of information, resources, and people toward a disaster area – such as evacuation returnees, people inquiring the well-being of relatives and friends, spectators, groups/individuals trying to take advantage of the situation, as well as informal volunteers [21]. Through studying several disasters throughout the USA, Quarantelli and Dynes [22,23] discuss the clash between newly emerging, extending, and expanding behavior/organizational structures and established disaster response organizations (for a later literature review on emergence compare [24]). Disaster contexts challenge established organizations through uncertainty, urgency, the necessity of consensus, losses of autonomy, and changing basis for participation/compliance. Thus, emergency planners tend to reject and/or be suspicious of responses that are informal and perceived as uncontrolled. This tendency has been also observed in the German context. With regard to the blizzard response of 1978/79, Dombrowsky [25] notes frictions between radio amateurs, so-called lay responders, and official operational forces. These frictions arose from clashes between official command chains and protocols versus ‘make-do’ approaches. Likewise, the breakdown of official communication channels contrasted with effectively-functioning ‘lay’ communication channels. There were also tensions regarding internal-external distinctions and the dependence of official responders on lay responders.

While confrontational attitudes may arise between emerging groups and official authorities, e.g. those driven by concerns that issues are not adequately addressed, these two groups are not “inherently in opposition” to each other [26], although conflicts between these two groups may be perceived when faced with a ‘problem’ [4]. This is also due to their significant operational differences, such as flexibility in response or choice of tasks, as well as the structure of volunteers and resources. Official command-and-control approaches leave little room for bottom-up community involvement [27]. While official responders are expected to respond, non-official responders often decide to spontaneously enter the scene [28]. Accordingly, actors draw from very different sources and levels of legitimacy, authority, responsibility, and accountability [29]. One complication is that non-official disaster responders have particularly heterogeneous motivations, activities, and demands: Official responders receive helpful offers from these volunteers, but are also confronted with the challenges associated with accepting such offers. These include risky behavior, people seeking profit, information, or disaster images, as well as potential negative impacts to mobility in a disaster area as converging movement occurs, e.g. in the form of traffic jams [30]. As a result, official responders not only need to respond to the disaster situation itself, but must also make choices and allocate resources for addressing non-official responses, e.g. for risk assessment for external involvement, communication, means of cooperation, task prioritization, and cost-benefit considerations regarding cooperation with or exclusion of external non-official actors [31].

As non-official disaster response is widespread and is often quite effective and efficient, research suggests that official disaster management should anticipate and plan for informal responses, while also considering the facilitation of certain kinds of emerging initiatives [22,24,32]. Official responders use different governing techniques to include or exclude non-official responders [33,34]. Harris et al. [31] describe the “involvement/exclusion paradox of spontaneous volunteering”. This paradox implies that spontaneous volunteers “can be both needed and, simultaneously, not wanted by disaster managers” and “helpers wanting to be involved, [are] juxtaposed with pressures for managers to exclude them”; pressures that arise particularly due to official operating culture/mechanisms that emphasize the importance of guidelines and attitudes, different management and task allocation approaches, and community and volunteering contexts. While cooperation is often necessary and beneficial, the “hedghog’s dilemma” points to the loss of functional independence and flexibility when citizen-led initiatives attempt to cooperate too closely with government agencies [27,29].

The perception of spontaneous volunteers as ‘the Other’ against the background of disaster myth imagery can impede cooperation [17,35–38]. Likewise, media attention at times focuses more on spontaneous activities than on official responders [39], as content

perceived as unusual or emotional makes good stories [40]. Non-official disaster volunteers challenge institutionalized notions that official response forces are the (only) ones in charge in disaster areas, and thus challenge related socializations into particular kinds of professional understandings and military-oriented operational models [2,4,36,41]. However, the presence of and need for civilian engagement is often underrecognized in official planning [32,37,42], especially considering that official responders may be affected or even overwhelmed, and that disaster response and recovery starts before and extends beyond the presence of official authorities at the scene.

Whereas eroding self-aid skills are often discussed with concern [43], Krüger and Albris [6] argue that certain kinds of ungovernable action are treated as “resilience unwanted”. McLennan et al. [29] point to a “weakening of control” of official emergency management organizations when non-official volunteers are involved (compare also [44]). Due to less-flexible command structures on the side of official responders and the lack of overall task prioritization and coordination by non-official responders, there are perceived instances of competition and/or conflict. For example, in some situations non-official disaster volunteers will more promptly address certain tasks, and official responders arrive to discover that their assigned tasks have already been accomplished by non-official responders [2]. Similarly, conflict can also arise when non-official responders do not respect codes of conduct and official authority [35,45,46].

The field of disaster response exposes multiple conflict lines, such as between paid and voluntary emergency-service co-workers within organizations [41,47–49], as well as between different official response organizations. While different (knowledge) backgrounds, e.g. regarding skills, safety training, procedures, value systems, questions about insurance, liabilities, and utility of the cooperation with non-official disaster volunteers can contribute to uncertainty [44], interrelations and conflict lines between the groups of official and non-official responders are still underexplored. With regard to the German context, there are no definitions nor operational guidelines to-date concerning when or which kind of non-official disaster volunteerism tends to be a nuisance, an extra burden, a threat, in competition with official response measures, or a beneficial and/or necessary support. There is also still little analysis of underlying impediments for cooperation and causes of conflict, including role and position-specific differences, dynamics, and changes in disaster response systems due to the increasing significance of non-official responders.

3. Methodology and empirical basis: interview and survey data

This article draws on a mix of qualitative and quantitative data that was collected in the context of the research project ATLAS-ENGAGE (2021–2023) which aimed at a meta-study on changing forms of disaster volunteering in Germany and potentials/hurdles of cooperation between official and non-official responders. The empirical project data – comprising interviews, a workshop, and a survey – was re-analyzed from a conflict perspective for the purpose of this article.

In the form of a content structuring approach based on Schreier 2014 [50], a total of 12 open-ended guided interviews, several informal project conversations, and a workshop discussion with members of official disaster management organizations (both paid and volunteers) (see Table A.1 in appendix) were analyzed to flesh out different kinds of conflicts and frictions surrounding non-official responses against the background of the official, established disaster response system in Germany. For data coding, an analytic framework was used based on Bourdieusian concepts to identify conflicts between official and non-official responders.¹ This approach was supplemented by an inductively generated categorization system of conflicts based on different logics of disaster response practices and rules. Each coded segment was condensed into an analytical statement, and then clustered and subsumed along inductively generated key words,² which were in turn summarized under a broader analytical conclusion (see sub-headings in section 6). The qualitative interview and workshop data are referred to by Roman numerals (see Table A.1 in appendix). Quotes were translated from German for the purpose of this article but analyzed in original language.

The online survey (run from 10 May, to 6 June 2023) conducted with members of operational disaster management organizations and agencies in Germany captured attitudes and perspectives of official disaster responders on non-official disaster volunteers (for full results see [51]). The average respondent served nearly 16 years in disaster and civil protection. The survey was spread via project contacts, online announcements, and key contact persons in various organizations and associations, who distributed the survey among their members. The non-representative survey sample comprises 1957 responses,³ from: members of relief organizations (39%),⁴ the largely volunteer-based government agency Federal Agency for Technical Relief (37%), fire brigades (31%), as well as local, state, and federal administrations with responsibilities in disaster management (9%).⁵ Hence, some stakeholders/organizations are more

¹ **Codes** (see theoretical concepts in section 4): conflicts surrounding 1) different functioning logics and rules, 2) cultural capital (educational qualifications, knowledge and understanding), 3) symbolic capital (prestige, honor, recognition), 4) economic capital (financial aspects), and 5) social capital (social ties and networks).

² **Key words:** Different requirements and rule sets, lack of official guidelines and clarity, lack of respect for official authority, (lack of) understanding for disaster management procedures/for non-official responders, different “languages” and perspectives, degree of flexibility, task demand/competition and waiting pressure, lack of knowledge about official responders and volunteerism, rejection of offers, competition and boundaries of “jurisdictions” for non-official responders (territory principle), switch from official to non-official responders, different operational and communication channels, necessary guidance for non-official responders, change, changing role for official responders, lower investment, attractiveness of volunteering, economic pre-conditions for volunteering, paid vs. unpaid work for the same task, support by employer, limited financial capacities, capacity limitations to train and use non-official responders.

³ As not all questions were compulsory and some respondents discontinued the survey in between, the number of respondents varies for each question. Most questions allowed for the option “I don’t know.” If not noted otherwise, the responses to a question range from 1957 to 1257.

⁴ German Red Cross (23%), St. John Accident Assistance (7%), German Life Saving Association (6%), Maltese Aid Service (3%), Workers’ Samaritan Federation (2%).

⁵ Multiple organizational affiliations possible.

strongly represented than others. The sample included paid staff (10%), official volunteers (70%), and those holding a paid and official voluntary position at the same time (20%). This implies a bias of official volunteers' perspectives – however, compared to the proportion of official paid forces versus official volunteer responders in population protection in Germany [12], the group of paid forces may actually be overrepresented in the sample. The distribution of answers also points towards a bias of operational in relation to administrative actors – in Germany, the operational forces outweigh staff in disaster-related administrations. The survey questions were formulated against the background of the theoretically-derived concepts and assumptions as outlined in section 4 (see also Figure B.1 in appendix). For the purpose of this article, a descriptive statistical analysis of the survey data was undertaken, and complemented by Kruskal-Wallis rank sum tests to look into statistical significance for selected variables and questions. Respective results are mentioned where considered particularly relevant to the topic.

4. Theoretical lens: disaster response as a social field

We draw on Pierre Bourdieu's practice theory and its 'tools' for analyzing societal dynamics through struggles in social space, habitus, capital relations, and associated forms of power [53–59] to explore (potential) conflicts between official and non-official disaster responders.

In order to make sense of society and particular groupings, Bourdieu focuses on the social space that stretches along unequally distributed capital accumulations and clusters of relatively homogenous groups (*milieus*) with different amounts and kinds of means and resources (*capital*) at their disposal [53]. Alongside the accumulation of different capital, individuals or groups also accumulate power, as they hold certain positions of power, and use the related benefits and privileges [58]. The social space is structured by the relative strengths and exchange rates between one form of capital to another as well as the specific rules concerning interaction, legitimization, and distribution and value of labor [59]. Hence, there are two ways the social system can change: First, relative positions in the social space and accompanying relative capital relations can shift and exert pressure on the structures of distribution of social positions and capitals (e.g. with the increasing significance of non-official responders), but also on the habitus which has to integrate these changes and construe some kind of coherence. Second, the rules and institutionalized structures as well as the "rules of the game" themselves, termed by Bourdieu as "the field", can change (for instance through a disaster) and lead to a reevaluation of capitals and a shift in legitimacy. In this way, the attractiveness of official volunteering may change. As the onset of a disaster causes sudden interruptions of or shifts in day-to-day patterns, certain resources and skills can gain or lose value, thus, altering capital relations and dispositions in social space, leading to social conflict. These changes inevitably coexist with competitive struggles surrounding positions and postures [58]. Changing rules of the game in the social space of disaster response are analyzed against the background of competing opportunities to participate in disaster response (section 6.1).

Individuals' perceptions and practices are the result of their preliminary socialization, which reduces complexity and offers a framework to interpret as well as routinize behavioral responses to a situation. People belonging to the same milieu have a higher degree of shared socialization and perceptions (as codified in their habitus) than those of another milieu. Habitus allows people to act according to the specific situation in a practical way in the sense that it does not predetermine but rather shapes thoughts and actions with regard to their limitations [56,60]. Thus, the concept of habitus is an analytical concept to describe how social structures and individual decisions interact. As an internalized, group-specific and socialized *modus operandi* and sense of orientation in social space, the concept of habitus reveals an action's meaning beyond what people may attribute or be aware of themselves, thus beyond a conscious rational choice calculation [56,57,60]. Frictions surrounding different disaster response habitus are analyzed with regard to clashing official versus non-official logics of disaster response practices (section 6.2).

Capital exists in various forms and determines which means (and related power) a person/group has and can gain or lose in social space: Most prominently known are 1) economic capital, which is directly convertible into money, 2) social capital, which builds on social ties and networks, and 3) cultural capital which draws on educational qualifications and incorporated knowledge, such as knowing how to behave or knowing which strategy would lead to best results for a career; but cultural capital also can be objectified, for instance, in form of possession and display of artefacts [54]. In addition, 4) symbolic capital entails prestige, honor, and recognition [55,60]. Official volunteering allows, amongst others, for gains in social capital (comradeship, influence on others), cultural capital (acquiring skills, learning about own strengths, career opportunities), and symbolic capital (societal recognition, social responsibility). These benefits can be motivators for volunteering, yet when specific expectations are not met, such as a respect and recognition, this can also lead to frustration and demotivation [61]. Even though specific capital returns may not necessarily be the main conscious motivators for volunteering (compare [62]), we argue that beyond rational motivations, pre-rational, habitually incorporated motivators are the key foundation for stabilizing the official disaster volunteering system. If they are questioned or altered – as said, this can remain on a more pre-rational level; only the affective outcome is crucial here – the mainly-formal volunteer-based system undergoes changes in the form of various underlying, symbolic, and manifested struggles. Capital-related shifts in reward patterns and tensions are analyzed with regard to cultural capital hurdles in form of challenges in task distribution and symbolic capital contestations revolving around sharing public recognition (sections 6.3 and 6.4).

With the actor group of non-official disaster responders gaining in significance, we use this Bourdieusian lens to explore how these developments may alter reward patterns and understandings within, and expectations upon, the official disaster volunteering and population protection system. Our underlying hypothesis is that conflicts materialize along these changing dispositions (changing rules of the game), interrelations (differences in disaster response habitus), and comparative habitually-perceived attractiveness of different volunteering actors (cultural capital hurdles and symbolic capital contestations). These subliminal conflicts are shown by interpersonal frictions and general hurdles for cooperation among these groups.

5. Case study: disaster response actors in Germany

The operational disaster response system in Germany builds on an interplay and cooperation of governmental and designated civil society actors [63]. While there is a small group of vocational, paid forces who address daily emergency response responsibilities, formal or official volunteers (so called *Ehrenamtliche*, literally those holding an honorary office) form the majority of official disaster response personnel [64]. These official volunteers engage through organizations like the Federal Agency for Technical Relief (Bundesanstalt Technisches Hilfswerk, THW), the local fire brigades, and the relief organizations, such as the German Red Cross (Deutsches Rotes Kreuz, DRK), the Workers' Samaritan Federation (Arbeiter-Samariter-Bund, ASB), the German Life Saving Association (Deutsche Lebens-Rettungs-Gesellschaft, DLRG), St. John Accident Assistance (Johanniter-Unfall-Hilfe, JUH), and Maltese Aid Service (Malteser Hilfsdienst, MHD).⁶ Although available numbers vary, it is estimated that 1.9 million official volunteers are engaged in the German population protection system [65]. These volunteers undergo intensive, professional, and regular training and to a certain extent commit themselves on a longer-term basis by taking over shifts and standby positions, leadership roles, or administrative tasks. Despite diverging legislation in the 16 German states and for the different organizations, the involvement of these official volunteers in disaster response is formally regulated. Once the authority in charge of disaster management sends out a request for operational assistance, the organizations activate volunteers who are trained for overtaking the respective tasks. For some organizations (fire brigades, Technisches Hilfswerk), there are laws codifying leaves of absence from the workplace and compensation for the employer or self-employed volunteer. Together, the official disaster volunteers and paid disaster forces make up what we refer to as *official (paid and voluntary) responders* (compare also [31]).

This traditional base for disaster response is confronted by a very diverse category of responders who are not affiliated with the official disaster management actors. Here we refer to them as *non-official responders/volunteers*⁷; other terms used in more or less equivalent ways are 'spontaneous', 'unaffiliated', 'unofficial', 'outsider', or 'informal' volunteers [1,29]. While some of these non-official volunteers integrate into the formal structures to a certain extent – e.g. by registering previously or on-site with an organization and overtaking tasks through this organization (e.g. DRK TEAM structures), and some cooperate or coordinate with formal structures through organizations such as churches, sport clubs, or employers – others perform their response activities completely independently (see Fig. 1) [52]. Therefore, the modes of and options for interaction and cooperation with official disaster responders vary greatly. The characteristics of volunteers are relevant for the cooperative potential with and acceptance by official responders. For example, the volunteers' age, physical constitution, qualification/skills, own exposure to the disaster, and locality (e.g. residence versus convergence from a greater distance) are important for determining official cooperation with non-official volunteers [52]. Of course, how useful or hindering official responders may perceive non-official volunteers also depends on the disaster phase, the type of disaster, and the location of activity (e.g. inside of outside of the hazard/danger zone) [52]. Likewise, the following management-related volunteering aspects can also play a role: the organizational form of volunteer groups, the potential for resource mobilization, the way of entering and time frame of the voluntary activity, the task profile (e.g. tasks within or outside of official responders' responsibility), the task requirements (e.g. simple tasks or tasks requiring extensive skill sets), and the type of assistance (e.g. hands-on or administrative) [52]. Although numbers are difficult to obtain, the phenomenon of non-official disaster volunteering has gained great significance in disaster response, research, and public attention in the past two decades. In the first months after the 2021 floods in Western Germany, it has been estimated that approximately 100,000 non-official volunteers provided assistance [66]. As a flood-related wiki with more than 800 groups and platforms indicates, the 'group' of non-official responders is extremely diverse and heterogenous [67].

The official response organizations as well as their missions and organizational cultures (re)create values, foster collective identity and habitus, and thus bond and align their members. Their attributed roles and perpetuated meaning of official response as social practice can be understood as resilience institutions. These structure social space in the sense of habituated group processes that

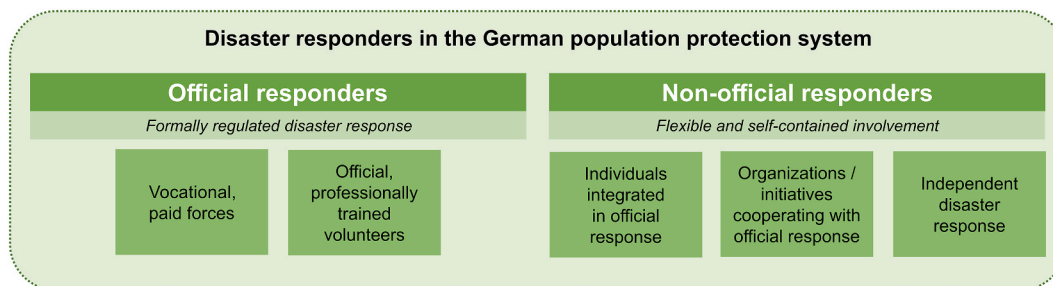


Fig. 1. Categorization of responders.

Source: compilation by authors [based on [52]]

⁶ In the Federal Civil Protection and Disaster Relief Act (ZSKG § 26), these relief organizations are suggested as particularly suitable for supporting state actors. They are not only active in disaster relief but some are also embedded in the wider sector of societal welfare and providers of social services.

⁷ Even though the term "spontaneous volunteers" is widely used, we prefer for the analytical purpose of this paper the term "non-official responders" because there is ample disaster recovery engagement, which is recurrent and longer term, thus not necessarily spontaneous (any more) [compare 10].

stabilize society and advocate certain permanence. Official responders are socialized into a particular professional organizational habitus that does not necessary overlap with the habitus forms found among non-official responders. It is also important to mention that non-official responders can have a vital role in contributing to societal resilience. The contributions they make to resilience often differ from those made by official responders, for example, non-official responses may not provide longer-term stabilizing and institutionalized disaster response functions in society. However, non-official responders nonetheless have important roles in communal coping capacities and processes of strengthening social ties and cohesion, resulting in praise from political stakeholders [68]. Ad-hoc non-official responders build on flexible, spontaneous, and in Bourdieu's terms heretic elements [58], which at least partially question the positioning and presumptions of official responders. Due to the emerging nature of non-official responses, they inevitably clash with established and institutionalized forms of official response.

6. Results: evidence for clashes, conflicts, and challenges among official and non-official responders

In the following, the perspectives of official responders held towards non-official ones are explored with regard to main points of friction and potential contestations arising between these two groups. Based on a descriptive statistical analysis of the survey data and a content-structuring analysis of the interview and workshop data, ambiguous attitudes of official towards non-official responders are identified, which may results from the following four points of friction: competing opportunities to participate in disaster response, a clash of logics of disaster response practices, challenges in task distribution, and shared public recognition (see Table 1 and Figure B.1 in appendix).

Official responders' experiences with and attitudes towards non-official responders are mixed. Rather positive attitudes towards non-official responders are qualified by little cooperation experience and organizational differences. About 86% of the survey respondents report that they have not yet or only partly worked in close cooperation with non-official responders. Of all respondents, 46% have positive associations regarding their cooperation with non-official responders, 37% have mixed feelings and 10% describe the cooperation as negative. Half of the respondents indicate that it very much depends on the situation whether non-official responders are more disruptive than helpful and are ambiguous about whether official and spontaneous responders complement each other well. Reservations towards non-official responders significantly depend on the organizational affiliation: DRK respondents see the cooperation with non-official responders significantly more positive than THW respondents, who have – compared to respondents affiliated with other organizations – the most negative association with non-official responders. Likewise, THW respondents see non-official responders as most disruptive (significant difference with regard to DRK, other relief organizations, and administrations). DRK respondents see the complementation potential between official and non-official responders significantly more positive than THW respondents and fire fighters. Potentially, different roles and tasks in disaster management and organizational self-images and socialization may contribute to these differences.

6.1. Competing opportunities to participate in disaster response

This section about official and non-official volunteering as competing opportunities to participate in disaster response, analyses the willingness of non-official involvement from the side of official responders and the potential changes in the attractiveness of official volunteering (see also sections 6.3 and 6.4).

Official responders do not always remain in their official roles but some also engage privately in disaster response activities: At times, official responders find it more attractive to get involved as non-official volunteers, for example, due to greater flexibility and self-determination (XIII). 27% of the respondents say that they themselves got privately involved, thus outside of their official role in crisis and disaster relief, and a significantly larger portion of 42% can imagine doing so in the future in addition to their official

Table 1
Points of friction between official and non-official responders.

Theoretical perspective	Changing rules of the game	Different disaster response habitus	Cultural capital hurdles	Symbolic capital contestations
Points of frictions	<i>Competing opportunities to participate in disaster response</i>	<i>Clash of logics of disaster response practices</i>	<i>Challenges in task distribution</i>	<i>Shared public recognition</i>
Summary of empirical findings (based on survey, interview, workshop data from the perspective of official responders)	Shifts in rules of the game and in positions and roles: <ul style="list-style-type: none"> • Official responders lose monopoly in disaster situations • Concern for potential loss of attractiveness of official volunteering 	Different approaches with contrary logics of response practice: <ul style="list-style-type: none"> • Operational protocols/ standards • Organizational logics/ values • Communication channels • Task prioritization and handling • Situational restrictions 	Delegating tasks to non-official responders is tricky due to: <ul style="list-style-type: none"> • Required skill set • Safety issues and liabilities • Lacking clarity about task distribution • Changing roles 	Tensions about recognition around: <ul style="list-style-type: none"> • Lack of recognition for official responders/ volunteers • Lack of mutual respect • Shared media and public attention

Source: compilation by authors

function. While reasons for private involvement vary – for example, not being called into the official operation (32%), the wish to help more (34%), more flexibly (22%), or faster (14%)⁸ –, it can be assumed that having had experiences in disaster response outside their official function grants them sympathy for others involved in non-official efforts. Likewise, the fact that 18% of respondents who had gotten involved privately had done so before taking up an official function in disaster response may indicate that non-official engagement can be a motivator to join official forces (XI).

With the opportunity to opt between private and official volunteering, the perspectives on the attractiveness of official volunteerism can change: Some people fear that the alternative way of getting involved in disasters without much pre-investment impact the attractiveness of official volunteerism in negative ways, e.g. people opting against official volunteering (XI, XII).

“A big challenge, or also fear that we have when we quite openly advertise spontaneous volunteers or unaffiliated helpers, or put it out there publicly that we’re looking for people like that, is that we might have people from current preparedness teams who say, ‘oh, I like that better. I don’t want to go through all the training. I don’t even want to show up regularly for service evenings and practice, but I like this new form of participation and assistance better.’ And that there are also helpers from us who then wander off, but we urgently need them in this area, so we also need them. In any case, we still see challenges in how to present our own voluntary work, which is also more time-intensive, in a way that is still attractive.” (XI)

In the survey, the majority of respondents (60%)⁹ disagree and 20% agree that the possibility to volunteer spontaneously makes official volunteering less attractive. 32% see non-official volunteering as more attractive than official volunteering because the latter requires lengthy training, while 45% do not agree. A good third (36%) agrees that non-official volunteering is more attractive than official volunteering because the former does not require conformity to hierarchies and structures, while 41% disagree. A major factor for the attractiveness of official volunteering is comradeship, thus the social capital as return: 78% of the respondents agree that in terms of camaraderie and togetherness, official volunteering is more attractive than spontaneous assistance.

6.2. Clash of logics of disaster response practices

The survey and interview data shows different logics of disaster response practices in non-official and official response approaches: structures, flexibility, standards, and expectations differ (compare also [45]). Responders are working, thinking, and acting in different social realms, based on different limitations. The differing logics of practice can result in clashes, which can be partly explained by different perspectives and conclusions on imperatives in oftentimes chaotic, unclear, and emotionally loaded situations. In the following section, differing logics of disaster response practices with regard to operational protocols, standards and organizational logics, communication, values, task prioritization, and situational restrictions are sketched out in order to exemplify how the resulting clashes can cause subliminal or overt frictions and impede cooperation, if not addressed.

According to the operational protocols, official responders cannot activate themselves but need to wait for official orders. In contrast, non-official volunteers can individually or collectively decide to step in to help. This can lead to frustration for official responders (III): In the case of the flood operation in 2021, some official units were not (yet) able to join the operation, while non-official disaster volunteers were very active on the scene. Irrespective of specific cases, 37% consider it unfair when non-official responders can tackle the situation while official responders’ forces still wait in reserve.

Official responders need to abide by strict standards. However, there is lack of official guidelines for cooperation with non-official responders and unclarity about insurance, work safety, liability, hygiene etc. (I) (see also further survey results [69]). Interview partners remark that imposing overreaching standards and intra-organizational logics, e.g. territorial principles and borders of different chapters, on non-official responders seems unrealistic (IX, X). Non-official volunteers can come and leave as they wish, thus they may choose to get involved differently if they feel the standards are too demanding (IX). Yet, in case of cooperation, official responders have to consider that non-official responders may not be aware of risks connected to their activities (see section 6.3), and need to ensure safety standards so that non-official volunteers and affected people are not exposed to unnecessary danger or risks.

Official and non-official responders also differ in the ways, means, and channels through which they communicate. In addition, official organizations uphold certain values, e.g. humanitarian and democratic principles, which their volunteers should support, and may create a collective identity. In contrast, non-official volunteers join the scene irrespective of and without indicating specific values. As a result, disagreements regarding values can cause friction in moments of interaction. In the survey, 58% of respondents agree that their organization/agency should not work with non-official responders who disregard organizational values. THW respondents were significantly more critical than those from DRK, other relief organizations and the fire brigades concerning the cooperation with non-official responders who disregard the organization’s values. Whereas THW is a state agency and thus builds on Germany’s political system and democracy, DRK and other relief organizations uphold more universal humanitarian values that are not linked to a particular understanding of state.

Frictions between official and non-official responders can also result out of different logics regarding the prioritization and handling of tasks: Operational requirements (e.g. prioritization of tasks, overall situational assessment, responsibility only for certain tasks, bureaucratic processes of procurement, command chains) limit the task flexibility of official compared to non-official responders, who are in turn perceived as chaotic (VI, XII). As they lack understanding of operational procedures, non-official responders may criticize official responders, e.g. concerning pace and efficiency as compared to non-official disaster volunteers (XII). In the

⁸ n = 497 for the data in this and the following sentence.

⁹ n = 611–612 for the data in this paragraph.

survey, 67% of the respondents¹⁰ agree that affected people often expect official responders to provide assistance outside their area of responsibility. This may partly explain why 49% of respondents agree that those affected usually perceive non-official response as more effective/helpful than official one.

Especially at the beginning of an operation, official responders have different priorities than caring for non-official responders. The contributions of non-official responders tend to be considered least helpful during the chaos phase before managerial structures are established (51% not helpful) and more helpful during the phase of once the situation has been brought under control and is stabilizing (63% helpful). This assessment also very much depends on the organizational affiliation of official responders and their respective tasks in disaster management: Fire fighters see the contributions of non-official responders during the chaos phase as much less helpful than DRK respondents and those from administrations. Fire fighters and THW respondents see the contributions of non-official responders during the stabilization phase as much less helpful than relief organizations.

Regardless whether official responders consider the timing suitable, non-official disaster volunteers often expect and demand immediate opportunity to get involved (II). Attempts to keep non-official responders out of the scene can cause frictions (V): "But we noticed pretty quickly that there is considerable resentment among the spontaneous volunteers when you ... when you just say 'no, we can't use you here right now'" (I). As the following quote illustrates, this confronts official responders with changing demands in operational situations:

"The spontaneous volunteers want to help, and right now, on the spot. [...] They feel touched by a certain situation, saying 'I have to do something there'. It is someone who is usually very proactive. It is someone who has a thirst for action, and usually also has doubts about the state structures. It's usually someone who says 'They can't fix this. The city can't do it. The aid organizations can't do it. Now it's up to me because I can help.' That is a very emotional motivation to go there. And of course, when someone like that comes into a situation with this emotionality and this drive, this person has little understanding when you say: 'No, wait. You have to wait now.' And that ... We have to see that we deal with these people early enough. And we have to think about tasks early enough. What you can do with someone in a certain situation, because if I then say: 'You have to wait another two hours ...' conflict is inevitable." (II)

6.3. Challenges in task distribution

The following section analyses challenges and points of tension in task distribution concerning required skill sets and knowledge, safety issues and risks, lacking clarity about task distribution and changing roles of non-official responders.

Different sets of knowledge, training and understanding can create hurdles for cooperation between official and non-official responders. Non-official disaster volunteers are not necessarily unqualified and may have lots of useful skills. However, their skills are less codified and vary greatly from person to person. Since non-official responders may lack cultural capital in certain situations (e.g. disaster experience, skills, understanding of needs, risk awareness, awareness where they hinder official response), official responders see a need for guidelines and consider a professional overview as necessary for total situational prioritization as well as management of core disaster management tasks (II, X). Under certain conditions, for instance in situations with hazards and high-risk exposure, official responders perceive non-official responders as unhelpful and would even prefer them to be absent from the scene: 65% of the survey respondents say that their organization/agency cannot cooperate with non-official responders in the danger zone (German "Gefahrenbereich"); additional 18% say this is partly true. As qualitative survey comments indicate, high risk areas are considered too dangerous for non-official responders because of their lack of knowledge about potential risks and safety measures [69]. The organizational affiliation has a significant impact on the responders' assessment: THW respondents see the cooperation with non-official responders in the danger zone significantly more critical than respondents from relief organizations. This may be related to the different tasks of the official response actors and associated risks.

Against the background that respondents think that operations will increase in duration (81%) and frequency (89%) within the next ten years, 46% agree and 25% partially agree that large or long-lasting situations could not be managed without non-official responders. With increasing demands, workload, and crises, the involvement of non-official disaster volunteers is seen less as competition and more as necessary support (X). 87% disagree that non-official responders take away jobs from official responders.

However, lack of consideration of comparative cultural capital and acquired disaster management skills of official volunteers in the task distribution can lead to frustration and anger as, even if according to our survey not a majority, still some official volunteers worry that non-official disaster volunteers could take their jobs:

"There was also no understanding among our volunteers, [...] when [...] [official] volunteers were involved in sorting and packing these donations in kind. [...] unaffiliated [non-official] helpers were brought into action by the busload [...] There were no open confrontations, but the [official] volunteers had such a rage in their stomachs [...] And then they said, 'That's outrageous.' And then they had tears running down their faces." (X)

"But we have had the phenomenon [of non-official volunteers] for years, only now actually concentrated in the last year and a half, two years, that [...] our [official] volunteer professionals are naturally afraid: 'They are taking my job away.'" (IX)

Therefore, some feel there is a need for clarity about which tasks non-official disaster volunteers may do in cooperation with official responders and which tasks remain the responsibility solely of official responders (IX). As the opportunities to become involved in

¹⁰ n = 614/609 for the data in this and the following sentence.

disaster management increase in diversity, cultural capital, in the sense of professionalized disaster management skills, no longer determines as much whether one can get involved. At the same time, the roles in disaster management are shifting. Some official responders demand for a change in mindset, arguing that official responders should be more willing to take on leadership roles rather than doing simple tasks themselves (XIII): 61% of the survey respondents agree that official responders should guide non-official ones rather than perform simple tasks themselves.

6.4. Shared public recognition

Public recognition and respect are important enablers for public voluntary work, but are perceived as scarce resources [61,70–73]. This section analyses the recognition, but also disrespect, that official responders claim to receive for their position.

A significant portion of survey respondents share the opinion that they as official responders receive too little recognition by paid forces (50%), media (66%), and politics (80%). Many official responders feel that recognition from official volunteers within their organization (70%) is “just right”. The response “just right” is also given concerning their private surroundings (65%), the leadership within their organization (59%), their professional environment (53%), and affected people (46% just right vs. 32% rather too little vs. 11% rather too much recognition).

The recognition which official responders perceive from the side of non-official ones seems mixed: 24% think it is rather too little; 37% find it just right; 8% consider it too much while 31% do not know. When non-official responders disrespect official responders' roles and authority, and disregard thereof, this may lead not only to conflicts but may also harm non-official responders, e.g. when orders or safety barriers are ignored (X). However, respect goes in both directions: 46% of official responders in the survey agree that non-official responders should receive more recognition from official ones.¹¹ When official responders disrespect non-official responders, this can harm an organization's public image. For example, some non-official responders got angry when their offers of help were rejected and they were sent away without any tasks (I, VII):

“Speaking from the perspective of the organization, it is, of course, always a question of image for us. So, if we send spontaneous volunteers away [...] that always reflects on us. When people then spread the word in the media ‘I wanted to help and was not allowed to’ and no one has given a plausible reason, then yes, we have a much bigger problem than we would have in dealing with the spontaneous volunteers.” (VII)

52% of respondents disagree that official responders receive more media attention than non-official ones¹². Official responders thus need to share media and public attention with a highly-visible group of non-official responders on the scene. (Real or perceived) imbalances surrounding public recognition and respect can arise due to the relative visibility of non-official volunteerism and the lack of public/media awareness that the majority of official responders are volunteers as well. As a result, official volunteers may be perceived as and mistaken for paid forces (I).

7. Discussion: different habitus, shifting dispositions, new roles, and unclear interrelations between official and non-official responders

With the increasing significance of non-official responders, significant changes in the disaster response system which impact official responders occur and were analyzed in the previous section with the help of survey, interview, and workshop data. The following section links the empirical results with the theoretical perspective (section 4) and literature review (section 2). Applying a Bourdieusian practice-theoretical lens [53–59] offers potential for the reflection of the differences, points of friction, and impediments for cooperation among official and non-official disaster responders, specifically those described above. With the help of this theoretical conceptual perspective, ambiguous attitudes by official responders towards non-official ones, underlying tensions, and potential conflicts based on the differences between these actors, and changing demands on the disaster response system due to the increasing significance of non-official disaster volunteers can be explained through: 1) changing rules of the game due to competing opportunities to participate in disaster response, 2) different disaster response habitus and resulting clashes of logics of disaster response practices, and 3) changing capital reward patterns as motivators and enablers for official response shift, particularly with regard to 4) cultural capital hurdles causing challenges in task distribution, and 5) symbolic capital contestations as manifested in shared public recognition. As neither official nor non-official responders constitute homogenous groups, the following considerations are based on theoretical ideal types and categories. While it is assumed that official responders have more in common with each other than with non-official responders, this theoretically formulated probabilistic tendency does not preclude other empirically observed cases. It is important to note that this article focuses on potential conflicts, while there are also numerous factors contributing to good cooperation and positive attitudes, especially when tensions and impediments are addressed well.

7.1. Discussion of results

Changing rules of the game due to competing opportunities to participate in disaster response: Habitus and field structures are constantly under pressure to adapt and reproduce themselves, especially when challenged (as in the case of a diversification of opportunities for participation in disaster response): Non-official volunteers demand participation in disaster response and thus question the positioning of official responders as the only legitimate actors [27,29,44]. As a result, official responders lose their

¹¹ n = 606.

¹² n = 609.

monopoly in disaster situations. The formation of a new group of actors within a disaster situation and respective establishment within the concert of disaster response leads to tensions and frictions. Hence, official responders assess the benefits and challenges associated with non-official responders as mixed. In the very codified and hierarchical disaster response system, the activities of 'outside/non-official' actors at times lead to uncertainty and conflicts. As habitus describes internalized ways to respond, actors are not necessarily aware of why and what kind of conflicts they find themselves in: The presence of non-official responders alters the *rules of the game* because the expertise and role legitimacy that have been outsourced to experts are suddenly confronted with 'lay people' who demand involvement. Likewise, there is some concern about a competition for volunteers where official volunteering could lose its attractiveness for some who prefer to engage in non-official response activities (see also capital reward patterns below). In essence, official response organizations face shifts in their positions and roles in the disaster response system due to a perceived need to ensure the attractiveness of official volunteering and to develop strategies of how to deal with non-official responders (for different governing techniques compare [6,31,33,34]).

Different disaster response habitus and resulting clashes of logics of disaster practices: Official response unfolds within the limits of specific explicit and implicit understandings of professionalism, competences, and responsibilities [30]. Internal and external perceptions of official responders (respectively their habitus) are shaped by organizational socialization, experiences and traditionalized practices as well as understandings of mandates and roles compared to outsiders – namely 'the general public' in need of help [4, 36,41]. As such, official responders share common group identities, narratives, values, and views on possibilities and role-attributed boundaries to a certain extent. These internalized and incorporated professional *habitus* of official responders and their respective worldviews are inscribed within response procedures and guidelines; those who have not been participating in the process of constructing the field could not bring in their habitual perspectives. This means, in consequence, that non-official responders have to deal with more unfamiliar circumstances – the field is not as familiar to them as it is for professionals. The habitus of official responders thus tends to leave less room to integrate people external to their system [27] and creates perceptual discrepancies between official versus non-official responders as well as parallel – in contrast to integrated – practices [31]. At times, their emerging and more flexible approach allows non-official responders to employ more targeted and effective response measures than established official response models [4]. Codified official operational protocols, standards, and communication channels are contrasted in this sense – and clash with – more spontaneous, situational logics of disaster response practices by non-official responders. This means that, in addition to the immediate demands of the disaster situation, the demands on the response system change: Official and non-official responders find themselves in ad-hoc negotiation dynamics concerning interrelations, shared visions, modes and timing of task distributions, communication channels, boundaries, and so on.

Changing capital reward patterns as motivators and enablers for official response shift: Official and non-official disaster responders draw from different primary enabling capital bases (compare for a discussion of formal/informal volunteering and capitals [74]): Official responders – paid staff as well as official volunteers – build their legitimacy and authority from their organizational affiliation and mandate, which in turn ensures a codified professionalization and acts as an entry card to the official response system. Thus, official responders are both enabled by *cultural capital* and receive it in return. Paid forces are additionally enabled by employment structures, receive a salary and are primarily dependent on *economic capital*. In contrast to employment, official disaster volunteering does not build upon payment and economic capital (compare [54]). However, volunteers receive certain non-monetary returns. They are, at least partly, enabled by *symbolic capital* [72]: They receive recognition such as with the traditionally used term 'honorary office' (German: *Ehrenamt*) indicates. The lack of recognition for official volunteers is often criticized or perceived as an area in need of improvement [61,70]. Recognition is complemented by a wide range of other motivators, including the will to help others (aka social responsibility), self-experience, and social ties and comradeship [62], thus *social capital*. Non-official response is enabled by networks as a key resource, thus is based on and generates further *social capital* [4,5,11]. With the help of social media, networks are quickly expanded, and volunteers and specific skills and resources can be pooled spontaneously.

But one must also consider that motivation emerges out of complex forms of sensemaking (compare [75]), which cannot be analytically evaluated to a full extent. This means, in the end, all approaches addressing motivation within the disaster response system always have to take into account that indefinite factors influence motivation, and that rather amorphous, less analytically graspable conditions such as an overall culture of solidarity, play a largely overlooked role.

With the rising significance of non-official volunteers, not only changes in the *rules of the game*, but also patterns of capital returns undergo shifts, which can result in, trigger, or intensify explicit or implicit underlying conflicts. While economic capital remains an important enabler and return to paid disaster responders, both official and non-official volunteers share social capital as basis for, motivator, and return for their involvement. Yet, as we will discuss in the following, more significant shifts in capital returns may arise in the context of cultural and symbolic capital.

Cultural capital hurdles cause challenges in task distribution: We suggest that the social norm necessitating educational qualifiers – *cultural capital* – as an entry card to participate beyond neighborly assistance in disaster response is increasingly contested, yet remains crucial with regard to guiding non-official responders and ensuring their safety. Conflicts arise when non-official responders criticize and ignore official rules [35,45,46]. Whereas there are instances of task competition, the survey data suggests that challenges do not generally seem to revolve around officials perceiving non-officials as stealing their tasks and job, especially considering more frequent and demanding crises. Rather, conflicts arise concerning who is doing what and based on which (habitually construed, respectively interpreted) justification. Official responders undergo lengthy qualifications and are socialized to not want to share the field with 'lay people'. The codified training and certificate process for official responders serves as evidence for a person's legitimate inclusion into disaster response activities and into established safety and liability structures. Thus, when their professionalization for disaster management activities is not considered in the distribution of tasks, official volunteers may feel disrespected. At the same time, specific skills by non-official responders may be especially useful for disaster response, and there are instances in

which official responders depend on these skills being provided from external individuals. For example, during the floods in Western Germany in 2021, farmers were important for hospital and nursing home evacuation because they had equipment and the means to get through flooded areas [76]. Thus, in a disaster situation, otherwise not-as-much-recognized cultural capital gains in value and official responders' cultural capital are contrasted, and at times contested, by ad-hoc relevant skills and means. This reconfiguration of the value of cultural capital can lead to uncertainty and also competition.

Symbolic capital contestations as manifested in shared public recognition: The contributions of non-official volunteers in disaster response may additionally contest the forms and volume of symbolic capital that official responders can draw on. With the rising group of highly visible non-official responders, official responders need to share media attention and public recognition. Media reports partly even focus on non-official responders, grant legitimacy, and enable non-official activities [39,40], for example, highlighting extraordinary citizen heroes and portraying them as having unexpected dedication, resources, skills, and drives for solidarity. A strong media emphasis on non-official responders is, in capital terms, of relative loss for official responders (compare [43]). Official volunteers may especially experience this loss in attention, and recognition, as they are often perceived more as officials than as volunteers, and thus potentially associated with duties and expectations [77]. *Symbolic capital*, however, as a key enabler for official volunteerism is suddenly comparatively easier to attain in a disaster situation via non-official volunteerism. On a structural level, these symbolic capital dumping dynamics of 'the honorary office losing honor in comparative terms' can imply shifts in the motivations for official disaster volunteering and undermine a pillar of the overall population protection system, and thus societal resilience. These tensions and struggles may at times erupt in interpersonal conflicts or frustrations.

7.2. Reflection on theoretical perspective

We suggest that – although some of the above discussed conflicts surrounding shifts in reward patterns may be implicit or subliminal only – this Bourdieusian lens is fruitful for at least four reasons.

First, the Bourdieusian lens reveals obstacles to cooperation: Bourdieu's habitus and capital considerations allow a gaining of perspective on somewhat hidden tensions and social dynamics which can impede cooperation among the distinct actor groups of official and non-official disaster responders. These underlying struggles may partly explain why, in spite of ample research and recommendations, the implementation of cooperation concepts remains reactive rather than proactive. Accordingly, potential (real or perceived) threats to the institution of official disaster volunteering, which forms the basis of Germany's population protection system, need to be addressed at their roots.

Second, the application of Bourdieu's principles allows us to understand the altered social norms within disaster situations: Society is marked by different habitus-shaped logics of interaction and continued negotiations, contestations, and assertions of dispositions, and accordingly, exchange rates among the different capitals. Disasters imply abrupt revaluation of capital: skills that were previously not considered especially useful can suddenly be the difference between life and death, while previously dominant capital may lose meaning and/or value until everyday structures are reestablished [78]. While disaster response can boost recognition of official responders (symbolic capital), the presence of non-official volunteers can also challenge official volunteers and their positioning within disaster and emergency management, including their monopoly of legitimate disaster response and related heroic imagery. At times, non-official responders may rise from 'lay people' to 'hyper experts' whose presence can question the expertise and means of official responders. Additionally, the increasing (wo)manpower provided by non-official responders can lead to shifting roles in the system: The role of official responders continually shifts further away from performing simple tasks, towards instruction and supervision of non-official responders as well as providing important pieces of risk knowledge that non-official responders may not have.

Third, the Bourdieusian lens allows for the consideration of cascading effects along different conflict lines: An understanding for potential or effective, implicit and explicit conflicts or contestations amongst different actor groups involved in disaster response can become even more important in the light of rising politicization of disasters and their contexts, including criticism, opposition, suspicion, and sometimes also violence towards official responders. In our survey among official responders, 72% of the respondents assume an increase of the politicization of operating situations in the next ten years (compare also [79]). 24% say that they often or sometimes face hostilities [51], while in our sample fire fighters experience significantly more hostilities than others. As an uniformed authority on the ground, people may perceive official responders as the "long arm of the state" [35], even though the majority of official responders are made up of volunteers who invest their time for the safety of their fellow citizens.

Fourth, this theoretical lens can be used to consider societal dynamics irrespective of disasters: Choices and motivations for volunteering depend on a variety of socio-economic factors. For example, the ways in which people spend their leisure time, thus also their choices of getting involved in society and volunteering, are connected to their social milieus [80]. Accordingly, the social background may impact who gets involved as an official volunteer and who opts for non-official volunteerism. Likewise, the ways in which people interact and in which different forms of volunteerisms work not only depend on official regulations but are also shaped by social rules and expectations in these particular groups. As discourse on gender roles shows, societal dynamics can impact social norms which can then influence decisions or means of volunteering – both in official and non-official contexts. Similarly, large societal trends like climate change or globalization can impact the role of certain capital on individual and societal levels. For example, economic capital and the need to spend time acquiring such capital can increase in times of economic insecurities. At the same time, the neoliberal *zeitgeist* can have a significant impact on the field of volunteer-based disaster management and population protection. This can devalue social, cultural, or symbolic capital. Therefore, decisions for volunteering can be affected by societal change that – at least ostensibly – is not linked to disaster management structures per se. Being aware of dynamics between societal change and (the value of) specific capital returns can be useful for anticipating and attenuating conflicts.

8. Conclusion

The field of disaster response in Germany is conflicted. The established population protection system – which is largely based on official volunteering – is undergoing changes due to the increasing significance of non-official responders. With new actor groups, changing roles, and respective impacts on capital reward patterns, the historically grown volatile balances within Germany's population protection system are undergoing shifts, irritations, and reconfigurations. This – according to our hypothesis – creates space for new opportunities for friction and competition as well as for cooperation.

In order to explore the challenges of cooperation between different disaster response actors, this article applied a Bourdieusian practice-theoretical lens [58] on underlying conflicts in the form of social struggles, frictions, and contestations based on *relative* individual and group positioning and disposition in the field of disaster management and population protection. We argue that underlying rules of the game – in the sense of enabling and rewarding structures, especially of official disaster volunteering – are altered by the increasing quantity and scope of non-official disaster responders. Established roles, logics, and understandings by official responders are partly challenged by, changing, or clashing with non-official approaches.

Based on empirical data from a survey, interviews and a workshop among official responders, we identified four points of friction concerning non-official responders: competing opportunities to participate in disaster response (changing rules of the game), a clash of logics of disaster response practices (different disaster habitus), challenges in task distribution (cultural capital hurdles), and shared public recognition (symbolic capital contestations). The identified conflicts surrounding struggles over legitimacy, control, access, competences, and recognition (see Table 1) can erupt in interpersonal, manifested, and outward facing disputes. However, they may also remain vague on an interpersonal level and, as part of incorporated habitus, manifest themselves indirectly, for example, in interpretations of roles, perspectives on 'the Other', defensive attitudes, and other obstacles to cooperation.

It is crucial to understand and consider these (implicit and explicit) points of friction, as they may constitute hurdles to cooperation between official and non-official responders and therefore undermine disaster response structures. Anticipating and acknowledging the respective shifts, frictions and reconfigurations can be important in order to foster a solid base of both official and non-official volunteering. It may also support efforts to proactively establish clarity regarding roles and forms of cooperation, especially in the light of ongoing societal change and the increasing politicization of disasters. Further studies focusing on perceptions of non-official volunteers could enrich the theoretical-conceptual and practical discussions on systemic shifts as well as suitable future constellations and forms of interaction.

Funding information

The article is based on a secondary analysis of results from the research project ATLAS-ENGAGE "Atlas of Civil Society Engagement in Population Protection – Societal Change and Involvement in Authorities and Organizations with Security Tasks" (2021–2023), which was funded by the Bundesamt für Bevölkerungsschutz und Katastrophenhilfe, Germany (funding code: BBK III.1–41201/0011). ATLAS-ENGAGE was conducted by the Disaster Research Unit of the Freie Universität Berlin, received technical support from the Bundesanstalt Technisches Hilfswerk, and was supported by the Deutsches Rotes Kreuz through a subcontract.

CRedit authorship contribution statement

Sara T. Merkes: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Visualization, Writing – original draft, Writing – review & editing. **Theresa Zimmermann:** Visualization, Writing – original draft, Writing – review & editing, Conceptualization, Data curation, Investigation, Methodology. **Martin Voss:** Funding acquisition, Methodology, Project administration, Resources, Supervision, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

Acknowledgements

Initial ideas for the article were discussed in the panel "Involving People in Emergency Response" at the Northern European Emergency and Disaster Studies Conference: NEEDS 2022, Copenhagen, November 2, 2022 (Theresa Zimmermann, Sara T. Merkes and Stephan Lorenz: *Whose disaster? Disaster involvement as a conflicted field between cooperation and competition*). We are grateful to the audience for their valuable comments. Special thanks go to our interview partners, the survey respondents, and everyone who supported our research. We would also like to thank the three anonymous reviewers for their valuable comments.

Appendix A

Table A.1

Overview qualitative data

Number	Date (mm-dd-yyyy)	Type	Interviewee/Organization	Interviewer/Facilitator
I	11/02/2022	Group interview	Bundesanstalt Technisches Hilfswerk	First and second author
II	11/02/2022	Interview	Johanniter-Unfall-Hilfe	First and second author
III	02/15/2022	Interview	Deutsches Rotes Kreuz	First and second author
IV	02/21/2022	Interview	Bundesamt für Bevölkerungsschutz und Katastrophenhilfe	First and second author
V	02/23/2022	Interview	Bundesnetzwerk Bürgerschaftliches Engagement	First author
VI	02/24/2022	Interview	Deutsche Lebens-Rettungs-Gesellschaft	First and second author
VII	03/29/2022	Interview	Malteser Hilfsdienst	First and second author
VIII	05/31/2022	Interview	Deutsches Rotes Kreuz, Ehrenamtskoordination, Kreisverband in Nordrhein-Westfalen	Tessa Bodynek (Deutsches Rotes Kreuz)
IX	09/06/2022	Interview	Deutsches Rotes Kreuz, Ehrenamtskoordination, Kreisverband in Brandenburg	Tessa Bodynek (Deutsches Rotes Kreuz)
X	10/06/2022	Interview	Deutsches Rotes Kreuz, TEAM Bonn	Tessa Bodynek (Deutsches Rotes Kreuz)
XI	06/13/2022	Interview	Deutsches Rotes Kreuz, Digitalisierung und Ehrenamtskoordination, Kreisverband in Niedersachsen	Tessa Bodynek (Deutsches Rotes Kreuz)
XII	06/13/2022	Interview	Deutsches Rotes Kreuz, TEAM Westfalen	Tessa Bodynek (Deutsches Rotes Kreuz)
XIII	10/03/2023	Workshop	Deutsches Rotes Kreuz, Bundesanstalt Technisches Hilfswerk	Tessa Bodynek (Deutsches Rotes Kreuz)

Source: compilation by authors

Appendix B

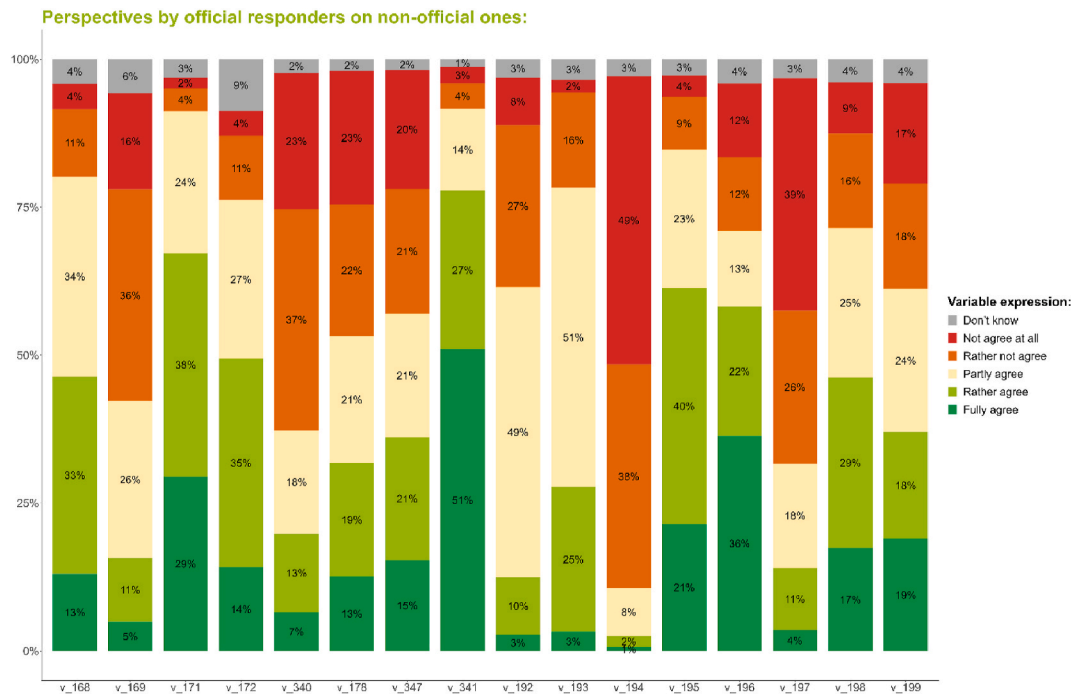


Fig. B.1. Selected survey results
Source: compilation by authors

Variable	n =	To what extent do you agree with the following statements? ¹³
v_168	606	Spontaneous volunteers should receive more recognition from operational forces.
v_169	609	Operational forces receive more media attention than spontaneous volunteers.
v_171	614	Affected people often expect operational forces to provide assistance outside their area of responsibility.
v_172	609	Affected people often perceive spontaneous volunteers as more effective/helpful than operational forces.
v_340	611	The option of spontaneous help in crises makes official volunteering in disaster and civil protection less attractive.
v_178	611	Spontaneous help is more attractive than official volunteerism because the latter requires a lengthy training.
v_347	612	Spontaneous volunteering is more attractive than official volunteering in disaster and civil protection because one doesn't have to have to integrate into hierarchies and structures.
v_341	612	In terms of camaraderie and togetherness, official volunteering is more attractive than spontaneous help.
v_192	1328	Spontaneous volunteers are more disruptive than helpful.
v_193	1326	Operational forces and spontaneous volunteers complement each other well.
v_194	1323	Spontaneous volunteers take away jobs from official volunteers.
v_195	1326	Operational forces should instruct spontaneous volunteers rather than perform simple tasks themselves.
v_196	1297	My organization/agency should not work with spontaneous volunteers who disregard our organizational values.
v_197	1322	My organization/agency could also cooperate with spontaneous volunteers in the danger zone (German: <i>Gefahrenbereich</i>).
v_198	1328	Large or long-lasting situations could not be managed without spontaneous volunteers.
v_199	1303	It is unfair when spontaneous volunteers can set to work while operational forces have to wait in reserve.

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¹³ Survey questions translated from German. For reasons of common understanding and usage in the field of disaster management, the survey used the terms “spontaneous volunteers” (German: *Spontanhelfende*), “operational forces” (German: *Einsatzkräfte*), and “official volunteers” (German: *Ehrenamtliche*). Spontaneous volunteers fall under the category of non-official responders while operational forces refer to official responders. Official volunteers are a sub-category of official responders (see Fig. 1).

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