MARK VAN DER GIESSEN

Co-creating Safety and Security

Essays on bridging disparate needs and requirements to foster safety and security

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Essays on bridging disparate needs and requirements to foster safety and security

De co-creatie van veiligheid:

Essays over het overbruggen van uiteenlopende wensen en eisen om veiligheid te bevorderen

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Acknowledgments

I was in my office at the Rotterdam School of Management, working on an evaluation of a novel form of collaboration between the Netherlands Public Prosecution Service, Police, and state subsidized legal assistance services (Jacobs et al., 2015). These organizations were experimenting with a new way to provide suspects with legal counsel, through video conferencing booths, before a first hearing with the police. I was just moving along with my work when Prof. dr. Gabriele Jacobs walked in and planted the seed for what would become the next six years of my life. She looked at me and said: 'Mark, how would you like to do a PhD?'

Looking back, it is very fitting that she asked me to apply to the PhD during that specific project. It was about collaboration, involving a joint initiative between government, legal and law enforcement organizations. It was about promoting safety and security, as this initiative pertained to an experiment to improve the legal protection of suspects. It was also about bridging disparate needs and requirements, as we examined if (and how) the video conferencing technology would be beneficial to everyone involved. These characteristics would later define my research.

This dissertation is the culmination of my efforts to better understand how very different people and organizations may come together to foster safety and security. My PhD has been a crazy journey, one that allowed me to see the human face behind otherwise abstract notions such as 'safety and security' or 'disparate needs and requirements.' I am very grateful to all the people I have met and worked with, the people who have shared their time with me, and those who have otherwise supported me and made this journey possible.

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I am deeply grateful to have met you, Nina. Being a PhD student can be challenging, being in a relationship with one is probably not much better. Thank you for your love, trust, patience, and support. Thank you for those times you gave me space to isolate and work. Thank you especially for the other times you dragged me away from my desk and made sure I spent time with friends and family. Thank you for always being there for me and reminding me there is more to life than work. You brought me balance and gave me a new and better perspective on the future.

I feel incredibly lucky to have made wonderful friends, both before and during my PhD. In order of appearance. Dr. Erwin Knippenberg, it's been about 15 years since we met. Two nerdy kids finding their way through High School. Look at us now, both with PhDs in our pocket. Mathieu Provencher, I've known you for about a decade now. We've only met in person a few times, but we've clocked probably over 2.000 hours just talking and playing games together online. Thank you for always being there, ready to adventure, ready to talk.

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Lastly, I would like to express my appreciation to all the people who have shared their time with me for my research and made this dissertation possible. I am deeply grateful to the law enforcement officers, community members and fellow researchers who participated in the Unity project. I could also not have written about (or published a paper on) responses to grand challenges without the time and support of those involved in the refugee crisis in Lesbos. Thank you, from the bottom of my heart, for sharing just a little bit of your lives with me.

That said, I hope that you – the reader – will find this dissertation interesting and meaningful. I sincerely hope that I was able to do justice to the experiences of the people I have met, and that my work can help inform future co-creation efforts for safety and security and make your lives a little bit easier.

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1. Introduction

The co-creation of safety and security is a diverse, complex, and persistent challenge that requires the simultaneous and continued engagement of many different actors. Safety and security contexts are diverse, ranging from the widespread daily policing practices involving local governments, law enforcement and community groups, to highly extreme and complex local responses to grand challenges, such as the professionals, volunteers and local communities responding to a refugee crisis. Regardless of the specific context however, practitioners and management scholars do not yet have the tools and knowledge to address how the actors involved, engaging from different backgrounds and with their own needs and requirements, may collaboratively foster safety and security.

The overall aim of this dissertation is to advance our understanding of how these actors with their disparate needs and requirements can collaboratively foster safety and security. In doing so, I also provide actionable knowledge for the government and non-government agencies, law enforcement and security organizations, as well as the citizen communities involved as actors on- and (potential) victims of safety and security challenges. First however, it is important to be clear about what safety and security entails.

Conceptualizing safety and security

Safety and security are highly complex concepts, and increasingly interconnected and indistinguishable from one another (Van den Berg et al., 2021). Safety is about freedom from harm, and security is the active prevention of risk of deliberate harm (OECD, 2020). In practice, safety and security often denote different aspects of well-being and harm, where safety tends to be used in the context of the prevention of incidental harmful natural events as well as unintentional harm caused by human mistakes and accidents. Security in turn emphasizes intentional harm causes by human actions, and the prevention of such behaviours. In some cases, particularly when it concerns purely safety, the distinction between safety and security is clear. Take for instance Weick's seminal study on sensemaking (unconscious) and actions (mistakes) during a (natural) forest fire and how this led to the loss of life of many of the responding firefighters (1993). As there was no

indication of intentional harm, this could be considered a study on safety, or rather, how natural and human factors coincided to create an unsafe situation and harm to the involved actors. In practice, safety and security are traditionally also used to denote different contexts, where safety more often refers to harm prevention in risky contexts (Hällgren et al., 2018) such as dangerous industries (Carroll, 1998; Marcus and Nichols, 1999) or healthcare (Vashdi et al., 2013) and security refers to matters of crime prevention and response and the business of selling crime prevention and response related items and goods (Brenig and Proeger, 2018; Heeks et al., 2018; OECD, 2020).

More often however, the distinction between safety and security is not so clear-cut, as natural and human, and intentional and unintentional factors intersect to create a complex safety *and* security challenge. Even seemingly contained cases may incorporate both safety and security elements. Take for example the response to a perceived terrorist threat (Cornelissen et al., 2014). At first glance this seems like a traditional law enforcement response to a perceived security threat, and a suspected terrorist was shot and killed. Though the threat of terrorism is man-made and very real, suggesting security aspects and implications, the suspect in this case was innocent. In a way, this man became the victim of unintentional and unconscious human processes and actions, that led to him being perceived as a terrorist and ultimately killed. As such, I could argue that the individual safety of this man was a victim of larger, global security threats due to terrorism.

Not to mention, the distinction between safety and security dissipates in particularly large-scale, complex and *grand* challenges (Eisenhardt et al., 2016; Ferraro et al., 2015). These contexts, due to their scale and the many different health, security, administrative, logistics, and other actors involved, contain both aspects of safety and security. For instance, disasters such as an earthquake may have a natural cause but can also be exacerbated by perceptions of human inefficiency, political and moral distrust in the government, feuds, scandals and briberies (e.g., Lanzara, 1983). Similarly, a local refugee crisis in one country can be caused by climate-change induced natural disasters such as draughts and floods, but also man-made conflict and war in a totally different part of the world (UNHCR, 2019). Even contemporary issues of local law enforcement which are commonplace across the world cannot be considered strictly as a security or safety challenge, as they incorporate safety threats and actors (e.g., social, healthcare professionals) as well as security challenges

(e.g., local crime and law enforcement). Real and perceived threats to safety and security interact, to create a local safety and security context and response (Van der Giessen et al., 2017, Ch. 3). I am particularly interested in addressing challenges that incorporate aspects of safety *and* security. Accordingly, I consider safety and security as interdependent and in conjunction.

Further complicating the conceptualization of safety and security, is the aforementioned distinction between real and perceived, or objective and subjective safety and security. Surely, some aspects of safety and security can be objectively measured. The innocent terrorism suspect who was killed is an objective loss of life (Cornelissen et al., 2014). The firefighters who lost their lives at Mann Gulch are casualties, and earthquakes can and do create tremendous physical and economic damages (Lanzara, 1983; Weick, 1993). Stories of human suffering during war and war-induced forced displacement are also manifold, clearly indicating a certain level of harm for many people (e.g., John and Labropoulou, 2019; Mazumdar et al., 2019; Vonberg, 2018).

However, safety and security also has a subjective component, where perceptions of safety and security are not analogous to objective harm or risk of harm. Spurred on by perceptions of rising crime, the threat of terrorist attacks and the free movement of goods, capital and people, the world is perceived by many to be an increasingly dangerous place (Millie and Herrington 2005; see also Kappeler and Gaines 2015; Lee and McGovern 2014). In fact, perceived insecurity has been identified as one of the most significant contemporary social problems (Valera and Guàrdia, 2014; see also Hollway and Jefferson, 1997; Hummelsheim et al., 2011; Quillian and Pager, 2010; Vilalta, 2011). The most prevalent example of the disparity between objective and subjective safety and security relates to measurements of crime, which can be considered an aspect of security. Crime rates have been declining steadily in Europe since the mid-1990s. Despite this objective improvement, perceptions are such that most people believe that crime rates have in fact been increasing (Millie and Herrington, 2005; see also Kappeler and Gaines, 2015; Lee and McGovern, 2014 for discussions on fear of crime). The difference between objective security and perceptions of insecurity is also called the reassurance gap (Millie and Herrington, 2005). The result is a paradox, as safety and security actors have (overall) never been so successful in preventing and dealing with instances of crime, and yet, confidence in police functioning in particular

has been decreasing, creating a need for reassurance of the public as a means of gaining legitimacy for policing decisions (Millie and Herrington, 2005; see also Hamilton-Smith et al., 2014; Mazerolle et al. 2013). Accordingly, safety and security is highly evaluative, can in part be measured in different ways, and responses need to go beyond simply dealing with objective safety and security to incorporate perceptions and their consequences.

I say that safety and security can only be measured in part, because most measurements only pertain to a specific aspect of safety and security, most commonly focusing on objective, predominantly economic impacts of crime specifically. In practice, these measurements often boil down to financial costs incurred for the prevention, response to- and consequences of, various forms of criminal behavior (e.g., Chalfin, 2015; Heeks et al., 2018). This includes for example the costs involved in preventing theft (through for instance additional surveillance), as well as those involved in apprehending and sentencing a criminal, and the consequences for the victim. Crime is indeed costly. For example, the total cost of crime in England and Wales for 2015-2016 alone was estimated to be approximately £59 billion, of which £50 billion due to crimes against individuals and £9 billion due to crimes against businesses (Heeks et al., 2018). Crime, and the threat of crime, give rise to a wide variety of economic activities in both the government domain and the business sector (Brenig and Proeger, 2018; OECD, 2020). This ranges from simple security systems to complex state-sponsored public-private partnerships to promote social resilience. Combined, the global public security market is estimated to be $350.6 billion in 2020 and forecast to grow to $812.7 billion by 2027. That is a 132% increase in market value in only 7 years.[1]

Far less common and less tangible are measurements of subjective safety, or consequences of a lack thereof for local actors and actions. At the individual level, safety is a prerequisite for life satisfaction, and fear and perceived lack of safety and insecurity significantly reduce life satisfaction and subjective wellbeing across Europe (Brenig and Proeger, 2018). Even in low-risk areas, the fear of crime and perceived risk of victimization can be substantial (Valera and Guàrdia, 2014). What makes safety and perceived safety particularly problematic and its impact difficult to measure, is that once these perceptions

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[1] https://www.researchandmarkets.com

exist, they can take on a life of their own, and through complex social dynamics lead to segregation, stigmatization, loss of social public space and a variety of economic and emotional concerns (Valera and Guàrdia, 2014; see also Hollway and Jefferson, 1997; Hummelsheim et al., 2011; Quillian and Pager, 2010; Vilalta, 2011). Some estimates exist, for instance trying to express the monetary expenses required to keep perceived safety and security neutral in the face of various safety and security challenges (e.g., Valera and Guàrdia, 2014), but the more intangible behavioural efforts and consequences are perhaps more relevant to understand the co-creation of safety and security than financial cost estimates.

Naturally, I am interested in promoting effective responses to objectively improve safety and security. However – in terms of the processes and actions studied in this dissertation – I focus more on the subjective realities of the involved stakeholders, and how these drive their co-creation efforts.

Contexts of co-creating safety and security

With this basic conceptualization of safety and security out of the way, the question remains what safety and security co-creation contexts look like. If we define co-creation as the process by which stakeholders interact and thereby shape their experience and perception of value (Roser et al., 2013) and operationalize value as both objective and subjective safety and security, the answer appears straightforward; any instantiation where multiple actors engage with each other in some way to foster safety and security. However, the reality is that safety and security contexts are highly diverse, complex and persistent and these characteristics pose important challenges.

First, in terms of diversity, co-creating safety and security can involve a large variety of problems and challenges and very different stakeholders. Safety and security contexts include for instance peace support missions in war torn areas (e.g., De Vries et al., 2014), frontline health and safety initiatives in local communities (e.g., Lloyd and Carroll, 2019), refugee crises (e.g., Kornberger et al., 2018), risky professional contexts (e.g. Carroll, 1998; Marcus and Nichols, 1999) and emergency responses (e.g. Beck and Plowman, 2014). Importantly, these contexts range from relatively immediate and contained crisis scenarios

(Cornelissen et al., 2014; Maitlis, 2005; Weick, 1993) to large-scale initiatives to address society's grand challenges (Eisenhardt et al., 2016; Ferraro et al., 2015). As such, safety and security contexts are omnipresent, and include small local efforts to keep a particular neighbourhood safe, to large-scale international responses to challenges such as terrorist threats, international organized crime, as well as disasters such as earthquakes, war, and displacement.

The diversity of safety and security contexts raises important questions regarding the generalizability of efforts to foster safety and security. In the traditional management literature, you commonly find that authors implicitly or explicitly propose implications to broader management contexts, such as SME's (e.g., Baunsgaard and Clegg, 2013), cross-functional teams (e.g., Pouthier, 2017), hybrid organizations (e.g. Ashforth and Reingen, 2014), or supply chain networks (e.g. Ellis and Ybema, 2010). Drawing generalizable best practices regarding the co-creation of safety and security has been challenging however, due to the wide variety in potential cases. Though there have been efforts to structure and categorize safety and security contexts to reduce fragmentation, for instance along the lines of cases of prevention vs. the response to extreme contexts or the nature of the responders (Hällgren et al., 2018), the disparate nature of these contexts and therefore the applicability of safety and security solutions remains unclear.

Accordingly, the diversity of safety and security contexts is an important thread throughout my work. I consider the influence of the social context on co-creation efforts explicitly in Chapter 3, where we take the example of local community policing practices – a common practice across Europe – and illustrate the context dependence of this policing approach (Van der Giessen et al., 2017). I also take a more in-depth look regarding the specific needs and requirements of specific community policing stakeholders for ICT mediated engagement in Chapter 5. Furthermore, I also incorporate the importance of (the diversity of) safety and security contexts by investigated two important and very different contexts separately, namely the aforementioned community policing practices which are widespread in Europe, as well as a more extreme and complex local response to a refugee challenge (Van der Giessen et al., 2021, Ch. 4). By considering a more 'traditional' and widespread safety and security approach as well as a more extreme case, I hope to capture

more of the spectrum of safety and security contexts and co-creation efforts (Eisenhardt et al., 2016; Hällgren et al., 2018).

Second, the promotion of safety and security is a highly complex task which requires the simultaneous involvement of multiple actors from different organizations, communities and backgrounds. This complexity is problematic, as the simultaneous involvement of many disparate actors poses unique challenges. Specifically, actors from different personal and professional backgrounds are likely to have different, and conflicting, interpretations of problems, solutions and processes (Eisenhardt et al., 2016; Ferraro et al., 2015). Not to mention, individuals act in ways that reflect their own assumptions and beliefs (Brown et al., 2008; Weick, 1995; Weick et al., 2005), and as such, their actions can vary greatly depending on their personal beliefs and how these individuals respond in specific circumstances (Barton and Sutcliffe, 2009; Cornelissen et al., 2014; Farjoun and Starbuck, 2007; Rudolph and Repenning, 2002). These challenges are less pronounced in more homogenous settings, for instance teams operating within the same sector (e.g., Weiss et al., 2018), or two organizations working in the same supply chain (e.g., Ellis and Ybema, 2010). Taking the example of traditional policing efforts, these would include local law enforcement, local community groups, and local government and municipality. These different actors will have different perceptions of what local safety and security efforts should look like (Brogden and Nijhar 2005; Kappeler and Gaines 2015), and accordingly, co-creation activities might be impeded because, for instance, the needs of elderly differ from those of the youth, or because minority groups do not see the same added value that law enforcement agencies advocate (Bayerl et al., 2016b). As a result, different stakeholders may be less inclined to work together, or wish to do so in different ways (Van der Giessen et al., 2017, Ch. 3).

In this dissertation, I uncover the roles of these different actors. I do so in a more focused and explicit manner, using the concept of identity and its role on different forms of collaborations in Chapter 2. I also specifically address disparate needs and requirements between different actors for co-creating safety and security in Chapter 5 – taking the case of online engagement for community policing. Here I investigate what specific police and community groups need and expect to adopt online tools for community policing.

Considering more extreme examples (Hällgren et al., 2018), immediate crisis situations also include a wide range of formal organizations and emergency responders including for instance paramedics (Müller and Van der Giessen, 2015), firefighters (Weick, 1993) and police responders (Cornelissen et al., 2014) but again also local communities, especially when dealing with natural disasters (Shepherd and Williams, 2014) such as an earthquake (Lanzara, 1983) or instances of forced displacement (Kornberger et al., 2018, 2019). Particularly large disasters and local responses to grand challenges raise important questions, as they involve many different actors, and the scale of the challenges make them difficult to comprehend. As other authors have noted, 'incomprehensible events tend to strip people of identity, leaving them no sensible narrative to enact' (Quinn and Worline, 2008: 501). Not to mention, many responders in these cases are more likely to lack the formal training and tightly orchestrated functioning that is typical for professional emergency responders (Weick and Roberts, 1993), and local communities and NGO volunteers are more than likely to come from different professional and personal backgrounds (Eisenhardt et al., 2016; Ferraro et al., 2015). Though the scale of the safety and security challenge in this case differs, both the common policing activities and more extreme contexts require the simultaneous involvement of highly different actors.

I explicitly address the complexity of co-creating safety and security – using the local response to a refugee crisis as the case – in Chapter 4 (Van der Giessen et al., 2021). Here we consider how disparate actors make sense of, and act on the complexity of a local refugee crisis in Lesbos, Greece. A local refugee crisis is a particularly complex and extreme example of co-creating security, which makes it particularly relevant for study (Eisenhardt et al., 2016).

A third aspect that characterizes safety and security efforts, I argue, is that many safety and security challenges are particularly persistent. With persistence, I refer to the notion that safety and security challenges endure despite efforts to prevent, alleviate, or resolve these problems. Again, examples are manifold, ranging from the ongoing daily practices of local governments and law enforcement to promote a safe environment for local communities (Van der Giessen et al., 2017, Ch. 3; Ch. 5) to complex international responses to refugee crises (Kornberger et al., 2018; Van der Giessen et al., 2021, Ch. 4), earthquakes (Lanzara et al., 1983), or even the recent outbreaks of Covid-19 and its variations. To put it

simply, a local neighbourhood doesn't simply become safe and secure through a one-time action. It is an ongoing challenge that persists virtually indefinitely, as people come and go, and local needs change. Similarly, a refugee crisis is more than the initial arrival of refugees at a European shoreline. It is an ongoing challenge, one that includes the journey (Kornberger et al., 2018), arrival (Van der Giessen et al., 2021, Ch. 4), as well as the long-term stay at refugee sites (De La Chaux et al., 2017; Van der Giessen et al., 2021, Ch. 4). This persistence, conceptually, entails that the safety and security challenge as well as the response must evolve over time as actors associate and interact with each other in the face of uncertainty regarding how the situation may evolve in the future, consequences of their actions and evaluations of their actions by others (Ferraro et al., 2015; Van der Giessen et al., 2021, Ch. 4). It also entails that many of these challenges persist beyond the engagement of any one specific actors, and accordingly, actors come and go, and responsibilities change (Ferraro et al., 2015). This imposes challenges regarding learning and sharing of knowledge between changing actors. It also has cognitive, emotional and behavioral consequences, as negative and harmful conditions persist despite best efforts to alleviate them (Chapman, 2020; Eisenhardt et al., 2016; Ferraro et al., 2015; Vonberg, 2018). Not to mention, the changing actors and responsibilities over time also imply uncertainty regarding the availability of responders, making it difficult to plan or strategize for future actions (Ferraro et al., 2015).

I explicitly address the influence of the persistence of co-creating safety and security in Chapter 4, in our study of local response to the refugee crisis in Lesbos Greece (Van der Giessen et al., 2021). Here, I show how and why the local response develops over time.

Two important developments: grand challenges and digitalization

There are two societal trends that deserve particular mention, as they are transforming the area of safety and security and increasing the relevance of studying the contexts I address in this dissertation. First, as other authors have noted, the world is facing more and increasingly complex challenges (George et al., 2016) that greatly affect large numbers of people (Eisenhardt et al., 2016), due to factors such as globalisation and the free movement of

goods, capital and people, climate induced natural disasters, changing international relations, international peace building, conflict and terrorism, as well as increasing inter-connectedness through technological developments (Burke et al., 2016; Eisenhardt et al., 2016; Ferraro et al., 2015; Western, 2016; UNHCR, 2019). This development indicates that safety and security challenges may increase in frequency and complexity in the coming years. Reflecting this development, scholarly interest in addressing such complex, *grand* societal challenges has increased (Eisenhardt et al., 2016; Ferraro et al., 2015; George et al., 2016). In line with this development, we use the local response to a grand challenge, a refugee crisis, as one of our cases of co-creating safety and security (Van der Giessen et al., 2021, Ch. 4), alongside the more commonplace example of community policing (Van der Giessen et al., 2017, Ch. 3; Ch. 5).

Second, technological advances are fundamentally shifting the safety and security field, as it has never been so easy to reach large groups of people and share information, raise awareness for a large variety of issues and concerns, or be as transparent about ongoing processes, challenges and concerns. With the advent of social media and increasingly powerful and accessible ICT such as smartphones, tablets and 4G and 5G networks, many public organizations are shifting their attempts to reach out to, and engage with their communities from offline to online. This shift makes sense, as email, social media, forums and other online platforms hold great potential to engage in novel ways (Bertot et al., 2012; Bonsón et al., 2019; Dai et al., 2017; Kavanaugh et al., 2012). This shift also applies to safety and security organizations, and for instance police organizations are increasingly trying to engage with local communities online, through online activities ranging from information sharing and gathering (DePaula et al., 2018; Walsh and O'Conner, 2019), local empowerment (Turner, 2010) and broader public relations efforts (Walsh and O'Conner, 2019). Social media platforms such as WhatsApp and Facebook are also pervasive platforms of communication in for instance a refugee crisis (Kornberger et al., 2018; Van der Giessen et al., 2021, Ch. 4). This development however also poses additional challenges, and practitioners struggle to capture the potential of online engagement, as this medium poses barriers to civic engagement in terms of motivational, access, and democratic divides (Epstein et al., 2014). In other words, as was the case for offline engagement, engaging online requires the involvement of disparate actors who may are may not be willing or able

to engage online, or wish to do so in different ways and for different reasons. We address specifically online needs and requirements for co-creating safety and security, using the context of online community policing in Europe, in Chapter 5.

Theoretical approaches

Co-creation

Now that I have outlined how I view safety and security and what characteristics make safety and security contexts particularly challenging and interesting to address, I introduce the theoretical approaches I have used to understand attempts to foster safety and security, where these fall short, and accordingly, what I aim to contribute to our understanding. Specifically, I approach safety and security efforts through a co-creation lens, but I also draw from- and build on theories of identity to understand disparate actors, and sensemaking to understand how they make sense of, and act on safety and security over time. Accordingly, I will briefly introduce co-creation as my chosen lens, as well as theories of identity and sensemaking as they provide structure to my understanding how disparate actors co-create safety and security.

As I mentioned previously, co-creation is defined broadly as the process by which stakeholders interact and thereby shape their experience and perception of value (Roser et al., 2013). Co-creation as a practice is frequently advocated for a variety of purposes, such as to develop new products and services, to improve organizational innovation, customer relationships, product quality and customer satisfaction, and to lower marketing and development costs (Kristensson et al., 2008; Roser et al., 2013; Zwass, 2010). Traditionally, co-creation has also been applied as a theoretical framework to understand a large variety of different ways of engagement and interaction between stakeholders for these purposes (Ramaswamy and Ozcan, 2018). These include for instance the development of new goods and services (e.g. Füller and Matzler, 2007), various forms of collaborations between innovators and end-users (e.g. Bogers et al., 2010), end-user customization (e.g. Franke and Piller, 2004), co-production (e.g. Ramirez, 1999), various forms of participation between consumers, communities and crowds (e.g. Cova and Dalli, 2009), knowledge sharing and application (e.g. Hakanen, 2014), partnerships (e.g. Grover and Kohli, 2012), and service

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exchange and service systems (e.g. Grönroos, 2012; Lusch and Vargo, 2006). Co-creation is a particularly suitable lens to use for the study of safety and security for three reasons.

First, as I have argued, safety and security requires the simultaneous involvement of multiple actors from different organizations, communities and backgrounds, requiring a multi-stakeholder lens. Because co-creation localizes the creation of value at the interactions between these stakeholders (Ramaswamy and Ozcan, 2018), it is particularly suited to understand how the disparate actors engage with each other. Second, co-creation is purposely broad, incorporating interactional engagements involving different roles of innovators, developers, users, communities, consumers and crowds, involving the production, innovation, customization, exchange, and co-production of various goods, services, knowledge (Ramaswamy and Ozcan, 2018). This flexibility in the roles of participating stakeholders and the diversity in the developed products and services makes this lens particularly suited to investigate the diverse safety and security contexts and challenges. Third, particularly in recent years, co-creation has emphasized that co-creation processes between stakeholders interact with the 'system environment' and are afforded by 'interactive platforms' (Ramaswamy and Ozcan, 2018: 200). As such, co-creation goes beyond specifying specific forms of collaboration or coordination, and explicitly incorporates a broader range of activities and interactions with the environment.

This last point regarding the contextual nature of co-creation is particularly interesting, as it emphasizes that co-creation interactions not only affect the environment but are also afforded by the environment. This lens accordingly allows us to incorporate the uncertain evolution of safety and security as diverse actors collectively make sense of their role over time, and associate and interact with each other in the face of uncertainty regarding how the situation may evolve in the future, consequences of their actions and evaluations of their actions by others (Ferraro et al., 2015). In other words, with co-creation I not only aim to understand how actors foster safety and security, but also how their actions and changes in the environment in turn change their understanding and approach. The contextual line of reasoning also extends to the methods of communication and engagement that are afforded by the context, and how these actors engage with each other. This is particularly relevant, considering the aforementioned advent of ICT for online engagement, which provides novel platforms for communication and engagement between many, and large numbers of different

stakeholders. Accordingly, the co-creation lens provides the theoretical underpinnings for a fresh look at the creation of safety and security through novel platforms for engagement. This is particularly relevant in the increasingly digitalized world of platformed interactions (Ramaswamy and Ozcan, 2018).

That said, the study of co-creation is not without important gaps that require our attention. The simultaneous engagement of disparate actors may provide opportunities for successful change through bottom-up, collective processes (Battilana et al., 2009; Garud et al., 2007), but several authors also point to a lack of understanding of how co-creation processes start, what they entail and when they end (Grönroos, 2011; Vargo et al., 2008), or how it might lead to field level outcomes (Ferraro et al., 2015: Padgett and Powell, 2012). There are also indications that co-creation efforts with highly different actors more often undermine effective collective responses as power relations and politics provide obstacles to collaborative engagement (Maitlis, 2005; Maitlis and Sonenshein, 2010; Quinn and Worline, 2008). These questions of how co-creation, starts, what they entail, and how they might lead to field level outcomes pervasive throughout the separate studies of this dissertation, even if the studies are positioned more specifically in extant theories of identity (Chapter 2), sensemaking (Van der Giessen et al., 2021, Ch. 4) and design (Ch. 5) for their separate contributions to these specific literatures.

Identity

To better understand the co-creation of safety and security, I in part rely and build on theories of identity. Identity provides structure and meaning to human behavior and serves as a helpful framework to interpret experiences (Stryker and Burke, 2000) and as a driver of personal, social and work behaviors (Miscenko and Day, 2015). It is because identity has shown to be so influential in driving both individual and group behaviours that it is a prime candidate in the study of co-creation. The literature on identity is considerable, and as a result we know a great deal about the role of different identities in various forms of collaboration, and in a variety of contexts. These include studies on various forms of engagement between individuals (e.g., Rouse, 2020), teams (e.g., Litchfield et al., 2018), organizations (e.g., Ellis and Ybema, 2010), professions (e.g. Lifshitz-Assaf, 2018), and within networks and alliances (e.g. Lashitew et al., 2020). Furthermore, these collaborations

span different contexts, including traditional management contexts such as supply chain relationships (Ellis and Ybema, 2010), but also include a few safety and security contexts, such as those of military operations and surgery teams (Kellogg, 2012; Turner and Tennant, 2010) and humanitarian disasters (Kornberger, et al., 2018; 2019). Accordingly, identity theory provides a useful and tested framework to understand the roles of the different actors in these efforts, and there is a rich tradition of research on the role of identity in various forms of collaboration.

I utilize a broad definition of identity, as a self-referential description that provides contextually appropriate answers to the question 'Who am I?' or 'Who are we?' (Ashforth et al., 2008: 327). Identity can be based on individual characteristics, but also group membership, and social roles (Ashforth, 2001). Accordingly, identity applies to individuals, but can also be constituted through groups and organizations. It is important to note that the concept of identity is not uniform. Rather, it has been conceptualized to mean different things, and it has been applied in different ways across different streams of research (Alvesson, 2010; Cornelissen et al., 2007). To illustrate how the separate studies make up this dissertation, I use identity rather loosely, to refer to the different people, groups and organizations involved in co-creating safety, and their backgrounds, perceptions, experiences, needs and requirements. As such, asking questions regarding the identity of the actors involved, allows me to interrogate what about actors makes them different from one another, and better understand how and why these actors engage in co-creating safety and security in specific ways. I do so because my dissertation is not limited to the identity literature, and I strive to make broader contributions. I do however provide a more fine-grained and specific operationalization of identity in Chapter 2, in accordance with the needs of the literature specifically on identity for that envisioned publication. In that chapter, I present a literature review on the role of identity in cross-boundary collaboration. Though it has a more specific focus on identity and a broader net for cross-boundary collaboration, it does provide a helpful overview of extant literature on disparate identities, as well as what we know about their role in collaborations across a variety of contexts.

As we also show in Chapter 2, current management research generally, and identity research specifically, predominantly concerns relatively simple forms of collaboration. This is for instance between organizations with a cultural boundary (e.g., Luciano et al., 2018),

different professions with a status or power differential (e.g., Mell et al., 2020) or individuals who identify with different groups (e.g., Weiss et al., 2018). These collaborations across a singular boundary don't do justice to the complexity inherent in fostering safety and security or the extreme nature of the challenges. These challenges are less pronounced in more homogenous settings, for instance teams operating within the same sector (e.g., Weiss et al., 2018), or two organizations working in the same supply chain (e.g., Ellis and Ybema, 2010). Accordingly, though it is helpful to differentiate between different actors in terms of identity, the identity literature has insufficiently incorporated engagements between multiple identities simultaneously to inform complex safety and security responses.

Sensemaking

Lastly, this dissertation draws from- and builds on extant sensemaking theory to inform the co-creation of safety and security. We understand sensemaking as an ongoing retrospective process that is grounded in personal identity construction (Weick, 1995). Actors make sense of specific circumstances by creating plausible narratives of understandings that are then used to validate and inform past, present and future actions in ways that reflect their own identity-related beliefs and assumptions (Brown et al., 2008; Weick, 1995; Weick et al., 2005). Sensemaking also provides an explanation as to why different identities behave differently, as sensemaking processes and actions can vary greatly between individuals owing to differences in personal beliefs and how and to what extent these are triggered in specific circumstances (Barton and Sutcliffe, 2009; Cornelissen et al., 2014; Farjoun and Starbuck, 2007; Rudolph and Repenning, 2002). Accordingly, sensemaking is very helpful to understand interactions between individuals, and how these drive and are driven by identity in the context of social interactions, social systems, collective actions and as part of larger response systems. As such, sensemaking is particularly suitable to understand how efforts evolve over time, and compatible with- and complementary to identity theories.

A particularly important tradition in sensemaking research is that of how sensemaking is interactionally accomplished (e.g., Quinn and Worline, 2008). This stream of collective sensemaking focuses on better understanding how sensemaking occurs between individuals zooming in on relationships between social structure and sensemaking (Weick, 1993), processes of identity generation and maintenance through social interaction (Brown

et al., 2008), sensemaking around interrelations within social systems (Weick and Roberts, 1993) and relationships between collective sensemaking and collective action (Quinn and Worline, 2008). Indeed, there is a rich tradition of collective sensemaking in a variety of safety and security contexts. Particularly, various crisis situations and other extreme contexts have provided a fertile ground for the development of novel theory. Examples are manifold, including for example how leaders give sense to a situation and influence the actions of others (Cornelissen et al., 2014; Weick, 1993), how 'sense' is interactionally accomplished and shapes a collective response among originally 'unorganized strangers' (Quinn and Worline, 2008: 504), and interactions between sensemaking and the social system within it takes place (Weick and Roberts, 1993).

However, there are also knowledge gaps within the sensemaking literature that require our attention, if we are to address society's more complex, and extreme safety and security challenges. Even if we look specifically at management studies on extreme contexts (Hällgren et al., 2018) and crisis situations specifically, these studies predominantly address relatively short-lived safety and security threats, for instance of firefighting (Barton and Sutcliffe, 2009; Weick, 1993; Whiteman and Cooper, 2011) or police interventions (Colville et al, 2013; Cornelissen et al. 2014), and responses by untrained civilians to events such as a rooftop collapse (Christianson et al. 2009). Far fewer studies have looked at how individuals make sense of- and position themselves within an ongoing safety and security context, where actors continue to engage after an initial emergency (Eisenhardt et al., 2016) and actors come and go and refine their understanding over time (Weick, 1995). This is problematic, as we do not yet understand how collective sensemaking evolves and informs safety and security challenges involving multiple different, organized and disorganized, formal and informal actors, or how these actors over times make sense of challenges that exceed their own understanding and involvement. We discuss and address these gaps in the literature on collective sensemaking in Chapter 4, where we present how we find that collective sensemaking is implicated in driving specific responses aimed at change, alleviation or recovery oriented responses in a local refugee crisis (Van der Giessen et al., 2021).

Aim of the dissertation

In the previous sections, I have argued that safety and security contexts are highly diverse, complex and persistent, as they are highly heterogenous and involve many different actors over long periods of time. Furthermore, I identified two important trends in the safety and security field, namely that safety and security challenges are getting increasingly frequent and complex, involving and affecting large numbers of people (Eisenhardt et al., 2016; George et al., 2016), and that the digitization of society has caused a shift to online forms of engagement, which brings novel platforms for engagement, but also holds challenges to online engagement (Bertot et al., 2012; Bonsón et al., 2019; Dai et al., 2017; Kavanaugh et al., 2012).

Furthermore, I have discussed why I have adopted a co-creation lens, and why I am building on- and contributing to theories of identity and sensemaking. Specifically, I have argued that co-creation is a suitable lens, but one that also has pertinent questions as it is not clear co-creation processes start, what they entail and when they end (Grönroos, 2011; Vargo et al., 2008), or how it might lead to field level outcomes (Ferraro et al., 2015; Padgett and Powell, 2012). I have also argued that identity theory provides a meaningful framework to investigate disparate actors, but one that is incomplete as extant research has largely focused on singular identity boundaries and as such don't do justice to the diversity and complexity of safety and security challenges (Eisenhardt et al., 2016; Ferraro et al., 2015). Lastly, I introduced theories of collective sensemaking, and their applicability to understand how disparate actors make sense of- and shape their engagement through interactions with each other and their environment over time. In doing so, I also argued that though these theories provide a helpful understanding for co-creation activities, they have so far not sufficiently accounted for the complexity and persistence of safety and security challenge due to their reliance on relatively tight-knit responder groups and relatively contained extreme contexts. (Eisenhardt et al., 2016; Hällgren et al., 2018). Accordingly, promoting local safety and security is a highly complex social and managerial challenge, fraught with practical and theoretical problems.

The overall aim of this dissertation is to address these extant questions and advance our understanding of how actors with disparate needs and requirements can collaboratively

foster safety and security. I do so through four studies. Please see Table 1 below for an overview of the studies in this dissertation and Figure 1 for a visualization of how these interrelate to cover different aspects of co-creating safety and security.

Table 1. Studies, questions, cases and aspects of co-creating safety and security.

Study	Questions	Case	Aspect
Taking stock and moving forward: a decade of research on the role of identity in cross-boundary collaboration (Ch.2)	What do we know about the role of identity in cross-boundary collaboration? What should future studies focus on?	-	Theoretical embedding of disparate actors
Community Policing: The Relevance of Social Contexts (Ch.3)	What is the context-specific nature of community safety and security? How are safety and security needs addressed through community policing? How may community policing better incorporate local context?	Community Policing (European)	The role of context
Collective sensemaking in the local response to a grand challenge: recovery, alleviation and change oriented responses to a refugee crisis (Ch.4	How do actors make sense of, and position themselves in, the local response to a grand challenge? How do actors enact the situation, and in doing so impact the collective response?	Refugee Crisis (Lesbos, Greece)	Co-creating safety and security as a process
Designing for successful online engagement - Comparing citizen and police expectations for community policing platforms (Ch.5)	What are the needs and requirements of police forces and local communities for the adoption of online platforms for mutual engagement, and in extension, are there relevant disparities in these expectations that may affect successful online engagement efforts?	Community Policing (European, online)	Needs and requirements of disparate users

Figure 1. Dissertation studies and how they relate.
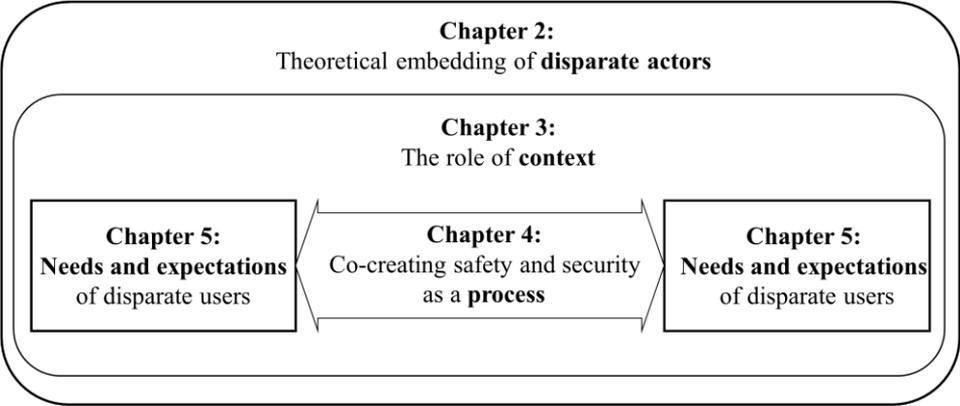
Methodological considerations

My personal world view inherently influenced how I approached my research; the methods I have chosen and how I interpret my data to come to any claims. In any research undertaking, it is important to be aware of- and transparent about the ontological and epistemological values that underpin the chosen methods and any conclusions derived from these methods. In other words, I intend to be transparent about my views and assumptions of the nature of the (social) world I have studied (ontology) as well as how I gain knowledge of this world (epistemology) (Van de Ven, 2007).

I follow the rich tradition of social constructivism, where reality is socially constructed, and 'made real in the minds and through the words and actions of its members' (Charmaz, 2000: 523). The notion that understanding the world involves the creation of plausible narratives is based on the view that we are in our actions, practices and fictions 'essentially a story-telling animal' (MacIntyre, 1981: 201), and that narrative is the 'primary form by which human experience is made meaningful' (Polkinghorne, 1988: 1, cf. Brown et al., 2008). In this view, organizations are regarded as socially constructed verbal systems which can interweave and harmonize but also contest and clash (Rhodes, 2001), and the stories people narrate provide insight into how they 'make the unexpected expectable, hence manageable' (Robinson, 1981: 60) and predict future states and behaviors (Brown et al., 2008; Martin, 1982). The narratives constructed by actors provides 'a rich body of

knowledge' (Stutts and Barker, 1999: 213) by shedding light on the subjectively conceived identities that are worked on by situated actors (Brown et al., 2008) to provide a continuing sense of 'coherence and distinctiveness' (Sveningsson and Alvesson, 2003: 1165). This approach means that I largely rely on qualitative, narrative data to understand how safety and security can be co-created. Specifically, I strive to understand the world through studying the narratives that predominantly emerge through coding of data (Corbin and Strauss, 1998). It also means that I understand my data not as objective truths, but 'filtered, edited and re-sorted based on hindsight' by the actors under study (Brown et al., 2008: 1039). As I argue that the co-creation of safety and security has a considerable subjective component, based on subjective needs, expectations, experiences and perceptions, social constructivism is a particularly suitable perspective.

Furthermore, my data collection and analysis strategies were also influenced by pragmatic considerations. For instance, my involvement in the Unity project (H2020 program, grant agreement number 653729) was instrumental to funding my PhD position, and the selection of police – community co-creation and their needs and requirements for online engagement. Similarly, the fact that I had the opportunity to go to Lesbos in Greece to study refugee crisis management meant that I could include this context into my studies. Certainly, availability of these cases has played a role in the selection of my studies. Nevertheless, I also argue that these cases are defensible on theoretical grounds, as a very prevalent (community policing) and extreme (refugee crisis) case respectively, with their own important challenges and questions that deserve to be addressed.

Lastly, I should note that the study on the relevance of social contexts for community policing (Van der Giessen et al., 2017; Ch.3) was originally written as a contribution to a book (Bayerl et al., 2017). I include it here in the dissertation, as it provides a relevant discussion of an important aspect of co-creating safety and security and as such complements the other studies. Because it was published as a book chapter however, its format differs from the other studies. Specifically, it incorporates a socio-historical review of the context dependent development of community policing based on secondary sources as well as some early theorizing on the requirements of community policing based on extant theory as well as qualitative data collected for the Unity project (Funded under the H2020 program, grant agreement number 653729). This theorizing specifically remains general and

descriptive, as we had not yet gotten around to a more fine-grained analysis of the Unity data. Nevertheless, the theorizing in that chapter can be described as abductive (Alvesson and Kärreman, 2007; Mantere and Ketokivi, 2013), as it was informed by the Unity data as well as extant literature on community policing and trust and legitimacy. As my theorizing developed after this publication, the focus also shifted to far more specific user needs and requirements for online engagement. This ultimately became the fifth chapter in this dissertation. As such, the book chapter also provides insight in how my ideas on co-creating safety and security have evolved since 2017. Please see Table 2. below for an overview of the methodological approaches of the studies in this dissertation.

Table 2. Overview of methodological approaches.

Study	Type	Data	Analysis
Taking stock and moving forward: a decade of research on the role of identity in cross-boundary collaboration (Ch. 2)	Systematic Literature Review	Extant literature since 2010 (Web of Science)	Descriptive – qualitative pattern matching
Community Policing: The Relevance of Social Contexts (Ch. 3)	Narrative Literature Review / qualitative case study	Extant literature on community policing, interviews	Descriptive socio-historical review, abductive theorizing based on extant literature and qualitative interviews
Collective sensemaking in the local response to a grand challenge: recovery, alleviation and change oriented responses to a refugee crisis (Ch. 4)	Qualitative case study	Interviews, participant observation	Abductive theorizing based on extant literature and qualitative interviews
Designing for successful online engagement - Comparing citizen and police expectations for community policing platforms (Ch. 5)	Mixed-method case study	Interviews, surveys	Mixed-methods, deductive (quantitative) establishment of user types, inductive (qualitative) analysis of their needs and requirements

Declaration of contributions

It is important to be upfront about the contributions of the authors in each of the studies. I will therefore declare my contributions and acknowledge the contributions of other parties where appropriate.

Taking stock and moving forward: a decade of research on the role of identity in cross-boundary collaboration is a systematic literature review to be submitted later this year. I will be the first author, and it will be co-authored with Dr. Kate Horton and Prof. dr. Gabriele Jacobs. As the first author, I formulated the research questions, established the search criteria and conducted the search query, and the second author provided feedback and suggestions. Coding the articles and making the final selection was done together with the second author, also to be able to discuss fringe cases and establish inter-observer reliability. I was responsible for describing, structuring and synthesizing the data, where the second author provided feedback and comments, which I integrated. The actual writing of the manuscript was performed by me, where I submitted drafts for feedback to the second and third author for comments and feedback. Accordingly, the second and third author provided comments, suggestions and feedback which I integrated into the manuscript.

Community Policing: The Relevance of Social Contexts has been published as a book chapter (Van der Giessen, et al., 2017). This study was made possible by the Unity project (Funded under the H2020 program, grant agreement number 653729). It had a duration of 3 years (May 2015 - April 2018) and the objective was to strengthen the connection between law enforcement agencies and communities across Europe by improving and supporting community-policing principles. This book chapter specifically was co-authored with my colleagues, Elisabeth Brein and Prof. dr. Gabriele Jacobs. Furthermore, the book was edited by Prof. dr. Petra Saskia Bayerl, Dr. Ruža Karlović, Prof. dr. Babak Akhgar, and Prof. dr. Garik Markarian. As the first author, I was responsible for the direction, content and writing of the chapter. I worked with Elisabeth Brein, who provided comments and suggestions for the text, particularly for the historical discussion of community policing. I sent the draft chapter to my promotor and co-author Prof. dr. Gabriele Jacobs for comments. I have integrated her feedback into the final version. Of note is that we originally intended the chapter to be purely a historical discussion of the evolution of community policing in Europe. Based on her suggestions, I also incorporated our own theorizing on the role of social context in police – community policing efforts. We originally intended to include this theorizing in study 4 (Ch. 5), but we ultimately shifted the focus of that article to online engagement specifically. Furthermore, the editing performed by Prof. dr. Petra Saskia Bayerl concerned formatting for this specific book and cross-referencing

with other book chapters. These changes have been reversed for this dissertation version. Lastly, I have presented previous versions of this book chapter at conferences and workshops in Zagreb (HR) and Rotterdam (NL).

Collective sensemaking in the local response to a grand challenge: recovery, alleviation and change oriented responses to a refugee crisis has been published in article form in the Human Relations journal (Van der Giessen, et al., 2021). I am the first author, with my – at the time – fellow PhD Christina Langenbusch as second author, and my promotors Prof. dr. Gabriele Jacobs and Prof. dr. Joep Cornelissen as third and fourth authors respectively. The data collection responsibilities of the authors are described in the article itself, where of note, Christina and I jointly collected the majority of the data during field visits to Lesbos Greece, and Prof. dr. Gabriele conducted additional interviews during a shorter visit. Due to ERIM regulations on PhD students collaborating for dissertation studies, the second author was not involved in this study after the initial data collection – she did not contribute to the theorizing in- or writing of the article. I formulated the research questions, performed the literature review, coded all interviews and additional documentation, performed the analyses and wrote the article. Throughout the process of theorizing and writing the article, my promotor and co-promotor provided feedback and suggestions. This included very helpful interpretations of reviewer comments, and suggestions to further improve the theorizing and positioning of the article. Furthermore, as the theorizing developed further, I double checked it with the other data collecting authors to make sure it remained true to their experiences in the field and their interpretation of the data. I also managed the correspondence with the journal reviewers and editor through two rounds of review (one risky revise and resubmit, one provisional acceptance). Lastly, l presented early drafts of this paper at conferences and workshops in Samos (GR), Rotterdam (NL) and Chicago (USA).

Designing for successful online engagement - Comparing citizen and police expectations for community policing platforms has been submitted in article form to the journal Government Information Quarterly, and at the time of writing, has received a revise and resubmit decision (Van der Giessen and Bayerl, submitted December 2020, to be re-submitted in October 2021). This study was also conducted under the umbrella of the Unity project (Funded under the H2020 program, grant agreement number 653729). I am the first

author of this specific study, with Prof. dr. Bayerl as the second author. Under the scope of Unity, Prof. dr. Bayerl led the Work Package. The data was collected by partner organizations in the participating EU countries. These partners transcribed and summarized the interviews. For the specific study in this dissertation, Prof. dr. Bayerl and I jointly formulated the research questions and (re-)coded interviews from the original Work Package where needed. In terms of the analyses, we jointly worked on the qualitative assessment of specific user needs and requirements, while I came up with the quantitative strategy to identity user contexts and conducted the quantitative analyses. We jointly wrote the article. Lastly, I have presented previous versions of this article at conferences and workshops in Budapest (BG) Zagreb (HR) and Rotterdam (NL).

The introduction and conclusion of this dissertation were written by me. I sent drafts of the dissertation to my promotors for comments during the finalizing stages, after which I incorporated their comments into the final version. Particularly, this has led to further contextualization and theoretical positioning of the dissertation.

Outline of the dissertation

In the subsequent chapters, I will present the independent studies that make up the core content of this dissertation. I will briefly introduce these studies here.

Study 1 - Taking stock and moving forward: a decade of research on the role of identity in cross-boundary collaboration is a systematic literature review on the state of the literature on the role of identity in various forms of collaboration across different boundaries. As such, it sheds light on what we know about the disparate (nature of) actors engaging in various forms of co-creation. In this study we propose a structure to understand the influence of identity on such collaborations, describe what has (and has not) been researched, and provide suggestions for future research. In doing so, we also set the stage for subsequent studies in this dissertation, which address various gaps identified in this study. Of note, we suggest that relatively few studies consider collaborations between groups, occupations, functions or individuals, collaborations between multiple identities at different levels of organizing (e.g., more than one identity tension), or identity as process rather than a static input barrier to overcome. Furthermore, questions remain regarding the

role of context, and relatively few studies consider the influence of relationships of trust and respect on collaborations between disparate identities. We address these shortcomings in the remaining studies.

Study 2 - Community Policing: The Relevance of Social Contexts provides a socio-historical reflection of the importance of the local social context for co-creating safety and security (the political, economic, social, technological, legal and environmental conditions of a community). We take as a case local community policing efforts, which is perhaps the most pervasive case of fostering safety and security as it exists between local law enforcement, government organizations and community groups across Europe (Casey, 2010; Hail, 2015a; Skogan, 2006). Community policing as a policing approach emphasizes decentralization, citizen involvement and problem solving and is tailored to local contexts with a focus on preventing crime rather than fighting it (O'Neill and McCarthy, 2012; Skogan, 2006; Terpstra, 2009). Addressing local safety and security is highly context dependent. Yet, community policing, the dominant approach to address safety and security concerns together with community members in Europe, is often applied as a one-size-fits-all solution. Accordingly, the implementation of community policing has led to mixed results (Kappeler and Gaines, 2015; OSCE, 2008), as local variations impede effective implementation and positive community policing outcomes (Dvoršek, 1996). Accordingly, we argue that community policing is not a uniform concept and the local implementation is highly contingent on mutual trust and perceived legitimacy between the police and local community. We furthermore propose a model in part based on our own qualitative empirical research that captures the interplay between local context, perceptions of legitimacy and trust and community policing partnerships for local safety and security and we make recommendations for practice to incorporate context-specificity into approaches to community policing.

Study 3 - Collective sensemaking in the local response to a grand challenge: recovery, alleviation and change oriented responses to a refugee crisis is a qualitative, empirical paper, in which we develop theory to better understand how local actors addressing a grand societal challenge make sense of, position themselves in, and act (Van der Giessen et al., 2021). Accordingly, in this study we focus on the processes of co-creating security. Grand societal challenges such as forced displacement are perhaps the most extreme and

complex cases of co-creating safety and security, incorporating issues that are challenging to individuals and might seem insurmountable. As a result, local actors struggle to respond in productive and meaningful ways individually and collectively. We use the case of a refugee crisis as our context of safety and security to investigate this question. We contribute to our understanding of co-creating safety and security by identifying three collective sensemaking narratives which actors use to validate action strategies aimed at alleviation, personal recovery, or structural change; and as characterized by different forms of interaction and emergent collective sensemaking. We also discuss the practical implications, and explain how and why local inhabitants, professionals, and volunteers, make sense of their role in a refugee crisis, and their responses develop differently over time.

Study 4 - Designing for successful online engagement: Comparing citizen and police expectations for community policing platforms is an applied paper on designing for online engagement, with important implications for public administrations dealing with online engagement. This is particularly the case for local community policing efforts, as both law enforcement officials and local community members appear to be reluctant to utilize ICT tools to engage with one another online, for example because of negative previous experiences (Lee et al., 2019), doubts of its usefulness (Hu et al., 2011), or in the case of law enforcement due to organizational barriers (Bullock, 2018). As was the case for offline co-creation of safety and security, there is tremendous diversity in stakeholders and challenges, involving community groups with labels such as 'hard to reach' or 'underserved' (Craig et al., 2010; Weitzer and Tuch, 2005), youth groups (Dirikx et al., 2012), LGBT+ groups (Dario et al., 2019; Pickles, 2019), and otherwise disadvantaged or marginalized communities (Louis and Greene, 2020) who might not see the police as a legitimate actor, and have differing needs and requirements for online engagement (Van der Giessen et al., 2017, Ch. 3).

Accordingly, in this study we return to the context of community policing as our case, as online platforms offer promising avenues for police forces and citizens to engage with each other. Furthermore, we here focus on the needs and requirements of these actors. The specifics of what users of online community policing platforms require for mutual engagement remains understudied and it is not clear what needs and requirements users of online platforms have, to engage to promote local safety and security. Rather than settling

for a police-community distinction, we use a data driven approach to identify three distinct user groups with disparate expectations for online community policing platforms: complacent users, high-need users, and sceptics. Our study compares their respective expectations and we offer concrete recommendations for the design of online community policing platforms to guide the online engagement across disparate user groups.

In the conclusion and discussion chapter of this dissertation, I return to the original aim and integrate the findings across the four studies in a final discussion. Here I summarize the contributions that were made through the individual studies to extant theory, what these mean for the overall problem of co-creating security across disparate needs and requirements, and which challenges remain for future research.

2. Taking stock and moving forward: a decade of research on the role of identity in cross-boundary collaboration

Abstract and keywords

Research on the role of identity in cross-boundary collaborations has taken flight in the last decade. As a result, our understanding has become highly fragmented across streams of literature and levels of analysis. In this systematic literature review, we take stock of our extant knowledge. In doing so we provide a synthesis of our understanding on the influence of identity on cross-boundary collaboration and its outcomes, within and across levels of organizing. Furthermore, we identify the theoretical and methodological strengths and limitations of this body of research and discuss promising avenues for future studies.

Keywords: Boundary, collaboration, identity, intercultural, inter-group, inter-organization, interpersonal, inter-occupational, inter-professional, inter-team, review.

Introduction

Collaboration is commonly presented as the solution to address a multitude of important organizational, managerial and societal issues (Derlega and Grzelak, 1982; Lai, 2011). The reality of collaboration – defined as 'mutual engagement of participants in a coordinated effort to solve a problem together' - is diverse and complex however, ranging from small dyadic collaborations to large-scale responses to grand challenges, and often involves many different stakeholders with different identities, goals, motives and embedded in different normative orders (Ferraro et al., 2015; Lai, 2011: 2; e.g., Kornberger et al., 2019; Rouse, 2020). Unfortunately, collaborations are also often problematic, as these highly different stakeholders contest and clash, and act in ways that reflect their own identity related assumptions and beliefs (Brown et al., 2008; Weick, 1995; Weick et al., 2005). For instance, important social movements can fail because reformers are divided along identity-based fault-lines rather than forming a united front (Kellogg, 2012). And yet, we also see that it is possible to overcome a long history of conflict if people draw from an identity they share,

rather than the history that divides them (Arikan et al., 2019). The influence of identity is not clear-cut, and can both impede and promote collaboration. Accordingly, the need to understand how different identities are implicated in various collaborations is great.

In line with these demands, there is a rich tradition of research on how different identities are implicated in fostering, or indeed impeding, efforts to solve various problems (Ashforth et al., 2008; Stryker and Byrke, 2000). In fact, interest is surging, as roughly 70% of the articles we identified on the topic are from the last decade alone. See also Figure 2 below, where we visualize the growth of the literature on the influence of identity on cross-boundary collaboration since the first publication we found from 1982.

Figure 2. the yearly and cumulative number of publications on the influence of identity on cross-boundary collaboration since 1982 (Web of Science).
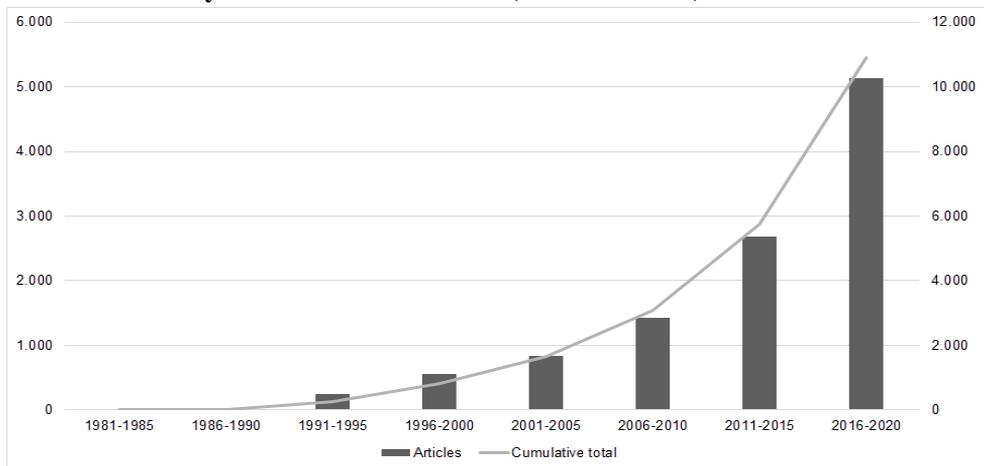
As a result of this rapid growth, the literature has become highly fragmented. More specifically, articles build on- (and contribute to) different literatures, involve different conceptualizations and influences of identity, various boundaries, forms of collaboration, and are interested in different collaboration outcomes. Identity is a prominent construct in several literatures, including on entrepreneurship (York et al., 2016), innovation (Lifshitz-Assaf, 2018; Zobel and Hagedoorn, 2020), corporate social responsibility (Brown et al., 2008), transactional cost economics (Marcos and Prior, 2017; Weber and Mayer, 2014), sensemaking (Stadtler and Van Wassenhove, 2016), team performance (Hogg et al., 2012), coopetition (Mathias et al., 2018; Sonenshein et al., 2017), marketing and branding (Essamri

et al., 2019), social movements (Yu, 2012), and many others. Furthermore, authors take perspectives informed by theories of framing, sensemaking and identity (e.g., Mesmer-Magnus et al., 2018), leadership (e.g., Lloyd and Carrol, 2019), boundaries and boundary work (e.g., Bucher et al., 2016), emotions and motivations (e.g. Mikkelsen et al., 2020) and studies of organizations and culture (e.g. Koppman et al., 2016). The collaborations span different contexts, including traditional contexts such as supply chain relationships (Ellis and Ybema, 2010) and organizational teams (Hogg et al., 2012), but also matters of life and death such as military operations and surgery teams (Kellogg, 2012; Turner and Tennant, 2010) and humanitarian disasters (Kornberger et al., 2018; 2019).

This fragmentation is problematic, as researchers working with a specific conceptualization of identity or theoretical lens rarely consider each other's work (Alvesson, 2010; Miscenko and Day, 2015). That's not to say that this is the first review on identity in the last decade (e.g., Brown, 2015). However, these reviews have focused on one particular level of organizing (e.g., organizations, teams), or are rooted within one specific theoretical perspective (e.g., leadership). As these literatures are not speaking to each other, it is unclear how extant theory relates to each other, and accordingly, what we know and where future research should focus to address potential gaps. If we are to further advance our understanding of the role of identity in cross-boundary collaboration, we must transcend 'field and paradigmatic boundaries' and integrate our insights (Brown, 2015: 23).

To address these shortcomings, we conduct a systematic literature review (SLR) to summarize, synthesize, and structure the extant literature on the role of identity in cross-boundary collaboration. In doing so we provide an overview that synthesizes our extant knowledge within and across levels of organizing. Specifically, we provide insight into what we know about the role of identity in terms of boundaries, tensions, processes and outcomes for collaboration between different organizations, occupations, groups and individuals. Furthermore, by comparing and contrasting extant theorizing and empirical findings across levels of organizing and streams of literature we are able to provide recommendations for how research should proceed to provide a more comprehensive picture of collaboration across disparate boundaries and identities. Specifically, we provide an overview of concepts and theories that warrant empirical testing and propose methodologies that might be

particularly viable to address current gaps and move our understanding forward. We continue in the next section with a discussion of our review approach.

Methodology

We performed a systematic literature review (SLR) with an explicit search strategy to ensure a comprehensive, transparent, and reproducible procedure (Denyer and Tranfield, 2009). SLRs have several downsides, including the challenge of synthesizing large amounts of material from different disciplines and a lack of representation from books (Pittaway et al., 2004), but the systematic and comprehensive nature is necessary to objectively evaluate the state and contribution of a body of literature (Ginsberg and Venkatraman, 1985), particularly one as heterogenous as ours. We summarize our SLR process in Figure 3 below.

Figure 3. Summary of the SLR process.

Establishing the research objectives

- Clarify the role of identity in fostering and inhibiting collaboration at and across boundaries,
- Integrate and critically evaluate relevant findings from this body of literature, and
- Identify promising areas for future research

Defining the conceptual boundaries

- Defining role of identity
- Defining boundaries
- Defining collaboration

Setting the search criteria

Search boundaries:

- High impact journals
- History in identity
- Electronic databases

Search terms:

- TS=identity AND (boundar* OR cross-* OR inter*) AND (collaborat* OR cooperat* OR coordinat* OR partner* OR alliance)

Cover period:

- January 2010 – December 2020

Applying the exclusion criteria:

- Articles that mention identity but do not primarily focus on identity
- Articles that mention boundary spanning or boundaries but do not primarily focus on those working at boundaries or across boundaries
- Articles that mention some form of engagement between actors, but do not specifically address working together in some way

Forward reference search

Validating search results

Researcher A independent coding

Researcher B independent coding

Validating data coding:

- Cross-comparison of coding results
- Revisiting articles for recoding
- Ensuring inter-rater reliability

Establishing the research objectives and conceptual boundaries

The purpose of this review is to clarify the influence of identity on cross-boundary collaboration, integrate and critically evaluate relevant findings from this diverse and fragmented body of literature, and identify promising areas for future research. The concepts that we need to define for the review are accordingly, and in order, that of identity, boundaries, and collaboration.

We utilize a purposely broad definition of identity, as a self-referential description that provides contextually appropriate answers to the question 'Who am I?' or 'Who are we?' (Ashforth et al., 2008: 327). Accordingly, identity is not specific to individuals, rather it refers to the meaning of an entity (e.g., individual, group, organization) that is internalized as part of a self-concept (Ashforth, 2001; Miscenko and Day, 2015). Identity serves as a framework to interpret experiences (Stryker and Burke, 2000) and as a driver of personal, social and work behaviors (Miscenko and Day, 2015). Furthermore, many authors differentiate between identity and identification (Miscenko and Day, 2015; Sluss and Ashforth, 2007). We follow this tradition, where we consider identification as the cognitive, psychological, or emotional attachment that an individual makes to an entity (Miscenko and Day, 2015).

In part due to its popularity, the concept of identity is not uniform. Rather, it has been conceptualized to mean different things, and it has been applied in different ways across different streams of research (Alvesson, 2010; Cornelissen et al., 2007). Of note, many authors consider identity to be a stable construct (Brown, 2015; Stryker and Burke, 2000), while others view identity as constantly changing, provisional, and contested (Alvesson et al., 2008). This is an important distinction as it indicates to what extent identity has been studied as a stable boundary to be overcome, or as one that can be actively worked on, for instance to foster collaboration. For inclusion in this review, the driving criteria is that the authors include the concept of 'identity' as a central construct, in line with our broad definition, regardless of their specific operationalization. As such, we can incorporate (and review) the role of identity, regardless of potential differences between theoretical streams.

Boundaries refer to the limits of identity conceptualizations, denoting where one entity (or identity) ends and another one begins. Boundaries in their own right feature prominently and explicitly within management and organizational studies, for instance

considering how open innovation dismantles knowledge boundaries between organizations (e.g., Lifshitz-Assaf, 2018), how professionals discursively negotiate boundaries (e.g., Bucher et al., 2016), how leadership may promote working across boundaries (Salem et al., 2018).

Boundaries can be conceptualized in a relatively straightforward manner, referring to for instance boundaries between levels of organizing, such as concrete organizations (e.g., Beck and Plowman, 2014), teams (Salem et al., 2019), networks and alliances (e.g., Lashitew et al., 2020), or individual people (Rouse, 2020). More often however, boundaries are conceptualized as a more abstract identity based entity, for instance as individuals belonging to a group with similar individual characteristics such as gender (e.g. Kukenberger and D'Innocenzo, 2020) or experience (e.g. De Vries et al., 2014), as belonging to a particular group such as an occupation or profession (e.g. Chattopadhyay et al., 2010; Turner and Tennant, 2010) or as performing a specific social role, such as defenders vs. reformers (e.g. Kellogg, 2012). For the purpose of this review, we consider both conceptualizations of boundaries simultaneously, and accordingly we review both the nature of the boundary (e.g., identity type) as well as the level of organizing (e.g., individual, group, team).

Viewing boundaries in this manner enables us to structure the extant knowledge first based on the level of organizing of the collaboration (e.g., between organizations, between groups, between individuals) and within these studies, consider the influence of identity on the collaboration across the different boundaries at this level of organizing. This allows us to investigate how actors may work together at different levels of organizing, despite single or even multiple identity boundaries that produce a variety of identity related tensions such as for instance those related to power and status (Baunsgaard and Clegg, 2013; Chattopadhyay et al., 2010).

Lastly, as collaboration can involve multiple disparate identities and take place across different types of boundaries and at different levels of organizing, collaborations range from very simple – such as between two individuals to come up with a creative idea (e.g. Rouse, 2020) to highly complex, such as between many different actors engaging at different levels of organizing to respond to a grand challenge (e.g. Eisenhardt, et al., 2016; Kornberger et al., 2019; Van der Giessen et al., 2021). Furthermore, collaboration itself can take many forms, such as knowledge sharing (e.g., Lifshitz-Assaf, 2018), team performance

(e.g., Mitchell et al., 2011), helping behaviors (e.g., DiBenigno and Kellogg, 2014), sharing of leadership (e.g. Kukenberger and D'Innocenzo, 2020) or resources (e.g. Ingram and Yue, 2008), and so on. For the purpose of this review, we consider all possible forms of collaboration, as long as the author explicitly calls it a form of collaboration. Furthermore, we acknowledge that collaboration is measured in different ways, including antecedents that are assumed to precede collaboration such as fostering a cooperative climate (e.g. Kukenberger and D'Innocenzo, 2020) or collaborative discourse that connects groups (e.g. Lloyd and Carroll, 2019), actual collaborative actions such as helping behaviors (e.g. DiBenigno and Kellogg, 2014) as well as measurements of consequences of collaboration such as team or inter-team performance (e.g. Porck et al,. 2019).

Setting the search criteria and applying exclusion criteria

We conducted our search through the Institute for Scientific Information's (ISI) Web of Science core database. The reason for choosing the ISI Web of Science database was its focus on academic journals, the advanced search functions, and its position within the academic community.

Our initial search was focused on peer-reviewed academic journal articles. We chose to do so due to their impact on the field and the validated nature of the knowledge provided (Podsakoff et al., 2005). Specifically, we originally selected journals with a Social Sciences Citation Index (SSCI) impact factor of 1.0 or higher which were identified as important contributors to the study of identity and/or boundary spanning. These two criteria led us to include the Academy of Management Annals (AMA), Academy of Management Journal (AMJ), Academy of Management Review (AMR), Administrative Science Quarterly (ASQ), British Journal of Management (BJM), Human Relations (HR), Journal of Applied Psychology (JAP), Journal of Business Ethics (JBE), Journal of Business Research (JBR), Journal of International Business Studies (JIBS), Journal of Management (JOM), Journal of Organizational Behavior (JOB), Management Science (MS), Organization (O), Organizational Behavior and Human Decision Processes (OBHDP), Organization Science (OrgSci), Organization Studies (OS), Personnel Psychology (PS), Public Relations Review (PRR), Strategic Management Journal (SMJ).

Within these journals, we searched the Title, Topic, Key words, Abstract and Reference Lists fields using carefully selected Boolean keywords. The operator * allows for variations such as spellings, synonyms, plurality and differing contexts. As we wanted articles which specifically focus on the notion of identity, we incorporated 'identity' as a full search term (TS=identity). However, we were less specific in terms of search terms for boundaries and collaboration, as we sought to include different conceptualizations of various boundaries and forms of collaboration in this very heterogeneous body of literature. As such, we included more general search terms for boundaries (TS=boundar* OR cross-* OR inter*) and collaboration (TS=collaborat* OR cooperat* OR coordinat* OR partner* OR alliance). We included 'alliance' as a search term, as we suspected there might be relevant studies in the literature on (strategic) alliances, and we feared the word 'alliance' might supplant collaboration and related terms in the titles and key words. As we explicitly searched for 'identity' however, we retained the focus on discussions of identity and prevented the inclusion of unrelated studies in alliance contexts. After a few trials we found that we inadvertently captured a lot of unrelated articles due to the often-used words 'interest' and 'interested', as authors identified the topic of their study. Accordingly, we included two exclusion terms (TS=NOT interest OR interested).

Lastly, we set a date range for our study, including only studies from the last decade (2010-2020). We opted to confine the search to the last decade to capture the majority as well as latest findings in the field. Roughly 70% of all articles identified with the specified search terms were from this last decade (see also Figure 2).

Expanding with forward referencing

After this initial search, we expanded our search with a forward citation search to manually incorporate influential studies we might have missed due to our strict initial journal selection. In doing so, we also incorporated studies from the following journals: Academy of Management Perspectives (AoMP), American Sociological Review (ASR), Business Ethics Quarterly (BEQ), European Journal of Work and Organizational Psychology (EJWOP), Industrial Marketing Management (IMM), International Small Business Journal (ISMJ), Journal of Cleaner Production (JoCP), Journal of Management Inquiry (JoMI), Journal of Occupational and Organizational Psychology (JoOOP), Journal of Product Innovation Management (JoPIM), Management and Organization Review (MOR), Personality and

Social Psychology Bulleting (PSPB), Production and Operations Management (POM), Public Administration (PA), Public Management Review (PMR), Research in Organizational Behavior (ROB), Strategic Organization (SO), The International Journal of Human Resource Management (IJHRM), The Leadership Quarterly (LQ).

Validating search results

We relied on independent coding of the papers by the first and second author to ensure inter-observer reliability for the inclusion of articles under study. We initially coded the papers using the titles and abstracts. However, in some cases the titles and abstracts included insufficient detail to evaluate the relevance of an article. In these cases, we examined the introduction and conclusions of the study. If either author was unsure of a specific article, we would discuss and come to an agreement regarding the inclusion or exclusion of these articles. In general, we erred on the side of caution, and included articles which we felt were relevant even if we had doubts regarding the focality of the notions of identity, boundary or collaboration.

Final selection

Applying our search terms without specifying a journal list left us with 10.084 articles. Narrowing this down to the last decade reduced this number to 7.815 articles. Specifying it further with our journal list reduced the number of articles further to 125 articles. Expanding this selection with forward referencing increased the number or articles to 192. Lastly, validating these results, we reduced the number of articles and removed 107 articles. Our search ultimately identified 85 articles across 33 journals. See Table 3 for an overview of the journals we ultimately included and the number of articles for each of these journals.

Table 3. Journals included in this review with the number of articles for each journal.

Articles in each journal	Journals	Journal titles
9	1	Organization Studies
8	1	Academy of Management Review
7	3	Journal of Business Ethics, Academy of Management Journal, Organization Science
5	1	Administrative Science Quarterly
4	1	Journal of Management Studies

3	2	Human Relations, Journal of Business Research
2	8	Journal of Organizational Behavior, Journal of Product Innovation Management, European Journal of Work and Organizational Psychology, Journal of International Business Studies, Public Management Review, Strategic Management Journal, Journal of Management, The Leadership Quarterly.
1	16	Academy of Management Annals, Journal of Occupational and Organizational Psychology, Academy of Management Perspectives, Management Science, American Sociological Review, European Journal of Operations Research, Personality and Social Psychology Bulletin, Personnel Psychology, Production and Operations Management, Industrial Small Business Journal, Journal of Applied Psychology, Public Relations Review, Research in Organizational Behavior, Strategic Organization, The international Journal of Human Resource Management, Journal of Management Inquiry

Analysis and synthesis

The nature of the data we collected is qualitative, focusing on the theories used and the conceptualization of constructs under study rather than performing a quantitative, meta-analysis of statistical findings. We selected pattern matching and explanation building as our method of analysis, looking for apparent synergies and differences between studies (Yin, 1994). We opted for a qualitative review, as we were primarily concerned with mapping out and locating specific knowledge on the influence of identity on cross-boundary collaboration.

The first author coded each of the 85 articles to identify the role of identity in cross-boundary collaboration and other relevant information (influence of identity, non-identity influences, methodological approaches, theoretical grounding, case, context, identity type, relationships between concepts, boundaries, collaboration levels of organizing and forms, measurements of identity and collaboration, inputs, processes, outputs, moderators, contributions, titles, authors, sources, publication year, citations). As a quality check, the second author checked and verified the coding conducted by the first author to establish inter-observer reliability. Any inconsistencies were discussed until consensus was reached.

We took a three-step approach to summarize, visualize and integrate the extant knowledge on the influence of identity on cross-boundary collaboration. Each step involved a critical reading of the full article, coding of these steps for the included articles, and validation by the second author. First, we organized articles according to the level of organizing of the collaboration, where we differentiated between individuals, groups/teams, occupations/functions, and organizations. Though an occupation is a group or collective in the traditional sense (Miscenko and Day, 2015), we differentiated between groups as an

organizational form and occupations/functions as a group identity, as we suspected important differences in how these articles consider the influence of identity (also acknowledging the differing natures of such boundaries). The level of organizing of the collaboration was established through a critical reading of the article. Specifically, we looked for explicit mentions of the collaborating stakeholders (e.g., two organizations, between occupations), measurements of the collaboration (e.g., how the authors measured collaboration and at what level), and claims of theoretical contribution (e.g. to literature on team performance, individual creativity, etc.). In case of doubt, we coded for the level of measurement of the collaboration as the best approximation of where the collaboration took place. We summarized extant knowledge for each level of organizing individually.

Second, within these different levels of organizing of the collaboration we also differentiated between levels of measurement of drivers and consequences of the collaboration. For instance, for inter-organizational collaborations, we considered what we know about individual and group-level processes that affect how these organizations may collaborate, as well as the supra-organizational (field) outcomes that may emerge from inter-organizational collaboration. This followed the same coding and validation process as our assessment of the collaboration itself and allowed us to investigate to what extent multi-level identity tensions, boundaries and processes have been implicated in different forms of collaboration and between different identities.

Lastly, to acknowledge the different influences of identity on collaboration, we explicitly positioned these influences (as well as non-identity influences) in a process model, where we differentiated between identity boundaries and tensions, non-identity influences, identity and non-identity processes that influence collaboration, different collaborative forms, and outcomes of these collaborations. These too were established through a critical reading of the article, and coding for these concepts.

Specifically, for identity boundaries and identity related tensions, we looked for explicit mentions of identities and their related boundaries (as operationalized previously), but also looked for the tensions that these are claimed to produce. Examples include the aforementioned identity related tensions of power and status (Baunsgaard and Clegg, 2013; Chattopadhyay et al., 2010). Furthermore, we investigated to what extent the focal articles included singular or multiple identity related boundaries, within and across levels of

organizing. For instance, two organizations could be differentiated by their affiliations with these organizations, but also – and simultaneously – for instance by country, occupation and ideologies. We differentiated between inputs and processes based on the way authors incorporated concepts in their manuscript, such as static boundary, tension, or stimulus, versus something that is dynamic and changing. Lastly, for outcomes of collaboration, we looked for mentions of intentional as well as unintentional changes that were explicitly attributed to the collaboration.

In terms of identity versus non-identity influences and processes, we looked critically at whether drivers and inhibitors of collaboration matched our definition and operationalization of identity and identification. Drivers that did not match our definition were labelled as non-identity influences. In practice, this meant that inputs and processes we labelled as identity-related were explicitly positioned as pertaining to an entity's self-referential description (Ashforth et al., 2008: 327) or the attachment to an entity (Miscenko and Day, 2015). Examples include specific identities and identifications (e.g., cultural, professional), identity-specific characteristics (e.g., cultures, frames, logics), and identity related tensions and threats (e.g., power, status). Non-identity influences and processes in turn are those that may be influenced by- or influence identities and identifications, but do not in themselves fit this operationalization. Examples include non-identity related contextual conditions (e.g., infrastructure, resources), activities (e.g., general leadership, strategic forms of communication and governance practices) and changes (e.g., formal boundary permeability, action capacity). In cases where the distinction between identity and non-identity related concepts was less clear, (e.g., strategic communication aimed at preserving an identity), we followed the theoretical positioning of the focal article.

This culminated in a multi-level synthesis of concepts and theories as well as the identification of theoretical and methodological gaps. See Figure 4 below for a visualization of how we interrelate these concepts for our review.

Figure 4. A basic structure for research on the influence of identity on cross-boundary collaboration.
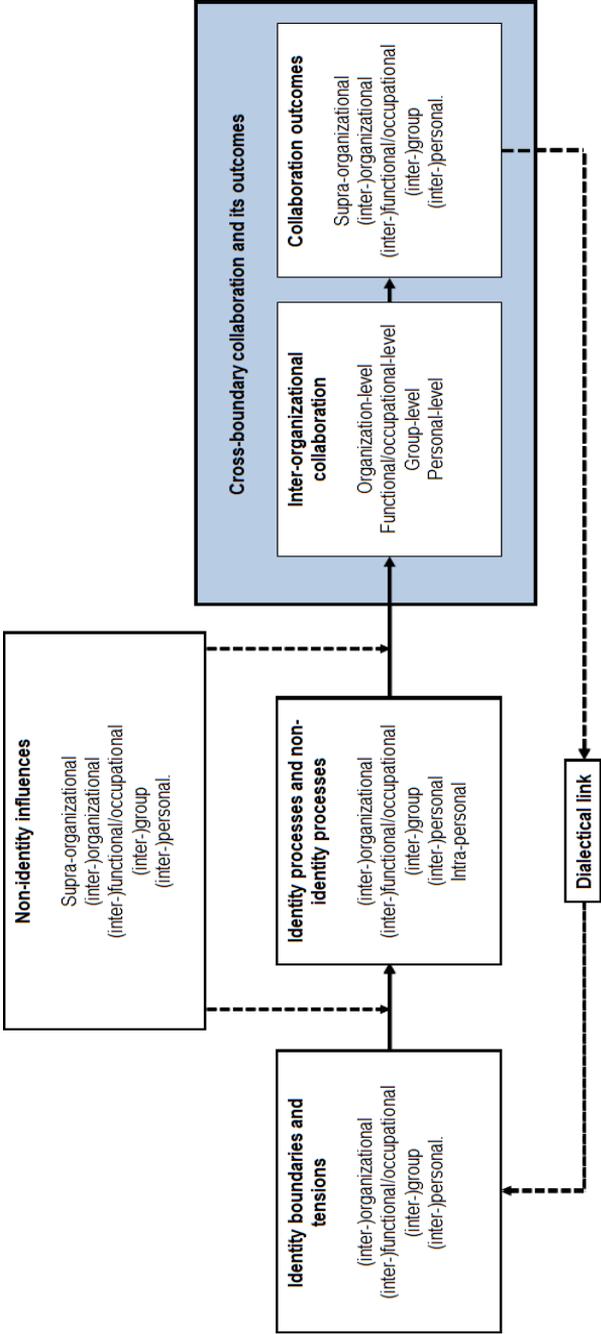
In the next section we will summarize and integrate the articles in our review.

Descriptive findings – most common roles of identity and types of studies

As a first step, we generated a descriptive overview of the role that identity plays in these studies, and the extent to which these studies have employed different methods. See Table 4 below for an overview.

Table 4. number of articles by role of identity and the type of study.

Role of Identity	Total	Qualitative	Quantitative	Mixed methods	Theoretical
Input	51 (56,67%)	16 (17,78%)	18 (20,00%)	4 (4,44%)	13 (14,44%)
(Of which single)	39 (43,33%)	12 (13,33%)	14 (15,56%)	4 (4,44%)	9 (10,00%)
(Of which multiple)	12 (13,33%)	4 (4,44%)	4 (4,44%)	0 (0,00%)	4 (4,44%)
Process	32 (35,56%)	16 (17,78%)	8 (8,89%)	2 (2,22%)	6 (6,67%)
Output	7 (7,78%)	6 (6,67%)	0 (0,00%)	0 (0,00%)	1 (1,11%)
Total	90 (100,00%)*	38 (42,22%)	26 (28,89%)	6 (6,67%)	20 (22,22%)

* Please note that for this- and subsequent tables, the total can exceed our 85 incorporated studies as some articles incorporate multiple influences of identity. For instance, as a dynamic concept which is both a boundary for collaboration (input) as well as a process that is worked on by different actors to foster collaboration (process.

Our review revealed that most of these studies incorporate identity as some form of input (identity related boundary or tension) (56,67%), followed by studies that incorporate some form of identity related process (35,56%). Far fewer studies explicitly incorporate identity as an outcome of collaboration (7,78%). Furthermore, of the studies that incorporate an identity boundary or tension, most of these studies consider a singular form of identity, and only a small minority of the incorporated studies explicitly consider an interaction between multiple, diverse identities in their study of collaboration (13,33%). These observations are interesting as they indicate a strong focus within the extant literature on identity as a boundary or tension to be overcome for successful collaboration, and in doing so generally consider a relatively simple, singular identity boundary. Conversely, it seems that identity as an outcome of different forms of collaboration (and the dialectical nature between collaboration and identity) is relatively understudied. Accordingly, more complex interactions between multiple disparate identities, particularly in terms of how these are shaped through collaborations over time, seem understudied.

In terms of the methods used in these studies, most aim to generate novel theory using qualitative methods (42,22%) or through a conceptual-theoretical paper (22,22%). Relatively few studies aim to test extant theory using quantitative (28,89%) or mixed-method (6,67%) approaches. Looking specifically at empirical studies, we see that there's a relatively even split between the role of identity as input vs. process for qualitative studies (17,78% each), while most quantitative studies exclusively test non-identity processes and outcomes, across a single identity boundary (15,56%). These findings indicate that though there is a strong interest in generating theory regarding the role of identity as an input or process for collaboration, empirical testing of identity processes that drive collaboration is underrepresented. This also applies to quantitative studies of how collaborations influence identity (0,00%), rather than of how identity processes influence collaboration (8,89%). Accordingly, there seems to be a lot of potential for theory-testing research, particularly considering identity related processes.

We also examined to what extent there might be variations between the level of organizing of the collaboration (e.g., between individuals, between organizations). See Table 5 below for an overview.

Table 5. number of articles by level of organizing, influence of identity and empirical methods of the paper.

Level of collaboration	Qualitative	Quantitative	Mixed method	Theoretical	Total
Organizational					
Identity inputs	11 (12,22%)	3 (3,33%)	1 (1,11%)	4 (4,44%)	19 (21,11%)
Identity processes	9 (10,00%)	2 (2,22%)	-	2 (2,22%)	13 (14,44%)
Identity outputs	3 (3,33%)	-	-	-	3 (3,33%)
Total	23 (25,56%)	5 (5,56%)	1 (1,11%)	6 (6,67%)	35 (38,89%)
Functional/occupational					
Identity inputs	3 (3,33%)	5 (5,56%)	2 (2,22%)	1 (1,11%)	11 (12,22%)
Identity processes	3 (3,33%)	2 (2,22%)	-	-	5 (5,56%)
Identity outputs	1 (1,11%)	-	-	1 (1,11%)	2 (2,22%)
Total	7 (7,78%)	7 (7,78%)	2 (2,22%)	2 (2,22%)	18 (20,00%)
Group					
Identity inputs	2 (2,22%)	6 (6,67%)	1 (1,11%)	4 (4,44%)	13 (14,44%)
Identity processes	2 (2,22%)	1 (1,11%)	1 (1,11%)	3 (3,33%)	7 (7,78%)
Identity outputs	1 (1,11%)	-	-	-	1 (1,11%)
Total	5 (5,56%)	7 (7,78%)	2 (2,22%)	7 (7,78%)	21 (23,33%)
Personal					
Identity inputs	-	4 (4,44%)	-	4 (4,44%)	8 (8,89%)
Identity processes	2 (2,22%)	3 (3,33%)	1 (1,11%)	1 (1,11%)	7 (7,78%)
Identity outputs	1 (1,11%)	-	-	-	1 (1,11%)

Total	3 (3,33%)	7 (7,78%)	1 (1,11%)	5 (5,56%)	16 (17,78%)
Total	38 (42,22%)	26 (28,89%)	6 (6,67%)	20 (22,22%)	90 (100,00%)

We found that most studies in our review looked at some form of collaboration between two different organizations (38,89%). The remaining studies were spread fairly evenly between collaborations between occupations, groups, and individuals (20,00%, 23,33% and 17,78% respectively). Moreover, we found that the reliance on qualitative methods is particularly strong for research on organization-level collaboration, where the amount of qualitative work (25,56%) is far greater than purely quantitative (5,56%) and mixed-method (1,11%) attempts at testing theory. As a result, it seems that studies to generate novel theory regarding inter-organizational identity related boundaries, tensions and processes are relatively popular, as these two categories account for roughly 30% of all studies in this review.

In the remainder of this section, we will clarify the role of identity in cross-boundary collaboration for the different organizing levels of collaboration (organizational, function/occupational, team/group, personal).

Conceptual findings – the role of identity in cross-boundary collaboration

The role of identity in inter-organizational collaboration

As we mentioned previously, inter-organizational collaborations were the most prevalent among the studies included in our review, and most of these studies utilized qualitative data to generate novel theory. Accordingly, we find that the literature on this level of collaboration is the most comprehensive, incorporating the largest number of identity related boundaries and tensions as well as identity and non-identity influences and processes. Furthermore, the inputs, processes, and outcomes of inter-organizational collaboration are also the most diverse in terms of the levels of organizing and measurement of these concepts. Please see Figure 5 below for a visualization of the extant literature on inter-organizational collaboration.

Figure 5. Overview of the literature on inter-organizational collaboration.
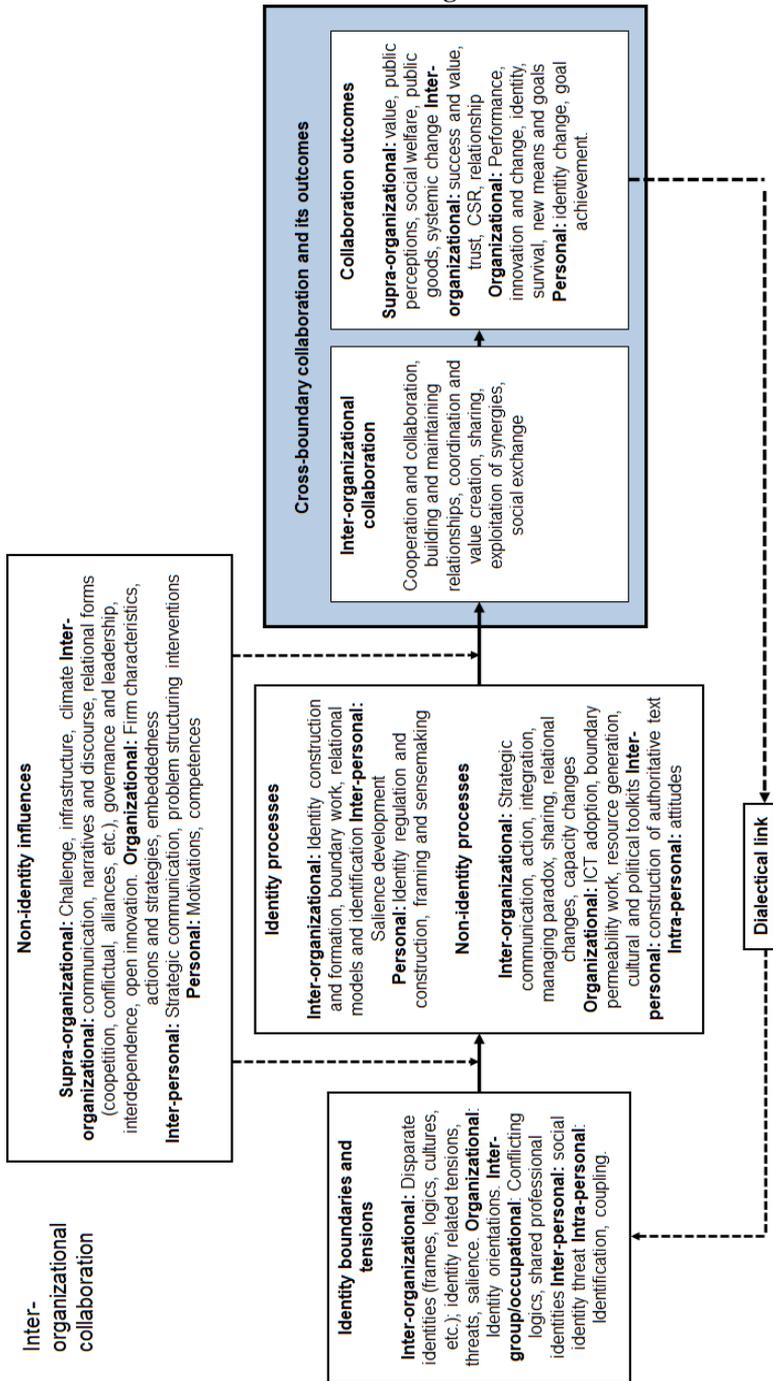
We find that extant theory on inter-organizational collaboration has considered a wide range of identity related boundaries and at different levels of organizing. For instance, these studies have considered disparate frames and logics (Le Ber and Branzei, 2010), cultures, (Jiang et al., 2011), dispositions and relational models (Bridoux and Stoelhorst, 2016) and meanings (Turner and Tennant, 2010). Extant research has also considered intra-organizational identity boundaries and how these in turn affect inter-organizational collaboration, for instance due to internal identity orientations (Korschun, 2015), professional identities (Arikan et al., 2020) and conflicting logics (Brown et al., 2018). To a lesser extent, these studies have also considered why these disparate identities form boundaries to collaboration, referring to how they cause tensions and social identity threat between people working for different organizations (Boone and Oezcan, 2014; Lauritzen, 2017) as well as within these participating organizations (Kane and Levina, 2017).

Identities and identity processes do not exist in a vacuum, and most of these studies also consider non-identity influences, be it as a context within which the collaboration takes place, or as another type of non-identity factor that influences inter-organizational collaboration in some way. We find that, at the inter-organizational level of collaboration, these span the personal to supra-organizational levels of measurement. For instance, studies have considered contextual conditions such as challenge (Beck and Plowman, 2014; Huemer, 2014), infrastructure and climate (Boone and Oezcan, 2014) and organizational characteristics such as firm size and age (Jiang et al., 2011), embeddedness (Lashitew et al., 2020) as well as management strategies (Essamri et al., 2019). Similarly, we see studies that focus on strategic communication, narratives and forms of discourse (e.g., Ellis and Ybema, 2010; Lashitew et al., 2020), specific actions and activities such as joint action (Feng et al., 2019) and open innovation activities (Zobel and Hagedoorn, 2020), and relational states such as conflict (Arikan et al., 2020), coopetition (Stadtler and Van Wassenhove, 2016) and alliances and partnerships (Marcos and Prior, 2017).

Conceptually, we find that the non-identity (contextual) influences are very similar to the non-identity processes. It therefore seems that the distinction between the non-identity influences and non-identity processes says more about the role that these concepts play in the studies under investigation (as trigger/contextual, vs. changing and worked on), rather

than that they denote different concepts. This is particularly interesting to note, as it suggests that many of the non-identity factors might be worked on actively to foster collaboration.

Interestingly, though most of these studies explicitly consider some form of disparate identity as the predominant boundary to overcome in inter-organizational collaboration, less attention has been given to the actual identity processes that take place to overcome the tensions due to these disparate identities. When it comes to studies on collaborations between organizations, these studies most commonly identify identity processes related to some form of identity construction (Korschun, 2015), or the formation of a collective, shared, or strategic group identity (Beck and Plowman, 2014; Ingram and Yue, 2008; Sonenshein et al., 2017) to overcome organizational boundaries. At the personal level, this generally entails some form of identity regulation (Kane and Levina, 2017), generation and integration of frames (Stadtler and Van Wassenhove, 2016), or otherwise shifts in personal and organizational identity salience (Gregory et al., 2020). In other words, this body of literature predominantly argues that the main way to overcome disparate identity boundaries between organizations is to generate some form of collective identity that spans the organizational divide, and to influence the identity salience of belonging to one specific (versus collective) identity.

Far more attention has been given to overcoming disparate identities through non-identity related measures and processes, at the organizational level of organizing. Broadly speaking, we can differentiate between forms of strategic communication, inter-organizational actions and behaviors, and relational changes that precede effective collaborations. Strategic communication refers to the use of discourse (Turner and Tennant, 2010), symbols (Brown et al., 2018) and tact (Kornberger et al., 2019) to influence frames (Bridoux and Stoelhorst, 2016; Le Ber and Branzei, 2010), preserve identities (Sonenshein et al., 2017) and otherwise contest points or mobilize for action (Boone and Oezcan, 2014). Inter-organizational actions and behaviors in turn include for instance forms of stakeholder incentivization (York et al., 2016) and otherwise attempts at managing paradox (Lauritzen, 2017). Interestingly, many of these processes are relational and may influence identity or identity processes but are not in themselves specific to identity. Rather, these studies refer to more general formation of relations of trust and understanding (Beck and Plowman, 2014; Daymond and Rooney, 2018; Holtzhausen, 2014), acknowledgment, respect and patience

(Huemer, 2014) or agreement (Ungureanu et al., 2020). This is interesting, as it suggests that some form of collective identity is not a requirement for effective collaboration, if other positive relational forms are in place. This suggests that actors with highly disparate identities might nevertheless be able to collaborate, provided these other relational conditions are met.

These studies also consider non-identity related processes that are conceptualized as intra-organizational, or (inter-personal), though far less frequently. Some of these related to similar communicative strategies that are also applied inter-organizationally, including specific cultural and political discourse (Koppman et al., 2016) and the construction of authoritative texts (Koschmann et al., 2012). At the personal-relationship level, these strategies are thought to foster social exchange (Gal et al., 2014), resources for internalizing social issues (Lashitew et al., 2020), and foster participative attitudes (Barrutia and Echebarria, 2020).

At this point it should be noted that, though we present these strategies, behaviors and relational changes independently from identity, that does not mean they are entirely independent from identity influences for every study under investigation. Rather, there is tremendous variability in these studies concerning to what extent the discussed identity processes influence, and are influenced by, these strategies, behaviors and relational changes. Furthermore, these studies vary greatly in terms of how explicit they are regarding these relationships, where many studies simply propose various strategies, behaviors and relational conditions that foster collaboration in a context of disparate identities, whereas others explicitly discuss how disparate identities can be worked on to foster collaboration. Not to mention, these studies independently consider different (identity) boundaries and (identity and non-identity) processes. Accordingly, though we provide an overview of the different boundaries and processes that are present in this body of literature. Specifying which specific processes work on disparate identities or despite disparate identities to foster collaboration lies beyond the scope of this review.

Looking specifically at conceptualizations of inter-organizational collaboration, we find that many different types and forms of collaboration have been studied. Many of these consider collaboration and cooperation in relatively general terms (Beck and Plowman, 2014; Boone and Oezcan, 2014; Egels-Zandén and Hyllman, 2011; Ingram and Yue, 2008;

Kornberger et al., 2019; Korschun, 2015). Even within these however we see that there is considerable fragmentation, as different scholars from different fields use different labels to identify the same if not highly similar activities, including for instance value creation (Best et al., 2019; Kourti and Garcia-Lorenzo, 2018; Le Ber and Branzei, 2010; Zobel and Hagedoorn, 2020), joint problem solving and co-creation (Essamri et al., 2019; Feng et al., 2019; Lauritzen, 2017; Turner and Tennant, 2010) or exploitation of synergies (Stadtler and Van Wassenhove, 2016). Some studies focus more explicitly on a specific aspect of collaboration, most commonly on sharing of knowledge and resources (Mathias et al., 2018; Sonenshein et al., 2017).

Overall, we notice that these studies (conceptually) consider collaboration in fairly general terms, as they are more interested in the processes that promote or inhibit effective collaboration. A prominent example of this is the seminal article by Beck and Plowman, who noticed the extraordinary collaboration between organizations in response to the Columbia space shuttle disaster, and attribute this to the formation of relationship-based trust and the formation of a collective identity between these organizations (2014). Moreover, the multitude of different collaborations raises the question of to what extent the identified processes might be transferable between contexts and collaborations.

In contrast to the fairly general terms in which collaboration is discussed, these studies do consider a very wide range of outcomes of collaboration at every level of organizing. For the organizations involved, this ranges from general outcomes such as performance and success (e.g., Le Ber and Branzei, 2010; Raisch and Tushman, 2016) to more specific outcomes such as the adoption of CSR practices (Brown et al., 2018), or innovation and change (Lashitew et al., 2020). Perhaps more interesting is that some of these studies explicate how inter-organizational collaborations may lead to field level outcomes, such as social welfare (Bridoux and Stoelhorst, 2016) and systemic change (Trujillo, 2018). Similarly, some of these studies also explicate personal outcomes of the people working for these organizations, as a result of the inter-organizational collaboration, such as how this affects their personal identities (Stadtler and Van Wassenhove, 2016) and goals (Koppman et al., 2016). This is particularly interesting, as it indicates that some of these studies explicitly consider the dialectical nature between collaboration and identity, as well as how actions and processes at lower levels of organizing might nevertheless lead to field level

outcomes. See Table 6 below for a summary of the literature on the influence of identity on inter-organizational collaboration.

Table 6. The influence of identity on inter-organizational collaboration.

Influence	Exemplars (e.g.):
Identity boundaries and tensions	**Inter-organizational:** Disparate identities (Le Ber and Branzei, 2010; Mathias et al., 2018), frames, logics (Le Ber and Branzei, 2010), cultures (Jiang et al., 2011), dispositions and relational models (Bridoux and Stoelhorst, 2016), meanings (Turner and Tennant, 2010), boundaries (Zobel and Hagedoorn, 2020), and related identity tensions and threat (Boone and Oezcan, 2014; Lauritzen, 2017), salience (Best et al., 2019). **Organizational:** Identity orientations (Korschun, 2015). **Inter-group/occupational:** Conflicting logics (Brown et al., 2018), shared professional identities (Arikan et al., 2020). **Inter-personal:** Social identity threat (Kane and Levina, 2017). **Intra-personal:** Identification (Korschun, 2015), founder identity coupling (York et al., 2016).
Non-identity influences:	**Supra-organizational:** Far from equilibrium conditions and challenge (Beck and Plowman, 2014; Huemer, 2014), infrastructure, anti-corporate climate (Boone and Oezcan, 2014). **Inter-organizational:** Communication, narratives and discourse (Ellis and Ybema, 2010; Holtzhausen, 2014; Lashitew et al., 2020); relational forms such as coopetition (Stadtler and Van Wassenhove, 2016), historical conflict (Arikan et al., 2020), alliances and partnerships (Marcos and Prior, 2017; Trujillo, 2018), affective relationships (Ingram and Yue, 2008), interdependence (Boone and Oezcan, 2014); relationship related differences in organizing (Egels-Zandén and Hyllman, 2011), open innovation activities (Zobel and Hagedoorn, 2020), joint action (Feng et al., 2019), threat (Koppman et al., 2016); mediation (Lauritzen, 2017); governance and leadership (Daymond and Rooney, 2018). **Organizational:** Firm size and age (Jiang et al., 2011), self-organizing actions (Beck and Plowman, 2014), new business initiation (Raisch and Tushman, 2016), local embeddedness (Lashitew et al., 2020), management strategies (Essamri et al., 2019). **Inter-personal:** Problem structuring interventions (Gregory et al., 2020), strategic communication (Kourti and Garcia-Lorenzo, 2018). **Personal:** Motivations (Barruta and Echebarria, 2020), cultural competence (Kane and Levina, 2017).
Identity processes:	**Inter-organizational:** Identity construction (Korschun, 2015), boundary work (Ellis and Ybema, 2010), collective, shared and strategic group identity formation (Beck and Plowman, 2014; Ingram and Yue, 2008; Sonenshein et al., 2017), relational models and identification (Bridoux and Stoelhorst, 2016; Feng et al., 2019). **Inter-personal:** Identity salience processes (Gregory et al., 2020). **Personal:** Identity regulation and construction (Kane and Levina, 2017; Koppman et al., 2016; Kourti and Garcia-Lorenzo, 2018), generating and integrating frames (Stadtler and Van Wassenhove, 2016).
Non-Identity processes:	**Inter-organizational:** Strategic communications involving framing and frame negotiation (Bridoux and Stoelhorst, 2016; Le Ber and Branzei, 2010), identity preservation communication (Sonenshein et al., 2017), symbols (Brown et al., 2018), discourse (Turner and Tennant, 2010), logic of tact (Kornberger et al., 2019), ideological contestation and mobilization (Boone and Oezcan, 2014); Actions involving reciprocity, accommodation and problem solving (Best et al., 2019; Mathias et al., 2018), demarcating and integrating

	actions (Raisch and Tushman, 2016; Stadtler and Van Wassenhove, 2016), stakeholder incentivation (York et al., 2016), managing paradox (Lauritzen, 2017), sharing of ideas (Gregory et al., 2020); Relational changes involving trust and understanding formation (Beck and Plowman, 2014; Daymond and Rooney, 2018; Holtzhausen, 2014); acknowledgment, respect and patience (Huemer, 2014), collaborative agreement and space (Ungureanu et al., 2020), general relationship decline (Marcos and Prior, 2017) and collective action capacity (Trujillo, 2018). **Organizational:** ICT adoption (Gal et al., 2014), cultural and political toolkits (Koppman et al., 2016), resources for internalizing social issues (Lashitew et al., 2020); boundary permeability work (Zobel and Hagedoorn, 2020). **Inter-personal:** Construction of authoritative texts (Koschmann et al., 2012). **Personal:** Participative attitudes (Barruta and Echebarria, 2020).
Collaboration:	Cooperation and collaboration (Beck and Plowman, 2014; Boone and Oezcan, 2014; Egels-Zandén and Hyllman, 2011; Ingram and Yue, 2008; Kornberger et al., 2019; Korschun, 2015), building and maintaining relationships (Arikan et al., 2020; Ellis and Ybema, 2010; Jiang et al., 2011), coordination and value creation (Best et al., 2019; Kourti and Garcia-Lorenzo, 2018; Le Ber and Branzei, 2010; Zobel and Hagedoorn, 2020), sharing knowledge and resources (Mathias et al., 2018; Sonenshein et al., 2017), joint implementation, planning, innovation, problem solving, co-creation (Essamri et al., 2019; Feng et al., 2019; Lauritzen, 2017; Turner and Tennant, 2010), meaningful participation (Koschmann et al., 2012), exploitation of synergies (Stadtler and Van Wassenhove, 2016), social exchange (Gal et al., 2014),
Collaboration outcomes:	**Supra-organizational:** Value, public perceptions (Koschmann et al., 2012), social welfare (Bridoux and Stoelhorst, 2016; Egels-Zandén and Hyllman, 2011), public goods (York et al., 2016), systemic change (Trujillo, 2018). **Inter-organizational**: success and value (Barruta and Echebarria, 2020; Best et al., 2019; Bridoux and Stoelhorst, 2016; Le Ber and Branzei, 2010; Huemer, 2014; Kourti and Garcia-Lorenzo, 2018), trust (Jiang et al., 2011), identity orientation (Gal et al., 2014), CSR practices (Brown et al., 2018), relationship breakdown (Marcos and Prior, 2017). **Organizational**: Performance (Jiang et al., 2011; Koppman et al., 2016; Raisch and Tushman, 2016), innovation and change (Lashitew et al., 2020), brand identity (Essamri et al., 2019), survival (Holtzhausen, 2014), new means and goals (York et al., 2016). **Personal**: Identity change (Stadtler and Van Wassenhove, 2016), goal achievement (Koppman et al., 2016).

The role of identity in inter-functional and occupational collaboration

Though we found fewer studies that explicitly focus on collaborations between different occupations or functional groups, we did find that these studies tend to go into more detail regarding the identity tensions that need to be overcome, and also consider a wide range of processes, forms of collaborations and outcomes. See Figure 6 below for a visualization of the extant literature on collaborations between different occupations.

Figure 6. Overview of the literature on inter-occupational/functional/discipline collaboration.
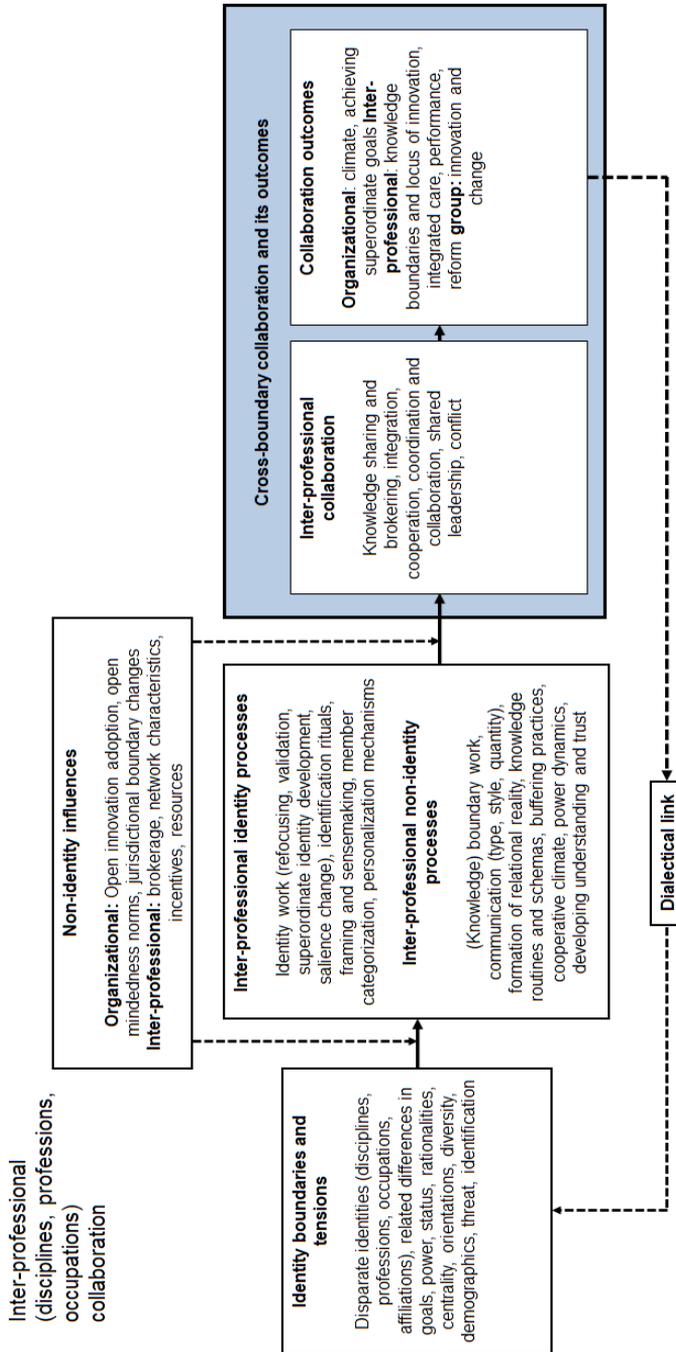
Studies on inter-occupational collaboration seem to go into more detail regarding the specific aspects of the discipline (Lifshitz-Assaf, 2018), occupation (Pouthier, 2017) and professional affiliation (Kertcher and Coslor, 2020) that represent boundaries to their collaboration. For instance, these studies consider identity related power, status and rationalities (Baunsgaard and Clegg, 2013; Chattopadhyay et al., 2010), centrality (Bolinger et al., 2018), diversity and demographics (DiBenigno and Kellogg, 2014; Mitchell et al., 2011). One study also considered more complex interactions between multiple identifications (Horton and Griffin, 2017). We find this observation interesting, as it suggests that occupations entail unique and specific identity boundaries that are not captured by more general studies on inter-organizational collaboration, and that it is possible to investigate more complex identity interactions.

When we consider the role of non-identity influences on inter-occupational collaborations, we see – much like at the organizational level of collaboration – several contextual factors. However, we find relatively fewer of them, and they are more focused on the inter-occupational and organizational levels of organizing. Specifically, several studies consider the organizational context within which occupations reside, either as a trigger (e.g., open innovation adoption, Lifshitz-Assaf, 2018; jurisdictional boundary changes, Bucher et al., 2016) or as a general contextual condition (e.g., open mindedness norms, Mitchell and Boyle, 2015). Inter-professionally, these studies consider general characteristics of the relationships such as centralization and the relative availability of resources (Ambrose et al., 2018) or the presence of a broker that may facilitate the collaboration (Kellogg, 2014).

Particularly interesting to note here is that – as opposed to inter-organizational collaborations – we find very little overlap between non-identity *influences* and non-identity *processes* in studies that focus on inter-occupational collaborations. It seems that this body of literature more uniformly focuses on identity related influences and treats non-identity related factors as more contextual and peripheral. Similarly, the non-identity influences considered in this body of literature are more static.

When it comes to identity related processes that affect inter-occupational collaboration, this body of literature provides a more nuanced view than was the case for inter-organizational collaboration. Specifically, this body of literature also considers

superordinate identity development (Ambrose et al., 2018) but in addition also inter-occupational refocusing work (Lifshitz-Assaf, 2018), validation (Bolinger et al., 2018), identification rituals (Pouthier, 2017), identity salience changes (Mitchell and Boyle, 2015), and member categorization (Baunsgaard and Clegg, 2013) and personalization mechanisms (DiBenigno, 2018). That said, all these identity processes are at the inter-occupational level, while extant studies on inter-organizational collaboration considered identity processes at the personal as well as organizational levels of measurement. This suggests that the literature on inter-occupational collaboration focuses more on processes of identification and categorization, rather than the formation of some collective or shared strategic identity.

We see a similar tendency for the non-identity related processes that affect inter-occupational collaboration. These studies focus exclusively on actions and relationships between occupations, and do not incorporate bottom-up and top-down processes. Specifically, authors have investigated various aspects of communication (type, style, quantity, accusations, claims) (Baunsgaard and Clegg, 2013; Chattopadhyay et al., 2010; DiBenigno and Kellogg, 2014), boundary work (Kertcher and Coslor, 2020; Lifshitz-Assaf, 2018), various changes in understandings of relational reality (Pouthier, 2017), knowledge routines and schemas (Currie and White, 2012), as well as relational changes in terms of climate (Kukenberger and Di'Innocenzo, 2020), power, and trust (Currie and White, 2012).

Looking specifically at collaborations between different professionals and occupations, we find that – similar to inter-organizational collaboration – many different forms have been studied, and often in general terms such as cooperation, collaboration and coordination (Bolinger et al., 2018; DiBenigno and Kellogg, 2014; Kertcher and Coslor, 2020; Mitchell et al., 2011). However, we also find further differentiation, to account for the added complexity that collaboration across occupational and functional boundaries entails. For instance, we find references to knowledge brokering (Currie and White, 2012), functional integration (Ambrose et al., 2018), shared leadership (Kukenberger and D'Innocenzo, 2020), as well as studies on how multiple work identities lead to conflict (Horton and Griffin, 2017).

Consistent with the stronger focus on collaboration between different occupations and functions, we also see that hypothesized and tested outcomes of these collaborations are more specific to the organizational and occupational context within-and between which

these collaborations take place. This includes outcomes for individual occupations and functions (e.g., Innovation and change, Mitchell and Boyle, 2015) as well as changes that occur between the occupations such as changes in their knowledge boundaries and the locus of innovation (Lifshitz-Assaf, 2018). Furthermore, these studies also describe general positive outcomes for these collaborations such as improved performance (Mitchell et al., 2011) or integrated care (Currie and White, 2012). We also found two organizational outcomes due to collaborations between occupations/functions, namely reform (Kellogg, 2014) and changes to the relational climate within the organization (Bolinger et al., 2018). As such, studies on collaborations at the occupational/functional level seem to consider both collaboration-specific outcomes, as well as some general organizational outcomes. Interestingly however, we did not find any personal outcomes of collaboration; most notably these studies do not seem to consider personal identity changes due to occupational collaborations. This is an interesting omission, as it suggests that individual-level identity processes are understudied when it comes to collaborations between different occupations, professions, functions and disciplines. This offers a potentially interesting avenue for future research. Please see Table 7 below for a summary of the influence of identity on inter-functional collaboration.

Table 7. The role of identity in inter-functional collaboration.

Influence	Exemplars (e.g.)
Identity boundaries and tensions	Disparate disciplines (Lifshitz-Assaf, 2018), professions (Mitchell and Boyle, 2015), occupations (Pouthier, 2017) and affiliations (Kertcher and Coslor, 2020); related differences in goals (DiBenigno, 2018), power, status and rationalities (Baunsgaard and Clegg, 2013; Chattopadhyay et al., 2010), centrality and orientations (Bolinger et al., 2018), diversity, demographics and threat (DiBenigno and Kellogg, 2014; Mitchell et al., 2011), identification complexity (Horton and Griffin, 2017).
Non-identity influences:	**Organizational:** Open innovation adoption (Lifshitz-Assaf, 2018), open mindedness norms (Mitchell and Boyle, 2015), jurisdictional boundary changes (Bucher et al., 2016). **Inter-professional:** Brokerage (Kellogg, 2014), centralization, incentives, information quality, resources, time (Ambrose et al., 2018).
Identity processes:	Identity work including refocusing (Lifshitz-Assaf, 2018), validation (Bolinger et al., 2018), superordinate identity development (Ambrose et al., 2018), identification rituals (Pouthier, 2017), identity salience changes (Mitchell and Boyle, 2015); framing and sensemaking (Bucher et al., 2016), member categorization (Baunsgaard and Clegg, 2013), personalization mechanisms (DiBenigno, 2018).

Non-Identity processes:	(Knowledge) boundary work (Kertcher and Coslor, 2020; Lifshitz-Assaf, 2018), communication (type, style, quantity, accusations, claims, discourse) (Baunsgaard and Clegg, 2013; Chattopadhyay et al., 2010; DiBenigno and Kellogg, 2014), formation of relational reality (Pouthier, 2017), knowledge routines and schemas (Currie and White, 2012), buffering practices (Kellogg, 2014), cooperative climate (Kukenberger and D'Innocenzo, 2020), power dynamics, developing understanding, trust (Currie and White, 2012).
Collaboration:	Knowledge sharing (Lifshitz-Assaf, 2018) and brokering (Currie and White, 2012), integration (Ambrose et al., 2018; Baunsgaard and Clegg, 2013), cooperation, collaboration and coordination (Bolinger et al., 2018; DiBenigno and Kellogg, 2014; Kertcher and Coslor, 2020; Mitchell et al., 2011), shared leadership (Kukenberger and D'Innocenzo, 2020), conflict (Horton and Griffin, 2017).
Collaboration outcomes:	**Organizational:** Relational climate (Bolinger et al., 2018), achieving superordinate goals (DiBenigno, 2018). **Group:** Innovation and change (Mitchell and Boyle, 2015). **Inter-professional:** Changed knowledge boundaries and locus of innovation (Lifshitz-Assaf, 2018), integrated care (Currie and White, 2012), performance (Mitchell et al., 2011), reform (Kellogg, 2014).

The role of identity in inter-group and team collaboration

We found approximately the same number of studies on more general inter-group and team collaboration as we did on inter-occupational collaboration (see also Table 5). However, we do see a markedly different distribution of studies, with increased variety in terms of the levels at which identity boundaries and tensions, non-identity influences and the processes are conceptualized. Please see Figure 7 below for visualization of the extant literature on the influence of identity on inter-group and inter-team collaboration.

Figure 7. Overview of the role of identity in general inter-group collaboration.
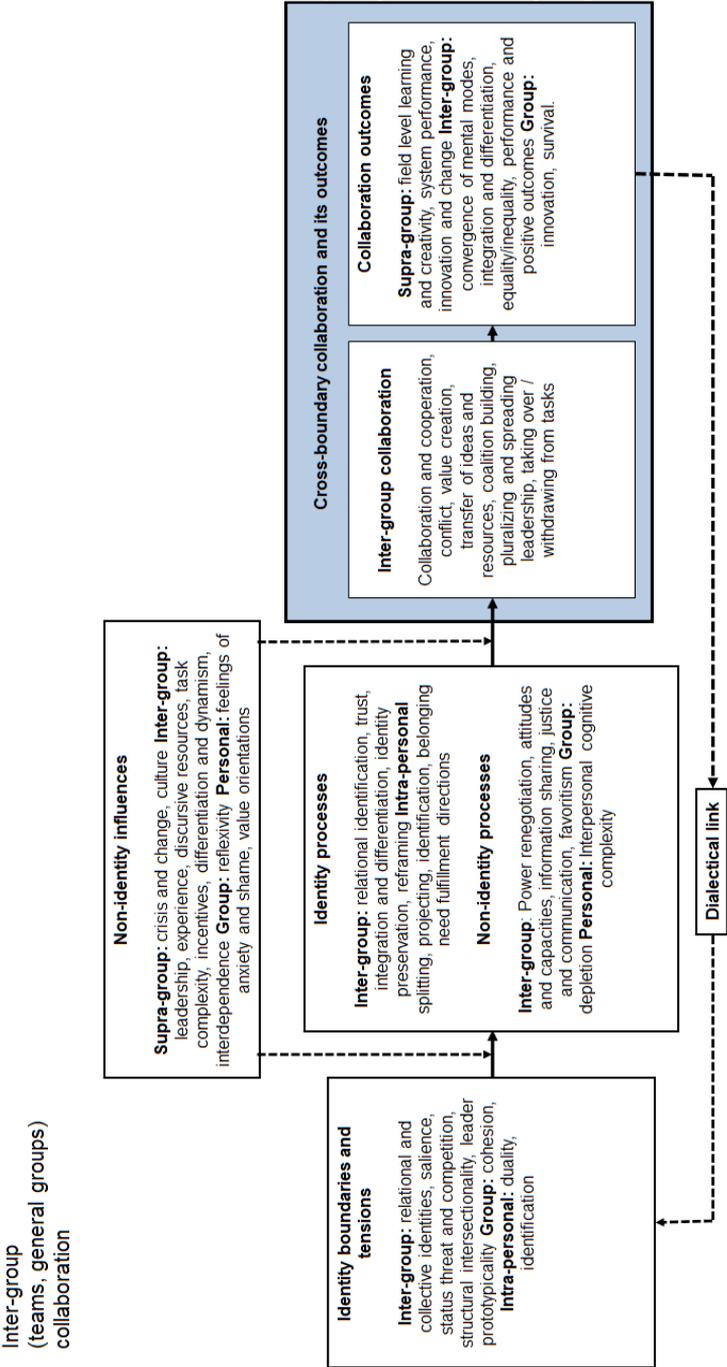
Where studies on inter-occupational boundaries exclusively conceptualized identity boundaries and tensions between those occupations, we see more diversity for inter-group collaboration. Specifically, these studies also consider personal identity tensions due to duality (Ashforth and Reingen, 2014) and identification with a particular system, organization, or team (DeVries et al., 2014; Porck et al., 2019). In terms of identity boundaries and tensions between groups, we find these studies remain relatively general regarding the nature of the specific identity, referring to general relational and collective identities (Rast et al., 2018; Salem et al., 2018), identification interactions (Mell et al., 2020), and related status threats and competition (Hogg et al., 2012). However, we also see some identity tensions that are specific to this body of research. Specifically, these studies additionally and explicitly consider leadership prototypicality, looking at the extent to which a leader is considered representative of the group (or a deviant) (Salem et al, 2018). Accordingly, though these identity tensions and boundaries seem more generic (as in, applicable to different types of groups), these studies also incorporate studies on leadership from an identity perspective.

We see a similar tendency when it comes to non-identity influences on collaboration, where these range from personal influences such as feelings of shame and anxiety (Mikkelsen et al., 2020) and value orientations (Andersson et al., 2017) to field-level contextual factors such as crisis and change conditions (Yu, 2012). Accordingly, studies of inter-group collaboration consider influences at different levels of organizing much like those studies on inter-organizational collaboration. Similarly, these non-identity influences also include both contextual factors such as task complexity (Porck et al., 2019) and levels of differentiation, dynamism (Luciano et al., 2018) and interdependence (Litchfield et al., 2018), but also different actions such as leadership (Hogg et al., 2012; Salem et al., 2018) and incentivation (Andersson et al., 2017). This is interesting, as it suggests that these studies are more heterogenous in their conceptualization of non-identity factors as static contextual factors and drivers and processes of collaboration.

The inter-group identity processes that foster collaboration are very similar to those we found for studies that focus on collaborations between occupations, in that it includes horizontal identity work such as relational identification (Hogg et al., 2012), integration and differentiation (Yu, 2012), as well as identity reframing (Lloyd and Carroll, 2019) and

preservation work (Dennissen et al., 2020). However, this body of research additionally considers individual, personal identity work and its role in fostering collaboration. These studies seem to concern both personal identity work such as splitting, projecting and identification (Ashforth and Reingen, 2014) as well as identity related sensemaking (Mikkelsen et al., 2020). It therefore seems that, in terms of identity processes, inter-group collaborations consider both inter-group and intra-personal identity processes.

We see a similar trend when it comes to research on non-identity processes that foster inter-group collaboration. Specifically, when it comes to actions and behaviors between these groups, extant research has considered active renegotiations of power (Lloyd and Carrol, 2019) and information sharing (Mell et al., 2020). In addition, these studies have looked at group and personal states, including attitudes and capacities (Rast et al., 2018), justice perceptions (Carton and Cummings, 2012), as well states of depletion (Porck et al., 2019) and individual interpersonal cognitive complexity (DeVries et al., 2014). When we consider both identity and non-identity processes that foster collaboration between groups, it is apparent that extant research explicitly considers both processes between these groups, as well as how these individual groups are constituted and formed. This is in contrast to extant research on collaborations between different occupations, which has exclusively focused on occupation level differences and processes.

When we consider collaborations between general groups and teams, we see very similar labels of collaboration to what we found for inter-organizational collaboration, including value creation (Schneider and Sachs, 2017), and knowledge sharing (Yu, 2012), but we also find more specific forms of collaboration as was the case for collaborations between occupations and functions, such as on sharing leadership (Lloyd and Carroll, 2019) and conflict (Ashforth and Reingen, 2014; Cuijpers et al., 2016).

Consistent with studies at the occupational level of collaboration, we find mostly general group and organization-level outcomes as a result of collaborations between different (general) groups and teams. These include for instance measures of performance and success (e.g., Hogg et al., 2012; Mell et al., 2020) as well as innovation and survival (Ashforth and Reingen, 2014) and at the group level and field-level learning and creativity (Salem et al., 2018). An interesting outcome that seems to be unique to these more general studies of group collaboration is that groups can converge (Carton and Cummings, 2012) as

well as integrate and differentiate (Yu, 2012) as a result of collaboration. This is particularly interesting, as it suggests an increased interest in the malleability and dynamic nature of groups in these studies, that is not seen to this extent for studies that focus on specific occupations or organizations. It also hints at the dialectical link between collaboration and identity, as we identified studies that examine identity processes and their effects on collaboration, but also collaboration's effects on the participating groups. That said, similar to studies on occupation-level collaborations, we did not find any studies that explicitly consider individual -level identity changes due to these collaborations. Instead, these studies seemed to focus on changing group, rather than individual, characteristics. See Table 8 below for a summary of the influence of identity on collaboration between groups and teams.

Table 8. The role of identity in inter-group collaboration.

Influence	Exemplars (e.g.)
Identity boundaries and tensions	**Inter-group:** Relational and collective identities (Rast et al., 2018; Salem et al., 2018), identification interactions (Mell et al., 2020), salience (Schneider and Sachs, 2017), identity related status threat and competition (Hogg et al., 2012), structural intersectionality (Dennissen et al., 2020), leader prototypicality (Salem et al., 2018). **Group**: Cohesion (Salem et al., 2019). **Intra-personal**: Duality (Ashforth and Reingen, 2014), identification (system, organizational, team) (De Vries et al., 2014; Porck et al., 2019).
Non-identity influences:	**Supra-group:** Contexts of crisis and change (Yu, 2012), culture (Andersson et al., 2017). **Inter-group:** Leadership (Hogg et al., 2012; Salem et al., 2018; 2019), functional experience (De Vries et al., 2014), discursive resources (Lloyd and Carroll, 2019), task complexity (Porck et al., 2019), incentives (Andersson et al., 2017), differentiation and dynamism (Luciano et al., 2018), perceived interdependence (Litchfield et al., 2018). **Group:** Reflexivity (Litchfield et al., 2018). **Personal:** Feelings of anxiety and shame (Mikkelsen et al., 2020), value orientations (Andersson et al., 2017).
Identity processes:	**Intra-personal:** Splitting, projecting, identification (Ashforth and Reingen, 2014), sensemaking (Mikkelsen et al., 2020), belonging need fulfilment directions (Luciano et al., 2018). **Inter-group:** Relational identification (Hogg et al., 2012), trust (Schneider and Sachs, 2017), integration and differentiation (Yu, 2012), identity preservation (Dennissen et al., 2020), reframing (Lloyd and Carroll, 2019).
Non-Identity processes:	**Inter-group**: Power renegotiation (Lloyd and Carroll, 2019), attitudes and capacity (Rast et al., 2018), information sharing (Mell et al., 2020), justice and communication (Ashforth and Reingen, 2014; Carton and Cummings, 2012), favouritism (Andersson et al., 2017). **Group**: Depletion (Porck et al., 2019). **Personal:** Interpersonal cognitive complexity (De Vries et al., 2014)
Collaboration:	Collaboration and cooperation (Andersson et al., 2017; Salem et al., 2018; 2019; Hogg et al., 2012), conflict (Ashforth and Reingen, 2014; Cuijpers et al., 2016), value creation

	(Schneider and Sachs, 2017), transfer of ideas and resources (Yu, 2012), coalition building (Dennissen et al., 2020), pluralizing and spreading leadership (Lloyd and Carroll, 2019), taking over/withdrawing from tasks (Mikkelsen et al., 2020).
Collaboration outcomes:	**Supra-group:** Field-level learning and creativity (Salem et al., 2018), system performance (Cuijpers et al., 2016), innovation and change (Litchfield et al., 2018). **Inter-group:** Convergence of mental modes (Carton and Cummings, 2012), integration and differentiation (Yu, 2012), equality/inequality (Dennissen et al., 2020), performance and successful outcomes (Hogg et al., 2012; Mell et al., 2020; Salem et al., 2019). **Group:** Innovation, survival (Ashforth and Reingen, 2014).

The role of identity in inter-personal collaboration

Lastly, we consider the extant literature on the influence of identity on interpersonal collaborations between individuals. Though this category constitutes a relatively smaller body of literature (see also Table 5), it is characterized by a high level of diversity in terms of levels of measurement for the individual identity boundaries, tensions, processes and outcomes of collaboration. See Figure 8 below for a visualization of the extant literature on the influence of identity on collaborations between individuals.

Figure 8. Overview of the role of identity in inter-personal collaboration.
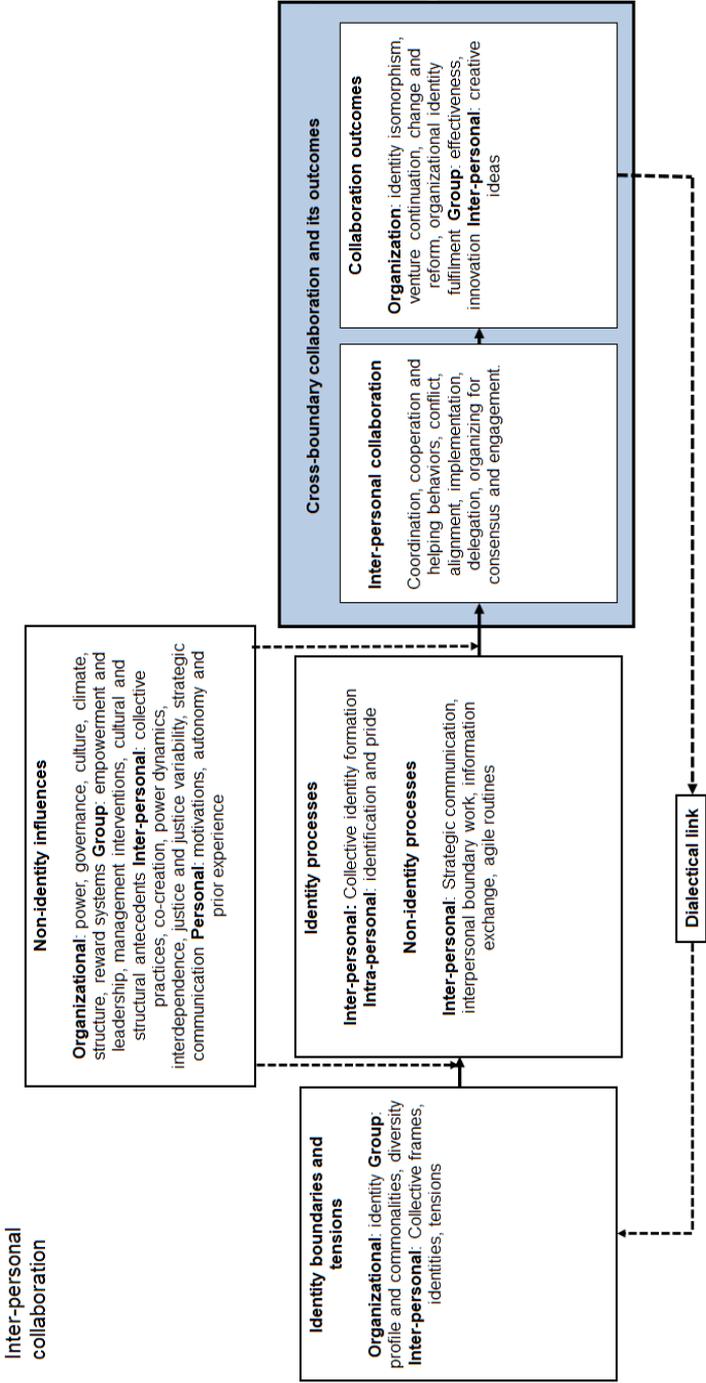
We find that the identity boundaries and tensions that studies of interpersonal collaborations consider are relatively general compared to those that were considered for collaborations between occupations (Faraj et al., 2011; Kellogg, 2012; Mesmer-Magnus, et al., 2018). Interestingly, these studies also consider a wide range of non-identity influences, though these seem to predominantly provide the context within which identity processes and collaboration take place. These span all levels of organizing, ranging from personal motivations, autonomy and experience (Rouse, 2020), to inter-personal practices (Kellogg, 2012), power dynamics (Rouse, 2020), interdependence (Annosi et al., 2017) and communication (Powell and Baker, 2014) and to organizational conditions such as related to power (Kellogg, 2011), governance (Weber and Mayer, 2014), culture, climate, structure and reward (Rouse, 2020). Particularly interesting however is that we also see more explicit mentions to specific actions that are implemented to promote collaboration, including managerial intervention (Annosi et al., 2017) as well as empowerment and leadership activities (Stewart et al., 2017). This indicates that, while interpersonal identity boundaries strongly rely on general notions and diversity, non-identity influences place a strong emphasis on the contextual nature of individual-level collaboration and the potential for (managerial) intervention.

We find that the studies on inter-personal collaborations have relatively little interest in the identity processes underlying these efforts. Only a few of these studies explicitly go into these processes, including on the formation of a collective identity (Kellogg, 2011; Mesmer-Magnus et al., 2018) and how a sense of collective identity fosters collaboration. Instead, these studies put greater emphasis on non-identity activities and processes that can be used to overcome identity boundaries for collaboration. Though these studies exclusively consider processes between the involved actors, they do incorporate a variety of processes. These include communication activities (Giorgi et al., 2017) and the use of cultural and political toolkits to engage other actors (Kellogg, 2011). We also see an emphasis on frame negotiation (Weber and Mayer, 2014) and framing based responses (Faraj et al., 2011). To a lesser extent, these studies also consider some interpersonal boundary work (Powell and Baker, 2017) and information exchange efforts (Annosi et al., 2017; Seo et al., 2020). Ultimately, we find that this body of literature is less interested in identity processes, and more interested in strategic ways to influence collaboration.

When we look specifically at forms of collaboration between individuals, we see – understandably – a greater focus on specific inter-personal actions than was the case for studies focusing on higher levels of organizing. These studies focus for instance on specific helping behaviors (Faraj et al., 2011), delegation activities (Stewart et al., 2017) and specific actions to organize for consensus and engagement (Powell and Baker, 2017).

Interestingly, studies on inter-personal collaboration seem less interested in individual-level outcomes. Instead, this body of research seems predominantly concerned with how collaborations between individuals can instigate higher-level changes for groups (e.g., effectiveness, Stewart et al., 2017 and innovation, Seo et al., 2020) and the larger organization these individuals are working for. Specifically, how individual-level collaboration may influence venture continuation (Powell and Baker, 2017), change and reform (Giorgi et al., 2017; Kellogg, 2012) and contribute to the fulfilment of the organizational identity (Mesmer-Magnus et al., 2018). This is perhaps not surprising, as management science has a strong interest in how smaller actions may nevertheless lead to larger outcomes (Ferraro et al., 2015) and many of the studies which found their way into this review were published in journals that focus greatly on organizational processes (e.g., Organization Studies). Nevertheless, it suggests that the personal consequences of being involved in specific forms of collaboration might be understudied, or at least more challenging to publish. See Table 9 below for a summary of the influence of identity on collaboration between individual actors.

Table 9. The role of identity in inter-personal collaboration.

Influence	Exemplars (e.g.)
Identity boundaries and tensions	**Organizational:** Identity (Mesmer-Magnus et al., 2018). **Group:** Profile and commonalities (Powell and Baker, 2017), diversity (Seo et al., 2020). **Inter-personal:** Collective frames, identities (Kellogg, 2012), tensions (Faraj et al., 2011).
Non-identity influences:	**Organizational:** Power (Kellogg, 2011), governance (Weber and Mayer, 2014), culture, climate, structure, reward systems (Rouse, 2020). **Group:** Empowerment and leadership (Stewart et al., 2017), managerial intervention (Annosi et al., 2017), cultural and structural antecedents (Giorgi et al., 2017). **Inter-personal:** Collective practices (Kellogg, 2012), co-creation (Rouse, 2020), power dynamics (Rouse, 2020), task interdependence (Annosi et al., 2017), justice and justice variability (Matta et al., 2020), strategic communication (Powell and Baker, 2017). **Personal:** Motivations, autonomy and prior experience (Rouse, 2020)

Identity processes:	**Inter-personal:** Collective identity formation (Kellogg, 2011; Mesmer-Magnus et al., 2018). **Intra-personal:** Identification and pride (Matta et al., 2020).
Non-Identity processes:	**Inter-personal:** Communication (Giorgi et al. 2017) through cultural and political toolkits (Kellogg, 2011), frame negotiation (Weber and Mayer, 2014), behavioural and framing based responses (Faraj et al., 2011; Kellogg, 2012), interpersonal boundary work (Powell and Baker, 2017; Rouse, 2020), agile routines and information exchange (Annosi et al., 2017; Seo et al., 2020).
Collaboration:	**Inter-personal:** Coordination, cooperation and helping behaviors (Faraj et al., 2011; Kellogg, 2011; Matta et al., 2020; Mesmer-Magnus et al., 2018), conflict (Weber and Mayer, 2014); alignment and joint implementation (Kellogg, 2012), delegation (Stewart et al., 2017), organizing for consensus and engagement (Powell and Baker, 2017).
Collaboration outcomes:	**Organization:** Identity isomorphism (Annosi et al., 2017), venture continuation (Powell and Baker, 2017), change and reform (Giorgi et al., 2017; Kellogg, 2012), organizational identity fulfilment (Mesmer-Magnus et al., 2018). **Group:** Effectiveness (Stewart et al., 2017), innovation (Seo et al., 2020). **Inter-personal:** Creative ideas (Rouse, 2020)

Conclusion and discussion

The primary goal of the present research was to summarize, synthesize, and structure the extant literature on the influence of identity on cross-boundary collaboration. As scholarly interest in this topic has grown exponentially over the last decade, we find that that the literature on how identity is implicated in various forms of cross-boundary collaboration is highly fragmented. By providing an integrative overview of extant research in terms of methodological approaches, levels of analysis and roles of theoretical perspectives and concepts, we hope to provide both researchers and practitioners with an accessible, comprehensive and structured understanding of our extant knowledge. Please see Table 10 below for a summary of the primary learnings and future research needs we identified in our review.

Table 10. Summary of primary learnings and future research needs.

1	Research on the role of identity in cross-boundary collaboration has grown tremendously in recent decades (70% of all articles on the topic are from this last decade, see Figure 2). As a result, our understanding of the role of identity in cross-boundary collaboration is increasingly vast, heterogeneous, and fragmented.
2	We suggest that work on the role of identity in cross-boundary collaboration can be classified along two dimensions: the level of organizing of the collaboration (persons, groups, occupations, organizations)

and the role of identity (as a barrier to collaboration, as a process influencing collaboration, or as a consequence of collaboration). Combined, it is possible to map the influence of identity at and across identity boundaries at different levels of organizing. Furthermore, it is also possible to incorporate non-identity influences and processes, to visualize tendencies to focus on identity vs. non-identity factors that might foster collaboration (see Figure 4).

3   Articles on the role of identity in cross-boundary collaboration are grounded in- and build on theoretical perspectives from a variety of literatures beyond those on identity and identity work, including for instance boundaries and boundary spanning, communication theory, economics, framing and sensemaking, leadership, multi-team systems and social movements. Furthermore, these studies consider a large variety of theoretical concepts as drivers, processes, forms of collaboration and outcomes of collaboration. As a result, the literature is highly disorganized. We find that there is considerable overlap in concepts between studies and levels of organizing, though these are operationalized, measured and implicated differently.

4   In terms of scholarly attention, most articles focus on collaborations across organizational boundaries (38,9%), and with identity predominantly incorporated as a barrier to collaboration (56,7%). See Tables 4 and 5 for an overview. Consequently, our understanding of collaboration across organizational boundaries is most developed, and includes identity boundaries and tensions, non-identity influences, identity and non-identity processes, and collaboration outcomes spanning the intra-personal to supra-organizational levels. Conversely, only a select few studies interrogated multiple identity boundaries simultaneously or how identities evolve over time as a collaboration continues. Accordingly, we know less about identity (and non-identity) processes that influence and are influenced by more complex collaborations, involving different or multiple identities within and across organizations.

5   Empirically, articles are heavily skewed toward qualitative and theoretical work, especially concerning the organizational level of collaboration, with a smaller portion of studies dedicated to quantitatively testing theory (28,89%). This is especially the case for organizational-level collaborations (only 14% of these articles quantitatively test theory). See Tables 4 and 5 for an overview.

6   Future research should focus on consolidating extant knowledge on the influence of identity on cross-boundary collaboration, integrating insights from different streams of literature and across levels of organizing. An important step would be to investigate to what extent identity influences can be integrated across different levels of collaboration and collaborative context.

7   Future research should focus less on established and well-researched singular boundaries of organization, function, occupation, etc. to focus on more complex collaborations involving multiple identities. Similarly, future research should also move beyond the dominant stable conceptualization of identity as a boundary (e.g., as input tension), and focus more on identity as a dynamic process, which interacts with various forms of communication and behavior, to influence collaboration and collaboration outcomes over time. One potential avenue for research here is to investigate how multiple identities are implicated in complex forms of collaboration over time, shaping and shaped by the evolving collaboration.

8   Future research on the interaction between these multiple identities in collaboration over time should explicitly consider identity and non-identity influences at different levels of organizing and theorizing. Specifically, studies should look at the interplay between intra-personal processes (e.g., framing, sensemaking, identification, etc.) and inter-personal processes (e.g. forming a sense of shared identity, processes of communication and behavior), and how these lead to personal as well as supra-personal (bottom-up) changes. One potential and particularly relevant avenue here is to investigate which specific processes may lead to systemic changes, and under which conditions.

9	Future research should focus on empirically testing proposed theories, as quantitative studies are underrepresented. This problem is particularly relevant for studies of identity processes, including those on how identity processes influence and evolve with ongoing collaborations.
10	Future research should focus more on potential ways to promote collaboration across identity boundaries. The non-identity influences that are implicated (regardless of the level of organizing of the collaboration) focus very much on traditional (and general) contextual and organizational factors such as climate, change, structure/infrastructure, or strategic forms of communication and leadership. Furthermore, we found indications that it is possible to foster collaboration despite highly disparate identities, provided certain relational conditions are met. Accordingly, investigating how we may foster such relationships to bridge intractible identity differences, offers an interesting potential avenue for future research.

As we provide specific observations of theoretical gaps in our results section as well as in Table 10 above, we instead shift our attention now to the larger implications of our findings for the field of identity research, as well as researchers interested in collaborations involving multiple different actors more generally. First, considering the volume of research into the influence of identity on cross-boundary collaboration, we find it somewhat surprising that so few studies consider multiple identity boundaries simultaneously. The overwhelming majority of studies consider collaborations across a single boundary, such as a specific cultural divide, expertise, profession, or collective affiliation.

This is problematic, as particularly more complex, *grand* or *wicked* challenges involve multiple stakeholders from different organizations and engaging at different levels of organizing (Eisenhardt et al., 2016; Ferraro et al., 2015; Kornberger et al., 2019). Addressing these challenges requires the engagement, participation and collaboration of these highly disparate stakeholders, which undoubtedly invokes identity related tensions that need to be overcome. There have been calls in recent years for more scholarly attention to be paid to such challenges, and previous authors have noted that there is considerable potential for theory development (Colquitt and George, 2011; Eisenhardt et al., 2016).

Similarly, echoing review findings from work identity literature (Miscenko and Day, 2015), we find that the majority of these studies incorporate identity as a stable boundary across which collaboration has to take place, and generally propose non-identity actions, strategies and processes to overcome these static identity boundaries. Though we found a few studies that also provide a more fine-grained analysis of how these actors do so through various sensemaking and framing processes, we find that more could be done to study the dialectical relationship between identity and collaboration, and how collaborations

are shaped by, but also shape, the identity of those involved. The extant research we found generally holds one or the other (identity vs. collaboration) constant, rather than investigated how these mutually enforce and drive a particular engagement effort over time.

Taken together, we argue that we know a great deal about collaborations across stable, and singular personal, group, occupational and organizational boundaries. Given the maturity of the field of identity, we think that the potential for conceptual and empirical breakthroughs lies with the study of more complex, evolving collaborations across multiple disparate identities. Specifically, these should focus on the interplay between disparate identities and collaboration, rather than keeping one or the other constant. We found some examples of particularly complex contexts in our review, for instance, on decision making in a refugee crisis characterized by an 'emerging polycentric and inter-sectoral collective of organizations' (Kornberger et al., 2019: 2). We suggest that these contexts hold particular potential to investigate emerging collaborations between highly disparate actors (with disparate identities), and specifically, how collaborations and identity are mutually shaped through the engagement of these actors.

Furthermore, we found that some articles suggest that collaboration can take place despite the disparate identities involved if specific relational and contextual conditions are met. Specifically, several authors refer to the importance of a relationship characterized by trust and respect (e.g., Beck and Plowman, 2014; Daymond and Rooney, 2018; Holtzhausen, 2014; Huemer, 2014). Particularly interesting is that the relationship between trust and collaboration seems to go both ways, where trust is considered a precondition for collaboration but also something that develops through working together (Beck and Plowman, 2014). These findings echo previous assertions that collaborations are possible despite widespread disagreement (Ferraro et al., 2015), but also raise important questions regarding how to foster collaboration and mutual trust and respect between disparate stakeholders, where both are necessary yet lacking.

Intuitively, this is particularly relevant for collaborations involving stakeholders which traditionally have not worked together or have other historical reasons for a lack of mutual trust and respect (e.g., Holtzhausen, 2014). Most of the literature we found in this review however pertains to organizations which do have a history of working together, such as those within supply chain networks (e.g., Ellis and Ybema, 2010), those with a collective

identity and collective norms despite some form of competition (e.g. Mathias et al., 2017), or those working within the same hospital to provide patient care (e.g. Kellogg, 2011). Accordingly, we suggest that future studies should instead focus on collaborations between disparate stakeholders, and those traditionally characterized by a lack of collaboration and mutual trust and respect.

Also, in light of these observation, we reiterate the aforementioned responses to grand challenges as a particularly relevant context for investigation (Eisenhardt et al., 2016; Ferraro et al., 2015; Kornberger et al., 2019). In such challenges, 'those tackling grand challenges are generally unable to glimpse the entire system', which fosters highly disparate understandings depending on the identities and experiences of the actors involved (Ferraro et al., 2015: 365). Other authors have also noted a characteristic lack of rational decision-making, as well as widespread moral and political distrust (and in some cases hostility) between actors in for example refugee crises but also large-scale disaster responses such as in the case of an earthquake (Kornberger et al., 2019; Lanzara, 1983 respectively). That's not to say that these conditions are exclusive to such grand challenges. Indeed, there are other contexts characterized by highly heterogenous actors and moral and political distrust, for instance between certain unions and NGOs (e.g., Egels-Zandén and Hyllman, 2011) or in the context of safety and security (e.g. Lloyd and Carroll, 2019), which are equally characterized by the involvement of highly disparate actors, a lack of- and reliance on mutual trust and respect for collaboration.

Lastly, it is worth highlighting one finding that might be particularly relevant for practice. We found a study that emphasized the potential of ICT mediated engagement for social exchange and collaboration (Gal et al., 2014). Considering the widespread adoption of ICT and online platforms for communication, this seems like a particularly promising platform to foster novel forms of collaboration across a wide variety of boundaries (Bertot et al., 2012; Bonsón et al., 2019; Dai et al., 2017; Kavanaugh et al., 2012). However, as the authors of that study also note, additional research is required to investigate to what extent ICT may provide a solution in contexts other than the particular (industrial) one they studied (Gal et al., 2014). Interestingly, these authors also raise the question of the potential role of IT to facilitate collaboration and cross-organizational transformation 'where multiple organizations are engaged' (Gal et al., 2014: 1389). As such, the study of potential ICT tools

might be particularly relevant also in the context of our aforementioned questions concerning interactions between multiple identities as well as more complex contexts involving highly disparate identities.

3. Community Policing: The Relevance of Social Contexts[2]

Introduction

Even though crime rates have been declining in Europe since the mid-1990s, the perception of many is that crime rates have in fact been increasing (Millie and Herrington, 2005; see also Kappeler and Gaines, 2015; Lee and McGovern, 2014 for discussions on fear of crime). Furthermore, elevated levels of fear of crime correlate with a decreased confidence in the functioning of police forces and organizations (Millie and Herrington, 2005). The feeling of insecurity combined with the perception that crime is rising in communities is also called the reassurance gap (Millie and Herrington, 2005). Traditionally, the perceived increase of crime and corresponding decreased levels of confidence in police functioning has underpinned a need for reassurance of the public as a means of gaining legitimacy for policing decisions (Millie and Herrington, 2005; see also Hamilton-Smith et al., 2014; Mazerolle et al., 2013). This change in policing climate has led to far-reaching changes in policing style and raised important questions regarding what the expansion of the traditional policing role to community policing means to various communities and police forces. Research shows that a reduction of insecurity or risk experienced by people has a positive impact on their perception of crime, thus reducing this reassurance gap (Millie and Herrington, 2005). This means that the police should tackle volume crime effectively but also target risks identified by the public in order to address the reassurance gap and (re)define community policing. Contemporary community policing is then instrumental in reassuring citizens and reinforcing trust in and legitimacy of the police.

Community policing is commonly introduced as the policing antidote to contemporary problems of crime and safety and has even been called the 'most important development in law enforcement in the past quarter century' (Skogan, 2006: 3). However,

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[2] This chapter has been adapted from Van der Giessen, M., Brein, E., & Jacobs, G. Community policing: The relevance of social contexts. (2017). In Bayerl, P.S., Karlovic, R., Akhgar, B., & Markarian, G. (eds), Community Policing in a European Perspective. Springer. Edited for consistency in lay-out, abbreviations and referencing, removal of suggested reading of other chapters in original book publication.

community policing is not a uniform concept, as there are almost as many definitions as there are books and articles published on the subject and community policing has different meanings to different people (Brogden and Nijhar, 2005; Kappeler and Gaines, 2015). Because modern day communities are increasingly complex, diverse and multi-cultural, no one single approach to delivering public safety and security can prove successful for everyone all of the time. Community policing invariably has to be adapted to the local context, where 'history and social context add to the complications' (Brogden and Nijhar, 2005: 230). The export of community policing practices and technologies from the UK and North America to other states has shown to be problematic, as it is not clear how community policing could be implemented in these different social contexts (Casey, 2010; Hail, 2015a).

A lack of recognition for the diversity present even within neighbourhoods, with a plurality of communities that may or may not wish to engage with statutory authorities, is a common problem among community policing approaches (Skogan, 2006). Because any form of collaboration and partnership requires mutual trust and understanding, trust and confidence building have been both a requirement and a goal of community policing efforts across Europe (Van der Giessen et al., 2016a,b). Care must be taken in assuming that any community wants to be involved in policing activities as many in the public may not in fact trust the police sufficiently to collaborate. Similarly, care must be taken in assuming that local police forces trust (all segments of) communities sufficiently for collaboration and empowerment. The European community policing landscape is exceedingly complex because the disparate social contexts of local trust and perceived legitimacy of police roles in community policing efforts do not lend themselves to a uniform operationalization or implementation of community policing strategies.

With social context, also known as social environment, we mean the immediate physical setting in which people live. It includes the political, economic, social, technological, legal and environmental conditions of a community. Although community policing continues to develop in both its conceptualization and implementation, providing positive outcomes for the public and the police, the lack of attention to the complexity of the European community policing landscape has resulted in unintended consequences (see for example Ashforth and Gibbs, 1990; Beck, 2002; Dvoršek, 1996; Fruhling, 2002; Innes, 2004; Staniforth, 2015). The implementation of community policing has been fraught with

difficulties and its effectiveness is often under dispute as a result (Kappeler and Gaines, 2015; OSCE, 2008). It is possible to overcome these complexities, but both practitioners and academics must take heed of the importance of local context as well as mutual trust and perceived legitimacy of the police's role in community policing. In this chapter, we offer a discussion of these requirements for community policing.

The Context-Specific Nature of 'European' Community Policing

Community policing as an ideology commonly draws on two historical views: a 'golden isles view' where somewhere in the modern world community policing works well and a 'golden age history' where sometime in the past the relationship between police and citizens was harmonious (Brogden and Nijhar, 2005). The truth is more nuanced, however, as in reality community policing has never been singularly successful anywhere. Community policing has developed gradually and in a very localized and fragmented manner over the past two centuries, where every instantiation has been an effort to build on previous lessons learned.

The community policing philosophy prevalent in Europe today, sometimes referred to as the Anglo-American model, originated in eighteenth century England and America (Brogden and Nijhar, 2005). The socio-economic backdrop throughout Europe was such that riots were occurring over food shortages, high prices, religious prejudice and a strong divide between the isolated rich and the newly made poor (Kappeler and Gaines, 2015; Richardson, 1974). It was during these tumultuous times that newly appointed Home Secretary for the UK Robert Peel, now commonly considered the father of modern policing, established the Metropolitan Police Act in 1829. The act drastically restructured the prevalent police forces, uniting a previously fragmented policing system and establishing a police office staffed by paid constables (Kappeler and Gaines, 2015). This move constituted the first contemporary instance of institutionalization of policing by consent, where the police officer is conceptualized as a local citizen who is selected from—and held accountable by—his peers and police power stems from the community (Brogden, 1982; Brogden and Nijhar, 2005):

Police at all times, should maintain a relationship with the public that gives reality to the historic tradition that the police are the public and the public are the police, the police being only members of the public who are paid to give full-time attention to duties which are incumbent on every citizen in the interests of community welfare and existence. (Metropolitan Police Act, 1829)

Although the development of the American tradition of community policing can be traced back to this English origin, the American police reform and institutionalization of community policing principles did not start until later and proved to be far more gradual. There was no single event for the American police institution to trigger the transformation of policing toward a model of consent and community relationships. Instead, community policing emerged over the years as historical forces set the stage: 'isolation of the police from the public and a growing use of overt and symbolic violence to control select groups in society' (Kappeler and Gaines, 2015: 89). As was the case in Europe, the backdrop was one of civil unrest, where racial tensions, civil disorder, fear of crime and a series of riots sparked and pushed the institutionalization and development of community policing principles. It was 1845 when full-time police forces started forming, and 1929 when the Police Chief of Berkeley California, August Vollmer, spearheaded the American police reform movement (Kappeler and Gaines, 2015).

However, even after the reform, the American police was still very much isolated from the public they served, relying on personal rather than constitutional authority, and lacking the relationship with the public necessary for the creation of safety through community policing (Greene, 2000; Kappeler and Gaines, 2015). It was not until the 1970s that the basic issues and ideas that would ultimately be considered Anglo-American community policing became prevalent in the American police discourse and practice (Goldstein, 1979; Trojanowicz, 1973; Trojanowicz and Dixon, 1974; Trojanowicz et al., 1975). Rising crime rates, loss of confidence in traditional policing methods, increased social polarisation and city riots seemed beyond the ability of law enforcement control, sparking discussions regarding the effectiveness of traditional policing and the proper role of the police in a democratic society (Zhao et al., 1995).

Community policing came to be seen as a suitable reaction to the perceived failures of traditional policing as police practitioners, academics and policymakers in the Western world agreed that the traditional style of policing, which focused mainly on law enforcement,

was no longer sufficient to tackle emerging crime and safety concerns of contemporary societies (OSCE, 2008). The police simply did not have the resources or capabilities to deal with the increasingly complex underlying causes of crime without the assistance of other state and non-state agencies—and of key importance, the public. This is particularly the case in our increasingly multi-cultural society where certain (less privileged, low income, minority) segments are especially vulnerable to crime and disorder and enforcement demands prevention, partnership working and problem solving (OSCE, 2008). The subsequent widespread adoption and further development of community policing during the late 1980s in Europe, America and England has been described by many as a policing paradigm shift away from a reactive, task-driven approach toward a community focused one where policing involves non-enforcement tasks and assistance for and with the community (Hail, 2015a). It is clear however that, even when adopting a historical view of 'European community policing', it has never been uniform in its underlying social philosophy, implementation or effectiveness.

Contemporary Community Policing in Europe

Community policing has been a popular buzzword in Anglo-American policing since the 80s (Brogden and Nijhar, 2005). However, as with many other policing models, community policing is an ambiguous concept. As European policing is comprised of multiple contexts and people, it should come as no surprise that there are also numerous strategies, practices and approaches adopted across Europe with the label of community policing, which sometimes have very little in common (OSCE, 2008). It includes approaches such as multi-agency policing, focused policing, reassurance policing and problem-oriented policing.

Comparing different labels employed by police organizations across Europe, England and Wales have adopted the label of neighbourhood policing to describe their proactive local policing activities, whilst the French police have adopted the label police de proximité and the Spanish policia de proximidad. In Scotland, the label attached to locally delivered policing is community policing, including both community and neighbourhood policing concepts in the overarching concept of reassurance policing (Hail, 2015a; Hamilton-Smith et al., 2014). To date, there has not been a singular definition to describe

community policing. It is therefore difficult to determine, which developments and activities fit the definition of 'community policing.'

Although the philosophy of community policing has changed considerably throughout the years and will continue to develop further, contemporary community policing is based on the assumption that tackling contemporary problems related to crime and safety requires a reframing of the police's role in society and (enhanced) relationships with the local community (Kappeler and Gaines, 2015). Narratives on contemporary policing have evolved in recent times to situate the concept of local policing as an overarching term, which includes a variety of policing strategies: from a reactive style of response-based policing to a more proactive style, all with a focus on the local area or community. Approaches range from the grand policing philosophy of community policing to specific forms of problem solving by for example the local beat officer (Brogden and Nijhar, 2005). At its core however, community policing constitutes a reframing of the role of the police in society, where a previously narrow role of reactive policing focused on crime and law enforcement is expanded to include a myriad of proactive community-oriented solutions to contemporary problems of crime and safety (Hail, 2015a; Kappeler and Gaines, 2015; OSCE, 2008; Skogan, 2008).

Some authors have expanded on the 'role for the public' in community policing, stating that it is 'with and for the community rather than policing on the community', emphasizing the police-community partnership aspect in problem solving strategies (Barnes and Eagle, 2007: 162; see also Brogden and Nijhar, 2005; Skogan, 2008). Taking the roots of policing by consent to heart, community policing not only embodies partnership for solving local problems but can also enable the empowerment of the community rather than dictating needs and requirements from a position of authority (Kappeler and Gaines, 2015). Other prominent elements of community policing are the importance of proximity (Terpstra, 2009), dealing with community-specific needs and problems and developing trust and reassurance through local accountability and transparency (Brogden and Nijhar, 2005). Regardless of its exact form, the objective of community policing is tackling criminality in all its forms and reassuring communities through partnership, problem solving and an enhanced relation with the public (Barnes and Eagle, 2007; Crawford et al., 2003; Kappeler and Gaines, 2015; OSCE, 2008; Skogan, 2008; Terpstra, 2009).

When practitioners and community members across Europe are asked what they consider community policing to entail, they describe community policing practices largely in terms of building relationships of trust and understanding, working together, communication and interaction and addressing local needs and issues (Bayerl et al., 2016; Van der Giessen et al., 2016b). However, although it is clear that a common understanding of the general community policing philosophy exists, there are considerable differences across countries and subgroups regarding the prioritization and implementation of specific community policing elements.

Although trust and mutual understanding are almost unanimously considered important, there are still local differences in terms of how best to actually promote trust, confidence and understanding across Europe (see also Hail, 2015a; Kääriäinen and Niemi, 2014). In a recent study on community policing practices in Europe, Belgian police officers for example operationalized the promotion of trust primarily through promoting accountability and transparency of police functioning, while local minority community members in Belgium prioritized improving social cohesion and embeddedness (Van der Giessen et al., 2016b).

In the Anglo-American model, community policing is often implemented in a way to contribute to a visible presence in the streets as a means of providing reassurance and a source of security to the public. Police should be both locally accountable and transparent where they must have discretion and should use this positively to maximize community confidence in the police (Brogden and Nijhar, 2005). Similarly, although there is a consensus on the notion that no single agency is equipped to deal with the complex and convoluted reality of local community safety and crime problems, some emphasize law enforcement agency and service provider cooperation, while others emphasize police–community partnership (Hail, 2015a; Van der Giessen et al., 2016b). Combined these two approaches are commonly referred to as the mixed economy of policing, where the inclusion of non-police agencies in the creation of safety increases the opportunities to resolve local issues (Skogan, 1994).

Ideally, community policing involves a combination of the two approaches. The basic premise of German community policing, for example, is that a network of engaged partners is required, where the community itself will 'take responsibility and do its part to

prevent crime' (Marin, 2011: 21; see also Hail, 2015a). This generally involves consulting, engaging and mobilizing the community in order to identify and tackle local community problems and their underlying causes, setting priorities for actions, multi-agency policing, reassurance policing and other pro-active problem solving strategies (OSCE, 2008).

When it comes to communication and interaction between the police and local communities, similar differences in prioritization and implementation occur. When Bulgarian police officers were asked about their implementation of community policing, they for example predominantly mentioned actions related to information gathering and sharing between not only police and community partners but also with other local partners. This can be contrasted with the community policing actions desired by local community members in Finland, who preferred community policing initiatives related to improving the availability, accessibility and approachability of local community officers (Van der Giessen et al., 2016b). These differences can be attributed in part to specific local needs and concerns.

The traditional response to crime and disorder is maintenance policing. However, this requires agreement about policing priorities in specific neighbourhoods and communities where this may not exist. There is a substantial body of research that suggests there is often disagreement even within communities on what priorities for community policing should be (Kappeler and Gaines, 2015). Adopting a one-size-fits-all approach to dealing with these community problems would likely not deal with the different issues and priorities that exist. Depending on these local requirements, some practitioners emphasize the importance of proactive policing for community policing, while others emphasize the importance of cooperation to address local needs and issues reactively as they emerge (Van der Giessen et al., 2016b). Police organizations in England and Whales for example have adopted the label of 'neighbourhood policing' to refer to proactive local services (Hail, 2015a), and community policing practitioners in some other European countries also prioritize community policing focused on prevention, protection and intervention (Van der Giessen et al., 2016b). On the other hand, others still maintain a reactive modus operandi, provided that local needs and issues remain central. 'Soft' policing activities related to providing assistance and service are sometimes considered as more influential to improve police-community relations than reactive or prevention oriented policing efforts (Van der Giessen et al., 2016b). Such differences require different communication strategies.

In short, although countries and groups seem to agree on the main core concepts, considerable differences exist regarding what constitutes community policing in practice. Police forces and communities thus have differing perspectives within and across countries on what 'community partnership' entails (Hail, 2015a). As such, the local needs, requirements and therefore implementation of community policing could differ drastically depending on the country, community and background of local community policing officers. Hence, community policing efforts need to content with an inherent multi-contextuality in tasks, processes and objectives.

The Multi-contextuality of European Community Policing

A long tradition in management research shows that the social context has a major impact on the meaning, interpretation and implementation of specific governance practices (Hofstede, 1993). Policing, and community policing practices specifically, are no exception. For example, Terpstra and Fyfe (2015) have recently shown for the Scottish and Dutch police that policies and strategies change their meaning quite a bit on their way to implementation. Jacobs and colleagues (2008) found similar effects within the German policing context. Neighbourhoods serve as the primary focus of police organizations where community consensus and structures guide the police response to the community's crime and security problems. Community policing is thereby embedded in its respective communities and the success of community policing is contingent on the requirements and expectations of these communities. Here we refer to such contingencies as the multi-contextuality of community policing, and it is the primary reason that the export of Anglo-American community policing principles to other contexts is so challenging (see for example Brogden and Nijhar, 2005; Dvoršek, 1996; Hail, 2015a; Kääriäinen, 2007; Van der Giessen et al., 2016a,b).

Although differences between countries, groups and individuals are innumerable, one specific factor deserves special attention: Citizen support significantly enhances police efforts and citizen support is contingent on the trust between police and their communities (Jackson and Gau, 2016; Kääriäinen and Siren, 2012; Skogan, 2006). The joint pursuit of safety by the police, local communities and other partners is dependent on the mutual trust

between the stakeholders and the perceived legitimacy of the police as a partner in community policing. As Myhill put it, the effective and continuous engagement of local neighbourhoods in community policing requires their 'willingness, capacity and opportunity to participate' (Myhill, 2012: 1, c.f. Hail, 2015b).

Trust is often used synonymously with legitimacy, although there is an important distinction. According to Jackson and Gau (2016: 3), trust concerns 'people's predictions that individual officers will (and do) do things that they are tasked to do', whereas legitimacy 'is the property or quality of possessing rightful power and the subsequent acceptance of, and willing deference to, authority.' Trust thus refers to the expectation that a person will perform whatever his or her task is, while legitimacy refers to the extent to which that person is perceived to have the right to perform that task. For example, a local police force can be both perceived to have the right to participate in local community events (perceived legitimacy of police action in the community) and to be effective in offering preventive information during these events (trust in positive behaviours and outcomes). Vice versa, a local community can be perceived to have the right to set its own safety priorities and be trusted to deal with these safety issues when empowered to do so. It is when trust and legitimacy overlap and exist mutually between the relevant stakeholders that these community policing efforts are most likely to result in partnership and cooperation for community policing (see Jackson and Gau, 2016 and Kääriäinen and Niemi, 2014 for a more detailed discussion of the importance of these concepts combining for attitudes toward legal authorities).

There is a social contract between citizens and government, which 'legitimates' the police to have moral and ethical authority. Citizens give up certain rights and entrust the police with the expectation that it will carry out expected activities in a positive manner (Kappeler and Gaines, 2015). It is therefore important to what extent the community accepts police 'interference' in the sphere of community relations and safety. As Virta puts it, 'the political culture (and within that, the specific police culture) provides for an acceptance of state police officers conducting activities outside more traditional public order and crime-related functions' (Virta, 2002: 191). This is central, as community policing takes advantage of police discretionary powers to enable them to conduct a variety of tasks that were previously not regarded as falling within the orbit of traditional police work.

There are two presumed underlying trains of thought: instrumental justice and procedural justice (Kääriäinen and Niemi, 2014). Many studies suggest that positive attitudes toward the police are predominantly due to successful police work and reductions in crime. This is known as the instrumental approach. Others suggest that legitimacy and trust are predominantly due to perceived fairness and respectful treatment by the police. This is the procedural approach (Bradford, 2012; Sunshine and Tyler, 2003; Tyler, 1990; 2001; 2005). An important complication to note here is that the public constructs their view of the police not only through their personal experiences, but also through the experiences of others. For example, members of ethnic minority groups may not have direct, personal negative experiences with the police, but because it is common to share experiences in close-knit communities, first-hand negative experiences can be shared to create a larger culture of distrust (Kääriäinen and Niemi, 2014; Weitzer and Tuch, 2005). The police being viewed as a legitimate organization not only by an individual, but also by the individual's community is therefore paramount in order for support for cooperation with policing efforts to develop (Bradford et al., 2013; Tyler, 2003; Lai and Zhao, 2010; Worral, 1999).

With these aspects of trust and legitimacy in place, it is possible to consider the differences between countries, communities, stakeholders and individuals regarding (mutual) trust and perceived legitimacy for community policing activities. Community policing embodies a rapid change in policing where the role of police has been extended beyond law enforcement, placing additional demands on the community, which may or may not perceive this extension as legitimate (Bittner, 1970; Manning, 1997; Wilson, 1968). The same applies to perceptions of community responsibility, where community policing can embody responsibilities of communities in safety issues where this was not previously the case. Therefore, when looking at the implementation of community policing across Europe, it is important to take into account the political history. Examples where the implementation of community policing has proven difficult due to lacking police legitimacy (among other factors) include Spain and Italy, where centralized Napoleonic traditions have made it challenging for both the police and the public to accept community policing roles (Hail, 2015b).

Differences in perceived legitimacy and trust also seem to exist due to socio-economic factors, as evidenced by differences between countries and specific communities.

Even within communities, there are numerous groups and subgroups of people, which may have differing perceptions of the police and their effectiveness in community policing (Brown and Benedict, 2002). Nordic countries particularly evidence relatively high levels of trust in the police; according to Kääriäinen at least in part due to a generally perceived equality and fairness of society as well as a high standard of public administration, low level of corruption and even income distributions among the population (Kääriäinen, 2007; Kääriäinen and Niemi, 2014).

Furthermore, differences also exist between sub-groups within communities. In Europe, trust in police among ethnic minorities and different socio-economic layers of society have been studied predominantly in Finland, the Netherlands and Great Britain (Kääriäinen and Niemi, 2014). Generally speaking, middle and upper-class layers of society show greater levels of trust for their police than do the poor and minority communities (Kappeler and Gaines, 2015; see also Carter, 1985; Kappeler et al., 1998; Scaglion and Condon, 1980). This is attributed to several factors, including perceptions of, for example, racial profiling, frequency of victimization, injustice, lack of concern on the part of the police and ineffectiveness of policing efforts (Bowling and Philips, 2003; Chan, 2011; Roh and Robinson, 2009; Warren, 2011; Wu et al., 2009).

Kääriäinen and Niemi (2014), for example, found that the longer Somalis lived in Finland, the less trust they had in the police, predominantly due to experienced victimization, improper treatment by the police, discrimination and the general social context of their close-knit community. Another minority community in the same country, the Russian community, showed similar levels of trust in the police as the native population despite anti-Russian attitudes and prejudices (Kääriäinen and Niemi, 2014). The factors underlying trust and legitimacy are highly complex, and further theory building and analysis is needed to identify the factors driving differences between minority groups in comparable socio-economic settings.

If the implementation of community policing occurs without considering these local requirements, problems invariably arise. For example, a highly visible and accessible police presence may help reduce fear of crime within some groups of the community (Brogden and Nijhar, 2005), but it may also induce feelings of insecurity and lowered levels of trust towards the police in other groups of the community due to the perception of being

discriminated against through these specific police actions (Brogden and Nijhar, 2005; Staniforth, 2015). Furthermore, if these visibility attempts at legitimacy management are so strong that they could be experienced as intrusive, they could be considered disingenuous or even lead to suspicion rather than to trust (Ashforth and Gibbs, 1990). Community policing can also become problematic if it deviates from a genuine problem solving ethos towards 'pseudo' problem solving through simply appeasing public appetites for enforcement that may function as unduly exclusionary. Worse yet, community policing can become a vehicle for the practical implementation of local punitive attitudes against marginalized or minority groups, if the local political context allows for disingenuous policing efforts, causing a deterioration of the police-community relationship.

Other authors have highlighted that the Western model of community policing is often not related to the requirements of former members of the Eastern block and that the implementation has occurred irrespective of local requirements (Fruhling, 2002). The danger with this form of assistance is that the agenda is set more by what is available rather than by what is needed, and it often suits sellers rather than consumers. Such attempts to transfer knowledge to Eastern European countries are shallow and generally do not bring anything new (Beck, 2002; Dvoršek, 1996).

Integration of the European Perspectives and Context of Community Policing

We argue that integrating the above insights regarding European community policing practices and the importance of local context in terms of perceived legitimacy of community policing roles and mutual trust allows for a more comprehensive model of police–public community policing efforts in Europe. In Figure 9, described and shown below, we depict the interplay between local context, perceptions of legitimacy and trust and community policing partnership for local safety discussed throughout this chapter. As previously stated, community policing is not a uniform concept and the local implementation is highly contingent on the local context and mutual trust and perceived legitimacy between the police and local community, both in the traditional policing sense and the expanded community policing conceptualization. As such, although local community policing efforts are based on community policing principles and generally include elements of trust, communication,

cooperation and addressing local needs and issues, the exact conceptualization and implementation varies from country to country and community to community.

This variation in community policing conceptualizations and implementation throughout Europe can be attributed to several factors. First and foremost, the community's readiness to cooperate, collaborate and partner with the police for community policing is dependent on the community's trust and perceived legitimacy of the police. As depicted in Figure 9, a community member is willing to cooperate if the police is trusted and perceived as legitimate in its traditional role performance, is willing to collaborate with the police if the police is trusted and considered legitimate in its expanded role in the community and is willing to accept the police as a partner in community policing efforts when the police is trusted and considered legitimate both in its traditional role as law enforcer and in the expanded community-oriented role of community policing.

Figure 9. Model of context-specific community policing in Europe.
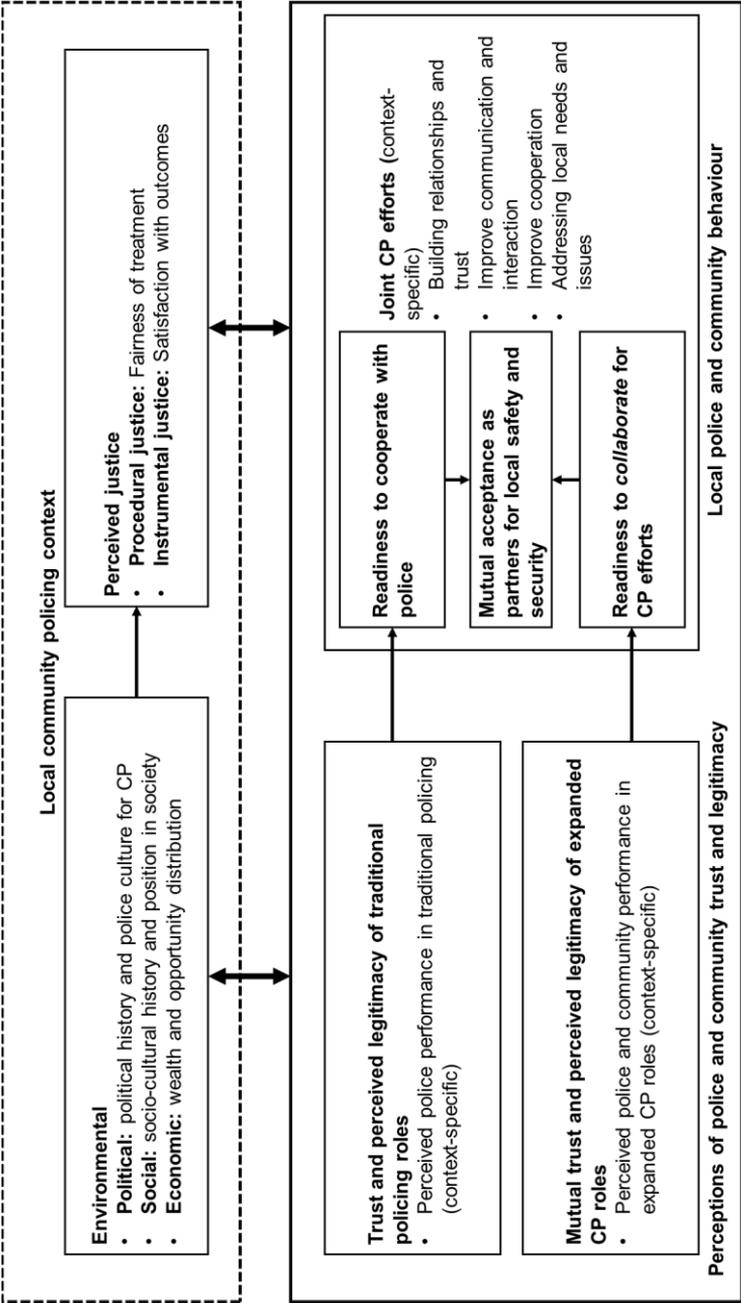
Similarly, community policing requires an acceptance of the local community role in local safety issues by the police. Furthermore, Figure 9 also depicts how perceived legitimacy and trust are highly dependent on the environmental context and perceived justice, which include the political, social and economic context as well as the individual's and/or community's experiences with police treatments and policing outcomes.

Lastly, it should be emphasized that the local community policing context not only has a strong influence on community policing practices, but successful community policing practices also influence the local context. This self-enforcing loop between the local community policing context and joint community policing efforts by the police, their partners and the communities (also shown in Figure 9) is the goal of community policing. This involves partnership, shared agenda setting, problem solving and an enhanced relationship between the police in the public in order to jointly improve the local situation. As such, community policing has the potential to deal with contemporary problems of crime, safety and reassurance as long as the requirements of these diverse communities and contexts are met.

Summary and Recommendations

In this chapter we discussed the high context-dependency of community policing. Community policing is by definition part of the community where it takes place, thus it derives its specific meaning, goals and priorities from its communities. Communities are social and complex phenomena consisting of different compositions of sub-groups and experiences with police. As a consequence, community policing needs to address each specific community with tailor-made approaches. We argued that a one-size-fits-all approach is not suited for community policing, as no single community is like another. Furthermore, as communities change over time, community policing has to change with them. In this chapter we conceptualized community policing as a process, which is largely determined by mutual trust and legitimacy perceptions between police and communities. These in turn are dependent on the social context of the (subgroups within) communities.

Our model leads to the following recommendations:

1. Because the local context has a strong impact on perceptions of justice (fairness of the treatment by police and satisfaction with policing outcomes) by members of the community, community policing efforts have to consider the social context of each specific (sub)community in order to be successful. community policing needs to be defined and adapted to each social context in order to deal with local needs and issues. As such, it is not possible to simply 'export' community policing best practices developed in a given time and context and assume positive results.

2. Satisfaction with the performance and outcomes of core tasks of policing and community policing in the broader sense strongly drive the readiness of community members to cooperate and collaborate with the police to tackle local concerns related to safety and security. Signs of dissatisfaction of community members with these core tasks therefore have to be taken seriously. This includes adequately dealing with, for example, perceptions of racial profiling, frequency of victimization, injustice, lack of concern on the part of the police and ineffectiveness of policing efforts.

3. Local communities are not homogenous entities and social complexities within communities need to be acknowledged. Pleasing the majority or over-emphasizing needs and requirements of one sub-group over another can trigger dissatisfaction within other segments of the community. This means all needs and concerns of local communities, not just those of a majority, must be taken into account when agenda setting, empowering local actors or visibly enforcing the law.

4. Community policing involves an expansion of the social contract between citizens and government placing additional requirements on trust and legitimacy throughout the whole community. Joint community policing efforts can only work when the community accepts police involvement within their community and the police accepts the community as a partner for local safety and security. It is important that all stakeholders acknowledge this, particularly when the socio-political context is such that police and community roles have historically been very distinct. Community policing should therefore involve not only an empowerment of local actors, but it might also include an effort to embed police actors within local communities if the context demands it.

5. Though it is not possible to generalize community policing practices developed in a certain context to other settings without considering the local context, it is desirable to learn from various local contexts to subsequently apply these lessons to own communities and community policing practices. We have adopted a European perspective to community policing, as we should learn from each other's approaches to community policing with specific communities in specific policing contexts and subsequently adapt and adopt those lessons learned. There is a great deal of diversity within Europe, which is reflected in the diversity within local communities.

Though to date community policing has had mixed results and has led to undesirable side effects, it is our hope that it is possible to overcome these complexities if both practitioners and academics consider the complexities of community policing for the implementation and evaluation of community policing efforts in Europe. We hope we can encourage tailor-made community policing approaches. Although community policing requires courage and genuine interest from police and communities, we believe that this courage can lead to resilient communities and lasting partnerships to deal with local needs in the areas of safety and security.

4. Collective sensemaking in the local response to a grand challenge: recovery, alleviation and change oriented responses to a refugee crisis[3]

Abstract and keywords

Grand societal challenges such as forced displacement are extreme and complex issues that are challenging to individuals and might seem insurmountable. How do local actors make sense of, position themselves in, and act on such challenges? We conducted a case study of the collective sensemaking narratives of 71 actors involved in the refugee crisis in Lesbos, Greece. We elaborate how actors make sense of their role in the local response to this grand challenge and explain why some ultimately chose to cooperate to address the plight of refugees whilst others distributed tasks or avoided responding altogether. We identify three collective sensemaking narratives which actors use to validate such action strategies aimed at alleviation, personal recovery, or structural change; and as characterized by different forms of interaction and emergent collective sensemaking. We contribute with our paper to the study of responses to grand challenges by showing how a collective sensemaking framework can be used to understand local responses. We also contribute to extant theorizing on collective sensemaking by showing how actors make sense of grand challenges through interactions with other actors and how their narratives inform individual and collective action.

Keywords: Grand challenge, forced displacement, refugee crisis, persistent crisis, complexity, extreme contexts, multi-stakeholder, interaction, collective sensemaking, collective action, alleviation, change.

Introduction

Local families were the first to respond as the beaches of Lesbos became the setting of a humanitarian crisis in 2015, with over 500 000 refugee arrivals - about five times its local population. 'As an island we were not ready. We didn't have the means to help these people.' Local inhabitants felt that their 'role in this was thrown upon us.' Over a period of several months, local families and entrepreneurs encountered refugees in their direct, daily environment. Men, women, families with grandparents, children and babies arrived – sometimes literally – in their back yards, or along the way to school or work: 'we had boats arriving right here at the hotel, right at our beach.' Greek emergency services followed, and international organizations and volunteers engaged shortly after that, creating a complex response system. A strategic advisor to NGOs commented that he came to Lesbos because he saw 'a nice project' about 'the integration of refugees and stuff.' Professionals mentioned wanting to learn new skills and develop professionally, as, 'to be on the ground, […] can be very good I think for work mobility later on.' Many of these professionals also mentioned they felt a sense of responsibility to get involved, and 'take my responsibility as European' and 'see how I can get a little bit closer to the fire […] without necessarily wanting to go to Syria.' Volunteers commonly took a break from their studies or work to provide humanitarian aid. One international volunteer commented, 'I have been given an opportunity to learn a lot and how do you say it, discover new skills, so I think that's very appealing.' Another international volunteer told us their 'first motivation to come here is just feeling really, you know, sad and frustrated and kind of helpless watching everything unfold.'

Given these different starting points, perceptions and experiences of crucial actors in this local manifestation of the grand challenge of forced displacement, we wondered how locals, professionals and volunteers individually and collectively made sense of the crisis and how this influenced their individual and collective responses. When we asked how actors experienced the interactions with each other, some local inhabitants shared stories of helplessness as they were warned by law enforcement that helping refugees would be considered human trafficking or were told to 'go away' by arriving volunteers or NGOs. Other inhabitants, professionals and volunteers instead shared stories of hope and expressed

that they felt that many of the other responders also 'care for these people' and began to jointly build schools and facilities for refugees.

As other authors have noted, 'the world is besieged by [grand] challenges' (George et al., 2016: 1880) that 'affect vast numbers of individuals in often profound ways' (Eisenhardt et al., 2016: 1113) and raise 'important questions around how individuals, organizations, and society might go about preparing for their impact' (Hällgren et al., 2018: 111). Forced displacement is one of many highly complex and persistent societal challenges, intersecting with war, climate-change induced natural disasters such as floods, draughts, earthquakes, poverty, water scarcity, famine, and disease outbreaks (UNHCR, 2019).

Sensemaking activities are critical 'in dynamic and turbulent contexts, where the need to create and maintain coherent understandings that sustain relationships and enable collective action is especially important and challenging' (Maitlis, 2005: 21). Understanding how individual and collective sensemaking informs collective action (Cornelissen et al., 2014; Maitlis, 2005; Quinn and Worline, 2008; Weick, 1993) is particularly important for many of society's grand challenges as these contexts are not only 1) extreme, exceeding any single individual or organization's capacity to act on and resolve the issue (Hannah et al., 2009); but they are also 2) highly complex, entailing multiple stakeholders with different views engaged at multiple levels of organizing and 3) persistent, as the extreme context continues beyond particular crisis episodes (Eisenhardt et al., 2016; Ferraro et al., 2015).

So far however, the study of collective sensemaking has focused on relatively contained crises involving established and tightly coupled systems of formal actors (Cornelissen et al., 2014; Maitlis, 2005; Weick, 1993), creating what we see as two critical blind spots. First, rather contained systems of tightly coupled formal actors are a markedly different setting from grand challenges that are complex and involve iterated interactions between diverse actors with different views on the issue and of what is required in terms of collective sensemaking and action (Ferraro et al., 2015). Second, the short-lived crises that have been studied to date are themselves not representative of persistent challenges where the event continues beyond the initial crisis and despite ongoing actor intervention (Eisenhardt et al., 2016).

There is thus a need, we argue, to better understand collective sensemaking of highly complex and persistent societal problems (Colquitt and George, 2011; Howard-Grenville et

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al., 2014; Tsui, 2013). To address this need, we formulate two research questions: 1) How do actors make sense of, and position themselves in, the local response to a grand challenge? 2) How do actors enact the situation, and in doing so impact the collective response?

We draw on semi-structured in-depth interviews with 71 actors who were engaged in the refugee crisis on Lesbos, Greece. We inquire about the backgrounds, perceptions, thoughts, feelings, and actions leading up to, during, and after their engagement with the crisis on the island to reconstruct their collective sensemaking narratives and abductively theorize patterns of collective sensemaking. As part of these patterns, we consider the interactions that trigger collective sensemaking, the formation of collective 'sense' in relation to the refugee crisis over time, the action strategies people adopt, and their collective impact on the issue locally.

We propose that sensemaking narratives of diverse actors in the local manifestation of a grand challenge can be used to understand the emergence of collective solutions to address society's complex and persistent societal challenges (Eisenhardt et al., 2016; Ferraro et al., 2015). We offer two main theoretical contributions from our study. First, we contribute to the literature on how individuals make sense of extreme contexts (Brown et al., 2008; Maitlis and Sonenshein, 2010) by looking at how people make sense of grand challenges. Specifically, we conceptualize grand challenges as extreme contexts (Hällgren et al., 2018) which are particularly complex and persistent and we investigate how individuals construct narratives and compress the grand challenge into a personal understanding.

Second, we contribute to extant theorizing on collective sensemaking (Maitlis, 2005; Quinn and Worline, 2008; Weick, 1995; Weick and Roberts, 1993) by adding the influence of complexity and persistence of grand challenges to the understanding of collective sensemaking. Specifically, we identify three patterns of emergent collective sensemaking and show how these inform individual and collective responses over time. In doing so, we answer calls to deepen our understanding of the distributed and heterogeneous nature of organizing in extreme contexts (Hällgren et al., 2018; Maitlis, 2005).

Theoretical background

Grand challenges are complex and persistent issues that are challenging to grasp in their entirety by a single individual. As essentially wicked issues, they resist being captured in a single, simple definition. Here, we theoretically approach the question of how individuals may individually and collectively make sense of grand challenges through a sensemaking lens. The literature that we briefly review involves general work on individual sensemaking, as well as work on the triggers for and processes of collective sensemaking. We end this section by extending a sensemaking lens to the grand challenge of the refugee crisis, as the setting for our study.

Sensemaking

Confrontations with extreme events can be powerful triggers that mobilize and perpetuate decision-making and action (Maitlis and Sonenshein, 2010) as they tend to 'shatter fundamental assumptions' and 'trigger sensemaking about the event, the self, and often the world at large' (Maitlis and Christianson, 2014: 72). Extreme contexts and particularly crisis scenarios have traditionally provided a rich setting for the study of sensemaking among multiple actors (Eisenhardt et al., 2016). Indeed, many scholars have used sensemaking as a valuable lens to understand the occurrence and evolution of such scenarios (Hällgren et al., 2018; Maitlis and Christianson, 2014).

For our study we understand sensemaking as an ongoing retrospective process which is grounded in personal identity construction (Weick, 1995). Actors make sense of specific circumstances by creating plausible narratives of understandings which are then used to validate and inform past, present and future actions in ways that reflect their own identity related beliefs and assumptions (Brown et al., 2008; Weick, 1995; Weick et al., 2005). As such, sensemaking processes and actions can vary greatly between individuals due to differences in personal beliefs and how and to what extent these are triggered in specific circumstances (Barton and Sutcliffe, 2009; Cornelissen et al., 2014; Farjoun and Starbuck, 2007; Rudolph and Repenning, 2002). Making sense of an event implies extracting cues from a situation, putting them into a plausible order, and interpreting them based on salient frames, thus answering the questions 'what's the story? And now what should I do?' (Maitlis

and Sonenshein, 2010; Weick et al., 2005: 410). Accordingly, sensemaking and the construction of a coherent and plausible narrative go hand in hand.

Extreme contexts provide a particularly interesting setting to understand the role of sensemaking narratives in producing both individual and collective action, because 'incomprehensible events tend to strip people of identity, leaving them no sensible narrative to enact' (Quinn and Worline, 2008: 501), and people need, as mentioned, a plausible narrative of events to understand what is going on and how to respond (Weick, 1995). Accordingly, narrative approaches have been used to understand ongoing extreme events (Quinn and Worline, 2008) as well as their role in responses to past events (Boudes and Laroche, 2009). Quinn and Worline (2008) specifically have argued that narratives are crucial for collective action when under duress, as people cannot act without formulating narratives to understand who they are in that context, to explain the duress that they find themselves in, to help them make moral and practical judgments, and to understand their place within a collective and (potentially) act as a collective.

Traditions of collective sensemaking

Collective sensemaking during or after extreme events has traditionally followed one of two approaches. The first has been predominantly concerned with the importance of sensegiving and its influence on the way issues are understood and enacted. For instance, Maitlis and Sonenshein (2010) elaborate how initial acts of sensegiving in the form of public statements can create powerful but misleading frames, which particularly in crisis contexts, are likely to generate fatal blind spots. Within the context of extreme events or crises, studies have indeed singled out the role of leaders and others who had an advantageous subject position in giving sense to a crisis scenario and influencing others to follow suit. Examples involve a fire spotter calling the Mann Gulch fire as a '10 o'clock fire' (that would be out by ten the next morning) (Weick, 1993: 635) and a police commander labelling a civilian as a possible terrorist suspect and asking for the mobilization of a firearms team (Cornelissen et al., 2014). However, singling out the predominant role of leaders or others' sensegiving underappreciates interactions between disparate actors that are typical for grand challenges and how the ongoing interaction between them influences sensemaking processes (Maitlis, 2005; Maitlis and Sonenshein, 2010).

The second approach to collective sensemaking has focused not just on how sense is given but rather at how it is interactionally accomplished, zooming in on relationships between social structure and sensemaking (Weick, 1993), processes of identity generation and maintenance through social interaction (Brown et al., 2008), sensemaking around interrelations within social systems (Weick and Roberts, 1993) and relationships between collective sensemaking and collective action (Quinn and Worline, 2008). A poignant example of this theoretical focus is the study by Quinn and Worline (2008) who detail the interactions between passengers on Flight 93 with their relatives over the phone and with others on the plane. Passengers aboard that plane, which was highjacked by terrorists, had to 'TODO re-establish their identities and narratives' and collectively figured out a possible response (p. 504). These originally 'unorganized strangers' (p. 504) were ultimately able to create a collective identity that enabled them to jointly attempt to stop the terrorists.

We position our study in the latter tradition of collective sensemaking, where we consider sensemaking to be an inherently social process that is grounded in individual identity creation and maintenance, as individuals interpret their environment in- and through interactions with others, constructing accounts that allow them to comprehend individual and joint roles and possibly act collectively (Maitlis, 2005; Quinn and Worline, 2008; Ryle, 1949; Weick and Roberts, 1993).

Collective sensemaking in the local response to a grand challenge

Local responses to grand challenges differ from responses to traditional extreme contexts in terms of complexity and persistence. The complexity of grand societal challenges (Eisenhardt et al., 2016; Ferraro et al., 2015) is in stark contrast to for instance the orchestrated functioning of a trained crew on an aircraft carrier, where individual roles and responsibilities are formalized and limited to the ship itself (Weick and Roberts, 1993). The actors involved in the local response to a grand challenge are, again in stark contrast to the crew of an aircraft or a fire-fighting brigade, typically from different personal and professional backgrounds and representing different organizations (Eisenhardt et al., 2016; Ferraro et al., 2015). This is problematic, as having many diverse actors is more likely to lead to multiple and conflicting interpretations of problems, solutions and processes (Ferraro et al., 2015). As more diverse actors engage, power relations and politics may also become

particularly influential in promoting (or indeed inhibiting) collective action (Maitlis, 2005; Maitlis and Sonenshein, 2010; Quinn and Worline, 2008). Such conflicting interpretations may undermine effective collective responses, but as previous authors have indicated, also provide specific opportunities for successful change through bottom-up, collective processes of joint action (Battilana et al., 2009; Garud et al., 2007). Indeed, research on responses to grand challenges does suggest promising ways to instigate positive change through collective action. For instance, authors have identified the enabling role of 'turbulence and chaos' in the emergence of new collaborative and organizational forms which may thrive under these conditions (Lanzara, 1983: 73) as well as the role of a shared moral dimension across disparate actor groups as facilitating effective collective responses (Kornberger et al., 2018). Theorizing on ways to foster coordination and collaboration without necessarily requiring agreement has suggested the importance of pragmatic 'participatory structures', the diffusion of 'multivocal inscriptions' and the pursuit of 'distributed experimentation' to allow the sustained engagement of diverse actors and actions (Ferraro et al., 2015: 22).

In contrast to a traditional extreme context, grand challenges are also remarkably persistent. This long-term character of grand challenges implies that actors enter or leave the crisis at different moments in time and refine their understanding over time (Weick, 1995). Due to the dynamic and nonlinear evolution of the crisis over time, actors cannot foresee the consequences of their actions, potential future states, or assign probabilities that may guide their actions (Ferraro et al., 2015). The persistence of grand challenges begs the question how diverse actors collectively make sense of their role over time, as they associate and interact with each other in the face of uncertainty regarding how the situation may evolve in the future, consequences of their actions, and evaluations of their actions by others (Ferraro et al., 2015).

In short, we need a more systematic understanding of how people make sense of a grand challenge and how complexity and persistence influence collective sensemaking and action.

Approach and method of analysis

Approach

We apply a constructivist approach, in which the sensemaking narratives that emerge are considered 'a world made real in the minds and through the words and actions of its members' (Charmaz, 2000: 523). In this view, the stories people narrate provide insight into how they 'make the unexpected expectable, hence manageable' (Robinson, 1981: 60) and predict future states and behaviors (Martin, 1982). Thus, collective sensemaking narratives are not in their own right objective truths, but 'filtered, edited and re-sorted based on hindsight' (Brown et al., 2008: 1039).

In terms of theorizing, we address our research questions through an abductive approach (Alvesson and Kärreman, 2007; Mantere and Ketokivi, 2013). We selected our explanation of how actors respond to the local instantiation of a grand challenge through iteratively comparing our understanding of our data to extant theory on sensemaking and grand challenges (Harley and Cornelissen, 2020; Ketokivi and Mantere, 2010). Ultimately, we intended to identify how individuals are able to make sense of grand challenges for themselves and how such sensemaking fosters collaboration and possible collective solutions.

Specifically, we previously considered two alternative lenses through which to interpret our data and understand local responses to grand challenges. We originally approached the context from the perspective of robust action (Ferraro et al., 2015), but ultimately found that this lens was not able to account for the differing local approaches. We for instance found that the proposed strategies for collective action, e.g., 'participatory structures', the diffusion of 'multivocal inscriptions' and the pursuit of 'distributed experimentation' (p. 22) were implemented in the field, but local actors differently utilized these strategies for their individual and organizational goals.

This shifted our attention to the individual sensemaking processes of actors (Brown et al., 2008) which we thought might explain why and how actors chose to utilize these robust action strategies (Ferraro et al., 2015) as well as other potential formal, material and moral tools at their disposal (Kornberger et al., 2018). However, individual sensemaking processes seemed helpful in understanding how and why actors originally chose to engage

in the refugee crisis in specific ways (Ferraro et al., 2015), but unable to account for the emergence of collective solutions over time.

Accordingly, to understand how collective solutions might emerge over time, we expanded our search to collective sensemaking. We ultimately specifically looked for interactions between actors and events as triggers of collective sensemaking and consider collective sensemaking as the evolving evaluations of these triggers in terms of emergent understandings of individual and collective roles over time (Weick and Roberts, 1993; Quinn and Worline, 2008).

Iteratively comparing and contrasting our reading of our case with each of these lenses allowed us to make novel candidate inferences about processes of individual and collective sensemaking in response to grand challenges. Consistent with existing work on abductive reasoning (Harley and Cornelissen, 2020; Ketokivi and Mantere, 2010), we used criteria of interestingness (highlighting the distinction from prior theoretical understandings) and usefulness (how useful are these inferences, and how likely are they as interpretations or explanations of the case?) to arrive at our ultimate reading of the case and as a basis for our theory elaboration.

Context

Forced displacement, defined as the movements of those displaced by conflict as well as by natural or environmental disasters, chemical or nuclear disasters, famine, or development projects (UNHCR, 2019), reached a record high of 79.5 million people worldwide in 2019, making it the greatest migration flow since WWII (UNHCR, 2019). Local instantiations of refugee crisis management have so far received limited attention from organizational scholars (De la Chaux et al., 2017). Existing management literature generally focuses on one specific site or organization providing a particular service or performing a particular task (e.g., De la Chaux, et al., 2017). Rather than limiting our study to one specific refugee site, we investigate local collaborative action of the various stakeholders that provide goods and services related to the arrival, stay, processing and departure of refugees on the island. This research approach is purposefully broad to allow for a broad spectrum of actors and services as well as for variability due to the subjectivity of appropriate definitions for problems and solutions from the perspective of the actors whom we study.

For our case, we investigate a specific instance of forced displacement that is ongoing on Lesbos, Greece. Conceptually, our research context is extreme, complex and persistent. This situation is extreme as over 500 000 refugees arrived on the shores of Lesbos in 2015, roughly five times its own population of about 100 000 inhabitants. A quick internet search for 'refugees Lesbos' nets images of dead men, women and children washed ashore, violent riots and refugees sleeping in the mud amongst piles of trash. Headlines of international news stories read 'Fatal fire at packed refugee camp sparks riots among residents' (John and Labropoulou, 2019), 'Death threats, despair and deportations: Three years on the front lines of Europe's migration crisis (Vonberg, 2018), and 'Lesbos migrant camp children say they want to die' (Mazumdar et al., 2019). Local responders do not have the capacity to manage the refugee flow, and most refugees do not have access to appropriate accommodation or critical services such as sanitation, education, and healthcare, with deteriorating health and mental conditions of large numbers of camp inhabitants (MSF, 2017). The consequences are also dire for the local Greek population, which was already suffering greatly from a now worsening economic recession due to a drastic cut in tourism (Tsartas et al., 2019) and for many undermined their financial livelihood. The exposure to the unfolding tragedy has caused secondary trauma for the local families as well as international professionals and volunteers who witness and respond to the tragedy (see Chapman, 2020).

The situation on Lesbos is also complex. In the wake of the record number of refugee arrivals, many Greek and international organizations followed, creating a complex amalgamation of actors and processes, covering experienced emergency professionals and inexperienced volunteers and local inhabitants. Different governmental (GO) and non-governmental organizations (NGO) are involved, including for example Europol and Frontex (international GO), UNHCR, and IRC (international NGO), the Hellenic Coast Guard (national GO), and Eurorelief (national NGO). Stakeholder responsibilities are not clearly defined, and many different stakeholders provide various goods and services from a variety of backgrounds. The problems, processes and solutions are complex and interconnected, as this local instantiation of the refugee crisis is connected to problems, processes, and actors elsewhere, from the nations at war in countries where people are displaced, to the migration policy of European countries and global institutions.

Lastly, the refugee crisis on Lesbos has been persistent. In 2020 the number of refugees on Lesbos still greatly exceeds the current housing and processing capacity and due to the lack of through-flow, a direct resolution still seems far off.

Data collection

Our data is predominantly textual, derived from in-depth interviews. We studied actors who were engaged locally on Lesbos Greece, between October 2017 and May 2018. We received permission and support from the Mayoral office of Lesbos to speak with relevant local authorities. Furthermore, we sampled for non-governmental actors in-and around the capital area of Mytilene and its local refugee sites, Moria and Kara Tepe, as these areas included most refugee related activities. We focused our sampling on core refugee related activities, namely reception of arriving refugees (reception), the provision of food and items (basic needs), medical and psychosocial services (PSS), legal support, education and coordination and logistics. Furthermore, we sampled for a variety of actor backgrounds and levels of seniority to investigate interactions between these divergent actors. Following the differentiation used by local actors, we distinguish between local inhabitants, professionals, and international volunteers. Local inhabitants in our sample are those who already lived on the island and worked in occupations unrelated to the refugee crisis, such as tourism or agriculture, or ran a store, bar or restaurant. Professionals are local as well as international and engaged with the refugee crisis professionally, working in relevant occupations such as psychiatry, legal aid, law enforcement or disaster logistics. International volunteers are those who come to Lesbos to volunteer without a professional obligation to do so. This distinction between actors is important as these groups differ in how they engage and disengage from the crisis and do so as part of different organizational structures.

In total we interviewed 71 individuals. We conducted interviews during three field visits in October 2017 (2 weeks), March-April 2018 (4 weeks) and May 2018 (2 weeks). We opted to collect data across 8 months to interview a wide variety of actors, incorporate perspectives on the high turn-over of volunteers, and collect data on the consequences of persistence. The sample was 49% male and 51% female. Out of these individuals, 32 were engaged in the refugee crisis since its inception in 2015. 67 out of 71 interviews were recorded. Recorded interviews were between 22-154 minutes long (with an average of 70

minutes) and conducted by the first, second and third author. We did not record 4 of the interviews, of which 2 at the request of the participant and 2 as these were brief unscheduled conversations with locals. These 4 conversations lasted less than 10-15 minutes. See Table 11 for a breakdown of our sample.

Table 11. Sample characteristics.

Actor type	Local inhabitants	Professionals	International volunteers
Total number of actors	17	32	22
Seniority:			
Manager or coordinator	1	21	8
Subordinate	16	11	14
Services provided			
Reception	12	8	3
Basic needs	13	4	20
Medical and psychosocial services	0	2	7
Legal support	1	11	0
Education	0	6	1
Coordination and logistics	1	9	5

We were originally guided by theoretical sensitivity, with questions constructed to evoke descriptions of the actors' sensemaking (Glaser, 1978). Later interviews were refined and amended to reflect learning around emergent themes. The recorded interviews were transcribed, resulting in 1 219 single-spaced pages of data. In addition, we produced 253 pages of field notes and thick descriptions. Lastly, we gathered rich additional data in the form of photographic and video material, background documentation, media reports and various communications of volunteer WhatsApp and Facebook groups.

Several of our participants raised questions in evaluating the usefulness and risks of our contributions as researcher to alleviating the crisis on Lesbos (Ketokivi and Mantere, 2010). One way of addressing these concerns was that we opted right from the start of our data collection to not interview refugees themselves, as many are considered vulnerable due to their traumatic experiences and might feel obligated to participate. Instead, we focused as organizational researchers on the response system.

Data analysis

Addressing our research questions incorporated three tasks, which we performed at first sequentially, but iteratively and parallel to each other as new content appeared to be relevant to the sensemaking of actors and emergent findings focused and deepened our study.

In the first task we sought to immerse ourselves in the interviews and supplementary data, creating a thick description of the actors' individual backgrounds, experiences, perceptions, and actions. This involved iterative coding of the interview transcripts and secondary documents on topic-relevant content through an open coding strategy to identify relevant themes (Corbin and Strauss, 1998).

Second, building on these thick descriptions, we sought to address the first research question, looking for how actors make sense of- and position themselves in the local response to a grand challenge. Keeping with current practices in narrative approaches to sensemaking, we used individuals' discourse to construct sensemaking narratives that hold across a larger group of actors (Sonenshein, 2010). In doing so, we maintain the rich narrative detail provided by the 'stories about remarkable experiences for individuals' (Brown et al., 2008: 1040) while also acknowledging that most narratives are 'fragments of stories, bits and pieces told here and there, to varying audiences' (Boje, 2001: 5). Furthermore, following current practices to understand responses to grand challenges, we aimed for 'a holistic assessment of the data,' focusing on elements such as temporal sequencing, plot, and broader patterns of meaning, rather than 'coding smaller portions of text' (Eisenhardt et al., 2016: 1119). Specifically, we looked for interactions with actors and events that reveal some form of turning point or development in personal understandings of the refugee crisis response and compared stories to establish narrative threads based on commonalities, contradictions, vagueness, and nuances of various kinds (Sonenshein, 2010).

Third, we deepened our study of narrative changes over time to address our second research question. Specifically, we were interested in the perceived relationships between the actions actors individually and collectively engage in and how these shape, maintain or change the refugee response system in their view. Accordingly, we also looked specifically at accounts of interactions between actors for the processual conditions under which individual and collective approaches appeared to emerge.

We validated our findings in several ways. First, we utilized multiple data sources to triangulate data from interviews, observations, and governmental status reports. This allowed us to get multiple perspectives on the same events. Second, the first author analyzed the data and cross-checked findings and interpretations with the second and third author to verify that – as the theoretical development progressed – it remained true to experiences in the field. Lastly, we shared our findings with several participants from Lesbos and other GO and NGO workers at a working conference and they confirmed our understanding.

Findings

We present our findings regarding the collective sensemaking narratives presented by local inhabitants, professionals, and international volunteers. We start with a description of the general structure of collective sensemaking in a refugee crisis and we then illustrate how collective sensemaking informs individual and collective action through patterns of collective sensemaking. In these narratives we distinguish between forms of interaction where we differentiate between the isolating, situating, and rejecting interactions that trigger sensemaking, the development of evaluations over time regarding the extreme, complex, and persistent nature of the context, and action strategies oriented at alleviation, recovery, and change.

Collective sensemaking narratives of strategic action
We found that all actor types typically at first responded by providing any form of alleviation they could. However, actors ultimately resorted to widely differing action strategies, where some would continue to engage through existing organizations and structures to provide alleviation to the refugees, others retreated from the refugee crisis insofar possible and focused on personal recovery, and yet others continue to engage but did so by creating novel collaborative structures to change the way alleviation is provided. The primary distinction between alleviation and change oriented strategies is that alleviation is situated in the existing collaborative structures of the refugee response system, while change oriented action strategies entail creating new collaborations, structures, and response systems.

Furthermore, we found that each of these action strategies was typically supported through a particular collective sensemaking narrative, triggered by specific forms of interaction and different emergent evaluations over time. We found that actors who continued working to alleviate the consequences of the refugee crisis by carrying out various tasks within the response system typically described situating interactions, understood as working with or along-side other responding actors within a clearly defined setting, and over time felt increasingly capable of providing meaningful aid as part of a collective response. Actors who over time resorted to focus on personal recovery typically presented a narrative in which they described isolating interactions, where they felt isolated or otherwise pushed away by other responding actors, and over time felt increasingly threatened by the interactions with these other actors and less able to cope with the extreme conditions imposed by the crisis. Lastly, actors who we found were increasingly creating changes to the refugee response system by establishing new structures and organizations typically presented a narrative where they interacted in such a way that they rejected other actors or organized responses, over time increasingly bonded with humanitarian ideals and sought out likeminded actors to create novel structures. We describe these patterns of collective sensemaking, using quotes to illustrate how and why these actors ultimately decided to engage with the refugee crisis in their respective ways. Figure 10 summarizes these collective sensemaking narratives and tables 12-13 summarize their actions and action outcomes for each of the six core activities.

Figure 10. The structure of collective sensemaking narratives in a refugee crisis.
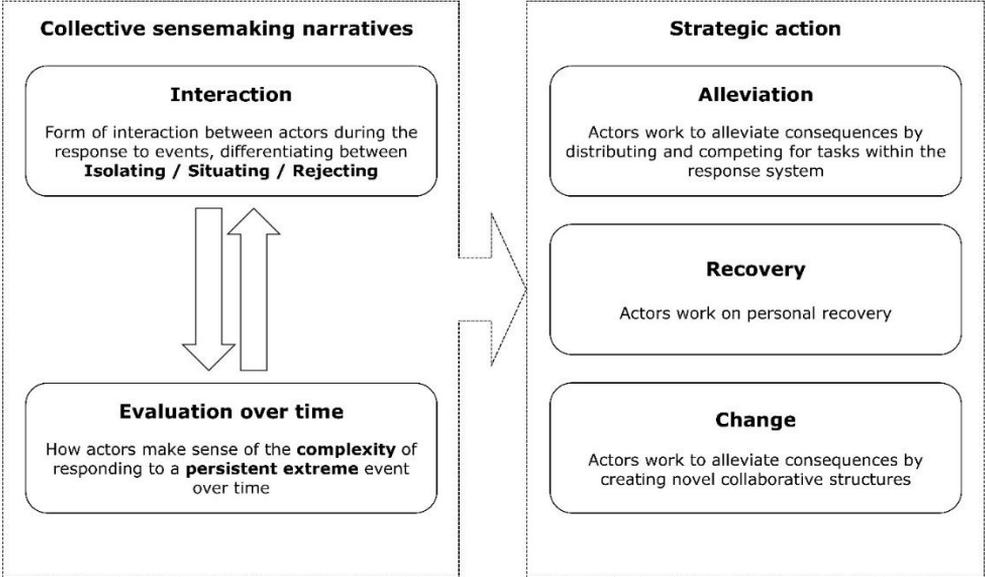
Alleviation

As mentioned above, most of the actors provided some form of alleviation when they first engaged with the refugee crisis, and some continued to do so over time. In terms of the interactions that trigger their sensemaking, these actors commonly attribute their evolving role in the refugee crisis to being situated within the existing refugee crisis response by other actors. These actors were working with their own organization and other responders either in a professional capacity or an informal collaboration that grew over time. For instance, a Greek professional actor who initially started teaching in Moria for 6 months but later took on coordinating duties for an education NGO emphasized that 'we have to work together, even though they don't agree, or they may not agree on what the problem is or what the solution is, or how to do something' to 'do the best for the children.' Accordingly, this actor described how his organization worked together with another education NGO so that combined they 'would have more capacity to host more children from Moria where the need is bigger' and they 'came up with a solution because both had good will for this to happen.' Similarly, an international volunteer who provided day-care activities told us that they 'work closely with [other organizations]' and 'always know what is happening, because we have weekly meetings.' That said, situating within the crisis response also oftentimes entailed

competition between organizations. Though these actors present themselves as part of a larger collective response where 'you all work together', this does often mean distributing tasks and resources, as one international volunteer stated, 'we are a different organization, so we don't work in the activities together.'

As these actors continue to engage with each other to provide alleviation in a situating manner, their evaluation of their own role and position in the refugee crisis develops in a distinct way. Specifically, they present a narrative where they are increasingly capable of dealing with the extreme, complex and persistent nature of the work by drawing on the positive effects of their work, personal value as member of a collective, and increased agency and growth as they persist in their engagement. For example, one of the international volunteers related to us 'I slowly got better. Strong enough, realized where my energies were supposed to be. Got realigned I guess you could say and taking social work was also to help myself, to learn how to deal with my own insecurities. So now I've learned that those tools to counteract an anxiety attack myself, I could teach those toward other people.' Accordingly, this actor learned to cope by learning and growing to eventually provide these experiences as lessons for refugees. Similarly, one of the local professional actors working in housing and accommodation related to us that their 'experience is really amazing' because they were able to go from 'almost no support' to now accommodating 'more than 60 000 people in camps and in other places', emphasizing the collective value that has been created by their organization through the refugee system as they grew.

We find that actors are situated within the response when they either professionally occupy a central position in the coordination of the refugee crisis, or when they are otherwise professionally or financially required to participate in the response. For instance, one of the professionals told us that 'it is an everyday job', and another emphasized a professional necessity to 'coordinate to see who is going to deal' and that 'the system is there, it's in place.' Accordingly, these actors take coordination for granted as being part of their professional role. Similarly, international volunteers often comment on the organizational cooperative format that is already in place for them to engage through. As one international volunteer commented, '[…] is an umbrella organization and there are various organizations under it' and 'they partnered with them to help mobilize volunteers.' However, other actors also comment on the inherent competition between volunteer organizations due to their need

for financing. The most common example mentioned is competition to be the first to respond to a refugee beach landing, where as a local inhabitant commented, NGO's rushed 'through the village, because the boat is coming, and everybody went there to promote themselves.'

Accordingly, the main driver of situating interactions seems to be a form of organizational centrality, or professional and financial requirement to engage with each other in this manner. Though these actors present a narrative where they situate themselves within the refugee response, this is oftentimes only as part of a specific organization that provides a particular activity. The action strategy that these actors ultimately employ is one where they work to alleviate the consequences of the refugee crisis, but often by distributing tasks between, or competing with, other groups and organizations providing similar activities. As these individuals and organizations learn and grow over time, this often leads to increasingly professionalized but competing alleviation activities between groups. Table 12. below presents a summary of how these professionalized forms of alleviation take shape in specific activity categories.

Table 12. Alleviation and its consequences for refugee crisis management.

Activities	Alleviation	Illustrating quotes
Reception	Shoreline response by multiple groups and organizations which distribute shoreline areas, who compete for media attention and financing.	'There were fights for boats, for God's sake. Who was going to take the boat to be able to post it with the sad children, the photograph' (Local inhabitant)
Basic needs	Multiple groups and organizations providing items, sometimes leading to abundancy of particularly high-profile items such as blankets in winter, but a lack of other products.	'It is such a waste. You see people putting a blanket down in Moria, putting down the coats, and selling them. Because they received multiple coats' (International volunteer)
Medical and psychosocial services	A few strong NGOs have exclusive access to refugee sites but insufficient capacity to deal with the large number of refugees.	'The need was so massive, in Moria, uhm, we tried to expand on the medical team. Which we weren't ready for' (Professional)
Legal support	Duplication of cases due to lack of alignment between different legal organizations. Commonly clients go to different legal advisors who are not aware of one another.	'They already had another lawyer, so there was another legal organization involved. […] so eh, three actors were involved' (Professional)
Education	Independent workshops, classes and other programs are provided by different actors. Sometimes competing for educational space and timeslots.	'They don't enter that space and we don't enter that space. That's why we are sharing an iso box, but never at the same time' (International volunteer)

Coordination and logistics	A monopoly of coordination roles for housing, security, and transportation at refugee sites by select NGOs and GOs.	'I am the scheduler. I schedule people, I control that' (International volunteer).

Recovery

Other actors described to us how they initially sought to alleviate the refugee crisis but ultimately disengaged to instead work on personal recovery, oftentimes after long periods of acting to alleviate the suffering of refugees. These actors attribute their decision to disengage from the refugee crisis to isolating interactions with other actors, oftentimes describing that they felt pushed away, ignored or otherwise isolated. For instance, an international volunteer questioned why working at the distribution point was so solitary, with little support from colleagues: 'how is this happening, how do you not have support?' and a local inhabitant called their situation 'total abandonment from everybody. From everybody. Turned their back to us.' The perceived isolating interaction took different forms, including not getting invited to meetings which meant that they 'didn't even know there were coordination meetings taking place', accusations where 'if you say something against, you are racist' and active boycotting of businesses, where 'they really, eh, they were so bad against me, that I moved out. My [business] they kicked me out of the [business].'

As these isolating interactions continue, their evaluation of their own role and position in the refugee crisis changed over time. Specifically, they present a collective sensemaking narrative where they feel that their wellbeing is threatened by the complex system of other actors, felt increasingly helpless and hopelessness as these interactions persisted, and they are ultimately unable to cope with the extreme nature of the refugee crisis. These actors often referred not only to the lack of help from other actors, but also the threat posed by other actors. For instance, one of the local inhabitants commented that 'wherever NGOs go, after is burned earth.' Over time, these actors simply feel unable to deal with the refugee crisis, saying for example 'I feel helpless that we cannot help, do more. But we cannot change the asylum system. We, we are tied.' As a local inhabitant indicated, eventually they were 'just finally not in a place where I can deal with it anymore, because it's too much.'

When we consider why isolating interactions are occurring according to the local inhabitants as well as professional actors and international volunteers, we find that their

narratives often indicate some form of bystander victimization. Specifically, we find that local inhabitants feel that they are seen as peripheral bystanders to the refugee crisis. As one local inhabitant commented, 'two volunteers walked down and a boat was arriving and she, she totally acted like we weren't even there. She knew we were Greek and she turned to the volunteers and said, "should I call for help? Do you need help?" And these guys have never been on our beach before. And I turned and I looked at her and I said "eh, are we invisible?"' These local actors perceived this as a fallacy, as they had been the first to respond, personally suffered from the refugee crisis, and felt that they were also well positioned to provide meaningful aid. As this local inhabitant told us, 'we had been dealing with the situation for months and months on end. We had a very organized and quiet way of dealing with it.' Similarly, international volunteers and professionals who attribute their role in the refugee crisis to isolating interactions also describe a sense of being considered by other actors as peripheral to the refugee crisis despite their active engagement. One international volunteer who worked in a distribution center and then left to go back home told us that 'I might have the feeling that I don't do anything because I'm just there and they take the clothes that they need.' The main driver of isolating interactions according to these actors therefore seems to be a perceived lack of centrality to the refugee crisis by other actors.

In terms of action strategies these actors ultimately employ, these actors stop engaging with the refugee system and limit themselves to work on personal recovery, which for the local inhabitants means prioritizing personal health and economic recovery, and for the international volunteers and professionals leaving the island. One of the international volunteers for instance concluded 'I can feel with the people, I can be like "this is a horrible situation" and I can be responsible to them, but I am not responsible for them. Their loss is not my responsibility' and '"I can't be crying all night for you" […] that they live in those situations doesn't mean that I should live in those situations.' A local Greek actor also commented on the motivation to work on personal recovery, mentioning that they 'have still also families behind us, take care of our children. Why I should feel ashamed when I think about my tomorrow?'

Change

Lastly, some actors were actively striving to create structural changes to the alleviation of the refugee crisis by creating new collaborative structures. Those who ultimately focus on instigating structural change construct a narrative where they are the ones rejecting the existing refugee system during their interactions. Though these actors were often invited to cooperate or collaborate through existing structures, they reacted with a rejecting response. For example, one of the local Greek inhabitants refused to work at a refugee site, calling them 'detention centers' where 'Families, women, children, men, elderly men, doesn't matter. Everyone was locked in and treated as criminals.' This actor also refused to associate himself with NGO volunteers, as many are 'those we call the voluntourists' who come because 'it's sexy. Adrenaline. You can take a few photos and post them on Facebook, and you are a hero. You can attract attention.' Similarly, an international volunteer told us how he wishes to 'change the system' but refuses to do so with European financing as 'if I apply to European funds, I have to obey to European laws. The European laws are hacking my freedom. Not my freedom only, anybody's freedom' or at the official registration center Moria as 'obviously we do not approve of Moria. Moria should not exist. Why should we put our signature and say "ok we approve this and work in there?"'

Accordingly, though these actors can engage within the crisis response system, these actors refuse to do so on various moral grounds, which they report intensify over time. As these actors continue to interact with the existing refugee crisis response system in a rejecting manner, these actors also develop a specific collective sensemaking narrative in which they make sense of the extreme, complex and persistent nature of the crisis in a specific way. These actors describe how they increasingly felt that the suffering imposed on the refugees is not only extreme but unacceptable, that the existing refugee crisis response is not only complex, but specifically insufficient and in their perception grounded in selfish motivations. For instance, one of the international volunteers told us how they came to feel that the refugee crisis response is selfish and inhumane while working in Moria with medical service providers, commenting how the organizations they worked with contained 'a lot of ego's', who claimed refugees as their patients 'so they are not working together and that is really a big problem – the ego problem.' Another international volunteer clarified, saying that 'everyone is finding its own right to be here, and is fighting for it' and 'it is a little bit

like saying refugees become a commodity.' Similarly, a group of other international volunteers working in Moria commented on the deteriorating situation in Moria saying that people are 'looking more sad, you can see it and feel it' and that refugees in Moria 'are handled as animals' and the added value that they provide is 'giving them the feeling they are a person' as 'they lost their dignity not because they lost it, but it was stolen. Step by step.'

When we consider why actors reject the extant crisis response according to local inhabitants, professionals and international volunteers, we find that local inhabitants as well as professionals and international volunteers refer to some form of personal victimization and identification with the plight of the refugees. The main difference here with respect to narratives that involve isolating interaction narratives is that actors who seek to provide structural changes dismiss perceived marginalizing attempts of other actors. It seems that a main motivation to do this is taking the plight of the refugees personally. Specifically, we find that local actors who reject other responding actors commonly refer to a personal refugee history. For instance, one local inhabitant told us 'we lived the history' as 'my family from my father's side they are all refugees. And yes, we have experienced that type of life kind of first-hand.' Similarly, one of the international volunteers related to us that this is not a refugee crisis, but a crisis that concerns us all it is 'a humanitarian crisis. And we are heading full speed to a place that will not be safe and we will not be free.' One of the international professional actors strongly identified with the plight of the refugees from a personal history with discrimination, telling us that 'I have an even higher responsibility to act respectfully, you know with an open heart. Because of where I'm from and who I am and how I am perceived often.'

In a sense, these actors ultimately not only reject the extant refugee crisis response, they themselves become instigators of novel organizations and collaborative structures. Accordingly, the action strategy that these actors ultimately engage in is one where they create new NGOs and collaborations between likeminded actors founded on principles of humanitarianism. Rather than distributing tasks or competing for specific forms of alleviation, these actors adopt an integrative approach of mutual empowerment as their main response. Table 13. below presents a summary of how change oriented strategic action takes shape for specific activities.

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Table 13. Change and its consequences for refugee crisis management.

Activities	Change	Illustrating quotes
Reception	New cooperative of formal and informal shoreline response groups who train together and work together for reception. Faster response times, better coordinated action and fewer injuries and casualties.	'I wrote a training program that spans the entire southern shore and brings all, most aspects of the boat landing into a training course. And includes all the actors on the southern shore […]. We have gotten to the point that we share volunteers and assets and things quite effectively' (Professional)
Basic needs	Activities shift from NGO led distribution and competition for the distribution of specific items to a joint facilitating and supporting role.	'If we can find something together to do, we do it. I think it just good to cooperate, to see what you can do together. […] We are growing with bigger projects. In the beginning it's clothes, medicals, and transport. And now we support housing, medical, personal things, library.' (International volunteer)
Medical and psychosocial services	Collaborative networks of medical professionals and other service providers emerge. PSS events are organized with actors that otherwise would not have worked together.	'You organize a concert and get to know a new organization […] and now we've had the first contact he involves me in everything that happens' (International volunteer)
Legal support	Shared consultation spaces, integrative case-based working. Increased resilience from sense of community.	'We have actors we can refer them, like eh, colleagues that work for different associations […] if there is a need we try to, I try, at least to cooperate with the other lawyer. For the good, for the client' (Professional)
Education	Schools and workshops where teachers provide different courses. Shared educational spaces and timeslot arrangements	'We partnered with two [organizations] and they come up and they work in the school. The school serves over 160 children every single day from both Moria, Kara Tepe and some other hotels' (Professional)
Coordination and logistics	The creating of facilities for shared goods, social media coordination platform for the distribution of goods.	'On the island now we are collaborating, we are supporting more than 20 organization with non-food items. And sometimes with food items' (International volunteer)

Discussion

With our study we aimed to better understand individual and collective sensemaking of extreme, highly complex, and persistent societal problems (Colquitt and George, 2011; Howard-Grenville et al., 2014; Tsui, 2013). We formulated two overarching research questions: 1) How do actors make sense of, and position themselves in, the local response to a grand challenge? 2) How do actors enact the situation, and in doing so impact the collective response?

Our findings show that collective sensemaking is predominantly driven by different forms of interaction between actors. We arrived at three patterns of collective sensemaking that are used to validate approaches aimed at personal recovery, alleviation, and change, respectively. These forms are differentiated by the form of interactions that trigger the sensemaking of diverse actors - isolating, situating and rejecting - the emerging 'sense' that evolves through these engagements and, the individual and collective actions performed. Specifically, actors who feel situated within the collective response system by other actors over time feel increasingly capable of dealing with the extreme, complex and persistent nature of the work by drawing on the positive effects of their work, personal value as member of a collective, and increased agency and growth as they persist in their engagement. These actors continue to provide alleviation in increasingly professionalized but competing ways. On the other hand, actors who experienced being isolated by other responding actors felt threatened by the complex system of responders, and ultimately decided to disengage from the refugee response system to work on personal recovery. Lastly, actors who reported that they themselves rejected other actors engaged in the collective response increasingly felt that the refugees were not adequately helped by the existing response system and strongly identified with the plight to overcome shortcomings in the response system in order to find adequate support for refugees. These actors more often create novel collaborative structures to provide humanitarian aid.

Understanding and responding to grand challenges

Our study has important implications for extant research on responding to grand challenges. Specifically, our findings shed new light on previous research on responses to refugee crises, but also similarly complex and persistent extreme contexts more broadly. For instance, the emergence of the Train of Hope, which was a citizen startup that 'took over state responsibilities and proved incredibly effective in addressing the crisis' (Kornberger et al., 2018: 317) can be understood through the narratives our actors presented to validate change oriented strategic action. In this view, we understand the emergence of the Train of Hope through interactions where actors reject the extant response system. Indeed, these actors wished 'to do better than established aid organizations such as the Caritas or the Red Cross. The argument was that many volunteers left these established NGOs and joined Train of

Hope because volunteers did not want to work under what they perceived as a 'little flexible regime' (Kornberger et al., 2018: 325). Similarly, the evaluations of these actors over time developed such that they united around a shared framing of human tragedy and humanitarian bonding and it 'gave rise to a strong sense of identity' and 'coordinated, collective action' (Kornberger et al., 2018: 325).

Similarly, we contribute a complementary understanding of the emergence and displacement of new collaborative and organizational forms. Specifically, Lanzara (1983) describes the general process of generating what he calls an ephemeral organization during an extreme event, in Lanzara's case an earthquake response, as 'a diagnosis and an evaluation of the situation' where an actor's 'intervention is a response to this diagnosis, and reveals a strategy which may be tentatively surfaced' (p. 76). Lanzara describes the emergence of a coffee-shop amidst the turmoil, following what we would consider another change oriented collective sensemaking narrative. Similarly, this actor 'discovered or made up for itself an organizational niche in which it could operate', produced change by creating a coffee-shop which 'enabled other people to take some sort of action', and did so through interacting 'with his own environment' and outside the 'formal constraints on the relief operations' (p. 79, 80). Furthermore, Lanzara also describes how this coffee-shop is later 'displaced' shortly after its formation as formal authorities began requiring official permits for access to the area (1983, p. 79). Where Lanzara explicated the environmental conditions and personal requirements for ephemeral organizations, we provide a complimentary framework to understand the collective sensemaking process that explain how and why these actors respond in specific ways within these conditions, including the creation of new short-term organizations and the competition for authority and resources between actors.

The influence of complexity on collective sensemaking
Our research also has important theoretical implications for the study of collective sensemaking as a process, as previous research has insufficiently incorporated the influence of complexity (Eisenhardt et al., 2016; Ferraro et al., 2015; Maitlis 2005; Maitlis and Sonenshein, 2010). Our findings echo previous assertions that change can emerge through collective processes (Battilana et al., 2009; Garud et al., 2007), particularly at the intersection of conflicting fields and logics of actors (Ferraro et al., 2015). We found that our disparate

actors held differing economic, humanitarian, and religious motivations, and differed between organizational forms such as NGO and government emergency professionals, or between large response systems and grassroots initiatives. The collective sensemaking narratives we found for recovery, alleviation and change oriented actions have powerful implications for understanding when change may or may not emerge at the intersection of these conflicting fields and logics.

Specifically, we found that actors who adopted a change oriented action strategy - those who start joint sessions for training and shore response, started warehouses to distribute goods, and overcame institutional affiliations to provide integrative care, legal aid and education - strongly rejected the existing refugee system and bonded with each other over a shared overriding sense of humanitarian urgency. Though this echoes previous assertions that collective sensemaking is inherently a social process that is grounded in identity construction (Brown et al., 2008; Weick, 1995; Weick et al., 2005), it also specifies a form of 'individual-specific needs for self-enhancement, self-efficacy and self-consistency' (Brown et al., 2008: 1040) where actors derive their sense of self-worth not from a preservation of self or an institutional affiliation, but through collectively bonding and identifying with the plight of refugees. Rather than creating a narrative of personal victimization or of collective instead of personal agency as was the case for recovery oriented and alleviation oriented narratives, these actors derive self-consistency and self-worth from a close association with the refugees and a notion of being the same, friends, brothers and sisters, and a shared sense of humanity. This suggests that differing sources of deriving self-worth may influence specific forms of strategic action.

Our results also echo previous findings that collective sensemaking drives the formation and reformation of social roles and relationships through interaction (Maitlis, 2005; Weick, 1993), and that a personal sense of place within a collective system, influences outcomes for a collective response (Quinn and Worline, 2008; Weick and Roberts, 1993). Specifically, those actors who ultimately disengaged from the refugee crisis and focused on personal recovery greatly attributed this to a sense of isolation and rejection by other actors, which enforced a personal sense of lack of agency to cope with the refugee crisis and made these actors position themselves outside of the collective response system. Furthermore, we found that those who explicitly commented on their place and value within the collective

response system oftentimes continued to provide alleviation in increasingly professional ways. Interestingly, our findings also suggest that – where the collective response system is deemed insufficient – change is generated not by developing a sense of place within the collective response, but by rejection of the extant system in favor of replacing this with other structures. In a sense, these actors position themselves within the larger macro-political context and humanitarian ideals, instead of the local collective response system. This suggests that developing an understanding of a personal role within a response system may not just be dependent on pre-existing normative orders (Ferraro et al., 2015; Weick and Roberts, 1993), but may be a process in which actors renegotiate to which orders and systems they belong- and contribute to.

Our findings raise two important questions for future inquiries into the role of complexity in collective sensemaking. First, the assertion that different narratives of identity construction and self-worth are implicated in recovery, alleviation and change oriented action strategies requires a more fine-grained investigation. Specifically, we strived to be transparent about the role of individual backgrounds of the different actor types in the collective sensemaking narratives they presented, but we were unable to fully disentangle the interplay between their different backgrounds, the identity construction activities during their engagement, and the action strategies these actors ultimately adopt due to our sampling strategy. A deeper investigation into the drivers of individual sensemaking by these different actors is required to make a stronger case for the role of individual actor types and forms of identity construction in collective change.

Second, the assertion that there may be different levels of belonging in a system and that particularly macro-levels of sense of place are implicated in change oriented action requires further assessment. We do not disagree with the importance of for instance heedful interrelating in the functioning of collective responses (Weick and Roberts, 1993), but we suggest that actors may distinguish between different levels of interrelating, e.g., individual roles, organizational roles, macro-political roles, and that further study is required to understand their influence on individual and collective action.

The influence of persistence on collective sensemaking

In persistent contexts such as a refugee crisis, long periods of time pass where individual actors remain 'confused by events and actions without developing sensible accounts' (Maitlis, 2005: 23), fueling increasing uncertainty regarding how the situation may evolve in the future, consequences of their actions, and evaluations of their actions by others (Ferraro et al., 2015). We found that this is indeed the case, as exemplified by the actors who constructed a recovery oriented collective sensemaking narrative, emphasizing their increased sense of helplessness and hopelessness over time, as they see no meaningful change despite long term engagement, limited consequences of their own actions, and evaluate the actions of others as either ineffective or conflicting with their own interests.

However, we also saw that a refugee crisis response is not a static system, but one that evolves and changes over time as different actors make sense of – position themselves in – and respond in different ways. For instance, our data suggests that the tenure of the actors may factor in not only the development of collective sensemaking narratives but also in the development of agency toward specific strategic actions. For instance, many of our actors made a distinction between stakeholders who have been around for prolonged periods and actors who come and go on short-term bases. Not only does a short-term engagement limit what can be accomplished by this actor, these actors are also perceived as less affected by, and oftentimes less serious about, the refugee crisis. Accordingly, there appears to be a temporal component in the sensemaking of actors and their willingness to engage in forms of cooperation. The tenure of actors is thus a viable candidate in the search for meaningful subtypes within the sensemaking narratives we identified, and a comparison of narratives at different stages of development might lead to further insights into their development.

Limitations

Our study naturally has limitations. First, we collected our data during an ongoing refugee crisis. Though investigating an ongoing crisis allowed us to better understand ongoing collective sensemaking in an extreme context, it also introduced a sampling bias toward actors who were still engaging with the refugee crisis. International volunteers and professionals who had already left the island to focus on their profession or studies are underrepresented. This is not necessarily a problem for understanding collective

sensemaking in a refugee crisis and how this influences specific outcomes for the collective response system as we intended, as those who left no longer affect the local response, but it does raise unforeseen additional questions regarding their potential recovery oriented sensemaking narratives. We were able to interview one international volunteer after returning home, but this is not sufficient to draw general conclusions. Though there are secondary sources of information available such as diaries and blogs shared by ex-volunteers and professionals (see for example Chapman, 2020), incorporating these instances was beyond the scope of our current paper.

Second, theorizing from a rich and complex dataset such as ours inevitably leads to a simplification, in our case to the identification of the most influential interactions, processes and action outcomes. We had to synthesize and summarize an enormous amount of material to come to a meaningful description of processes and outcomes that hold across interactions. As a result, though we present the key turning points in our analysis as well as the characteristics of our proposed collective sensemaking narratives, we were not able to incorporate more subtle narrative differences or outliers. It should be noted that no actor responded exclusively toward a particular goal, as actors perform many different actions with different actors, and change their approaches over time. This is reflected in the process characteristics of the collective sensemaking narratives. We also do not claim that the narratives we present perfectly reflect all experiences of every individual. Rather, they reflect the prototypical narratives that are used to validate specific ways of working. It is also possible that the collective sensemaking narratives we identify are not exhaustive. It is possible that subtypes exist, for instance, between specific combinations of actors. For the current study however, we argue that the search and identification of such subtypes would have complicated our findings beyond a point of practical or theoretical relevance.

Furthermore, we adopted a narrative approach to understand the experiences and actions related to us. Though this allowed us to accurately reflect the lived experience of the actors as they describe their feelings, thoughts, and actions, it does mean we have to be cautious in establishing the boundaries of their lived experience. Insofar possible, we have triangulated narratives and sources to validate statements related to factual events, actions, and contextual changes. Similarly, we acknowledge that the sensemaking narratives of our actors are constructed retrospectively, and therefore subject to the benefit as well as bias of

hindsight. Accordingly, we must be cautious to generalize the narratives presented by our actors to factual contextual outcomes. Despite these limitations, our study has significant implications for both research and practice.

Implications for practice

This study has several important practical implications. First, our study informs an understanding of the personal and contextual constraints of humanitarian responses to a refugee crisis. This has implications not just for refugee crises and grand challenges, but also other extreme and complex emergency contexts involving different actors. Specifically, our findings help explain why professional actors, despite being trained to respond to crisis situations, are unlikely to instigate structural changes to the alleviation provided. Though they arguably have more experience and skills to do so, their operation within organizational and professional boundaries seems to predominantly lead to situated forms of alleviation. More likely to seek out structural changes were international volunteers, who more often transcended organizational boundaries and sought out likeminded individuals to create novel structures and collaborations. Yet, international volunteers are often also more transient, engaging on short-term contracts, and are often self-employed or bound by the NGOs that employ them. Local inhabitants in turn are most affected by the refugee crisis, yet also poorly positioned to instigate structural changes as they are themselves victims of the refugee crisis (yet not necessarily perceived as such). In the case of our study, local inhabitants faced the refugee crisis in addition to an exacerbated economic crisis. These findings implicate particularly the importance of wielding the skills and knowledge of professional actors in such a way that it enables and informs the more transient international volunteers and alleviates the strain on local inhabitants insofar possible. Accounting for the transient nature of specific actors in a persistent problem context remains a methodological and theoretical challenge in multi-stakeholder studies.

Second, we found that all our participants were either benevolent actors or victims and attempted to make the best of a difficult situation. Yet, there was widespread emerging misunderstanding, disagreement, a lack of consideration for each other's positions and in some cases even outward hostility between individuals and particular groups. The collective sensemaking narratives we found help explain why these actors with good intentions still

instigate or perpetuate division and isolation. By sharing these narratives with the actors, they may better be able to understand each other's positions and engage with each other in positive ways.

For instance, actors working through NGOs tend to provide important items such as blankets, water, food and medicine, or activities such as legal aid, education, and coastal reception and coordination tasks. However, by taking ownership of responsibilities in competition with other actors, these actors institutionalize competition for resources and responsibilities. This not only meant that NGOs predominantly implicitly or explicitly compete for resources, but also that local actors – the ones living on the island - are pushed aside in the scramble. This resulted in outward hostility and a lack of collaboration between NGOs and certain local groups, who not only feel their livelihood is threatened by the negative exposure produced by many NGOs, but also personally disrespected in how they are treated on their own home island.

Our findings also have implications for our status as researchers in ongoing responses to grand challenges as well as other extreme contexts. Particularly local actors were very vocal against those they called 'voluntourists', and by extension, other actors who they perceive to be benefitting from their hardship. Though local actors primarily mentioned NGO volunteers as the primary example, we must also carefully weigh our motivations, methods, and contributions.

Lastly, actors should be aware that though they are individually providing important goods and activities, by doing so in isolation or competition they indirectly impede the development of collaborative forms of change. We found considerable opposition between NGOs in individual interviews, yet grassroots NGOs and professional NGOs have more in common than they convey as they engage in the same processes, actions, and strive for similar – positive – outcomes. We found that actors can engage in such a way that it promotes the development of joint activities, networks and development through implementing integrative experiments and enhancing their sense of joint agency under a united humanitarian cause.

5. Designing for successful online engagement - Comparing citizen and police expectations for community policing platforms[4]

Abstract and keywords

Online platforms offer efficient avenues for police forces and citizens to engage with each other, especially in the context of citizen-focused preventive policing approaches such as community policing. Accordingly, much interest has been garnered for understanding technology-mediated forms of engagement between police and local communities. However, the specifics of what users of online community policing platforms require for mutual engagement remains understudied. Our study aims to shed light on the acceptance of online community policing services and the specific features and functionalities online community policing platforms should possess according to police and citizen users. For this purpose, we adopted a mixed-method approach involving 133 respondents from police forces and local communities in six countries. We identified three distinct user groups with disparate expectations for online community policing platforms: complacent users, high-need users, and sceptics. Our study compares their respective expectations and offers concrete recommendations for the design of online community policing platforms to guide the online engagement across disparate user groups.

Keywords: Online engagement; citizen engagement; community policing; design requirements; contextuality

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[4] This work has been adapted from Van der Giessen, M., and Bayerl, P.S. (under review). Designing for successful online engagement - Comparing citizen and police expectations for community policing platforms. Edited for consistency in lay-out and referencing.

Introduction

The advent of social media in the last two decades has given a powerful impetus to the notion of online engagement between citizens and public organizations due to its potential for many-to many exchanges and other novel forms of mutual engagement (Bertot et al., 2012; Bonsón et al., 2019; Dai et al., 2017; Kavanaugh et al., 2012). For the police specifically, the idea of citizen engagement is enshrined in the concept of community policing. Community policing refers to a policing approach that emphasizes decentralization, citizen involvement and problem solving and is tailored to local contexts with a focus on preventing crime rather than fighting it (O'Neill and McCarthy, 2012; Skogan, 2006; Terpstra, 2009). Effective community policing engagement between police and local communities is thought to lead to higher trust in police and policing efforts (Van der Giessen et al., 2017; Warren et al., 2014; Yeh, 2017), improved transparency and legitimacy of public actors (Bonsón et al., 2015; DePaula et al., 2018), citizen engagement (Warren et al., 2014) and ultimately, a higher quality of services to citizens (Allen et al., 2020; Yeh, 2017). Consequently, the presence of police organizations online has increased dramatically over the last ten years with online activities ranging from information sharing and gathering (DePaula et al., 2018; Walsh and O'Conner, 2019), local empowerment (Turner, 2010) and broader public relations efforts (Walsh and O'Conner, 2019). In short, there seem to be many reasons for the police to engage with local communities online to improve local safety and security together with the community.

Despite the potential of online engagement for police organizations, widescale engagement between police and local communities remains challenging. There are persistent barriers to online civic participation in terms of motivational divides (i.e., willingness to adopt, acquire, learn and use these technologies), access divides (disparities in abilities to access online opportunities) and democratic divides (disparate motivational bases for political actions) (Epstein et al., 2014). Also, citizens participating in online groups seem less satisfied than their offline counterparts (Cullen and Sommer, 2011). In a policing context, this appears particularly true for so-called 'hard-to-reach' or 'underserved' communities, including ethnic minority groups (Craig et al., 2010; Weitzer and Tuch, 2005), youth groups (Dirikx et al. 2012), communities with negative previous experiences with the

police (Lee et al., 2019), LGBT+ groups (Dario et al., 2019; Pickles, 2019), disadvantaged high-crime communities (Louis and Greene, 2020) or otherwise marginalized communities who question the legitimacy of the police (Louis and Greene, 2020). Furthermore, police officers themselves also question e-governance technology, doubting its usefulness (Hu et al., 2011) or struggling with organizational and cultural barriers to adopting them (Bullock, 2018). This suggests that the police has not fully realized the potential of online engagement and that barriers to adoption by police and community users exist, as is the case for many other public organizations striving to reach local communities through online, predominantly 'social' media (Dekker et al., 2020).

This study focuses on police efforts to engage with local communities to contribute to a broader understanding of how public organizations involved in matters of local safety and security may manage barriers to the adoption of online communication platforms. We are guided by the following research question: What are the needs and requirements of police forces and local communities for the adoption of online platforms for mutual engagement, and in extension, are there relevant disparities in these expectations that may affect successful online engagement efforts?

To address this question, this study consists of two analyses; first, a quantitative assessment of potential sub-groups that may exist among potential police and community users. This analysis is guided by the sub-question: Are there sub-groups among potential police and community users of online platforms that inform divergent needs and expectation for tool adoption? We conduct a series of group- and country comparisons as well as an exploratory cluster analysis at the individual level based on perceptions of police accessibility and acceptance of online platforms for community policing. This analysis allows us to differentiate between different use-contexts and make context specific design recommendations for online community policing platforms.

The analysis of differing use contexts informs the second analysis, where we perform a qualitative assessment of the specific features and functionalities that are required for the adoption of online platforms for community policing by user groups. This analysis addresses our second sub-question: What are the user needs and requirements that have to be met to adopt online platforms for community policing? Combined, our analyses allow us to make specific design recommendations regarding the needs and requirements of divergent

user groups and specify exactly what online platforms for community policing should entail to be accepted by community and police users. Furthermore, as we collect our data across police users and communities identified as particularly relevant for community policing efforts and across six European countries, our recommendations encompass heterogenous sets of citizen groups and police forces on both sides of the engagement. We adopt both concepts of exploration and exploitation in order to develop new practices and improve existing strategies for online engagement for community policing specifically, and public-private engagement more generally (Gupta et al., 2006; March, 1991).

Our analyses show that needs and requirements for online community policing platforms differ between different groups of police and community users, where we differentiate between high-need users, complacent users and sceptics. This typology helps us understand why online community policing efforts often meet with disparate reactions and success both across and within countries and user groups. Furthermore, our findings provide police organizations as well as designers of online platforms with concrete and detailed features and terms that will support acceptance of community policing tools across use contexts.

Designing for online police-community engagement

Designing for disparate needs and requirements

Engagement between the police and local communities is complex, as 'policing and services need to be able to address the complexities of the ways in which different groups and individuals negotiate often difficult and traumatic episodes and situations in their lives' (Wessels, 2009: 512). Accordingly, the literature on online forms of engagement rightfully stresses the need to consider divergent needs and requirements for different user groups and activities. As other authors have noted, the choice of engagement depends on a variety or rational and irrational (Ebbers et al., 2016) as well as instrumental and expressive factors (Frimpong et al., 2019) that differ greatly between individuals and situations.

The extant literature on online engagement emphasizes that technologies must be accepted and adopted by public organizations – in our case the police – as well as local community members (Margetts and Dunleavy, 2002). For police users specifically,

conditions for acceptance seem to commonly revolve around operational considerations including efficiency, effectiveness, accountability, and management support (Chen et al., 2019). For community users, extant research indicates that there are large discrepancies in the types of police services required by, for example disadvantaged versus advantaged communities, where the disadvantaged predominantly seek emergency responses as opposed to seeking to report crimes (Louis and Greene, 2020). Similarly, citizen engagement has shown to be influenced by perceptions of police legitimacy (O'Connor, 2017).

However, a review of existing studies on online police-community engagement shows that most of these studies are descriptive in nature, focusing on either the organizational side and their requirements (e.g., Jeanis et al., 2019; Medaglia and Zheng, 2017) or specific community user behaviours (Bonsón et al., 2015). The extant literature generally omits to compare and contrast divergent needs and requirements between different groups of users. As a result, we lack a cross-context understanding of how online services should look and function from the perspective of disparate user groups, in our case citizens and police forces. This greatly impedes the development of online platforms across contexts (Craig et al., 2010). Accordingly, we explicitly compare and contrast between police and community users and seek to uncover common as well as conflicting user-specific needs and requirements within these use contexts.

Designing for online engagement beyond social media

Community policing has traditionally been focused on personal, face-to-face engagement with members of the public, for instance by officers who 'walk the beat', conduct town hall meetings, or visit families, youth centres or homeless shelters. With the advent of social media, policing has expanded online to platforms such as Facebook, Twitter, Instagram, and YouTube. As a result, police forces can now reach a wide range of users and user communities very quickly without the high costs of outreach often required in face-to-face settings (Meijer, 2014). The extant literature on online engagement reflects this development and we already know a great deal about online engagement through social media. Previous studies inform us for example about content shared through Facebook and Twitter (Bonsón et al., 2015; 2019; Dai et al., 2017; Gascó et al., 2017; Williams et al., 2018), community

interaction during online events (Dai et al., 2017) and the use of government websites (Huang and Benyoucef, 2014).

However, social media are also limited in that community users predominantly use them to communicate with family or friends or to voice opinions, and not so much for other goals such as information gathering or interactive forms of engagement (Gintova, 2019). Furthermore, social media platforms restrict the type of content they support. Twitter famously limits posts to 280 characters, while TikTok allows 15 second videos, and Instagram focuses on photo walls.

Ultimately, social media are but one potential (online) platform for engagement, whereas previous research has shown that citizens utilize a variety of channels, including front desks, telephone, websites, social media and other application-based platforms, depending on a variety of goals, personal characteristics and situational triggers (Ebbers et al., 2016). Accordingly, there have been calls for inquiry into additional tools to reach 'hard-to-reach' groups in a manner that acknowledges that consultation is a process rather than a snapshot of interaction (Cook, 2002: 516). In our study, we accordingly seek to uncover user needs and requirements for online engagement without limiting ourselves to specifically social media.

Our study analyses the specific features and functionalities desired by police and community user groups and provides concrete design recommendations to promote the acceptance of online platforms for mutual engagement. In doing so, we follow recommendations to consider the 'interplay of organisational, technological and individual and cultural dynamics' (Bullock, 2018: 245) and build on extant research to provide design recommendations to overcome social and technological barriers in the engagement between public and civic groups (Meijer, 2015; Wessels, 2009).

Methodology

Approach
We used a mixed-method approach which combined quantitative inquiry to establish a data driven typology of user groups (sub-question 1) with in-depth, semi-structured interviews to investigate the specific features and functionalities of online engagement tools amongst user

groups (sub-question 2). Combined, these methods allow to make concrete recommendations for the design of online platforms for public-private engagement, particularly in the context of local safety and security. We collected our data from members of police forces engaged in community policing and community groups that were identified by these police forces as important recipients of community policing. The research was conducted in the context of an EU-funded research project with assistance from academic institutions and police organizations in eight countries, representing a diverse set of policing contexts: Belgium, Bulgaria, Croatia, Estonia, Finland, Germany, Republic of North Macedonia, and the United Kingdom. The research was led by the authors (i.e., development of research questions, conceptualizations, instructions, instruments, and data analyses), while data collection was done by partners in the respective country to ensure that participants could provide information in their own language. This mixed and multi-national approach enabled us to systematically investigate the heterogeneity, including overlaps and alignments, in expectations and requirements for online community policing efforts across multiple contexts and between the two core user groups (Walsham, 1995).

Sample

Partners were instructed to recruit ten citizens and ten police officers in their respective country. For citizens, we focused on young people, as this group had been identified by police forces in the project as main target group for their online community policing engagement efforts (reference masked for blind review). We stipulated that participants should be between 18-25 years; in addition, no vulnerable individuals should be selected (such as those with a learning disability). All participants must be able to give full informed consent to participate in the research' (reference masked for blind review). An equal number of men and women should be included. Members of police forces should be involved in community policing efforts for and with the main target group and the additional community (or communities). Overall, partners collected data from 86 police officers and 91 citizens (n=177). However, information from two countries, Bulgaria and Estonia, had to be excluded, as it missed relevant pieces of data required to address our first research sub question. The remaining six countries provided answers from 133 participants, 62 of which from police officers, 71 from young citizens. In the overall sample, 66.9% were male, 30.8%

female, while 2.3% of respondents chose to not disclose their gender. Across countries, the gender distribution ranged from 19% to 40% female. The average age of respondents across all countries was 32.45 years (range: 18 to 62 years). Tenure within the police was in average 20.42 years (range: 2 to 43 years). Table 14 provides an overview of police and community respondents per country.

Table 14. Sample characteristics.

Country	Police	Community	Type of community	Total
Belgium (BE)	10	10	Young university students	20
Croatia (HR)	10	10	Young red Cross volunteers	20
Finland (FI)	10	11	Young migrants	21
Germany (DE)	10	20*	Young migrants and young football hooligans	30
North Macedonia (MK)	10	10	Young university students	20
Great Britain (GB)	12	10	Young migrants	22
Total	62	71		133

* The German project partner recruited two community groups with ten interviews each.

Data collection and instruments

Data collection instruments were in the respective language of the countries and conducted by trained researchers within each country to ensure that respondents could express themselves unhindered by language issues and that interviewers were familiar with the local and cultural context of interviewees. The initial data collection instruments were provided in English, translated into the language of the partner country, and back-translated into English for validation. This step was important to ensure that translations were accurate and that the meanings of statements were not compromised in the translated versions (Temple and Young, 2004). Consultations were carried out between the authors and the country teams to identify and rectify any potential misinterpretations or ambiguities in the translations. The surveys and interview protocols were piloted in three countries to ensure the questions were easy to understand for both community and police members.

For our first sub-question, we utilized quantitative measures to explore potential disparities in user types and contexts based on measures of acceptance of community policing tools and perceptions of police accessibility. Acceptance of community policing tools was measured using two items adapted from Davis et al. (1989) ('given that I have access to a tool to support community policing efforts, I predict that I would use it', and

'assuming I have access to a tool to support community policing efforts, I intend to use it'; $\alpha = 0.88$; assessed on a 7-point Likert scale from 1: completely disagree to 7: completely agree). Perceptions of police accessibility was measured using two self-developed items ('the police is sufficiently visible online to the community partner and other intermediaries', and 'the police is sufficiently approachable online by the community partner or relevant intermediary'; $\alpha = 0.77$; scale from 1: completely disagree to 7: completely agree).

To assess user requirements and expectations for online community policing engagement for our second research question, we used a standardized open-ended interview protocol as this format allows for flexibility and scoping and can thus accommodate heterogeneity in answer styles and complexity across diverse contexts (Myers and Newman, 2007). Two different interview protocols where developed: one for members of police forces with expertise in community policing, the other for community members. In the interviews we asked participants to name at least five concrete functionalities and five concrete features community policing tools should have for four specific community policing purposes: information sharing, improved relationships and trust, increased accountability, and increased visibility and availability. These purposes had been identified as core elements of community policing efforts in a previous study in the same project (reference marked for blind review). In a second step, we further asked about the conditions for acceptance and rejection for the adoption of community policing tools ('What are the conditions that need to be fulfilled in order for you to adopt an ICT tool/system to support community policing? Which conditions would prevent you from using such a tool/system?'). All questions were systematically anchored to the person to foreground personal expectations and experiences (Schultze and Avital, 2011).

Analysis

To identify potential user typologies, we first determined contextual differences between countries and between police and community users in terms of perceptions of community policing tool acceptance and police accessibility by conducting a series of Kruskal-Wallis One-Way ANOVAs. We complimented this analysis with Dunn's pairwise comparisons to pinpoint significant differences to specific countries. We also looked for individual-level differences between users regardless of their country or community/police affiliation to

determine whether attitudes crosscut the traditional split into community–police and country groups. This clustering was conducted using the two aspects perceptions of police accessibility and community policing tool acceptance as direct proxies for a need for online community policing platforms and their potential to overcome community–police engagement gaps. For the analysis, we utilized a two-step cluster analysis using the complete sample of 133 people. This identified three disparate user types: sceptics, complacent users and high-need users. Details of this analysis and findings are presented in the results section.

Our analytic approach of the interview data followed thematic and content analytic principles (Auerback and Silverstein, 2003) to identify the main topics and themes. Interview answers were coded by both authors in several cycles, starting with open or initial coding (Charmaz, 2006) with repeated sessions of comparison and consolidation to create a shared coding scheme. All coding was conducted in the qualitative software package Atlas.ti. The final coding resulted in a total of 759 codes for requested features and functionalities for information sharing, 493 for improving relationships and trust, 361 for increasing accountability, 424 for increasing visibility and availability, 734 for conditions for adoption, and 454 for conditions for rejection. To reduce overlap of needs and requirements for these purposes we ultimately aggregated our codes under the following themes: objectives of community policing tools, requirements for community policing tools and conditions for acceptance. For requirements of community policing tools we distinguished between functionality, content, features and design. Only after the coding was completed, interviews were assigned to one of the three user clusters as identified in the quantitative analysis. This allowed us in a subsequent analysis step to systematically compare objectives, requirements, and acceptance conditions firstly between police officers and citizens and secondly amongst the three disparate clusters of users we identified through the exploratory cluster analysis.

Results

Identifying user types in police and community users
In exploring disparate user types, the first obvious distinction in our sample is a comparison between police versus community. We did not find a significant difference regarding the

acceptance of online community policing tools (Chi-square = 3.47, p =.063, df = 1; see Table 15) as both community and police were highly positive towards community policing platforms for online engagement (median scores of 6 for both). However, police officers were significantly more positive about the degree of police accessibility (Chi-square=13.26, p=.000, df=1; median scores of 4.5 versus 3.5) than young community members in our sample (Chi-square=5.63, p=.018, df=1; median scores of 5 versus 4). The second obvious distinction is a comparison of countries. While we found significant differences in community policing tool acceptance (Chi-square=27.90, p=.000, df=5), these differences were entirely due to more critical perceptions by participants from North Macedonia (median of 4 versus 6 for community policing tool acceptance).

Table 15. Group differences for dependent variables (Kruskal-Wallis H).

Kruskal-Wallis H	Community-Police differences			Country differences		
	X^2	Df	p value	X^2	Df	p Value
Community policing tool acceptance	3.47	1	p = .063	27.90	5	p < .001
Police accessibility	13.26	1	p = .000	8.65	5	p = .124

These observations demonstrate the potential for online community policing engagement, as both police and community respondents indicated high rates of acceptance for online community policing tools. At the same time, we found considerable disparities between young people and police in their judgement about police's accessibility, indicating a need for better engagement. Interestingly, direct country comparisons failed to elicit meaningful differences to compare attitudes towards online community policing engagement. This suggests that police versus community differences are a more meaningful basis for comparison of community policing tool requirements than country differences.

Still, comparisons of community versus police remain high-level and may mask underlying disparities in attitudes within these two broad groups. We therefore conducted a subsequent exploratory cluster analysis at the individual level. The analysis confirmed that attitudes differed systematically across respondents in terms of police accessibility perceptions (F=41.9, df=2, p=.000, $\eta2$=0.52) and community policing tool acceptance

(F=90.9, df=2, p=.000, η2=0.70), establishing three clusters. We labelled the first cluster complacent users as they are characterized by a moderate perception of police accessibility combined with a moderate acceptance of online community policing platforms. The second cluster was characterized by lower perceptions of police accessibility but a strong desire for community policing tools. We thus labelled this cluster high-need users. The third cluster we refer to as sceptics, as they showed low ratings of police accessibility and at the same time a greater reluctance to adopt online community policing tools than other clusters. The complacent users cluster was the biggest one, followed by high-need users. Sceptics were the least frequent in our sample (Table 16). Comparing these clusters with the group-based findings, we found that they are closely aligned: a higher percentage of sceptics and high-need users among community users in line with the generally lower perceptions of police accessibility among young people in our sample, whereas police users tended to be largely complacent (see Figure 11 for a visualization).

Table 16. Results of exploratory cluster analysis centroids.

| | High-need users | Complacent users | Sceptics |
Scale [rating: 1-7]	Mean rating	Mean rating	Mean rating
Police accessibility	2.55	5.06	2.77
	('disagree')	('slightly agree)	('slightly disagree')
Community policing tool acceptance	6.36 ('agree/strongly agree')	5.84 ('agree')	3.31 ('slightly disagree)
Number of people in the cluster	47 (36.2%)	59 (45.4%)	24 (18.5%)

Figure 11. Frequency of user types amongst young people and police officers.
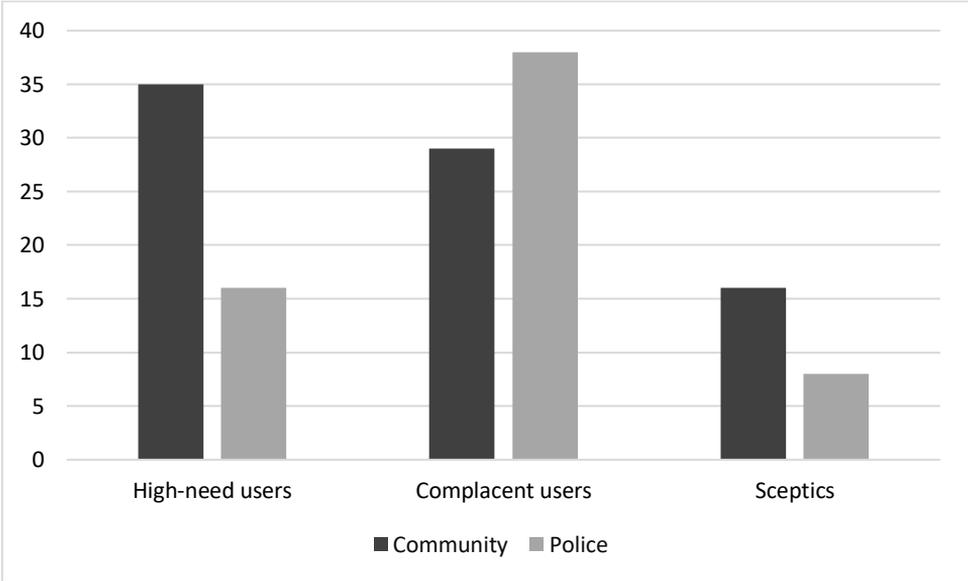
This indicates that for the systematic investigation of design expectations, an individual-level analysis is more appropriate than a coarser analysis based purely on group-membership such as police or community. For our subsequent qualitative analysis of conditions for acceptance as well as the features and functionalities desired for online community policing engagement we therefore assigned every participant to the respective cluster of high-need user, complacent user, or sceptic.

Shared online community policing engagement conditions and design expectations

Goals for using community policing tools and conditions for their acceptance. Police and community respondents mentioned the same two goals for adopting online community policing platforms: to improve mutual communication and to improve cooperation and collaboration between police and young communities. To accomplish these objectives, acceptance and usage of community policing platforms is key. Police officers and young community members named several common conditions for acceptance, namely 1) a baseline of mutual trust, 2) availability and accessibility of the community policing tool, 3) availability and accessibility of community policing officers who use the tool, 4)

affordability and cost-effectiveness, 5) clear and shared terms of use and usage guidelines, 6) availability of tech support and 7) education and training in how to use the tool. In addition, the police respondents voiced the need for 'support from senior managers' and a broad acceptance within the police organization. Acceptance conditions thus combined technical issues with questions of resources, costs, support, shared rules, and a pre-existing relationship in the form of trust.

Necessary functionalities. In terms of specific ICT-requirements, both groups focused on the technical aspects of the community policing tool (possibility of 'rapid communication' and information sharing, 'GPS integration,' 'reliability' and 'stability'), followed by data management ('anonymity' of users, 'data protection,' 'transparency' and 'traceability of information') and 'up-to-date content.' The request for personal anonymity as well as transparency of information flows is interesting as on first glance, they seem to contradict each other. Young respondents claimed that they would use the tool if it provided sufficient personal protection from the police for themselves but would be able to see what information the police have and what is done with this information. The police respondents equally recognized these two requirements as prerequisite to promote mutual trust during tool use.

Expected content. Police and community respondents agreed on a number of contents they wished to see on the community policing tool: local crime statistics, announcements on local events, police activities, and general safety related news. Both user groups also asked for updates regarding their own case and information from databases of police, prosecutor, and legal support officers. However, community users emphasized their own case progress and responses to their inquiries, while police officers required information on their investigations. Lastly, online community policing platforms should provide a meaningful platform to address 'common questions and concerns' through a FAQ page or portal.

Expected features. Both groups would like to see an integration of the community policing platform with existing platforms and provide meaningful access to and integration with services such as Facebook and WhatsApp and allow for the sending of textual and visual information such as pictures and videos. Other desired features were more security-

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specific, referring to 'data collection' and 'analysis' options for crime-related information as well as 'verification of information' provided by police and community users.

      Design preferences. Shared design preferences expect the community policing platform tool to be 'clear', 'accessible' and 'easy to use.' For instance, users generally asked for a 'modern' and 'official' look, in line with the desired image of the police. Furthermore, respondents asked for a 'uniform design' across mobile and web-based applications and adaptability for different communities and languages. Figure 12 visualizes the shared community and police user requirements for online community policing platforms.

Figure 12. Shared goals, conditions and design requirements for online community policing engagement tools.

Police

Conditions for acceptance

Mutual trust

Accessibility & availability of tool & officers

Sufficient resources, cost & time effective tool

Defined terms of use

Tech support

Education & training

Adherence to privacy legislation

Management support & organizational buy-in

Tech support

Goals of ICT

Bidirectional communication between the police, other authorities and multiple communities

Improved cooperation and collaboration

Requirements of ICT

Functionality

Reliable & Stable

Rapid sharing and responding

Daily updates of content

Anonymous use and protection of data

Transparant and traceable info

GPS integration

Content

Local crime info

Local news, events, announcements, police activity

Personal (case) info

FAQ

Database connectivity

Images & video

Features

Social media integration

Mail and messaging

Reporting

Feedback & complaint

Data collection & analysis

Service and contact portal

Design

Modern & official

For specific communities

Uniform across platforms

Easy to use

Clear & accessible

Multiple languages

Community

Conditions for acceptance

Mutual trust

Accessibility & availability of tool & officers

Free tool

Defined terms of use

Tech support

Adherence to privacy legislation

Figure 12. Shared goals, conditions and design requirements for online community policing engagement tools.

Requirements specific to high-need users, complacent users and sceptics

Next to the shared expectations, we also found needs and requirements specific to high-need, complacent and sceptic users. These flag up important disparities in expectations and needs across user groups that need to be addressed collectively for comprehensive online community policing engagement.

Goals, conditions and tool requirements specific to high-need users. Police and community in the high-needs user cluster often did not have experience using online services to engage with the other group. Interestingly, both sides mentioned different goals for online engagement: while police officers were interested in community policing tools to 'enhance police performance', young people in our sample were focused on the creation of trust. Consequently, young people emphasized features that allow personalized contacts ('pictures of local officers and ability to contact officers based on specific characteristics such as age or gender), reporting without personal consequences and the ability for 'continuous access.' Police officers, in contrast, had more specific requests: 'usage statistics,' 'call integration' and 'support for the elderly.' Alignment with community users can be found in their request for not tracking users during their use of the platform. Figure 13 visualizes the additional conditions and requirements for high-need police and community users.

**Figure 13. Specific conditions and requirements for high-need users.**
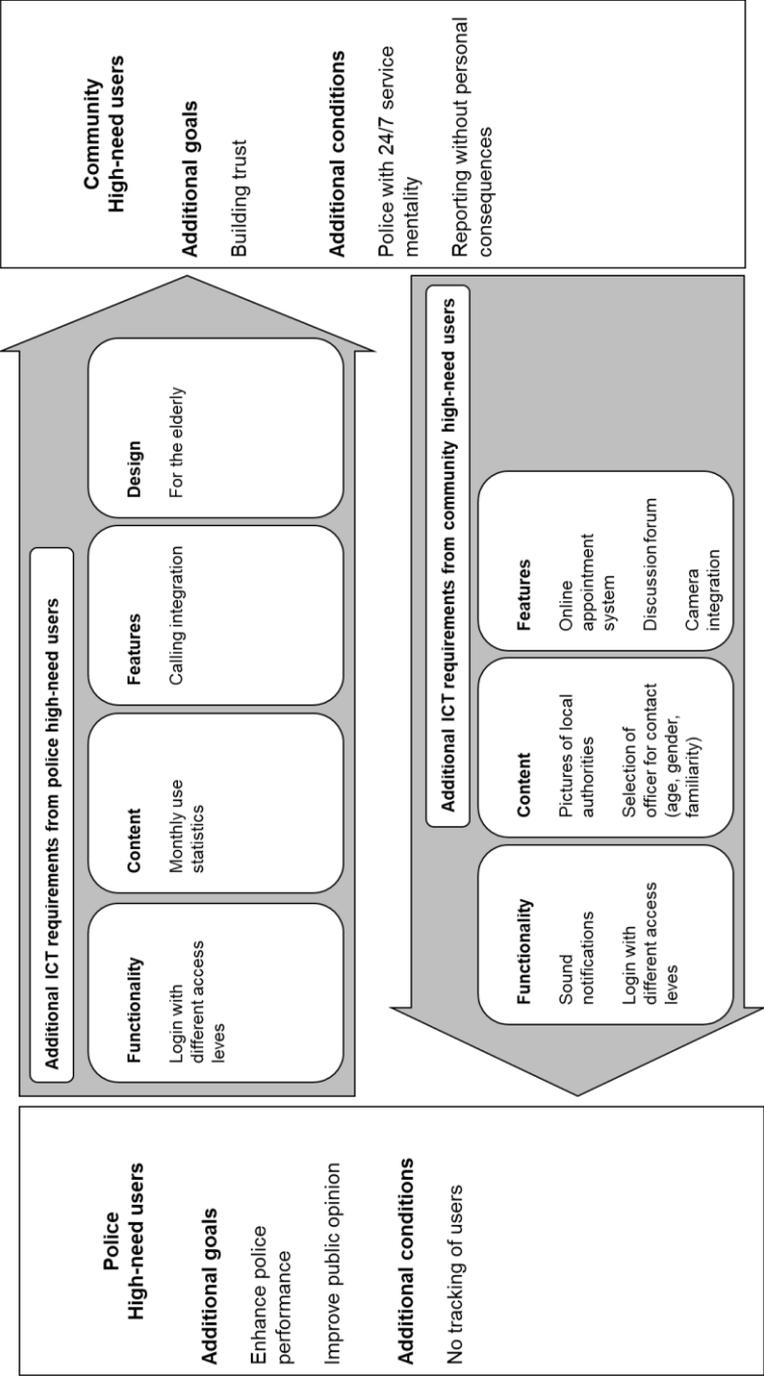
Goals, conditions and tool requirements specific to complacent users. Users classified as complacent often already had experience with online engagement with the other group, for example, through online policing portals or via social media such as Facebook. The 'complacency' of this groups might be explainable, at least in part, by their shared recognition that online community policing tools need to stand next to other engagement efforts, either in terms of 'traditional communication tools' (police officers) or in the form of personal presence of police in the community (young people). Furthermore, these users often mentioned that there already existed a relationship of trust between police and community users which they sought to build on. Accordingly, these users commonly mentioned criteria that might further mutual engagement such as 'organizing local events' or the possibility for 'regular contact' with police officers (young community members). Although most of these additional features seem fairly evident, the police and community users emphasized disparate use aspects that require further attention. Police respondents were commonly already engaging with communities through social media such as Facebook but sought to improve their engagement specifically with younger audiences as these have been more difficult to reach. Furthermore, police users wished to do so using a tool that does not replace traditional forms of communication but supports additional information sharing (including 'guides for organizing activities', information on local safety organizations, 'verification of news items' and 'sharing of documents' through attachments) and the observation of specific opportunities for intervention. Interestingly, the community respondents seemed open to these initiatives provided the tool allowed them to engage in a very personalized manner. Specifically, community respondents classified as complacent users strongly emphasized recognizability of police users, 'regular contact' with specific officers, and a wider presence of these officers in the community. Accordingly, online engagement should support personal contact rather than replace it. The greater familiarity with (online) engagement tools is also apparent in police officers' request to provide 'feedback during developmental processes' and 'possibilities for testing.' Figure 14 summarizes the additional flavors for complacent users.

Figure 14. Specific conditions and requirements for complacent users.

Complacent community users

Additional conditions

Presence of the police in the community

Additional ICT requirements from complacent police users

Content

Guides for organizing local activities

Information on local neighborhood watch

Features

Integrated app development feedback

Document attachments

Info verification

Additional ICT requirements from complacent community users

Functionality

Offline functionality

Light software

Content

Positive news

Recognizable officers

Features

Regular contact with officers

Design

Recognizable design & logo

Complacent police users

Additional goals

Communication with parents of young people

Observation of needs and intervention

Additional conditions

Operational and system integration

Testing possibility

Alongside traditional communication tools

Goals, conditions and tool requirements specific to sceptics. The police and community respondents we classified as sceptics mentioned far fewer specific tool requirements, and instead focused on conditions for acceptance that have not yet been met. Police sceptics expected online engagement tools to help 'promote social responsibility' within the community. Community sceptics in turn voiced a desire for the police to adopt a 'more preventive approach' to policing and a 'service mentality' as pre-condition to adopting community policing tools. In terms of the few specific tool requirements, police sceptics mentioned the option to record audio and video and access to current rules and procedures that are in place. Community sceptics additionally requested content in the languages of minority groups to get younger users to engage and search functions to find information relevant to them. However, both police and community sceptics mentioned that there is currently insufficient trust and motivation to use online tools to engage with each other. Accordingly, these respondents were sceptical regarding the ability of online tools to promote engagement between the police and young people, as they lack mutual trust and motivation to engage to begin with. Figure 15 below summarizes the specific conditions and requirements of sceptics.

Figure 15. Specific conditions and requirements for sceptic users.

Community Sceptics

Additional goals
Easy and quick access to relevant information

Police adopt apreventive approach to policing

Additional conditions
Increased mutual trust

Increased user motivation

Incentives for use

Police with 24/7 service mentality

Additional ICT requirements from police sceptics

Content
Legislative information

Functionality
Audio and video recording

Additional ICT requirements from community sceptics

Design
Specific for younger users

Multiple languages, incorporating minority groups

Functionality
Search function

Police Sceptics

Additional goals
Create social responsibility

Additional conditions
Increased mutual trust

Increased user motivation

Discussion

The extant literature on online engagement highlights the challenges of designing for disparate user groups with different overlapping and contrasting needs and requirements. Many studies have been conducted over the past decade to understand how and why public organizations and citizens utilize social media for engagement (Bullock, 2018; Gupta et al., 2006; Meijer, 2015; Wessels, 2009). However, these studies have been predominantly descriptive and have largely limited themselves to social media as the channel for online communication. For that reason, in this study we combined exploration – of potential user groups without presupposing a police-community dichotomy – and exploitation – comparing and contrasting user needs and requirements – to provide design recommendations for successful online engagement between different public and civic users independent of specific channels or platforms.

Our study suggests that overall, police and community alike are positive about the potential of online community policing engagement tools. We find that users are willing to adopt ICT to improve cooperation and collaboration if a baseline of mutual trust is met. This validates assertions that online platforms provide considerable potential to improve mutual engagement (Bertot et al., 2012; Bonsón et al., 2019; Dai et al., 2017; Kavanaugh et al., 2012). Yet, our study also demonstrates that this overall view requires differentiation. We found underlying clusters of complacent users, high-need users, and sceptics, leading to a more fine-grained individual level differentiation of user needs and requirements (Margetts and Dunleavy, 2002). The three clusters which emerged through our analysis cut across police and community groups as well as countries, which suggests that traditional boundaries of country or group members may be less meaningful than often assumed and that instead fault lines may run across such abstract, pre-defined characteristics. The notion of user clusters recommends itself a fruitful alternative which can create novel and crucial insights into specific user needs and requirements.

Using these clusters, we were able to pin-point similarities and disparities in expectations and needs across user groups. These findings take seriously previous studies that assert that we must consider individual-level factors (Ebbers et al., 2016; Frimpong et al., 2019). Discerning between these three different user groups not only helps explain

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differences in needs and requirements between police and community users across different countries, but this approach also informs how we might design online platforms to cater specifically for complacent users, high-need users and sceptics among potential police and community users. In doing so, we build on previous research on the design of online platforms across use-contexts (e.g., Craig et al., 2010) and help explain why online community policing efforts often achieve mixed results.

Our study purposefully investigated self-prescribed user requirements for online community policing engagement instead of existing engagement practices. Thus, where previous research on online engagement focused on the use of existing communication channels such as social media (e.g., Bertot et al., 2012; Bullock, 2018; Gascó et al., 2017; Williams et al., 2018), we took a step back and left the type of channel open, therefore also incorporating the possibility of adopting tools such as websites, games, apps, and other unspecified forms of ICT-mediated online engagement. We found that potential users indeed offered a wide range of prescriptions for online engagement in terms of design, desired features, functionalities, and content that are not possible through social media channels such as Facebook, Twitter, Instagram or TikTok. In doing so, we build on previous research that has explored the potential and limitations of online engagement beyond face-to-face interaction (Meijer, 2014) as well as previous studies on potential online channels for engagement for different goals and purposes that users might have (Cook, 2002; Ebbers et al., 2016; Gintova, 2019).

In terms of practical implications, our study allows for specific design considerations to address user needs and requirements. Many of the desired features and functionalities are shared, regardless of police or community affiliation or complacent, high-need or sceptic use-context. For instance, functionalities such as anonymous use and protection of data as well as the need for transparent and traceable information were widely shared. Furthermore, users requested a broad range of content, including local news and crime information as well as personal case information and connectivity to other public agencies. Accordingly, it is possible to design online engagement platforms with a broad appeal to diverse user groups – for police as well as for communities.

However, we can also formulate design recommendations specific to complacent users, high-need users and sceptics, respectively. For example, high-need users emphasized

the need for login limitations and different levels of access to the platform as well the possibility to select specific officers for contact, with pictures of these officers. This suggest a heightened need for individualization, which depending on the platform is often possible to design for. Similarly, complacent users emphasized more local empowerment-oriented content and functionalities, including guides for organizing local activities, information on local neighbourhood watch groups, and positive news about the local community. These users also stressed a desire for independence through mobility and light software requirements as well as offline functionality. This suggests that even complacent users with moderate perceptions of police accessibility and acceptance of community policing tools recognize the potential of online engagement.

That said, our findings regarding the sceptics group of users also reflect limitations of online platforms. Specifically, our recommendations reflect previous findings that negative perceptions of police legitimacy limit openness to (online) forms of communication (Louis and Greene, 2020; Van der Giessen et al., 2017). Users we classify as sceptics require increased mutual trust before being willing to adopt online forms of engagement and point the finger at each other for needed changes (e.g., police desiring increased local social responsibility, community members requiring a more preventive policing response). We must therefore be cautious about implementing online platforms for engagement when perceptions of trust are low.

Lastly, we identified design recommendations that are not specific to social media. We find that though the online platform should feature some form of social media integration, many of the desired functionalities, features and design considerations may be challenging to implement through current social media platforms. Specifically, among the shared features and functionalities requested are data collection and analysis functionality, anonymity guarantees, ownership and traceability of information, database connectivity, login access differentiation and verification of information functionality. These findings indicate that many users request more complex and individualized processes as well as more control over these processes than social media allow for (Cook, 2002).

Several limitations of our study also need to be mentioned. First, our theoretical sampling for 133 participants across six countries provided a broad spectrum of experiences which we argue captures the heterogeneity inherent in the rational and irrational (Ebbers et

al., 2016) as well as instrumental and expressive factors (Frimpong et al., 2019) that may impact community policing tool acceptance and use. However, we must be cautious to consider these findings representative of any one country or group due to the small number of respondents for any one group (community, police, high-need users, complacent users, sceptics). Second, our study is based on perceptions provided by users about potential online platforms for community policing. Accordingly, we did not capture actual experiences with online platforms and how they directly or indirectly influenced user needs and requirements.

Based on these limitations, we make two recommendations for future research. First, to fully capture nuances in needs and requirements that may exist within one design context (e.g., community policing officers in one specific area engaging with a specific sub-group of community members), we advocate investigations to validate and expand the notion of user clusters and their importance for differential designs of engagement platforms. Second, our study was focused on police and young community members, while similar user typologies are likely to exist also in other contexts where targeted and group-sensitive online engagement is key. Exploring optimal design configurations in these settings can, in combination with observations of actual usage and its challenges, provide crucial pointers for further refining user experiences and reducing barriers to engagement online.

Funding statement

and citizens, 2) developing communications technology to facilitate the co-creation of security and 3) designing, developing and delivering training about community policing.

6. Conclusion and discussion

The overall aim of this dissertation is to advance our understanding of how actors with disparate needs and requirements can collaboratively foster safety and security.

Promoting local safety and security is a multifaceted social and managerial challenge, fraught with practical and theoretical problems. In four studies, I address these aspects, looking at the potential different actors and boundaries involved in collaboration, the importance of the social context in which collaborations for safety and security take place, the collective sensemaking processes that take place among and between the actors involved and how these shape their individual and joint responses, and the needs and requirements of actors for (online) engagement for safety and security. In doing so, I've shed new light on our understanding of the co-creation of safety and security. In this final chapter, I summarize the main findings and contributions of the studies that make up this dissertation and highlight the implications (and limitations) of these findings. Finally, I will reflect on potential avenues for future research.

Theoretical implications

The boundaries and disparate identities of collaboration

My research on the role of identity in cross-boundary collaboration makes important contributions to the study of identity, and previous research on the role of identity in various forms of collaboration (Kellogg, 2011; Litchfield et al., 2018; Miscenko and Day, 2015). We argue that scholarly interest in the role of identity in various forms of cross-boundary collaboration has increased greatly in recent decades. So much so, that 70% of all the studies we found are from the last decade. As a result, we consider the literature to be highly fragmented and heterogenous across different streams of literature, as well as different levels of organizing.

We contribute to previous research by integrating this body of literature across roles of identity and levels of organizing of the collaboration. Specifically, we propose a structure to study the influence of identity on cross-boundary collaboration which can be used to understand this influence, and compare our extant knowledge across levels of organizing.

By providing an integrative overview of extant research on the role of identity in cross-boundary collaboration in terms of methodological approaches, levels of analysis and roles of theoretical perspectives and concepts, we hope to provide both researchers and practitioners with an accessible, comprehensive and structured understanding of our extant knowledge. Furthermore, we identify gaps in the literature for future studies and make concrete suggestions future research.

For instance, we argue that future research should focus on consolidating extant knowledge on the influence of identity on cross-boundary collaboration, integrating insights from different streams of literature and across levels of organizing insofar as possible. An important step would be to investigate to what extent identity influences can be integrated across different levels of collaboration and collaborative contexts. We also suggest that future research should focus on empirically testing proposed theories, as quantitative studies are underrepresented.

Furthermore, this study has important recommendations and implications specifically for research on co-creating security, which we address through the other studies in this dissertation. Of particular note, one of the gaps we found in the literature on the role of identity in cross-boundary collaboration pertained to a lack of consideration for more complex collaborations involving multiple disparate identities (Eisenhardt et al., 2016; Ferraro et al., 2015). We found that the vast majority of the studies incorporated a single identity boundary (for example an occupation, or specific collective identity), and studied processes of collaboration for this specific boundary.

We consider this particularly problematic for understanding the co-creation of security, as this is a particularly complex context that involves multiple stakeholders with disparate identities, who are engaging across different personal, group, and organizational boundaries (e.g., Eisenhardt et al., 2016; Ferraro et al., 2015). We address this gap in our study on collective sensemaking in the local response to a grand challenge (Van der Giessen et al., 2021, Ch. 4). We also find that safety and security contexts are very much underrepresented in this literature. We address this shortcoming directly in our study on the importance of the social context for community policing (Van der Giessen et al., 2017, Ch. 3), and by explicitly focusing this dissertation on safety and security contexts (Van der Giessen et al., 2016, Ch. 3; Van der Giessen et al., 2021, Ch. 4; Ch. 5).

Similarly, we also find that most of the studies in our review incorporate identity as a stable boundary across which collaboration takes place, rather than as a dynamic concept which changes over time as stakeholders continue to collaborate. Though we found a few studies that do so through various sensemaking and framing processes, we find that more could be done to study the dialectical relationship between identity and collaboration, and how collaborations are shaped by, but also shape, the identity of those involved. This is an important omission for understanding how actors understand and act on persistent safety and security challenges over time (Colquitt and George, 2011; Howard-Grenville et al., 2014; Tsui, 2013) and one that we address in our study on collective sensemaking in the local response to a grand challenge (Van der Giessen et al., 2021, Ch. 4).

Lastly, we also found that some articles suggest that collaboration can take place despite the involvement of highly disparate identities, if particular relational and contextual conditions are met. Specifically, some articles suggest the potential for collaboration if a relationship of respect and trust exists between the collaboration stakeholders (e.g., Beck and Plowman, 2014; Holtzhausen, 2014; Daymond and Rooney, 2018; Huemer, 2014), and we also found one study that emphasized the potential of ICT mediated engagement for social exchange and collaboration (Gal et al., 2014). We address these two gaps in this dissertation, considering trust and legitimacy (Van der Giessen et al., 2017, Ch. 3) and needs and requirements for online engagement between police and community stakeholders specifically (Ch. 5). Our findings in Chapter 5 echo the assertion that trust and legitimacy are important for (more specifically) online engagement.

The role of the social context on co-creating safety and security – European community policing

My research makes important contributions to the study of community policing specifically, but also has implications for the role of social context in the implementation of collaborative solutions to foster safety and security more generally. A long tradition in management research shows that the social context has a major impact on the meaning, interpretation and implementation of practices (Hofstede, 1993; Terpstra and Fyfe, 2015; Jacobs et al., 2008), and community policing is only one example of this impact (Van der Giessen et al., 2017, Ch. 3).

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This chapter contributes to our understanding of contextuality for the co-creation of safety and security in two ways. First, we illustrate and emphasize the context-specific nature of community policing. Traditional community policing research draws on two historical views: a 'golden isles view' where somewhere in the modern world community policing works well and a 'golden age history' where sometime in the past the relationship between police and citizens was harmonious (Brogden and Nijhar, 2005). Based on a socio-historical review, we show that community policing has never been singularly successful anywhere. Community policing has developed gradually and in a very localized and fragmented manner over the past two centuries, leading to mixed results (Van der Giessen et al., 2017, Ch. 3). Accordingly, we argue that there is no 'one size fits all' approach to community policing and that local needs and requirements differ drastically based on context. In fact, we argue that also within communities and police forces, differences exist regarding what community policing is, or what it should look like in practice (Hail, 2015a; also an explicit finding in Ch. 5). As such, this case exemplifies the contextuality and evolving nature of the co-creation of safety and security.

Second, based on this socio-historical review of community policing as well as our own theorizing based on our coding of qualitative data, we argue that one of the reasons community policing fails is due to a lack of mutual trust and legitimacy between police and community members. Citizen support is highly dependent on trust and legitimacy (Jackson and Gau, 2016; Kääriäinen and Siren 2012; Myhill. 2012; Skogan 2006). Building on this body of research, we propose a framework for the interplay between local context, perceptions of legitimacy and trust and community policing partnership for local safety and security. In doing so, we specify under which socio-contextual conditions local community members are willing to cooperate, collaborate, or partner with their local police forces for joint community policing efforts (Van der Giessen et al., 2017, Ch. 3).

The process of co-creating safety and security – responding to a refugee crisis

My research also makes important contributions to our understanding the process of co-creating safety and security. Taking a collective sensemaking lens and applying it to the local response to a refugee crisis as our case, we uncovered how actors make sense of, and

position themselves in, the local response to a grand challenge and subsequently, how they enact the situation and impact the collective response.

We argue that – to date – the study of collective sensemaking has focused too much on established and tightly coupled systems of formal actors (Cornelissen et al., 2014; Maitlis, 2005; Weick, 1993) as well as on relatively straightforward organizational divides (see also Ch. 2). As a result, we know relatively less about how actors may respond to more complex problems that involve iterated interactions between diverse actors with different views of the issue and of what is required (Ferraro et al., 2015). Furthermore, the relatively short-lived crises studied to date are not representative of persistent challenges where safety and security challenges extend beyond the initial crisis and despite ongoing efforts to alleviate these situations (Eisenhardt et al., 2016).

We contribute to the extant literature in two ways. First, we propose that it is possible to understand the emergence of collective solutions to society's complex and persistent societal challenges (Eisenhardt et al., 2016; Ferraro et al., 2015), by investigating the sensemaking narratives of the diverse actors involved (Van der Giessen et al., 2021, Ch. 4). We contribute to the literature on how individuals make sense of extreme contexts (Brown et al., 2008; Maitlis and Sonenshein, 2010) by looking at how people make sense of grand challenges. Specifically, we conceptualize grand challenges as extreme contexts (Hällgren et al., 2018) that are particularly complex and persistent and we investigate how individuals construct narratives and compress the grand challenge into a personal understanding.

Second, we contribute to extant theorizing on collective sensemaking (Maitlis, 2005; Quinn and Worline, 2008; Weick, 1995; Weick and Roberts, 1993) by adding the influence of complexity and persistence of grand challenges to the understanding of collective sensemaking. Specifically, we identify three patterns of emergent collective sensemaking and show how these inform individual and collective responses over time. In doing so, we answer calls to deepen our understanding of the distributed and heterogeneous nature of organizing in extreme contexts (Hällgren et al., 2018; Maitlis, 2005).

Designing for disparate needs and requirements – online engagement for European community policing

Finally, this dissertation has important implications for the design of ICT tools for online engagement between police and community stakeholders. Specifically, by proposing a typology of user-groups and specifying their group-specific needs and requirements. Police organizations have increasingly worked to engage with communities online, be it for information sharing and gathering (DePuala et al., 2018; Walsh and O'Conner, 2019), local empowerment (Turner, 2010), or broader public relations efforts (Walsh and O'Connor, 2019). Yet, the success of online engagement has been limited, due to reasons including motivational, access and democratic divides (Epstein et al., 2014). Moreover, most of the extant research to date on online police-community engagement have been descriptive in nature (Bullock, 2018; Gupta et al., 2006; Meijer, 2015; Wessels, 2009), focusing on either the organizational requirements (e.g., Jeanis et al., 2019; Medaglia and Zheng, 2017) or specific community user behaviours (Bonsón et al., 2015). These two sides are rarely compared or contrasted, so we know relatively little about the extent to which user needs and requirements are similar or divergent between different groups of users.

Our study builds on previous research on engagement through online platforms in three ways. First, we find that, overall, police and community actors are positive about the potential of online community policing engagement tools and are willing to use such tools if a baseline of trust is met. This supports previous assertions that online platforms hold potential to improve mutual engagement between police and community users (Bertot et al., 2012; Bonsón et al., 2019; Dai et al., 2017; Kavanaugh et al., 2012) and emphasizes the importance of trust (Beck and Plowman, 2014; Holtzhausen, 2014; Daymond and Rooney, 2018; Huemer, 2014; Van der Giessen et al., 2017, Ch. 3).

Second, whereas previous studies predominantly apply a police-community dichotomy in establishing needs and requirements, we opted to conduct an exploratory cluster analysis to derive user contexts from the data, without superimposing predefined user groups. We ultimately distinguish between high-need users, sceptics and complacent users, with their own individual needs and requirements. Accordingly, we answer previous calls to consider individual-level factors (Ebbers et al., 2016; Frimpong et al., 2019) and build on

previous research to explain why online community policing efforts achieve mixed results (e.g., Craig et al., 2010).

Third, while previous studies on online engagement focused on existing online social media platforms (e.g., Bertot et al., 2012; Bullock, 2018; Gascó et al., 2017; Williams et al., 2018), we extended our range to also include any other type of channel, such as websites, games and apps. We found a wide range of design considerations, desired features, functionalities and content that are not possible through social media channels such as Facebook, Twitter or Instagram. Accordingly, we contribute to previous studies on the potential and limitations of online engagement (Cook, 2002; Ebbers et al., 2016; Gintova, 2019; Meijer, 2014) and through a wider range of platforms. Please find Table 17 below for a summary of the contributions of the studies in this dissertation.

Table 17. Summary of problems, questions and contributions for the studies in this dissertation.

Study	Main findings	Contribution(s)
Taking stock and moving forward: a decade of research on the role of identity in cross-boundary collaboration (Ch. 2)	Research on the role of identity in cross-boundary collaboration has grown tremendously in the last 10 years. As a result, this body of literature is increasingly vast, heterogeneous, and fragmented. This literature can be classified along two dimensions: the level of organizing of the collaboration and the role of identity in this collaboration. Most articles focus on collaborations across organizational boundaries, and with identity predominant incorporated as a singular barrier to collaboration. Empirically, articles are heavily skewed toward qualitative and theoretical work.	We contribute to the study of the role of identity of various forms of collaboration by integrating this body of literature across roles of identity and levels of organizing of the collaboration We propose a structure to study the role of identity in cross-boundary collaboration which can be used to understand this influence, and compare our extant knowledge across levels of organizing We identify gaps in the literature for future studies. We suggest future research should consider complex forms of collaboration, with more than one identity related boundary. Furthermore, we suggest that we require more quantitative testing or proposed relationships, particularly for identity processes (rather than identity boundaries as input).
Community Policing: The Relevance of Social Contexts (Ch. 3)	Community policing is not a uniform concept and the local implementation is highly contingent on the local, social context	We contribute to the literature on community policing by discussing community policing variations across time (historical) and space (geographical). In doing so, we argue against the common application of community

	Police-community engagement for community policing is highly contingent on mutual trust and perceived legitimacy	policing as a 'one size fits all' approach to preventive policing.
		We contribute to the study of community policing by proposing a model that captures the interplay between local context, perceptions of legitimacy and trust and community policing partnerships for local safety and security.
		We make recommendations for practice to incorporate context-specificity into their approaches to community policing.
Collective sensemaking in the local response to a grand challenge: recovery, alleviation and change oriented responses to a refugee crisis (Ch. 4)	We identify three collective sensemaking narratives which actors use to validate action strategies aimed at alleviation, personal recovery, or structural change; and as characterized by different forms of interaction and emergent collective sensemaking.	We contribute to the literature on how individuals make sense of extreme contexts by looking at how people make sense of grand challenges. Specifically, we conceptualize grand challenges as extreme contexts that are particularly complex and persistent and we investigate how individuals construct narratives and compress the grand challenge into a personal understanding.
		We contribute to extant theorizing on collective sensemaking by adding the influence of complexity and persistence of grand challenges to the understanding of collective sensemaking. In doing so, we answer calls to deepen our understanding of the distributed and heterogeneous nature of organizing in extreme contexts.
Designing for successful online engagement - Comparing citizen and police expectations for community policing platforms (Ch. 5)	We found three distinct user groups with disparate needs and requirements for online community policing platforms: complacent users, high-need users, and sceptics.	We contribute to the study of community policing by suggesting that – contrary to traditional community policing research – user needs and requirements are more complex than a simple police-community dichotomy.
	We identified the general and user-group specific needs and requirements for online community policing engagement.	We also found that besides a need for safety and security, online engagement also requires a baseline of trust and legitimacy between police and community actors. Without this, actors will refuse to engage with each other online. This suggests an important limitation to online engagement for community policing – commonly presented as a one size fits all solution.
		We contribute to the study of ICT design in that we found that exploratory cluster analysis methods may be helpful in

inductively identifying user groups, which offers more practical solutions than assuming a group based on nationality, community or organizational affiliation.

We also offer concrete recommendations for the design of online community policing platforms to guide the online engagement across disparate user groups. These go beyond presupposed group affiliations or traditional social media platforms.

Reflecting on fostering safety and security

I started this dissertation with a discussion of what safety and security entails, where I argue that the distinction between (objective and subjective) safety and security is not so clear-cut, as natural and human, and intentional and unintentional factors intersect to create a complex safety *and* security challenge. Furthermore, I identified two important trends in the safety and security field, namely that safety and security challenges are getting increasingly frequent and complex (Eisenhardt et al., 2016; George et al., 2016), and that the digitization of society brings novel platforms for engagement but also holds challenges to online engagement (Bertot et al., 2012; Bonsón et al., 2019; Dai et al., 2017; Kavanaugh et al., 2012). Now that I've discussed the theoretical implications of the individual studies, I would like to return briefly to the overarching theme of safety and security.

In many ways, this dissertation is a testament to the interconnectedness of the concepts of safety *and* security (Van den Berg et al., 2021). This applies to our studies in the context of community policing (Van der Giessen et al., 2017, Ch. 3, Ch. 5) as well as the study on local responses to a refugee crisis (Van der Giessen et al., 2021, Ch. 4). For instance, we found that community policing in many ways entails a shift from a reactive focus on responding to crime, to also incorporate proactive efforts to promote safety and indirectly prevent crime, through addressing local problems, catering efforts to community specific needs and requirements, and empowering local communities (Hail, 2015a; Kappeler and Gaines, 2015; OSCE, 2008; Skogan, 2008). Accordingly, community policing involves an awareness that one way to prevent crime and require security measures, is to proactively foster safety (Van der Giessen et al., 2017, Ch. 3). Furthermore, when we consider specifically the needs and requirements of users to engage with police officials online, they

mention a variety of aspects that relate to both safety and security (Ch. 5). Some of these relate to the online platform specifically (e.g., security against abuse of the tool, information sharing to promote local safety), while others are more general requirements of engagement (e.g. trust, which is fostered through the transparent and effective promotion of safety and security).

Also, when we consider the local response to a refugee crisis (Van der Giessen et al., 2021, Ch. 4), we see that safety and security are interconnected. A particularly pervasive sentiment we found among the people involved is that there must be a balance between safety and security, and refugee crises persist because the safety of displaced individuals is sacrificed in favor of (political) action on international security concerns. The irony is that feelings of insecurity due to refugee presence on the island among the local population as well as responding international actors were minimal. And yet, because of these international security concerns, we find thousands of refugees living in unsafe conditions.

I also specified in the introduction that I am particularly interested in the subjective side of safety and security, because negative perceptions can take on a life of their own, and through complex social dynamics lead to segregation, stigmatization, loss of social public space and a variety of economic and emotional concerns (Valera and Guàrdia, 2014; see also Hollway and Jefferson, 1997; Hummelsheim et al., 2011; Quillian and Pager, 2010; Vilalta, 2011). We elaborated on this notion theoretically from the perspectives of identity and sensemaking, where to put it simply, individuals act very differently, depending on their experiences and beliefs (Barton and Sutcliffe, 2009; Cornelissen et al., 2014; Farjoun and Starbuck, 2007; Rudolph and Repenning, 2002). We found that subjective experiences can form a powerful barrier to collaborative action, but also a strong motivator for mutual engagement depending on these beliefs and experiences (see also Ch. 2; Van der Giessen et al., 2021, Ch. 4; Ch. 5).

For examples of how the subjective experience of safety and security can lead to consequences such as segregation and stigmatization we have to look no further than the refugee sites we investigated on Lesbos (Van der Giessen et al., 2021, Ch. 4). One of these sites especially, is formally run by the military and used to detain refugees after their arrival. Even after this original processing, refugees are not allowed to leave the island of Lesbos, and are – as such – segregated and stigmatized. Zooming in on the subjective experiences of

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the actors in our study, we specifically found that their experiences while interacting with one another were fundamental in driving different alleviation, personal recovery, or structural change oriented actions (Van der Giessen et al., 2021, Ch. 4). This not only serves as an example of how individual identity and experiences drive sensemaking and action (Barton and Sutcliffe, 2009; Cornelissen et al., 2014; Farjoun and Starbuck, 2007; Rudolph and Repenning, 2002), it also results in a variety of emotional and economic concerns for the actors involved. Take for example the local population who are not only suffering economically because the refugee crisis is exacerbating a recession (Tsartas et al., 2019), but also suffering emotionally due to their experiences with the refugees and their treatment by other responding actors (Van der Giessen et al., 2021, Ch. 4).

Lastly, it is worthwhile to reflect on the two safety and security trends I identified in the introduction in light of this dissertation, specifically, the increasing incidence of complex safety and security challenges (Burke et al., 2016; Eisenhardt et al., 2016; Ferraro et al., 2015; Western, 2016; UNHCR, 2019), and the shift to digital media for engagement (Bertot et al., 2012; Bonsón et al., 2019; Dai et al., 2017; Kavanaugh et al., 2012). Taken together, I would argue that complex safety and security challenges will become more common, but simultaneously, there is also increased potential for mutual transparency and engagement.

We already see this in our study on the local response to a refugee crisis (Van der Giessen et al., 2021, Ch. 4). Specifically, virtually every actor we spoke with actively used online platforms such as WhatsApp and Facebook to create exposure, garner finances, coordinate action and otherwise share information with other actors (Van der Giessen et al., 2021, Ch. 4). In fact, this observation contributed to our shift to a sensemaking lens, as the use of online 'participatory structures' was so omnipresent that the use of it in itself was not a factor to distinguish actors (Ferraro et al., 2015: 22; Van der Giessen et al., 2021, Ch. 4). What this shows is that the advent of digital platforms for engagement in and of itself is not sufficient to address the (increasing) complexity of contemporary societal challenges. Rather, it raises additional questions regarding when and how these digital media can be leveraged to foster structural change. As we saw in the refugee crisis study, actors utilized these technologies but also often in competitive ways, indirectly inhibiting structural and collaborative solutions (Van der Giessen et al., 2021, Ch. 4).

However, this dissertation also confirmed that important questions remain regarding the adoption of ICT to address such complex issues. In the context of community policing, we found that willingness for mutual engagement is also dependent on perceptions of mutual trust and legitimacy, and this is particularly also the case for online and digital forms of engagement (Van der Giessen et al., 2017, Ch. 3, Ch. 5). We found that one group of potential ICT users, which we label as the sceptics, were particularly reluctant to adopt ICT for mutual engagement (Ch. 5) because they simply do not trust one another to utilize the platform in a way that is mutually beneficial. To rephrase it in terms of safety and security, these actors were concerned that the ICT tools would not be used to foster safety, and rather, might pose security risks.

Taken together, this dissertation illustrates that ICT and online platforms for engagement play a prominent role in complex safety and security challenges, but that important questions remain regarding the adoption and use of these platforms. More specifically, even if actors are willing to adopt ICT, we find that they may not necessarily do so in a way that fosters collaboration or structural solutions. Accordingly, this dissertation affirms my assertions that grand challenges and digitization are important developments, but also that important questions remain regarding how to deal with these developments in the future.

Theoretical reflection on incorporating multiple disciplines

In many ways, this dissertation answers the call for more management scholarship on major societal challenges (Eisenhardt et al., 2016; Ferraro et al., 2015; George et al., 2016). As other authors have noted, addressing complex societal issues requires working across disciplines (Eisenhardt et al., 2016; Ferraro et al., 2015). Furthermore, there is great potential to develop novel theory by building bridges between different literatures or disciplines (Colquitt and George, 2011).

However, multi-disciplinary approaches are rather uncommon within the management field, as it can often be excessively challenging to incorporate insights from multiple disciplines within a singular article for publication. Particularly when it comes to developing novel theory, there is a tremendous emphasis on developing a focused and persuasive line of arguments, clearly defining constructs, and carving out a space for your

contributions within an existing literature (Cornelissen, 2017). Considering identity theory specifically, we have already shown that most of these studies pertain to a singular identity or organizational boundary (see also Ch. 2). The need for focus and a specific space within extant literature can be at odds with the complexity inherent in addressing complex, and grand societal challenges.

This dissertation, and indeed other dissertations that are comprised of multiple studies on the same subject, provide a unique opportunity to address challenges from multiple angles and disciplines. In the previous section, I have outlined individual contributions to studies of criminology, identity, sensemaking, extreme contexts and ICT design. It is worth emphasizing that these individual contributions were possible because we considered a particularly complex topic, namely co-creating safety and security. I believe that – by incorporating multi-disciplinary interests – I have also been (fortunate to be) able to make novel contributions to extant literatures and address safety and security challenges in novel ways. Perhaps the most straightforward example can be found in chapter 5, where we combine insights from ICT design and criminology (also building on Van der Giessen et al., 2017, Ch. 3, considering disparate community policing contexts) to understand how ICT design might assist in promoting police-community engagement online.

Rather than shying away, we as scholars are obligated to embrace the complexity inherent in many of society's greatest challenges and find solutions (Eisenhardt et al., 2016; Ferraro, et al., 2015; Jones and Felps, 2013; Mitchell et al., 2016; Porter and Kramer, 2006). This dissertation is a testament that it is possible to generate novel insights and practical recommendations by studying more complex issues and collaborations, but also that addressing such challenges in an integrative manner requires insights from multiple disciplines.

Practical implications

Community policing professionals
Based on our research, we make five recommendations for community policing professionals to incorporate the role of the social context, and with it the importance of mutual trust and perceptions of legitimacy in their work. First, we suggest that community policing efforts have to consider the social context of each specific (sub)community in order

to be successful. As such, it is not possible to simply export community policing best practices developed in a given time and context and assume positive results. This has important implications for government and law enforcement policy makers. These practitioners should be hesitant to import community policing practices from other contexts, even if these have been shown to be effective in that particular context. Instead, we suggest that policy makers inform themselves - or are additionally informed through training or education - regarding the importance, needs and requirements of their own unique social context.

Second, we suggest that signs of dissatisfaction of community members with core policing tasks must be taken seriously as this influences readiness to participate in community policing. This includes adequately dealing with, for example, perceptions of racial profiling, frequency of victimization, injustice, lack of concern on the part of the police and ineffectiveness of policing efforts. The implication for local law enforcement organizations is that, though online forms of engagement hold potential for community policing practices, these are not a replacement for traditional offline community policing methods. Additional efforts to respond to community perceptions (beyond dealing with objective crime) might be helpful, and fostered through additional training for law enforcement for instance in communication, language training, cultural awareness. At the policy level, this might include programs to counter problems of racism but also an increased prioritization of perceived safety and security, and police image, both online and offline.

Third, we suggest that pleasing the majority or over-emphasizing needs and requirements of one sub-group over another can trigger dissatisfaction within other segments of the community. This means all needs and concerns of local communities, not just those of a majority, must be considered when agenda setting, empowering local actors or visibly enforcing the law. Perceptions of trust and legitimacy are important to foster engagement between communities and the police, which requires sensitivity to (perceived) fairness and equality. Furthermore, as we found that specifically smaller minority and hard to reach groups have particularly low perceptions of trust and legitimacy, prioritizing community policing efforts and promoting engagement with these groups might be particularly beneficial. Here, we recommend law enforcement practitioners to specifically consider individual needs and requirements, rather than presupposing a more simplistic community-

police dichotomy, or even comparing between two communities. This might be done, for instance, through fostering more individual, personal and face-to-face approaches at the policy level. The local neighbourhood officer might consider striking up a conversation with local community members and developing a bond, which would be more beneficial to developing mutual trust than an online approach.

Fourth, we suggest that joint community policing efforts can only work when the community accepts police involvement within their community and the police accepts the community as a partner for local safety and security. It is important that all stakeholders acknowledge this, particularly when the socio-political context is such that police and community roles have historically been very distinct. Community policing should therefore involve not only an empowerment of local actors, but it might also include an effort to motivate and embed police actors within local communities if the context demands it. As we found that not all police officers are equally accepting of community policing as a policing approach, or consider a partnership with the local community as part of their role, an important step would be to educate these specific law enforcement officials on the potential and merits of community policing.

Lastly, though it is not possible to generalize community policing practices developed in a certain context to other settings without considering the local context, we suggest that it is desirable to learn from various local contexts to subsequently apply these lessons to own communities and community policing practices. We highly recommend that law enforcement agencies organize events such as workshops and work-practice conferences to exchange best practices and experiences.

Furthermore, we make two recommendations specifically for the design of ICT tools to support police-community collaborations for safety and security. First, we find that not everyone is willing to adopt ICT for online engagement, the user-group we label as sceptics. We recommend that – for those users who reject ICT tools for online engagement – promoting mutual trust and legitimacy through more traditional, offline means, is a required preceding step. This means that law enforcement and other public safety organizations who are attempting to implement online forms of engagement while conditions of perceived (mutual) trust and legitimacy are not met, shift their strategy to offline forms of community policing, aimed at building these relationships.

Second, for the users who are willing to adopt ICT for online engagement, we provide specific user-group specific recommendations for the content, features, design and functionality of online engagement tools. These include specifications for non-social media channels, which are required for data collection and analysis functionality, anonymity guarantees, ownership and traceability of information, database connectivity, login access differentiation and verification of information functionality. We recommend that organizations who are designing ICT mediated forms of engagement for community policing specifically consider our findings, and implement our design needs and requirements (see Ch. 5) in their tool development.

However, also for other contexts of online engagement, we argue that our bottom-up data driven approach to determine user groups provides a meaningful and more fine-grained way to determine use contexts. Accordingly, we recommend ICT design be more user and data driven at the individual level, and that these designers conduct an exploratory analysis of user needs, rather than presupposing needs based on group membership, nationality, geographic location, or other assumed cluster of needs.

Grand Challenge responders

Our study on the collective sensemaking processes of actors responding to the local instantiation of a grand challenge has several important practical implications, for responders to refugee crises (specifically) and grand challenges more generally (Van der Giessen, et al., 2021, Ch. 4). This study has several important practical implications.

First, our findings highlight how important it is that professional actors involved wield their knowledge and skills in such a way that it enables and informs the more transient international volunteers, and alleviates the burden of the refugee crisis on local inhabitants as much as possible. This indicates a need for education and training for international volunteers and NGO organizations about the impact of a crisis on the local population, as well as the impact that their own involvement may have on these local actors. Without awareness and proper training, international volunteers and NGO's may inadvertently exacerbate the difficulties for the people living their daily lives in these extreme contexts.

Furthermore, to better respond to the transient nature of international volunteers and NGO's, additional structures must be in place, to allow for learning and development

beyond the engagement of individual actors. This can entail many (small) actions that nevertheless allow for organizational learning, such as evolving training and development for arriving actors by those who are leaving, working documents that are added on by actors over time, or explicit experimentation and development goals at the organizational level. We are aware that these recommendations might be at odds with the uncertain development of crisis contexts, but are nevertheless necessary to prevent many of the challenges we found (see Van der Giessen et al., 2021, Ch. 4).

Second, we suggest that the collective sensemaking narratives we found help explain why actors – despite good intentions – still instigate and perpetuate division and isolation. We argue that awareness of these different narratives may help actors better understand each other's situation and support them to engage with each other in more productive and positive ways (Van der Giessen et al., 2021, Ch. 4). One way to incorporate this in the field is through the training of arriving volunteers as we mentioned previously, but this recommendation has broader implications, and also includes awareness and understanding between different formal and informal actors. We saw that some actors started novel collaborations with each other to their mutual benefit (and that of the local population and refugees). Accordingly, we highly recommend that – instead of working in isolation or competition – responding organizations actively seek out collaborations and mutually added value through their engagement. One of the reasons this is not happening enough in our data, is competition for resources. However, we also saw that these collaborations are perceived favourably, and might garner more resources to respond, as well as allow them to do so more efficiently (thus saving resources at the same time). Accordingly, we found that it is very important for actors to engage in such a way that they promote the development of joint activities, networks and the implementation of integrative experiments to enhance their sense of joint agency under a united humanitarian cause. Performing alone or in isolation, even if the act is in itself meaningful (e.g., providing blankets, responding to beach landings), perpetuates competition between actors and impedes structural changes in the long run.

Lastly, our findings have important implications for other researchers studying ongoing responses to safety and security challenges such as grand challenges, as well as other extreme contexts. Particularly, we found that local actors felt that some actors benefit from their hardship, and referred to these actors as 'voluntourists.' As researchers we must

be very careful to weigh our motives, methods and contributions, to make sure the benefit of our research sufficiently warrants our engagement in such situations.

I personally struggled very much with this question, often feeling guilty as I also personally benefit from my research – as it allows me to complete my PhD. I sincerely hope my research will help local actors in responding (jointly) to matters of safety and security, making my intrusions worth the cost. The implication for other researchers is that they should be aware of not only the ethical considerations of researching extreme contexts such as a refugee crisis, but they also have to be sensitive to perceptions of other actors involved, and how they come across, and personally impact the situation. This is not only important to not add (negatively) to an already challenging context, but also to allow for continued goodwill between local actors, responding (professional) international organizations and the research community. This can be implemented through training or a workshop for Ph.D. students for instance, who are about to embark on such a study. Many NGOs already provide such a training to their volunteers. Before my own engagement I acquired ethical approval, but in retrospect, approval is not sufficient without awareness and preparation.

Reflecting on my methodology and limitations

As I specified in the introduction, my personal views of the world inherently influenced how I approached my research; the methods I have chosen and how I interpret my data to come to any truth claims. The main example of this is my reliance on social constructivism to understand the world (Charmaz, 2000). This perspective is particularly clear in my work on collective sensemaking in a grand challenge (Van der Giessen et al., 2021, Ch. 4), though certainly also present in both studies that focus on the community policing context (Van der Giessen et al., 2017, Ch. 3 and Ch. 5). These studies heavily rely on interviews, where we strive to uncover the experiences and perceptions of our interviewees, and reconstruct how they understand reality – in order to understand how they see and shape the world around them. Further research is required to determine the extent to which my findings based on the 'worlds' I have investigated are transferable to others. I have noted this in the limitations of the relevant studies, and I also call for research in other contexts in the future research section.

Nevertheless, I still hold that my findings, though perhaps not fully transferable to other contexts or actors (full transferability was also not a goal of this research), does hold powerful implications. Certainly, other challenging contexts have aspects in common with the ones I studied, and different actors likely come from similar backgrounds, engage in similar tasks, and do so based on similar motivations. Furthermore, I did consider multiple safety and security contexts (including data collection on community policing approaches and a refugee crisis response, but also incorporating broader literatures on extreme contexts, crises and the role of identity on collaboration). As such, I do believe there are learning points regardless.

A second note I would like to make is on the potential (and limitations) of my theorizing based on the collected data. Three of my studies involve theorizing based on predominantly qualitative data, which always involves a certain level of subjectivity. Though I have naturally taken the appropriate steps to be transparent about my decisions, steps taken, and interpretations in the individual studies, they are nevertheless based on my interests. Simply put, another researcher with the same dataset might find something else entirely more interesting, and dedicate his research to that aspect. One example of this is my abductive theorizing for the collective sensemaking in the local response to a grand challenge, where I describe how I arrived at the collective sensemaking lens. Accordingly, I do not preclude the possibility that another researcher might have focused on another aspect of the refugee crisis (or a different grand challenge context entirely), and come to a different interpretation of how events unfolded.

Another note I would like to make, is that my research has changed and evolved through the course of this PhD, just like I have as a person and researcher. The most concrete example of this evolution is found in my assertion that trust and perceptions of legitimacy are fundamental to the co-creation of safety and security. I first encountered this notion during a preliminary literature review, which ultimately became part of the socio-historical discussion of community policing (Van der Giessen et al., 2017, Ch. 3). We were also in the process of collecting and analysing qualitative data for the Unity project I was involved in at the time (H2020 program, grant agreement number 653729), where trust and legitimacy also surfaced as fundamental to police-community co-creation. Accordingly, we discussed these aspects in that publication, and proposed a model to describe how trust and perceived

legitimacy influence collaboration, cooperation and partnering between police and community stakeholders. It wouldn't be until four years later however, that we were able to fully analyse and articulate the role of trust and perceived legitimacy, this time in the context of specifying needs and requirements for online engagement (Ch. 5). Accordingly, the difference between these two works (one book chapter, the second one an article under review), signifies how they contribute in different ways, and also embody how my understanding of concepts has evolved and been refined along the way.

A second, less tangible example of the influence of my own development, can be found in my publication on the collective sensemaking in a refugee crisis (Van der Giessen et al., 2021, Ch. 4). Due to the stringent requirements of the article format, I didn't have enough paper real estate to fully articulate how much this article changed as my personal state of mind changed, or how much I felt personally affected by that research project. For instance, the final version of this article has a rather positive tone, focusing on the best intentions of actors and the potential of joint action and systemic change. This makes for much more pleasant reading than an earlier version, where I took systemic change as the basis, and described out all the factors and reasons that caused people and collaborations to break down, give up, and move away for various reasons.

I should note that this change did not change the overall message of the article or conclusions drawn, but it certainly gives a different feeling to reading the article. The truth is, I felt very much guilty, pessimistic and physically ill after the data collection visits. Guilty, because of my privilege and – at least in part – selfish motivations to conduct research, pessimistic because despite the potential for systemic change, the refugee crisis persists (to this day), and ill, as I contracted three types of food poisoning visiting the refugee sites. This also added to my sense of guilt, as I got sick in a matter of weeks, while many thousands of men, women and children stay there for months if not years.

I suppose that what I'm trying to convey is that I strived to be transparent, but the studies in this dissertation are nevertheless snapshots in time of who I am as a researcher and human being. I hope my research resonates with other people, particularly the human beings behind the sanitized labels of 'law enforcement', 'police', 'community members', 'volunteers', 'local inhabitants', 'professionals', 'stakeholders' and 'actors' who showed me a snapshot of their lives.

Future research

This dissertation raises several questions for future studies which offer potential avenues to better understand the co-creation of safety and security. These have already been addressed in the individual studies. However, there are some larger questions that deserve to be repeated and emphasized here.

First, adopting the process model we proposed in our study on the role of identity in cross-boundary collaboration, we suggest future research focus more on the interaction between identity differences as drivers (or boundaries for) co-creation (I) and the processes that actors individually and collectively engage in to jointly foster safety and security (P). For instance, in our study on the collective sensemaking in the local response to a grand challenge, we were not able to fully understand to what extent the identity construction activities and action strategies actors ultimately adopted were influenced by the different identities and backgrounds of these different actors. In other words, though we found that different types of actors (e.g., local inhabitants, volunteers, professionals) were more or less inclined toward specific sensemaking narratives, we could not fully disentangle the influence of these different backgrounds. As we found that most research on the role of identity in collaboration focuses on singular identities and the organizational level of collaboration (our working paper) and we uncovered the collective sensemaking processes that actors engage in (Van der Giessen et al., 2021, Ch. 4), seeing how these drivers and processes interact is a logical next step.

Second, one recommendation we made for future research in one of the studies (Ch. 5) is also applicable more generally. A common theme across the studies in this dissertation is to acknowledge the influence of the (local) context (Ch. 2; Van der Giessen et al., 2017, Ch. 3) as well as that of individual factors (Van der Giessen et al., 2021, Ch. 4 and Ch. 5). Both notions raise the question to what extent our findings are truly transferable to other contexts and actors, within the realm of co-creating safety and security, but also in terms of other forms of collaboration between disparate actors. Accordingly, the findings in this dissertation require empirical testing, across different contexts as well as involving different actors. One suggestion I make here based on my research (Ch. 5) is to adopt a data driven approach to determine user needs and requirements. We found that not presupposing a

community-police dichotomy allowed for a more fine-grained analysis of their needs and requirements, and a similar methodology may lead to novel insights regarding the co-creation of safety and security involving other actors and contexts – and specifying these from the ground up.

References

Allen B, Tamindael LE, Bickerton SH and Cho W (2020) Does citizen coproduction lead to better urban services in smart cities projects? An empirical study on e-participation in a mobile big data platform. *Government Information Quarterly* 37(1): 1-10.

Alvesson M (2010) Self-doubters, strugglers, storytellers, surfers and others: Images of self-identities in organization studies. *Human Relations* 63(2): 193–217

Alvesson M, Ashcraft K and Thomas R (2008) Identity matters: Reflections on the construction of identity scholarship in organization studies. *Organization* 15(1): 5–28.

Alvesson M and Kärreman D (2007) Constructing mystery: Empirical matters in theory development. *The Academy of Management Review* 32(4): 1265-81.

Ashforth BE (2001) Role transitions in organizational life: An identity-based perspective. Mahwah, NJ: Lawrence Erlbaum Associates.

Ashforth BE and Gibbs BW (1990) The Double-edge of organizational legitimation. *Organization science* 1(2): 177-94.

Ashforth BE, Harrison SH and Corley KG (2008) Identification in organizations: An examination of four fundamental questions. *Journal of Management* 34(3): 325–74.

Auerback CF and Silverstein LB (2003) Qualitative data: An introduction to coding and analysis. NY: NYU Press.

Barnes I and Eagle T (2007) The role of community engagement in neighbourhood policing. *Policing* 1(2): 161-72.

Barton MA and Sutcliffe KM (2009) Overcoming dysfunctional momentum: Organizational safety as a social achievement. *Human Relations* 62(9): 1327–56.

Battilana J, Leca B and Boxenbaum E (2009) How actors change institutions: Towards a theory of institutional entrepreneurship. *The Academy of Management Annals* 3(1): 65-107.

Bayerl PS, Van der Giessen M and Jacobs G (2016) Unity – 1st stakeholder analysis: Shared themes and concepts. H2020-Project Unity Deliverable 3.2. Rotterdam, NL: Centre

of Excellence in Public Safety Management/Rotterdam School of Management, Erasmus University Rotterdam.

Bayerl PS, Van der Giessen M and Jacobs G (2016b). Unity – Gathering of user requirements for CP tools. H2020-Project Unity deliverable 3.4. Rotterdam, NL: Centre of Excellence in Public Safety Management/Rotterdam School of Management, Erasmus University Rotterdam.

Beck A (2002) International and regional initiatives: Providing appropriate international assistance. Crime and Policing in Transitional Societies Conference paper. Johannesburg: 235-40.

Bertot JC, Jaeger PT and Hansen D (2012) The impact of polices on government social media usage: Issues, challenges, and recommendations. *Government Information Quarterly* 29(1): 30-40.

Bittner E (1970) The functions of the police in modern society. Rockville, MD: National Institute of Mental Health, Center for Studies of Crime and Delinquency.

Bogers M, Afuah A and Bastian B (2010) Users as innovators: A review, critique, and future research directions. *Journal of Management* 36(4): 857–75.

Boje DM (2001) Narrative methods for organizational and communication research. London, UK: SAGE.

Bonsón E, Perea D and Bednárova M (2019) Twitter as a tool for citizen engagement: An empirical study of the Andalusian Municipalities. *Government Information Quarterly* 36(3): 480-89.

Bonsón E, Royo S and Ratkai M (2015) Citizens' engagement on local governments' Facebook sites. An empirical analysis: The impact of different media on content types in Western Europe. *Government Information Quarterly* 32(1): 52-62.

Boudes T and Laroche H (2009) Taking off the heat: Narrative sensemaking in post-crisis inquiry reports. *Organization Studies* 30(4): 377-96.

Bowling B and Philips C (2003) Policing ethnic minority communities. In: Newburn T (ed) Handbook of Policing. Devon, UK: Wilan Publishing.

Bradford B (2012) Policing and social identity: Procedural justice, inclusion and cooperation between police and public. *Policing and Society: An International Journal of Research and Police* 24(1): 22-43.

Bradford B, Jackson J and Hough M (2013) Police legitimacy in action: Lessons for theory and practice. In: Reisig M and Kane R (eds) Oxford handbook of Police and Policing. Oxford, UK: Oxford University Press.

Brenig M and Proeger T (2018) Putting a price tag on security: Subjective well-Being and willingness-to-pay for crime reduction in Europe. *Journal of Happiness Studies* 19(1): 145-66.

Brogden M (1982) The Police: Autonomy and consent. London, UK: Academic Press.

Brogden M and Nijhar P (2005) Community policing. National and international models and approaches. London, UK: Willan.

Brown AD (2015) Identities and identity work in organizations. *International Journal of Management Reviews* 17(1): 20–40.

Brown B and Benedict WR (2002) Perceptions of the police: Past findings, methodological issues, conceptual issues and policy implications. *Policing: An International Journal,* 25(3): 543-80.

Brown AD, Stacey P and Nandhakumar J (2008) Making sense of sensemaking narratives. *Human Relations* 61(8): 1035-62.

Bullock K (2018) The police use of social media: Transformation or normalisation? *Social Policy and Society* 17(2): 245-58.

Burke A, Lee-Koo K and McDonald M (2016) An ethics of global security. *Journal of Global Security Studies Advance* 1(1): 64–79.

Carroll JS (1998) Organizational learning activities in high-hazard industries: The logics underlying self-analysis. *Journal of Management Studies* 35(6): 699–717.

Carter D (1985) Hispanic perception of police performance: An empirical assessment. *Journal of Criminal Justice* 13(6): 487-500.

Casey J (2010) Implementing community policing in different countries and cultures. *Pakistan Journal of Criminology* 2(4): 55-70.

Chalfin A (2015) Economic costs of crime. In: Jennings WG, Higgins GE, Maldonado-Molina MM and Khey DN (eds) The Encyclopedia of Crime and Punishment. Hoboken, NJ: John Wiley and Sons, Inc.

Chan J (2011) Racial profiling and police subculture. *Canadian Journal of Criminology and Criminal Justice* 52(1): 87-93.

Chapman A (2020) A doctor's story: Inside the 'living hell' of Moria refugee camp. Available at: https://www.theguardian.com/world/2020/feb/09/moria-refugee-camp-doctors-story-lesbos-greece.

Charmaz K (2000) Grounded theory: Objectivist and constructivist methods. In: Denzin NK and Lincoln YS (eds) Handbook of qualitative research, 2nd edition. Thousand Oaks, CA: SAGE, 509-35.

Charmaz K (2006) Constructing grounded theory: A practical guide through qualitative analysis. London, UK: Sage Publications.

Chen YC, Hu LT, Tseng KC, Juang WJ and Chang CK (2019) Cross-boundary e-government systems: Determinants of performance. *Government Information Quarterly 36*(3): 449-59.

Christianson MK, Farkas MT, Sutcliffe KM and Weick KE (2009) Learning through rare events: Significant interruptions at the Baltimore & Ohio railroad museum. *Organization Science* 20(5): 846–60.

Colquitt JA and George G (2011) From the editors: Publishing in 'AMJ' – Part 1: Topic choice. *The Academy of Management Journal* 53(3): 432-35.

Colville I, Pye A and Carter M (2013) Organizing to counter terrorism: Sensemaking amidst dynamic complexity. *Human Relations* 66(9): 1201–23.

Cook D (2002) Consultation, for a Change? Engaging users and communities in the policy process. *Social Policy and Administration* 36(5): 516-31.

Corbin JM and Strauss AL (1998) Basics of qualitative research: Techniques and procedures for developing grounded theory. Newbury Park, CA: SAGE.

Cornelissen JP (2017) Editor's comments: Developing propositions, a process model, or a typology? Addressing the challenges of writing theory without a boilerplate. *Academy of Management Review* 42(1): 1-9.

Cornelissen JP, Haslam SA and Balmer JMT (2007) Social identity, organizational identity and corporate identity: Towards an integrated understanding of processes, patternings and products. *British Journal of Management* 18(s1): S1-S16.

Cornelissen JP, Mantere S and Vaara E (2014) The contraction of meaning: The combined effect of communication, emotions and materiality on sensemaking in the Stockwell shooting. *Journal of Management Studies* 51(5): 699-736.

Cova B and Dalli D (2009) Working consumers: The next step in marketing theory? *Marketing Theory* 9(3): 315–39.

Craig C, Marnoch G and Topping I (2010) Shared leadership with minority ethnic communities: Views from the police and the public in the UK. *Policing and Society* 20(3): 336-57.

Crawford A, Lister S and Wall D (2003) Great expectations: Contracted community policing in New Earswick. York, UK: Joseph Rowntree Foundation.

Cullen R and Sommers L (2011) Participatory democracy and the value of online community networks: An exploration of online and offline communities engaged in civil society and political activity. *Government Information Quarterly* 28(2)*:* 148-54.

Dai M, He W., Tian X, Giraldi A and Gu F. (2017) Working with communities on social media: Varieties in the use of Facebook and Twitter by local police' *Online Information Review* 41(6): 782-96.

Dario LM, Fradella HF, Verhagen M and Parry MM (2019) Assessing LGBT people's perceptions of police legitimacy. *Journal of Homosexuality* 67(7): 1-31.

Davis FD, Bagozzi RP and Warshaw PR (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science* 35(8): 982-1002.

De La Chaux M, Haugh H and Greenwood R (2017). Organizing refugee camps: 'Respected space' and 'listening posts'. *Academy of Management Discoveries* 4(2): 155-79.

Dekker R, Van den Brink P and Meijer A (2020) Social media adoption in the police: Barriers and strategies. *Government Information Quarterly* 37(2): 1-9.

Denyer D and Tranfield D (2009) Producing a systematic review. In: Buchanan DA and Bryman A (eds) The Sage handbook of organizational research methods. London, UK: Sage Publications: 671–89

DePaula N, Dincelli E and Harrison TM (2018) Toward a typology of government social media communication: Democratic goals, symbolic acts and self-preservation. *Government Information Quarterly* 35(1): 98-108.

Derlega VJ and Grzelak J (eds) (1982) Cooperation and helping behavior. New York: Academic Press.

Dirikx A, Gelders D and Parmentier S (2012) Police-youth relationships: A qualitative analysis of Flemish adolescents' attitudes toward the police. *European Journal of Criminology* 9(2): 191-205.

Dvoršek A (1996) Applicability of western police experiences - Desires and possibilities from the viewpoint of Slovenian Police. In: Pagon M (ed) Policing in Central and Eastern Europe: Comparing First hand Knowledge with Experience from the West. Slovenia: College of Police and Security Studies.

Ebbers WE, Jansen MGM, Pieterson WJ, Van de Wijngaert LAL (2016) Facts and feelings: The role of rational and irrational factors in citizens' channel choices. *Government Information Quarterly* 33(3)*:* 506-15.

Eisenhardt KM, Graebner ME and Sonenshein S (2016) Grand challenges and inductive methods: Rigor without rigor mortis. *Academy of Management Journal* 59(4): 1113-23.

Epstein D, Newhart M and Vernon R (2014) Not by technology alone: The "analog" aspects of online public engagement in policymaking. *Government Information Quarterly* 31(2): 337-44.

Farjoun M and Starbuck WH (2007) Organizing at and beyond the limits. *Organization Studies* 28(4): 541-66.

Ferraro F, Etzion D and Gehman J (2015) Tackling grand challenges pragmatically: Robust action revisited. *Organization Studies* 36(3): 363-90.

Franke N and Piller F (2004) Value creation by toolkits for user innovation and design: The case of the watch market. *Journal of Product Innovation Management* 21(6): 401–15.

Frimpong LK, Oteng-Ababio M, Owusu G and Wrigley-Asante C (2019) Public confidence in the police: Tests of instrumental and expressive models in a developing country city. *Police Practice and Research* 20(2): 139-55.

Fruhling H (2002) Changing the police in transitional countries: The case of Latin America. Paper presented at the Conference In Search of Security. Montreal.

Füller J and Matzler K (2007) Virtual product experience and customer participation - A chance for customer-centred, really new products. *Technovation* 27(6–7): 378–87.

Garud R, Hardy C and Maguire S (2007) Institutional entrepreneurship as embedded agency: An introduction to the special issue. *Organization Studies* 28(7): 957-69.

Gascó M, Bayerl PS, Denef S and Akhgar B (2017) What do citizens communicate about during crises? Analyzing Twitter use during the 2011 UK riots. *Government Information Quarterly* 34(4): 635-45.

George G, Howard-Grenville J, Joshi A and Tihanyi L (2016) Understanding and tackling societal grand challenges through management research. *Academy of Management Journal* 59(6): 1880-95.

Ginsberg A and Venkatraman N (1985) Contingency perspectives of organizational strategy: A critical review of the empirical research. *Academy of Management Review* 10(3): 421-34.

Gintova M (2019) Understanding government social media users: An analysis of interactions on immigration, refugees and citizenship Canada Twitter and Facebook. *Government Information Quarterly* 36(4): 1-10.

Glaser B (1978) Theoretical Sensitivity. Mill Valley, CA: Sociology Press.

Goldstein H (1979) Improving policing: A problem-oriented approach. *Crime and Delinquency* 25(2): 236-58.

Greene J (2000) Community policing in America: Changing the nature, structure, and function of the Police. In: Criminal Justice volume 3, Policies, Processes, and Decisions of the Criminal Justice System. Washington DC: National Institute of Justice: 299-370.

Grover V and Kohli R (2012) Cocreating IT value: New capabilities and metrics for multifirm environments. *MIS Quarterly* 36(1): 225–32.

Grönroos C (2011) Value co-creation in service logic: A critical analysis. *Marketing Theory* 11(3): 279–301.

Grönroos C (2012) Conceptualising value co-creation: A journey to the 1970s and back to the future. *Journal of Marketing Management* 28(13/14): 1520–34.

Gupta AK, Smith KG and Shalley CE (2006) The interplay between exploration and exploitation. *Academy of Management Journal* 49(4): 693-706.

Hail Y (2015a) CP across Europe. Document provided for the Unity project, October 26, 2015.

Hail Y (2015b) Procedural Justice, Legitimacy and CP. Document provided for the Unity project, October 26, 2015.

Hakanen T (2014) Co-creating integrated solutions within business networks: The KAM team as knowledge integrator. *Industrial Marketing Management* 43(7): 1195–203.

Hamilton-Smith N, Mackenzie S, Henry A and Davidones C (2014) Community policing and reassurance: Three studies, one narrative. *Criminology and Criminal Justice* 14(2): 160-78.

Hannah ST, Uhl-Bien M., Avolio BJ and Cavarretta FL (2009) A framework for examining leadership in extreme contexts. *The Leadership Quarterly* 20(6): 897-919.

Harley B and Cornelissen J (2020) Rigor With or Without Templates? The Pursuit of Methodological Rigor in Qualitative Research. *Organizational Research Methods* xx(x): 1-23.

Hällgren M, Rouleau L and De Rond M (2018) A matter of life or death: How extreme context research matters for management and organization studies. *Academy of Management Annals* 12(1): 111-53.

Heeks M, Reed S, Tafsiri M and Prince S (2018) The economic and social cost of crime. *Research Report 99*. ISSN: 1756-3666.

Hofstede G (1993) Cultural Constraints in Management Theories. *Academy of Management Perspectives* 7(1): 81-94.

Hollway W and Jefferson T (1997). The risk society in an age of anxiety: Situating fear of crime. *The British Journal of Sociology* 48(2): 255-66.

Howard-Grenville J, Buckle SJ, Hoskins BJ and George G (2014) From the editors: Climate change and management. *Academy of Management Journal* 57(3): 615-23.

Hoyer WD, Chandy RK, Dorotic M, Krafft M and Singh SS (2010) Consumer co-creation in new product development. *Journal of Service Research* 13(3): 283-96.

Hu PJH, Chen H, Hu HF, Larson C and Butierez C (2011) Law enforcement officers' acceptance of advanced e-government technology: A survey study of COPLINK Mobile. *Electronic Commerce Research and Applications* 10(1): 6-16.

Huang Z and Benyoucef M (2014) Usability and credibility of e-government websites. *Government Information Quarterly* 31(4): 584-95.

Hummelsheim D, Hirtenlehner H, Jackson J and Oberwittler D (2011) Social insecurities and fear of crime: A cross-National study on the impact of welfare state policies on crime-related anxieties. *European Sociological Review* 27(3): 327-45.

Innes M (2004) Signal crimes and signal disorders: Notes on deviance as communicative action. *The British journal of sociology* 55(3): 335-55.

Jackson J and Gau JM (2016) Carving up concepts? Differentiating between trust and legitimacy in public attitudes toward legal authority. In: Shockley E, Neal TMS, PytlikZillig L and Bornstein B (eds) Interdisciplinary perspectives on trust: Towards theoretical and methodological integration. New York: Springer.

Jacobs G, Christe-Zeyse J, Keegan A and Polos L (2008) Reactions to organizational identity threats in times of change: Illustrations from the German police. *Corporate Reputation Review* 11(3): 245-61.

Jeanis MN, Muniz CN, Molbert CL (2019) Law enforcement and social media usage: An analysis of engagement. *Policing: A Journal of Policy and Practice* 0(0): 1-14.

John T and Labropoulou E (2019) Fatal fire at packed refugee camp sparks riots among residents. Available at: https://edition.cnn.com/2019/09/30/europe/lesbos-moria-refugee-camp-greece-fire-riots-intl/index.html.

Jones TM and Felps W (2013) Shareholder wealth maximization and social welfare: A utilitarian critique. *Business Ethics Quarterly* 23(2): 207-38.

Kahn AE (1966). The tyranny of small decisions: Market failures, imperfections, and the limits of economics. *International Review for Social Sciences* 19(1): 23-47.

Kappeler VE and Gaines LK (2015) Community policing: A contemporary perspective (7th edition). Routledge: New York, London.

Kappeler VE, Sluder RD and Alpert GP (1998) Forces of deviance: Understanding the Dark Side of the Force (2nd edition). Prospect Heights, IL: Waveland Press.

Kavanaugh AL, Fox EA, Sheetz SD, Yang S, Li LT, Shoemaker DJ and Xie L (2012). Social media use by government: From the routine to the critical. *Government Information Quarterly* 29(4): 480–91.

Kääriäinen J (2007) Trust in the police in 16 European countries – A multilevel analysis. *European Journal of Criminology* 4(4): 409-35.

Kääriäinen J and Niemi J (2014) Distrust of the police in a Nordic welfare state: Victimization, discrimination, and trust in the police by Russian and Somali minorities in Helsinki. *Journal of Ethnicity in Criminal Justice* 12(1): 4-24.

Kääriäinen J and Sirén R (2012) Do the police trust in citizens? European comparisons. *European Journal of Criminology* 9(3): 276-89.

Ketokivi M and Mantere S (2010) Two strategies for inductive reasoning in organizational research. *The Academy of Management Review* 35(1): 315-33.

Kornberger M, Leixnering S, Meyer RE and Höllerer M (2018) Rethinking the sharing economy: The nature and organization of sharing in the 2015 refugee crisis. *Academy of Management Discoveries* 4(3): 314–35.

Kornberger M, Leixnering S and Meyer RE (2019) The logic of tact: How decisions happen in situations of crisis. *Organization Studies* 40(2): 239-66.

Kristensson P, Matthing J and Johansson N (2008) Key strategies for successful involvement of customers in the co-creation of new technology-based services. *International Journal of Service Industry Management* 19(4): 474-91.

Lai ER (2011) Collaboration: A literature review. *Pearson Research Report.*

Lanzara GF (1983) Ephemeral organizations in extreme environments: Emergence, strategy, extinction. *Journal of Management Studies* 20(1): 71-95.

Le Ber MJ and Branzei O (2010) Towards a critical theory value creation in cross-sector partnerships. *Organization* 17(5): 599-629.

Lee HD, Kim D, Woo Y and Reyns BW (2019) Determinants of citizen support for community-oriented policing. *Police Practice and Research* 20(1): 34-47.

Lee M and McGovern A (2014) Policing and media: Public relations, simulations and communications. Abingdon, Oxon: NY: Routledge.

Leonardi PM (2011) Innovation blindness: Culture, frames, and cross-boundary problem construction in the development of new technology concepts. *Organization Science* 22(2): 347-69.

Louis S, Greene JR (2020) Social context in police legitimacy: Giving meaning to police/community contacts. *Policing and Society* 30(6): 656-73.

Lusch RF and Vargo SL (eds) (2006) The service-dominant logic of marketing: Dialog, debate, and directions. Armonk, NY: M.E. Sharpe.

MacIntyre A (1981) After virtue: A study in moral theory. Paris: University of Note Dame Press.

Maitlis S (2005) The social processes of organizational sensemaking. *Academy of Management Journal* 48(1): 21-49.

Maitlis S and Christianson MK (2014) Sensemaking in organizations: Taking stock and moving forward. *The Academy of Management Annals* 8(1): 57-125.

Maitlis S and Sonenshein S (2010) Sensemaking in crisis and change: Inspiration and insights from Weick (1988). *Journal of Management Studies* 47(3): 551-580.

Manning PK (1997) Police work (2nd edition). Prospect Heights, IL: Waveland Press.

Mantere S and Ketokivi M (2013) Reasoning in organization science. *The Academy of Management Review* 38(1): 70-89.

March JG (1991) Exploration and exploitation in organizational learning. *Organization Science* 2(1): 71-87.

Marcus AA and Nichols ML (1999). On the edge: Heeding the warnings of unusual events. *Organization Science* 10(4): 482–99.

Margetts H and Dunleavy P (2002) Cultural barriers to e-government. Academic article for the report: 'Better public services through e-government'. London, UK: National Audit Office.

Marin I (2011) Community policing in Berlin. Background paper. International Conflict Research Institute. Accessed at http://www.incore.ulst.ac.uk/pdfs/wp_BerlinBackgroundPaperCAPT.pdf

Markets and Markets (2016) Public Safety and Security Market by Solution – Global Forecast to 2021. Retrieved from: http://www.marketsandmarkets.com/Market-Reports/public-safety-security-market-1024.html

Martin J (1982) Stories and scripts in organizational settings. In: Hastorf A and Isen A (eds) Cognitive social psychology. New York: Elsevier-North Holland: 225–305.

Mazerolle L, Bennett S, Davis J, Sargent E and Manning M (2013) Procedural justice and police legitimacy: A systematic review of the research evidence. *Journal of Experimental Criminology* 9(3): 245-74.

Mazumdar T, O'Donnell, G and Daouphars H (2019) Lesbos migrant camp children 'say they want to die'. Available at: https://www.bbc.com/news/av/world-europe-50814521.

Medaglia R and Zheng L (2017) Mapping government social media research and moving it forward: A framework and a research agenda. *Government Information Quarterly* 34(3): 496–510.

Meijer AJ (2014) New media and the coproduction of safety: An empirical analysis of Dutch practices. *American Review of Public Administration* 44(1): 17-34.

Meijer AJ (2015) E-governance innovation: Barriers and strategies. *Government Information Quarterly* 32(2): 198-206.

Médecins Sans Frontieres (2017) 2017 in figures. Available at: https://www.msf.org/international-activity-report-2017/greece.

Millie A and Herrington V (2005) Bridging the gap: Understanding reassurance policing. *The Howard Journal of Criminal Justice* 44(1): 41-56.

Miscenko D and Day DV (2015) Identity and identification at work. *Organizational Psychology Review* 6(3): 1-33.

Mitchell RK, Weaver GR, Agle BR, Bailey AD and Carlson J (2016) Stakeholder agency and social welfare: Pluralism and decision making in the multi-objective corporation. *Academy of Management Review* 41(2): 252-75.

Müller T and Van der Giessen M (2015) 'If he dies, I'll kill you.' Violence, paramedics and impression-management. *Studies In Symbolic Interaction volume 45. Contributions from European Symbolic Interactionists: Conflict and Cooperation*. Emerald Insight: 177-93.

Myers MD and Newman M (2007) The qualitative interview in IS research: Examining the craft. *Information and Organization* 17(1): 2–26.

Myhill A (2012) Community engagement in policing: Lessons from the literature. National Policing Improvement Agency. Accessed at http://whatworks.college.police.uk/Research/Documents/Community_engagement_lessons.pdf

O'Connor CD (2017) The police on Twitter: Image management, community building, and implications for policing in Canada. *Policing and Society* 27(8): 899-912.

OECD (2020) OECD Better Life Index. Accessible at:
https://www.oecdbetterlifeindex.org/topics/safety/

O'Neill M and McCarthy D (2012) (Re)negotiating police culture through partnership working: Trust, compromise and the 'new' pragmatism. *Criminology and Criminal Justice* 14(2): 143-59.

Organization for Security and Co-operation in Europe (2008) Good practices in building police-public partnerships. Vienna: OSCE.

Padgett JF and Powell WW (2012) The problem of emergence. In: Padgett JF and Powell WW (eds) The Emergence of Organizations and Markets. Princeton, NJ: Princeton University Press.

Pickles J (2019) Policing hate and bridging communities: A qualitative evaluation of relations between LGBT+ people and the police within the North East of England. *Policing and Society* 30(7): 741-59.

Podsakoff PM, MacKenzie SB, Bachrach DG and Podsakoff N (2005) The influence of management journals in the 1980s and 1990s. *Strategic Management Journal* 26(5): 473-88.

Polkinghorne DE (1988) Narrative knowing and the human sciences. Albany: State University of New York.

Porter ME and Kramer MR (2006) The link between competitive advantage and corporate social responsibility. *Harvard Business Review* 84(12): 78-92.

Powell EE and Baker T (2014) It's what you make of it: Founder identity and enacting strategic responses to adversity. *Academy of Management Journal* 57(5): 1406–33.

Quillian L and Pager D (2010) Estimating risk: Stereotype amplification and the perceived risk of criminal victimization. *Social Psychology Quarterly* 73(1): 79-104.

Quinn RW and Worline MC (2008) Enabling courageous collective action: Conversations from United Airlines flight 93. *Organization Science* 19(4): 497-516.

Ramaswamy V and Ozcan K (2018) What *is* co-creation? An interactional creation framework and its implications for value creation. *Journal of Business Research* 84: 196-205.

Ramirez R (1999) Value co-production: Intellectual origins and implications for practice and research. *Strategic Management Journal* 20(1): 49–65.

Rhodes C (2001) Writing organization, (re)presentation and control in narratives at work. Amsterdam, NL: John Benjamins.

Richardson JF (1974) Urban police in the United States. Port Washington, NY: National University Publications, Kennikat Press.

Robinson JA (1981) Personal narratives reconsidered. *Journal of American Folklore* 94: 58–85.

Roh S and Robinson M (2009) A geographic approach to racial profiling. The microanalysis and macro analysis of racial disparity in traffic stops. *Police Quarterly* 12(2): 137-69.

Roser T DeFillippi R and Samson A (2013) Managing your co-creation mix: Co-creation ventures in distinctive contexts. *European Business Review* 25(1): 20-41.

Rudolph JW and Repenning NP (2002) Disaster dynamics: Understanding the role of quantity in organizational collapse. *Administrative Science Quarterly* 47(1): 1-30.

Ryle G (1949) The Concept of mind. Chicago: University of Chicago Press.

Scaglion R and Condon RG (1980) Determinants of attitudes toward city police. *Criminology* 17(4): 485-94.

Schultze U and Avital M (2011) Designing interviews to generate rich data for information systems research. *Information and Organization* 21(1): 1–16.

Shepherd DA and Williams TA (2014) Local venturing as compassion organizing in the aftermath of a natural disaster: The role of localness and community in reducing suffering. *Journal of Management Studies* 51(6): 952-94.

Skogan WG (1994) Community participation and community policing. Presentation at the Workshop on Evaluating Police Service Delivery. University of Montreal and Solicitor general Canada, November 1994.

Skogan WG (2006) Police and community in Chicago: A tale of three cities. New York: Oxford University Press.

Skogan WG (2008) An overview of community policing: Origins, concepts and implementation. In: Williams T (ed) (2008) The handbook of knowledge based policing: Current conceptions and future directions. West Sussex, UK: Wiley and Sons: 43-58.

Sluss DM and Ashforth BE (2007) Relational identity and identification: Defining ourselves through work relationships. *Academy of Management Review* 32(1): 9–32.

Smith WK (2014) Dynamic decision making: A model of senior leaders managing strategic paradoxes. *Academy of Management Journal* 57(6): 1592–623.

Sonenshein S (2010) We're changing–or are we? Untangling the role of progressive, regressive, and stability narratives during strategic change implementation. *The Academy of Management Journal* 53(3): 477-512.

Staniforth A (2015) Unity – An Introduction to community policing in the UK. West Yorkshire, UK: West Yorkshire for Innovation, West Yorkshire Police.

Stryker S and Burke PJ (2000) The past, present, and future of an identity theory. *Social Psychology Quarterly* 63(4): 284–97.

Stutts NB and Barker RT (1999) The use of narrative paradigm theory in assessing audience value conflict in image advertising. *Management Communication Quarterly* 13(2): 209–44.

Sunshine J and Tyler T (2003) Moral solidarity, identification with the community, and the importance of procedural justice: The police as prototypical representatives of a groups moral values. *Social Psychology Quarterly* 66(2): 153-65.

Sveningsson S and Alvesson M (2003) Managerial identities: Organizational fragmentation, discourse and identity struggle. *Human Relations* 56(10): 1163–93.

Temple B and Young A (2004) Qualitative research and translation dilemmas. *Qualitative Research* 4(2): 161-78.

Terpstra J (2009) Community policing in practice: Ambitions and realization. *Policing: A Journal of Policy and Practice* 4(1): 64–72.

Terpstra J and Fyfe N (2015) Mind the implementation gap? Police reform and local policing in the Netherlands and Scotland. *Criminology and Criminal Justice* 15(5): 527-44.

Trojanowicz RC (1973) Juvenile delinquency: Concepts and control. Englewood Cliffs, NJ: Prentice Hall.

Trojanowicz RC and Dixon SL (1974). Criminal Justice and the Community. Englewood Cliffs, NL: Prentice Hall.

Trojanowicz RC, Trojanowcz JM and Moss FM (1975) Community based crime prevention. Pacific Palisades, CA: Goodyear Publishing Co.

Tsartas P, Kyriakaki A, Stavrinoudis T, Despotaki G, Doumi M, Sarantakou E and Tsilimpokos K (2019) Refugees and tourism: A case study from the islands of Chios and Lesvos, Greece. *Current Issues in Tourism* 23(1): 1-17.

Tsui AS (2013) The spirit of science and socially responsible scholarship. *Management and Organization Review* 9(3): 375-394.

Tyler TR (1990) Why people obey the law. New Haven, CT: Yale University.

Tyler TR (2001). Public trust and confidence in legal authorities: What do majority and minority group members want from the law and legal institutions? *Behavioral Sciences and the Law* 19(2): 215-35.

Tyler TR (2003) Procedural justice, legitimacy, and the effective rule of law. *Crime and Justice* 30: 283-357.

Tyler TR (2005) Policing in black and white: Ethnic group differences in trust and confidence in the police. *Police Quarterly* 8(3): 322-42.

UNHCR (2019) Global trends: Forced displacement in 2019. Available at: https://www.unhcr.org/globaltrends2019/.

Valera S and Guàrdia J (2014) Perceived insecurity and fear of crime in a city with low-crime rates. *Journal of Environmental Psychology* 38: 195–205.

Van den Berg B, Hutten P and Prins R (2021) Security and safety: An integrative perspective. In: Jacobs G, Suojanen I, Horton KE and Bayerl PS (eds) International Security Management – New solutions to complexity. Cham, CH: Springer: 13-27.

Van de Ven AH (2007) Engaged scholarship: A guide for organizational and social research. Oxford: Oxford University Press.

Van der Giessen M, Bayerl PS and Jacobs G (2016a) Unity – Report on the baseline measurements. H2020-Project Unity Deliverable 7.3. Rotterdam, NL: Centre of Excellence in Public Safety Management/Rotterdam School of Management, Erasmus University Rotterdam.

Van der Giessen M, Brein E and Jacobs G (2017) Community policing: The relevance of social contexts. In: Bayerl PS, Karlović R, Akhgar B and Markarian G (eds) Community Policing - A European Perspective. Cham, CH: Springer: 35-50

Van der Giessen M, Jacobs G, Brein E and Bayerl PS (2016b). Unity – First stakeholder analysis: Comparative view on stakeholder needs and perspectives. H2020-Project

Unity Deliverable 3.3. Rotterdam, NL: Centre of Excellence in Public Safety Management/Rotterdam School of Management, Erasmus University Rotterdam.

Van der Giessen M, Langenbusch C, Jacobs G and Cornelissen JP (2021) Collective sensemaking in the local response to a grand challenge: Recovery, alleviation and change-oriented responses to a refugee crisis. *Human Relations* 0(00): 1-33.

Vargo SL, Maglio PP and Akaka MA (2008) On value and value co-creation: A service systems and service logic perspective. *European Management Journal* 26(3): 145-52.

Vashdi DR, Bamberger PA and Erez M (2013) Can surgical teams ever learn? The role of coordination, complexity, and transitivity in action team learning. *Academy of Management Journal* 56(4): 945–71.

Western J (2016) What is global in global security studies? *Journal of Global Security Studies* 1(1): 99–101.

Vilalta CJ (2011) Fear of crime in gated communities and apartment buildings: A comparison of housing types and a test of theories. *Journal of Housing and the Built Environment* 26(2): 107-21.

Virta S (2002) Local security management policing through networks. *Policing: An International Journal of Police Strategies* 25(1):190-200.

Vonberg J (2018) Death threats, despair and deportations: Three years on the front lines of Europe's migration crisis. Available at: https://edition.cnn.com/2018/06/20/europe/world-refugee-day-volunteers-europe-intl/index.html.

Walsh JP and O'Connor C (2019) Social media and policing: A review of recent research. *Sociology Compass* 13(1): 1-14.

Walsham G (1995) Interpretive case studies in IS research: Nature and method. *European Journal of Information Systems* 4(2): 74–81.

Warren PY (2011) Perceptions of police disrespect during vehicle stops: A race based analysis. *Crime and Delinquency* 57(3): 356-76.

Warren AM, Sulaiman A and Jaafar NI (2014) Social media effects on fostering online civic engagement and building citizen trust and trust in institutions. *Government Information Quarterly* 31(2): 291-301.

Weick KE (1993) The collapse of sensemaking: The Mann Gulch disaster. *Administrative Science Quarterly* 38(4): 628–52.

Weick KE (1995) Sensemaking in organizations. Thousand Oaks, CA: Sage.

Weick KE and Roberts KH (1993) Collective mind in organizations: Heedful interrelating on flight decks. *Administrative Science Quarterly* 38(3): 357–81.

Weick KE, Sutcliffe KM and Obstfeld D (2005) Organizing and the process of sensemaking. *Organization Science* 16(4): 409–21.

Weitzer R and Tuch SA (2005) Determinants of Police Satisfaction with the Police. *Police Quarterly* 8(3): 279-97.

Wessels B (2009) Information and communication technologies and policing: The dynamics of changing police-public communication in the East End of London. *The Howard Journal* 48(5): 501-13.

Whiteman G and Cooper WH (2011) Ecological sensemaking. *Academy of Management Journal* 54(5): 889-911.

Williams CB, Fedorowicz J, Kavanaugh A, Mentzer K, Thatcher JB and Xu J (2018) Leveraging social media to achieve a community policing agenda. *Government Information Quarterly* 35(2): 210-22.

Wilson JQ (1968) Dilemmas of police administration. *Public Administration Review*, (Sept./Oct.): 407-16.

Worral JL (1999) Public perceptions of police efficacy and image: The "fuzziness" of support for the police. *American Journal of Criminal Justice* 24(1): 47-66.

Wu Y, Sun IY and Triplett RA (2009) Voices from the barrio: Chicano/a gangs, families, and communities. In: Esbensen F, Tibbetts S and Gaines: (eds) American youth gangs at the millennium. Long Grove, IL: Waveland Press: 113-41.

Yeh H (2017) The effects of successful ICT-based smart city services: From citizens' perspectives. *Government Information Quarterly* 34(3): 556-65.

Yin RK (1994) Case study research: Design and method, 2nd edition. Thousand Oaks, CA: Sage Publications.

Zhao J, Thurman QC and Lovrich NP (1995) Community-oriented policing across the US: Facilitators and impediments to implementation. *American Journal of Police* 14(1): 11-28.

Zwass V (2010) Co-creation: Toward a taxonomy and an integrated research perspective. *International Journal of Electronic Commerce* 15(1): 11-48.

Literature review references (Ch. 2)

Ambrose SC, Matthews LM and Rutherford BN (2018) Cross-functional teams and social identity theory: A study of sales and operations planning (SandOP). *Journal of Business* Research 92: 270-8.

Andersson O, Huysentruyt M, Miettinen T and Stephan U (2017) Person-organization fit and incentives: A causal test. *Management Science* 63(1): 73-96.

Annosi MC, Foss N, Brunetta F and Magnusson M (2017) The interaction of control systems and stakeholder networks in shaping the identities of self-managed teams. *Organization Studies* 38(5): 619-45.

Arikan I, Arikan AM and Shenkar O (2020) Nation-dyadic history and cross-border corporate deals: Role of conflict, trade, generational distance, and professional education. *Strategic Management Journal* 41(3): 422-66.

Ashforth BE and Reingen PH (2014) Functions of dysfunction: Managing the dynamics of an organizational duality in a natural food cooperative. *Administrative Science Quarterly* 59(3): 474-516.

Barrutia JM and Echebarria C (2020) Public managers' attitudes towards networks: Different motivations, different attitudes. *Public Management Review* 23(7): 1-26.

Baunsgaard VV and Clegg S (2013) Walls or boxes': The effects of professional identity, power and rationality on strategies for cross-functional integration. *Organization Studies* 34(9): 1229-325.

Beck TE and Plowman DA (2014) Temporary, emergent interorganizational collaboration in unexpected circumstances: A study of the Columbia Space Shuttle response effort. *Organization Science* 25(4): 1234-52.

Best B, Moffett S and McAdam R (2019) Stakeholder salience in public sector value co-creation. *Public Management Review* 21(11): 1707-32.

Bolinger AR, Klotz AC and Keith L (2018) Contributing from inside the outer circle: The identity-based effects of noncore role incumbents on relational coordination and organizational climate. *Academy of Management Review* 43(4): 680-703.

Boone C and Oezcan S (2014) Why do cooperatives emerge in a world dominated by corporations? The diffusion of cooperatives in the US bio-ethanol industry, 1978-2013. *Academy of Management Journal* 57(4): 990-1012.

Bridoux FM and Stoelhorst JW (2016) Stakeholder relationships and social welfare: A behavioral theory of contributions to joint value creation. *Academy of Management Review* 41(2): 229-51.

Brown JA, Clark C and Buono AF (2018) The United Nations Global Compact: Engaging implicit and explicit CSR for global governance. *Journal of Business Ethics* 147(4): 721-34.

Bucher SV, Chreim S, Langley A and Reay T (2016) Contestation about collaboration: Discursive boundary work among professions. *Organization Studies* 37(4): 497-522.

Carter DR, Cullen-Lester KL, Jones JM, Gerbasi A, Chrobot-Mason D and Nae EY (2020). Functional leadership in interteam contexts: Understanding 'what' in the context of why? Where? When? And who? *The Leadership Quarterly* 31(1): 1-19.

Carton AM and Cummings JN (2012) A theory of subgroups in work teams. *Academy of Management Review* 37(3): 441-70.

Chattopadhyay P, Finn C and Ashkanasy NM (2010) Affective responses to professional dissimilarity: A matter of status. *Academy of Management Journal* 53(4): 808-26.

Cuijpers M, Uitdewilligen S and Guenter H (2016) Effects of dual identification and interteam conflict on multiteam system performance. *Journal of Occupational and Organizational Psychology* 89(1): 141-71.

Currie G and White L (2012) Inter-professional barriers and knowledge brokering in an organizational context: The case of healthcare. *Organization Studies* 33(1): 1333-61.

Daymond J and Rooney D (2018) Voice in a supra-organisational and shared-power world: Challenges for voice in cross-sector collaboration. *The International Journal of Human Resource Management* 29(5): 772-804.

De Cremer D, Van Dijke M and Mayer DM (2010) Cooperating when you and I are treated fairly: The moderating role of leader prototypicality. *Journal of Applied Psychology* 95(6): 1121-33.

Dennissen M, Benschop Y and Van der Brink M (2020) Rethinking diversity management: An intersectional analysis of diversity networks. *Organization Studies* 41(2): 219-40.

De Vries TA, Walter F, Van der Vegt GS and Essens PJMD (2014) Antecedents of individuals' interteam coordination: Broad functional experiences as a mixed blessing. *Academy of Management Journal* 57(5): 1334-59.

DiBenigno J (2018) Anchored personalization in managing goal conflict between professional groups: The case of US army mental health care. *Administrative Science Quarterly* 63(3): 526-69.

DiBenigno J and Kellogg KC (2014) Beyond occupational differences: The importance of crosscutting demographics and dyadic toolkits for collaboration in a US hospital. *Administrative Science Quarterly* 59(3): 375-408.

Egels-Zandén N and Hyllman P (2011) Differences in organizing between unions and NGOs: Conflict and cooperation among Swedish unions and NGOs. *Journal of Business Ethics* 101(2): 249-61.

Ellis N and Ybema S (2010) Marketing identities: Shifting circles of identification in inter-organizational Relationships. *Organization Studies* 31(3): 279-305.

Essamri A, McKechnie S and Winklhofer H (2019) Co-creating corporate brand identity with online brand communities: A managerial perspective. *Journal of Business Research* 96: 366-75.

Faraj S, Jarvenpaa SL and Majchrzak A (2011) Knowledge collaboration in online communities. *Organization Science* 22(5): 1224-39.

Feng Y, Teng D and Hao B (2019) Joint actions with large partners and small-firm ambidexterity in asymmetric alliances: The mediating role of relational identification. *International Small Business Journal* 37(7): 689-712.

Gal U, Jensen TB and Lyytinen K (2014) Identity orientation, social exchange, and information technology use in interorganizational collaborations. *Organization Science* 25(5): 1372-90.

Giorgi S, Bartunek JM and King BG (2017) A Saul Alinsky primer for the 21st century: The roles of cultural competence and cultural brokerage in fostering mobilization in support of change. *Research in Organizational Behavior* 37: 125-42.

Gregory AJ, Atkins JP, Midgley G and Hodgson AM (2020) Stakeholder identification and engagement in problem structuring interventions. *European Journal of Operational Research* 283(1): 321-40.

Hogg MA, Van Knippenberg D and Rast III DE (2012) Intergroup leadership in organizations: Leading across group and organizational boundaries. *Academy of Management Review* 37(2): 232-55.

Holtzhausen L (2014) Non-profit organizations bridging the communication divide in a complex South Africa. *Public Relations Review* 40(2): 286-93.

Horton KE and Griffin MA (2017) Identification complexity and conflict: How multiple identifications affect conflict across functional boundaries. *European Journal of Work and Organizational Psychology* 26(2): 286-98.

Huemer L (2014) Creating cooperative advantage: The roles of identification, trust, and time. *Industrial Marketing Management* 43(4): 564-72.

Ingram P and Yue LQ (2008) Structure, affect and identity as bases of organizational competition and cooperation. *Academy of Management Annals* 2(1): 275-303.

Jiang CX, Chua RY, Kotabe M and Murray JY (2011) Effects of cultural ethnicity, firm size, and firm age on senior executives' trust in their overseas business partners: Evidence from China. *Journal of International Business Studies* 42(9): 1150-73.

Kane AA and Levina N (2017) Am I still one of them?': Bicultural immigrant managers navigating social identity threats when spanning global boundaries. *Journal of Management Studies* 54(4): 540-77.

Kellogg KC (2011) Hot lights and cold steel: Cultural and political toolkits for practice change in surgery. *Organization Science* 22(2): 482-502.

Kellogg KC (2012) Making the cut: Using status-based countertactics to block social movement implementation and microinstitutional change in surgery. *Organization Science* 23(6): 1546-670.

Kellogg KC (2014) Brokerage professions and implementing reform in an age of experts. *American Sociological Review* 79(5): 912-41.

Kertcher Z and Coslor E (2020) Boundary objects and the technical culture divide: Successful practices for voluntary innovation teams crossing scientific and professional fields. *Journal of Management Inquiry* 29(1): 76-91.

Koppman S, Mattarelli E and Gupta A (2016) Third-world "sloggers" or elite global professionals? Using organizational toolkits to redefine work identity in information technology offshore outsourcing. *Organization science* 27(4): 825-45.

Kornberger M, Leixnering S and Meyer RE (2019). The logic of tact: How decisions happen in situations of crisis. *Organization Studies* 40(2): 239-66.

Korschun D (2015) Boundary-spanning employees and relationships with external stakeholders: A social identity approach. *Academy of Management Review* 40(4): 611-29.

Koschmann MA, Kuhn TR and Pfarrer MD (2012) A communicative framework of value in cross-sector partnerships. *Academy of Management Review* 37(3): 332-54.

Kourti I, Garcia-Lorenzo L and Yu A (2018) Managing the interactions between multiple identities in inter-organizational collaborations: An identity work perspective. *European Journal of Work and Organizational Psychology* 27(4): 506-19.

Kukenberger MR and D'Innocenzo L (2020) The building blocks of shared leadership: The interactive effects of diversity types, team climate, and time. *Personnel Psychology* 73(1): 125-50.

Lashitew AD, Bals L and Van Tulder R (2020) Inclusive business at the base of the pyramid: The role of embeddedness for enabling social innovations. *Journal of Business Ethics* 162(2): 421-48.

Lauritzen GD (2017) The role of innovation intermediaries in firm-innovation community collaboration: Navigating the membership paradox. *Journal of Product Innovation Management* 34(3): 289-314.

Le Ber MJ and Branzei O (2010) Value frame fusion in cross sector interactions. *Journal of Business Ethics* 94: 163-95.

Lifshitz-Assaf H (2018) Dismantling knowledge boundaries at NASA: The critical role of professional identity in open innovation. *Administrative Science Quarterly* 63(4): 746-82.

Litchfield RC, Karakitapoğlu-Aygün Z, Gumusluoglu L., Carter M and Hirst G (2018) When team identity helps innovation and when it hurts: Team identity and its relationship to team and cross-team innovative behavior. *Journal of Product Innovation Management* 35(3): 350-66.

Lloyd R and Carroll B (2019) Identifying discursive resources for pluralising leadership: Looping chief executive officers and the frontline across hierarchy. *Human Relations* 74(6): 815-841.

Luciano MM, DeChurch LA and Mathieu JE (2018) Multiteam systems: A structural framework and meso-theory of system functioning. *Journal of Management* 44(3): 1065-96.

Marcos J and Prior DD (2017) Buyer-supplier relationship decline: A norms-based perspective. *Journal of Business Research* 76: 14-23.

Mathias BD, Huyghe A, Frid CJ and Galloway TL (2018) An identity perspective on coopetition in the craft beer industry. *Strategic Management Journal* 39(12): 3086-115.

Matta FK, Scott BA, Guo Z and Matusik JG (2020) Exchanging one uncertainty for another: Justice variability negates the benefits of justice. *Journal of Applied Psychology* 105(1): 97-110.

Mell JN, DeChurch L, Contractor N and Leenders R (2020) Identity asymmetries: An experimental investigation of social identity and information exchange in multiteam systems. *Academy of Management Journal* 63(5): 1561-90.

Mesmer-Magnus JR, Asencio R, Seely PW and DeChurch LA (2018). How organizational identity affects team functioning: The identity instrumentality hypothesis. *Journal of Management* 44(4): 1530-50.

Mikkelsen EN, Gray B and Petersen A (2020) Unconscious processes of organizing: Intergroup conflict in mental health care. *Journal of Management Studies* 57(7): 1355-83.

Mitchell RJ and Boyle B (2015). Professional diversity, identity salience and team innovation: The moderating role of openmindedness norms. *Journal of Organizational Behavior* 36(6): 873-94.

Mitchell RJ, Parker V and Giles M (2011) When do interprofessional teams succeed? Investigating the moderating roles of team and professional identity in interprofessional effectiveness. *Human Relations* 64(10): 1321-43.

Pittaway L, Robertson M, Munir K, Denyer D and Neely A (2004) Networking and innovation: A systematic review of the evidence. *International Journal of Management Reviews* 5/6(3/4): 137-68.

Porck JP, Matta FK, Hollenbeck JR, Oh JK, Lanaj K and Lee SM (2019) Social identification in multiteam systems: The role of depletion and task complexity. *Academy of Management Journal* 62(4): 1137-62.

Pouthier V (2017) Griping and joking as identification rituals and tools for engagement in cross-boundary team meetings. *Organization Studies* 38(6): 753-74.

Powell EE and Baker T (2017) In the beginning: Identity processes and organizing in multi-founder nascent ventures. *Academy of Management Journal* 60(6): 2381-414.

Prügl R and Spitzley DI (2020) Responding to digital transformation by external corporate venturing: An enterprising family identity and communication patterns perspective. *Journal of Management Studies* 58(1): 1-30.

Raisch S and Tushman ML (2016) Growing new corporate businesses: From initiation to graduation. *Organization Science* 27(5): 1237-57.

Rast III DE, Hogg MA and Van Knippenberg D (2018) Intergroup leadership across distinct subgroups and identities. *Personality and Social Psychology Bulletin* 44(7): 1090-103.

Rouse ED (2020) Where you end and I begin: Understanding intimate co-creation. *Academy of Management Review* 45(1): 181-204.

Salem M, Van Quaquebeke N and Besiou M (2018) How field office leaders drive learning and creativity in humanitarian aid: Exploring the role of boundary-spanning leadership for expatriate and local aid worker collaboration. *Journal of Organizational Behavior* 39(5): 594-611.

Salem M, Van Quaquebeke N, Besiou M and Meyer L (2019) Intergroup leadership: How leaders can enhance performance of humanitarian operations. *Production and Operations Management* 28(11): 2877-97.

Schneider T and Sachs S (2017) The impact of stakeholder identities on value creation in issue-based stakeholder networks. *Journal of business Ethics* 144(1): 41-57.

Seo E, Kang H and Song J (2020) Blending talents for innovation: Team composition for cross-border R&D collaboration within multinational corporations. *Journal of International Business Studies* 51(5): 851-85.

Sonenshein S, Nault K and Obodaru O (2017) Competition of a different flavor: How a strategic group identity shapes competition and cooperation. *Administrative Science Quarterly* 62(4): 626-56.

Stadtler L and Van Wassenhove LN (2016) Coopetition as a paradox: Integrative approaches in a multi-company, cross-sector partnership. *Organization Studies* 37(5): 655-85.

Stewart GL, Astrove SL, Reeves CJ, Crawfrod ER and Solimeo SL (2017) Those with the most find it hardest to share: Exploring leader resistance to the implementation of team-based empowerment. *Academy of Management Journal* 60(6): 2266-93.

Trujillo D (2018) Multiparty alliances and systemic change: The role of beneficiaries and their capacity for collective action. *Journal of Business Ethics* 150(2): 425-49.

Turner G (2010) Ordinary people and the media: The demotic turn. London, UK: Sage.

Turner N and Tennant SJ (2010) As far as is reasonably practicable: Socially constructing risk, safety, and accidents in military operations. *Journal of Business Ethics* 91(1): 21-33.

Ungureanu P, Bertolotti F, Mattarelli E and Bellesia F (2020) Collaboration and identity formation in strategic interorganizational partnerships: An exploration of swift identity processes. *Strategic Organization* 18(1): 171-211.

Weber L and Mayer K (2014) Transaction cost economics and the cognitive perspective: Investigating the sources and governance of interpretive uncertainty. *Academy of Management Review* 39(3): 344-63.

Weiss M, Kolbe M, Grote G, Spahn DR and Grande B (2018) We can do it! Inclusive leader language promotes voice behavior in multi-professional teams. *The Leadership Quarterly* 29(3) 389-402.

York JG, O'Neill L and Sarasvathy SD (2016) Exploring environmental entrepreneurship: Identity coupling, venture goals, and stakeholder incentives. *Journal of Management Studies* 53(5): 695-737.

Yu K (2012) Formal organizations and identity groups in social movements. *Human Relations* 65(6): 753-76.

Zobel AK and Hagedoorn J (2020) Implications of open innovation for organizational boundaries and the governance of contractual relations. *Academy of Management Perspectives* 34(3): 400-23.

About the author

Mark van der Giessen is a doctoral candidate at the Department of Organisation and Personnel Management, Rotterdam School of Management, Erasmus University Rotterdam (EUR). He previously obtained his MSc in International Comparative Criminology also at EUR, at the Erasmus School of Law.

Mark van der Giessen is interested in processes of cooperation and collaboration, specifically in the context of promoting safety and security. Combining learnings from criminology and management, he hopes to provide novel insights and practical tools to help local law enforcement, government, non-government organizations and communities promote a safe and secure environment for themselves and others. He conducts his research primarily through the lenses of sensemaking and identity. However, he has also taken a design perspective to provide practical tools for (online) engagement.

Mark van der Giessen has published some of his work in Human Relations, the International Journal of Drug Policy, and Studies in Symbolic Interaction. He has also contributed a book chapter to Community Policing – a European Perspective. He has presented his work at multiple international conferences, including the Academy of Management Annual Meeting, CEPOL Research and Science and Big Data in Law Enforcement.

Curriculum Vitae

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PROFESSIONAL EXPERIENCE

2014-2018	**Researcher at the Rotterdam School of Management - Erasmus University.** Coordination and research at the Centre of Excellence in Public Safety Management (CESAM). Evaluating the 'ZSM-procedure' of the Public Prosecution Service, the process and consequences of the nationalization of the Dutch police, perspectives on- and best practices for community policing in the EU (H2020 program, grant agreement number 653729).
2012-2014	**Project coordinator and researcher at the Research and Documentation Centre - Ministry of Justice and Security.** Coordinating research and consulting on the theme 'Alcohol and Violence', designing and performing qualitative and quantitative research pertaining to the Dutch coffeeshop policy and the production, consumption and export of cannabis.
2011-2012	**Researcher at Impact Research and Development - Amsterdam.** Performing qualitative and quantitative research projects on behavioural interventions and the care for delinquents with psychiatric illness in a forensic setting.
2004-2007	**Event Security Assistant at the Dutch Embassy - Washington DC, USA.** Assisting with the security of VIP guests at the Dutch Embassy in Washington DC, USA.

EDUCATION

2015-2021	**PhD - Organisation and Personnel Management.** Erasmus University Rotterdam. Thesis topic: Co-creating safety and security – Essays on bridging disparate needs and requirements to foster safety and security
2010-2012	**Master - International Comparative Criminology (MSc).** Erasmus University Rotterdam.

Thesis topic: Aggression and Violence against Paramedics.

2007-2010   **Bachelor - Clinical and Health Psychology (BSc).** University of Utrecht.
Thesis topic: Homesickness among men and women. Relationships with experiences abroad, attachment style, neuroticism and locus of control.

Minor - Criminology. University of Utrecht.
Thesis topic: Hells Angels, organized crime or an organization with criminals?

2004-2007   **International Baccalaureate.** Washington International School.
Diploma obtained with 1st honors.

ADDITIONAL ACTIVITIES

2020	EUR Taskforce Ethical Dilemma App – Member
2019	EUR Taskforce on Work Pressure - Member
2018	Organizational Behavior Division, Annual Meeting of the Academy of Management - Reviewer
2018	EUR Taskforce Dilemmas and Opportunities in the Collaboration with External Parties - Reviewer
2018	ERIM PhD Council - Chair
2017	ERIM PhD Council – Vice Chair

OTHER QUALIFICATIONS

Skills
- ATLAS
- Microsoft Office
- NVIVO
- SPSS
- Basic Didactics (RISBO certificate)

Languages
- Dutch, fluent
- English SAT, writing, 96th percentile of college-bound Americans

Academic portfolio

PUBLISHED PAPERS

Van der Giessen M, Langenbusch C, Jacobs G and Cornelissen JP (2021) Collective sensemaking in the local response to a grand challenge: Recovery, alleviation and change-oriented responses to a refugee crisis. *Human Relations* 0(00): 1-33.

Van der Giessen M, Van Ooyen-Houben MMJ and Moolenaar DEG (2016) Estimating the production, consumption and export of cannabis: The Dutch Case. *International Journal of Drug Policy,* 31: 104-12.

Müller T and Van der Giessen M (2015) 'If he dies, I'll kill you.' Violence, paramedics and impression-management. *Studies In Symbolic Interaction volume 45. Contributions from European Symbolic Interactionists: Conflict and Cooperation*. Emerald Insight. 177-93.

PUBLISHED BOOK CHAPTERS

Van der Giessen M, Brein E and Jacobs G (2017) Community policing: The relevance of social contexts. In: Bayerl PS, Karlović R, Akhgar B and Markarian G. (eds) Community Policing in a European Perspective. Cham, CH: Springer: 35-50.

ACADEMIC PAPERS IN PROGRESS

Van der Giessen M, Horton KE and Jacobs G. Taking stock and moving forward: a decade of research on the role of identity in cross-boundary collaboration. Target journal: *Human Relations*.

Van der Giessen M and Bayerl PS. Designing for successful online engagement - Comparing citizen and police expectations for community policing platforms. Revise and resubmit at *Government Information Quarterly.*

O'Neill M, Van der Giessen M, Bayerl PS, Hail Y, Aston E and Houtsonen J. Conditions, Actions and Purposes (CAP): A dynamic model of community policing in Europe. Target journal: *Policing and Society.*

Langenbusch C, Van der Giessen M, Cornelissen JP and Jacobs G. Coping with Ambivalent Emotions: Making sense of the local manifestation of forced displacement. Target journal: *Academy of Management Discoveries.*

Van der Giessen M, Bayerl PS and Jacobs G. (2016). Unity – Report on the Baseline Measurements. H2020-Project Unity Deliverable 7.3. Rotterdam, NL: Centre of Excellence in Public Safety Management/Rotterdam School of Management, Erasmus University Rotterdam.

Van der Giessen M, Jacobs G, Brein E and Bayerl PS (2016) Unity – First Stakeholder Analysis: Comparative view on stakeholder needs and perspectives. H2020-Project Unity Deliverable 3.3. Rotterdam, NL: Centre of Excellence in Public Safety Management/Rotterdam School of Management, Erasmus University Rotterdam.

Van der Giessen M, Moolenaar DEG and Van Ooyen-Houben M (2014) The export of cannabis cultivated in the Netherlands: An estimate of the size and a discussion of the possibilities and limitations of the research. Cahiers 2014-19. The Hague: WODC. [English summary available]

Van der Giessen M and Plaisier J (2012) Overview of ongoing research in the area of care for delinquents with psychiatric problems. Amsterdam/The Hague, NL: Impact R&D/DJI. [Dutch only]

Bayerl PS, Jacobs G and Van der Giessen M (2015) Unity – Report on evaluation criteria. H2020-Project Unity deliverable 7.1. Rotterdam, NL: Centre of Excellence in Public Safety Management/Rotterdam School of Management, Erasmus University Rotterdam.

Bayerl PS, Van der Giessen M and Jacobs G. (2015) Unity – Report on existing approaches and best/effective practices to community policing. H2020-Project Unity deliverable 3.1. Rotterdam, NL: Centre of Excellence in Public Safety Management/Rotterdam School of Management, Erasmus University Rotterdam.

Bayerl PS, Van der Giessen M and Jacobs G (2016a) Unity – 1st stakeholder analysis: Shared themes and concepts. H2020-Project Unity deliverable 3.2. Rotterdam, NL: Centre of Excellence in Public Safety Management/Rotterdam School of Management, Erasmus University Rotterdam.

Bayerl PS, Van der Giessen M and Jacobs G. (2016b). Unity – Gathering of user requirements for CP tools. H2020-Project Unity deliverable 3.4. Rotterdam, NL: Centre of Excellence in Public Safety Management/Rotterdam School of Management, Erasmus University Rotterdam.

Plaisier J, Van Ditzhuijzen J, Mol M and Van der Giessen M (2012) The potential effects of the own contribution on the influx of patients in a forensic care and prison setting: A quick scan among Dutch experts and international research literature. Amsterdam/The Hague, NL: Impact R&D/DJI. [Dutch only]

Van Ooyen-Houben M, Bieleman B, Korf DJ, Benschop A, Van der Giessen M, Nijkamp R, Snippe JM and Wouters M (2013) The private club and the residence criterion for Dutch coffeeshops: Evaluation of the implementation and outcomes in the period

May-November 2012 - An interim report. Cahiers 2013-2. The Hague, NL: WODC. [English summary available]

Van Ooyen-Houben M and Van der Giessen M (2014) Previous interventions limiting coffeeshop availability. In: Van Ooyen-Houben M, Bieleman B and Korf DJ (eds) Coffeeshops, tourists and the local market. Evaluation of the private club and the residence criterion for coffeeshops. Final report The Hague, NL: WODC: 30-42. [English summary available]

Van Ooyen-Houben M and Van der Giessen M (2014) The implementation of the residence criterion according to the actors involved. In: Van Ooyen-Houben M, Bieleman B and Korf DJ (eds) Coffeeshops, tourists and the local market. Evaluation of the private club and the residence criterion for coffeeshops. Final report. The Hague, NL: WODC: 44-73. [English summary available]

CONFERENCE PRESENTATIONS

- 'Violence against Paramedics: The perspectives of Paramedics.' The European Society for the Study of Symbolic Interaction, 3rd conference. Erasmus University Rotterdam, NL, July 2012.
- 'The production, consumption and export of Dutch cannabis.' Presentation at the 9th Annual conference of the International Society for the Study of Drug Policy. University of Ghent, BE, May 2015.
- 'An institutionalized mess? Establishing boundary conditions for robust action in refugee crisis management.' Academy of Management 2018 – Changing Lives. Chicago IL, USA, August 2018.
- 'The Unity IT Toolkit: The CP of the future.' Big Data in Law Enforcement, Police College Croatia, November 2017.
- 'The different faces of anonymity – Disentangling anonymity requirements for ICT facilitated community-police communication.' CEPOL Research and Science, National University of Public Service Budapest, November 2017.
- 'Connecting the disconnected: ICT requirements for communicating with diverse communities.' Security Narratives, RSM Rotterdam, March 2018.

INVITED WORKSHOPS

- 13th Organization Studies Workshop on Responding to Displacement, Disruption and Division, May 2018, Samos Greece, Managing the Local Manifestation of a Global Grand Challenge: A case study of the refugee crisis in Lesbos.
- Academy of Management Discoveries Paper Development Workshop, May 2018, RSM Rotterdam, Managing the local manifestation of global displacement: The Refugee Crisis in Lesbos.

TEACHING AND SUPERVISION

Teaching
- **MSc Human Resource Management (ENG)**
  Coordinating and teaching Research Challenges in Human Resource Management and Organisations and Behavior – 2017 - 2019
- **Parttime MSc Business (NL)**
  Teaching Business Research Methods – 2018 - 2019
- **BSc Organisations and Behavior (NL/ENG)**
  Guest Lecture on Power, Conflict and Negotiation – 2018
  Guest Lecture on Leadership – 2018
- **BSc Research Training and Bachelor Thesis (NL/ENG)**
  Teaching Bachelor Thesis Research Training – 2020

Thesis supervision
- MSc Business Information Management – 2019 (ENG)
- MSc Organisational Change and Consulting – 2020 (ENG)
- BSc Business Administration – 2020 (NL)

Thesis co-readership
- MSc Human Resource Management – 2017- 2019 (ENG)
- MSc Management of Innovation – 2016 - 2017 (ENG)
- MSc Master in Management – 2018 (ENG)
- MSc Strategic Management – 2020 (ENG)
- MSc Organisational Change and Consulting – 2017, 2020 (ENG)
- MSc Business Information Management – 2017 - 2018 (ENG)
- MSc Global Business and Sustainability – 2018 (ENG)
- Parttime MSc New Business Innovation and Entrepreneurship – 2021 (NL)

COMPLETED DOCTORAL COURSES AND TRAINING

2018	RISBO Basic Didactics Training (Certificate acquired)
2017	Developing Theory and Theoretical Contributions
	Workshop on Structural Equation Modelling through PLS
	Experimental Methods in Business Research
2016	Publishing Strategy
	Multi-level Analysis Workshop
	Scientific Integrity

Teaching, presenting and writing in English
Statistical Methods
Topics in the Philosophy of Science
Advanced Topics in Organizational Behavior
Social Networks and Market Competition

ADDITIONAL CONFERENCE AND UNIVERSITY SERVICE

- Reviewer, Organizational Behavior Division, Annual Meeting of the Academy of Management 2018.
- Member, EUR Taskforce Dilemmas and Opportunities in the Collaboration with External Parties 2018.
- Member, EUR Taskforce on Work Pressure 2019.
- Member, EUR Taskforce Ethical Dilemma App 2020.
- Vice-Chair, ERIM PhD Council 2017.
- Chair, ERIM PhD Council 2018.
- Researcher, Unity. funded under the H2020 program, grant agreement number 653729. May 2015 - April 2018.

Summary

The co-creation of safety and security is a diverse, complex and persistent challenge that requires the simultaneous and continued engagement of many different actors. Safety and security contexts are diverse, ranging from the widespread daily policing practices involving local governments, law enforcement and community groups, to highly extreme and complex local responses to grand challenges, such as the professionals, volunteers and local communities responding to a refugee crisis. Regardless of the specific context however, practitioners and management scholars do not yet have the tools and knowledge to address how the actors involved, engaging from different backgrounds and with their own needs and requirements, may collaboratively foster safety and security.

The overall aim of this dissertation is to advance our understanding of how these actors with their disparate needs and requirements can collaboratively foster safety and security. I do so through four studies.

In Study 1 - Taking stock and moving forward: a decade of research on the role of identity in cross-boundary collaboration - I shed light on what we know about the disparate (nature of) actors engaging in various forms of co-creation. In this study I propose a structure to understand the influence of identity on such collaborations, describe what has (and has not) been researched, and provide suggestions for future research. Specifically, we find that research on the role of identity in cross-boundary collaboration has grown tremendously in the last 10 years. As a result, this body of literature is increasingly vast, heterogeneous, and fragmented. We suggest the literature can be classified along two dimensions: the level of organizing of the collaboration and the role of identity in this collaboration. We find that most articles focus on collaborations across organizational boundaries, and with identity predominant incorporated as a singular barrier to collaboration. Empirically, articles are heavily skewed toward qualitative and theoretical work. With this review, I also set the stage for subsequent studies in this dissertation, which address various gaps identified in this study.

In Study 2 - Community Policing: The Relevance of Social Contexts - I provide a socio-historical reflection of the importance of the local social context for co-creating safety and security (the political, economic, social, technological, legal and environmental

conditions of a community). We take as a case local community policing efforts, which is perhaps the most pervasive case of fostering safety and security as it exists between local law enforcement, government organizations and community groups all across Europe (Casey, 2010; Hail, 2015a; Skogan, 2006). We argue that community policing is not a uniform concept and the local implementation is highly contingent on mutual trust and perceived legitimacy between the police and local community. We furthermore propose a model based on our own qualitative empirical research that captures the interplay between local context, perceptions of legitimacy and trust and community policing partnerships for local safety and security. Specifically, we suggest that the form of co-creation between communities and the police is dependent on the level of mutual trust and legitimacy. We also make recommendations for practice to incorporate context-specificity into their approaches to community policing.

In Study 3 - Collective sensemaking in the local response to a grand challenge: recovery, alleviation and change oriented responses to a refugee crisis - we develop theory to better understand how local actors make sense of, position themselves in, and act on a grand societal challenge. We contribute to our understanding of co-creating safety and security by identifying three collective sensemaking narratives which actors use to validate action strategies aimed at alleviation, personal recovery, or structural change; and as characterized by different forms of interaction and emergent collective sensemaking. Specifically, we classify these interactions as isolating, situating and rejecting. We also discuss the practical implications, and explain how and why local inhabitants, professionals, and volunteers, make sense of their role in a refugee crisis, and their responses develop differently over time.

In Study 4 - Designing for successful online engagement: Comparing citizen and police expectations for community policing platforms - we return to the context of community policing as our case, as online platforms offer promising avenues for police forces and citizens to engage with each other. The specifics of what users of online community policing platforms require for mutual engagement remains understudied and it is not clear what needs and requirements users of online platforms have, to actually engage to promote local safety and security. Rather than settling for a police-community distinction, we use a data driven approach to identify three distinct user groups with disparate

expectations for online community policing platforms: complacent users, high-need users, and sceptics. Our study compares their respective expectations and we offer concrete recommendations for the design of online community policing platforms to guide the online engagement across disparate user groups.

In the conclusion and discussion chapter of this dissertation, I return to the original aim and integrate the findings across the four studies in a final discussion. Here I summarize the contributions that were made through the individual studies to extant theory, what these mean for the overall problem of co-creating safety and security across disparate needs and requirements, and which challenges remain for future research.

Samenvatting

De co-creatie van veiligheid is een diverse, complexe en aanhoudende uitdaging die een simultane en doortastende aanpak van verschillende actoren vereist. De mogelijke contexten zijn divers, variërend van de alom aanwezige dagelijkse praktijk voor de openbare orde en veiligheid door gemeente, politie en burgers, tot de aanpak van plaatselijke uitwerkingen van zeer extreme en complexe *grand challenges*, zoals die van professionals, vrijwilligers en lokale gemeenschappen in een vluchtelingen crisis. Ongeacht de specifieke context, hebben we echter niet de kennis en middelen om bij te dragen aan hoe verschillende actoren, vanuit hun eigen achtergrond en met hun eigen wensen and eisen, samen kunnen werken aan veiligheid.

Het doel van deze dissertatie is om bij te dragen aan onze kennis over hoe deze actoren met hun verschillende wensen en eisen samen de veiligheid kunnen bevorderen. Ik doe dit met vier onderzoeken.

In Onderzoek 1 – 'Taking stock and moving forward: a decade of research on the role of identity in cross-boundary collaboration' – geven we inzicht in wat we weten over de verschillende (kenmerken van) actoren die zich bezig houden met vormen van co-creatie. In dit onderzoek stellen we een structuur voor die gebruikt kan worden om de invloed van identiteit op zulke samenwerkingen te begrijpen, beschrijven we wat we (nog niet) hebben onderzocht, en doen we aanbevelingen voor vervolgonderzoek. We constateren dat onderzoek over de rol van identiteit in samenwerkingen enorm is gegroeid in de afgelopen 10 jaar. Hierdoor is onze kennis groot, maar ook heterogeen en gefragmenteerd. We stellen voor dat de literatuur geclassificeerd kan worden aan de hand van twee dimensies: het organisatie niveau van de samenwerking en de rol van identiteit in de samenwerking. We hebben ook gevonden dat de meeste artikelen focussen op samenwerkingen tussen organisaties, waarbij identiteit voornamelijk beschouwd wordt als een stabiele barrière voor de samenwerking. Empirisch gezien zijn de meeste artikelen kwalitatief of theoretisch van aard. Met deze studie leggen we ook de basis voor de rest van de onderzoeken in deze dissertatie, welke ingaan op de omissies die in dit onderzoek naar voren zijn gekomen.

In onderzoek 2 – 'Community Policing: The Relevance of Social Contexts' (Van der Giessen et al., 2017) – geven we een socio-historische bespreking van het belang van de

lokale sociale context voor de co-creatie van veiligheid (de politieke, economische, sociale, technologische, wettelijke en omgevingsfactoren van een gemeenschap). We gaan in op gebiedsgebonden politiewerk als casus, wellicht het meest voorkomende voorbeeld van het bevorderen van veiligheid in Europa (Casey, 2010; Hail, 2015a; Skogan, 2006). We stellen dat gebiedsgebonden politiewerk geen uniform concept is en dat de lokale implementatie afhankelijk is van wederzijdse percepties van vertrouwen en legitimiteit tussen de politie en de lokale gemeenschap. We stellen verder een model voor gebaseerd op ons eigen kwalitatief-empirische onderzoek, welke ingaat op de samenhang tussen de lokale context, percepties van legitimiteit en vertrouwen en gebiedsgebonden politiewerk. We stellen dat de vorm van co-creatie tussen burgers en de politie afhankelijk is van het niveau van wederzijds vertrouwen en legitimiteit. We doen ook aanbevelingen voor de praktijk om kenmerken van de lokale context te integreren in de lokale aanpak van gebiedsgebonden politiewerk.

In onderzoek 3 – 'Collective sensemaking in the local response to a grand challenge: recovery, alleviation and change oriented responses to a refugee crisis' (Van der Giessen et al., 2021) – ontwikkelen we theorie om beter te begrijpen hoe lokale actoren hun begrip vormen, zichzelf positioneren, en acteren op een *grand societal challenge*. We dragen bij aan onze kennis betreffende de co-creatie veiligheid door drie *collective sensemaking narratives* te identificeren die actoren gebruiken om actie strategieën te valideren die gericht zijn op *alleviation, personal recovery,* of *structural change*; en gekenmerkt worden door verschillende vormen van interactie en *emergent collective sensemaking*. We classificeren deze vormen van interactie als *isolating, situating* en *rejecting*. We bespreken ook implicaties voor de praktijk en leggen uit hoe en waarom lokale burgers, professionals en vrijwilligers hun eigen rol in de vluchtelingen crisis op een bepaalde manier interpreteren, en hoe hun aanpak zich door de tijd heen ontwikkelt.

In onderzoek 4 – 'Designing for succesful online engagement: Comparing citizen and police expectations for community policing platforms' – keren we terug naar de context van gebiedsgebonden politiewerk als casus, omdat online communicatie platformen een veelbelovend middel zijn voor de politie en burgers om met elkaar te werken. De specifieke eisen van gebruikers van deze online platformen zijn onvoldoende onderzocht en het is niet duidelijk welke behoeften en eisen gebruikers hebben, om ook echt samen de lokale veiligheid te bevorderen. In plaats van dat we genoegen nemen met het klassieke

onderscheid tussen politie en burger, analyseren we de data en identificeren we drie verschillende gebruiker-groepen, met verschillende verwachtingen van online middelen voor gebiedsgebonden politiewerk: *complacent users, high-need users,* en *sceptics.* We vergelijken hun verwachtingen en we geven concrete aanbevelingen voor het ontwerp van online middelen voor gebiedsgebonden politiewerk om de online samenwerking tussen verschillende groepen vorm te geven.

In het laatste hoofdstuk van deze dissertatie keer ik terug naar het oorspronkelijke doel en integreer ik bevindingen van de vier onderzoeken. Hier vat ik mijn contributies samen voor de theorie, wat deze betekenen voor ons begrip van de co-creatie van veiligheid en welke uitdagingen voortbestaan voor toekomstig onderzoek.

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The co-creation of safety and security is a diverse, complex and persistent challenge that requires the simultaneous and continued engagement of many different actors. The purpose of this dissertation is to shed light on how these actors with their own needs and expectations may collaboratively foster safety and security. I consider two cases: local community policing involving the police and citizens; and the response of local inhabitants, professionals and international volunteers to a refugee crisis.

The dissertation consists of four studies. In the first study I set the stage by providing a systematic literature review on the role of identity in cross-boundary collaboration. The second study sheds light on the importance of the social context in which engagement efforts take place, considering specifically community policing. In the third study I shift my attention to the process of fostering safety and security and elaborate how actors make sense of their role in the local response to a refugee crisis. In doing so, I explain why some ultimately choose to cooperate to address the plight of refugees whilst others distribute tasks or avoid responding altogether. Lastly, in the fourth study I return to the case of community policing and shed light on the needs and expectations of police and citizen actors for online engagement. Taken together, this dissertation contributes to our understanding of the role of different actors, contexts, processes and (online) tools in the co-creation of safety and security.