Organization without actorhood:

Exploring a neglected phenomenon

Michael Grothe-Hammer

Helmut Schmidt University

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Author Note

Michael Grothe-Hammer, Institute of Social Sciences, Helmut Schmidt University,

Holstenhofweg 85, 22043 Hamburg, Germany.

Contact: michael.grothe-hammer@hsu-hh.de.

Abstract

Most scholars explicitly or implicitly build on the assumption that organizations have to be externally recognized as actors to become constituted as organizations. Although recently some scholars have reported on instances of organization without actorhood, the phenomenon still remains widely neglected. Moreover, so far, organization without actorhood is seen as something very limited in terms of complexity and permanency. In this paper, we will draw a different picture. Drawing on the concept of degrees of organizationality (Dobusch & Schoeneborn, 2015) and a decision-based understanding of organization (Ahrne & Brunsson, 2011; Luhmann, 2003), we develop a framework that allows us to explore how much organization is possible without actorhood. Drawing on a qualitative case study of an inter-organizational collective concerned with ensuring public safety, we illustrate that highly complex organization is possible without constituting an actor. Our study presents evidence contradicting the common assumption that complex organization relies on the external attribution of actorhood. We also add to debates on responsibility of organizations and inter-organizational relations by pointing out that organization without actorhood has certain implications, i.e. it allows for a specific avoidance of responsibility.

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1. Introduction

Organizational scholars have reported at length on the importance of actorhood when it comes to defining modern organizations. It is thereby typically assumed that there can be no organization without actorhood. Instead, organizations must be recognized externally as collective actors to become constituted as organizations (Geser, 1992; King, Felin, & Whetten, 2010; Taylor & Cooren, 1997). 'The organization-as-actor notion, in fact, is probably the majority view in the organizational literature' (Robichaud, Giroux, & Taylor, 2004, p. 618) and has become widely taken for granted (Meyer & Jepperson, 2000; King et al., 2010; Suddaby, Elsbach, Greenwood, Meyer, & Zilber, 2010). However, this narrow focus on such organizational phenomena that are only visible as actors seems to have created a kind of a blind spot within organization studies. Thus, scholars tend to neglect the significance and relevance of instances of organization that are not visible as an actor (Ahrne & Brunsson, 2011; Scott, 2015). So far, only few scholars have tried to go beyond the organization-as-actor view by inquiring less visible and recognizable instances of organization. For instance, Ahrne and colleagues suggested exploring the possibilities of organization that takes place outside of conventional organizations (Ahrne & Brunsson, 2011; Ahrne, Brunsson, & Seidl, 2016). They suggest that organization is a specific kind of social order, i.e., a decided order, which does not necessarily include an organization as an actor. Despite this slightly growing interest in organizational phenomena outside the realm of organizational actors, existing works so far only illustrate rather limited extents of organization without actorhood. While the existing literature suggests that there is organization without actorhood in various forms, we so far know very little about how complex such instances can be. In fact, organization without actorhood is hitherto seen as

severely limited in respect to potential complexity. In a recent paper, Dobusch and Schoeneborn (2015) built on Ahrne and colleagues and argued that a full-scale organization involves three degrees of organizationality: interconnected decision-making processes; actorhood; identity. While they acknowledge the assumption that there can be organization without developing actorhood, they argued that such organization without actorhood only takes place on the first of three degrees of organizationality and is severely limited in terms of possible complexity and permanency. For them, organization without actorhood is something 'ad-hoc' like a 'bunch of friends helping each other move' (Dobusch & Schoeneborn, pp. 1008-1009). However, note that this diagnosis, so far, is rather an assumption than an actual empirical insight. Against this backdrop, we want to empirically explore the possibilities of organization without actorhood. Accordingly, we ask the following questions:

Is highly complex organization possible without developing actorhood?

If so, which implications does organization without actorhood have?

We draw on a qualitative case study of an inter-organizational collective concerned with ensuring the safety and security of large-scale events in a multifunctional event arena. We will illustrate the possibility of organization that implements elaborated decision structures and processes while not constituting an organizational actor. We found complex and interrelated structures, namely membership, hierarchies, rules, and compliance monitoring – constituted by and constituting recursive processes of interconnected decision-making leading to a certain degree of decision autonomy on a distinctive collective level. Hence, the core insight of this paper is that it is possible to construct highly complex organization without constituting an actor – and that such an organization has certain consequences in respect to responsibilities. Referring to Dobusch and Schoeneborn, we call this instance of organization without actorhood a *first-degree organization*.

We add to the existing literature in three respects. First, we build on recent developments in organization studies, namely on the mentioned concept of differing degrees of organizationality (Dobusch & Schoeneborn, 2015) and the decision-based perspective on organizations (Ahrne et al., 2016), which – as we will show – allows acknowledging complex organizational phenomena without actorhood. In contrast to common assumptions in the literature (King et al., 2010; McPhee & Zaug, 2000; Taylor & Cooren, 1997) our study evidences that complex organization can become constituted without the external attribution of actorhood. Second, since we inquire organization on an inter-organizational level, we also add to the debate on the organizationality of inter-organizational relations (Ahrne et al., 2016). So far, inter-organizational relations are typically depicted as highly organized when they have developed actorhood on the inter-organizational level. In this respect, our study illustrates the possibility to organize inter-organizational relations in a highly complex manner without constituting an actor. Third, we add to debates on the responsibility of organizations and in inter-organizational relations by pointing out that organization without actorhood has certain implications, i.e., it allows for a specific avoidance of responsibility. We will also further discuss the consequences, difficulties, and advantages of organization without actorhood in general as well as in respect to public safety.

2. Actorhood, organizations, and organizationality

That organizations can be seen as actors is a central argument in many organization works (King et al., 2010; Robichaud et al., 2004; Coleman, 1974). Despite the importance of the concept of actorhood for organization studies, only a few works actually deal with a definition of the notion (Meyer & Jepperson, 2000; Suddaby et al., 2010). Among those works is that by Geser (1992) who outlined that organizations should be conceptualized mainly by the fact that those are actors in the sense of being capable of interacting with other

organizations as well as with individuals. This is similar to the work of Taylor and Cooren (1997) who elaborated that organizations need to be communicatively constructed as an actor by others to become constituted. Also in this line of argumentation is the work by McPhee and Zaug (2000) who argued that organizations rely on institutional positioning through interaction with other organizations to become constituted as organizations. Other scholars usually apply similar notions – sometimes more or less explicit – relying on the assumption that an organization must be recognized (or constructed) as an actor capable of interacting with other actors (e.g., Drori, Meyer, & Hwang, 2006; Meyer & Jepperson, 2000; Scott & Davis, 2007). In a meta-theoretical paper, King et al. (2010) concluded that the actorhood of an organization implies two aspects. First, an organization must be capable of collective deliberation, self-reflection, and action; and second, an organization must be 'attributed as capable of acting by other actors' (King et al., 2010, p. 292).

The assumption that an organization is an actor implies that it has independent decision-making capabilities in its own right making it 'an independent decision-making actor' (Krücken & Meier, 2006, p. 244). The external addressability of an organization as an actor further leads to the ascription of responsibility, because if decisions can be attributed to an organization as an actor, it can be held responsible for those decisions (Geser, 1992; Krücken & Meier, 2006; Meyer & Bromley, 2013; King et al. 2010). Externally attributed actorhood therefore implies on the one hand that organizations are 'conceived as important decision-making entities in their own rights' (Krücken & Meier, 2006, p. 241) and on the other hand that organizations should and can be held responsible for their decisions (King et al. 2010, p. 294). Thus, actorhood of an organization implies independent *decision-making capabilities* and *responsibility*.

Dobusch and Schoeneborn (2015) built on such works in a recent paper. They developed a concept of stages of organizationality that integrates the aspects of decision-

making and actorhood, and combines these with identity. They argue that an organization in a common understanding has distinctive decision-making capabilities, is perceived and addressable as an actor by externals and has some kind of identity that marks what the organization is and what it stands for. These criteria – interconnected decision-making, actorhood, and identity – are conceptualized as degrees of organizationality, whereby each degree builds on the former one. An organization then needs to meet all of these three criteria to become a full-scale organization. With their concept of organizationality, Dobusch and Schoeneborn emphasized that there must be some distinctive system of interconnected decision-making (first degree) before there can be actorhood (second degree) or even organizational identity (third degree).

Their concept acknowledges that already on the first degree something can become "organizational" as soon as a distinctive system of interconnected decision-making emerges. We conclude that although they emphasized the importance of actorhood for full-scale organizations, they acknowledged that already on the first degree of organizationality instances of organization can occur without developing actorhood. However, we argue that they underestimated how much organization is possible already on the first degree of organizationality. Without actorhood, they describe this first degree as merely 'ad-hoc' not leading to a higher degree of permanency and complexity.

Their assumption on the limitedness of organization without actorhood mirrors the existing research on instances of organization that occur outside of full-scale organizations. Some scholars indeed recognized the relevance of such organizational instances and i.a. inquired on the relevance of organizational elements for such phenomena like standards (Higgins & Tamm Hallström, 2007; for the example of corporate social responsibility see Rasche, Bakker, & Moon, 2013), social movements (den Hond, Bakker, & Smith, 2015), markets (Aspers, 2011), crowdfunding (Nielsen, 2018), and even intimate relationships

(Ahrne, 2015). However, these works typically deal with only one or few organizational elements like exploring the effects of membership decisions on the setting of specific rules (Ahrne, Brunnson, & Tamm Hallström, 2007).

This also seems to be true with respect to studies on network forms of organization. Indeed, the majority of these studies focus on questions of centrality, density, fragmentation or governance (Provan, Fish, & Sydow, 2007), and networks are more often than not defined as the opposite or at least very different from organization (Ahrne & Brunsson, 2011; Moretti & Zirpoli, 2016; Podolny & Page, 1998; Powell, 1990). Nevertheless, a number of works exist that deal with aspects of organizationality of networks. Sydow and colleagues (Sydow & Windeler, 1998; Sydow, Schüssler, & Müller-Seitz, 2016), for instance, have discussed how networks organize by looking at issues of member selection, task allocation, rule formulation, and evaluation. However, the specific cases they inquired turn out to be networks that have developed an externally perceived actorhood. Cases like the financial advisory network MLP, the airline network Star Alliance, or many others feature 'a common name over the door', a brand, a logo, and often even dress codes and a unified postal address (Berthod, Grothe-Hammer, & Sydow, 2018, p. 216). Such a prevalence of actorhood is also present in network studies of other scholars. Dyer and Nobeoka (2000) inquired the management of knowledge-sharing networks thereby looking at organizational elements like membership, rules, sanctioning and hierarchies. However, their case is the Toyota group, which shares a common name and even a strong collective identity – and therefore actorhood on the network level. In a seminal paper, Gulati, Puranam, and Tushman (2012) discussed how to design network structures in terms of hierarchy and membership thereby proposing to understand such networks as instances of 'meta-organizations'. Here again, actorhood on the network-level is obvious. Other studies on highly organized networks have discussed the production of external legitimacy thereby conceptualizing the network as 'entity' (Human &

Provan, 2000) or a 'collective actor' (Fortwengel & Jackson, 2016). And in yet other cases the inquired "networks" turn out to be legally founded organizations after all, as for example in cases of trade associations (Park, 1996) or business associations (Sydow, 2004), in which, again, actorhood is unquestionable. Another interesting example of the organization of networks are so-called "network administrative organizations". Networks set up these as separate administrative entities for governing a network (Provan and Kenis, 2008). In these cases, again, networks form legal organizational entities and therefore some kind of actor.

We conclude that even the organization of networks typically comes combined with actorhood. Finding works that concentrate on organizational aspects of networks in which such networks do not develop actorhood turns out to be difficult. Among these are studies on temporary or project-based forms of organization (Bakker, DeFillippi, Schwab, & Sydow, 2016). While it is obvious that temporary forms of organization – like film projects – lack a certain persistence in time, on the level of networks that create those temporary organizations it is possible to identify more permanent organizational aspects (Bakker et al., 2016). One network form that does not necessarily develop actorhood is the so-called 'latent organization'. This is characterized by a certain permanency of specific organizational elements like long-term relational contracts and systems of rewarding and sanctioning (Starkey, Barnatt, & Tempest, 2000). In other works on networks, scholars also explored the forms and complexity of rule systems (Grothe-Hammer & Berthod, 2017), standard setting in networks (van den Ende, van de Kaa, den Uijl, & de Vries, 2012), or network hierarchies (Johns, 2010). Most noteworthy, Ahrne et al. (2016) have proposed to see networks 'as social orders with varying degrees of organization' (p. 97). Accordingly, they briefly discuss the possibilities of networks to introduce single organizational elements like formal memberships or hierarchies. However, these works concentrate only on one or few aspects of organization. Therefore, even in the network literature we can usually find more complex instances of

organization only paired with some kind of actorhood on the network level, while we find

organization without actorhood in very limited manifestations.[1] We conclude that although

some studies exist exploring possibilities of organization without actorhood, these studies

typically tend to focus on limited extents of organization outside of full-scale organizations.

So far, organization without actorhood is depicted as something very limited in terms of

possible complexity and permanency.

3. Decision-based organization theory

We want to explore the possible complexity of organization without actorhood and

therefore what Dobusch and Schoeneborn (2015) called the first degree of organizationality.

This first degree denominates an organized system based of interconnected-decision

processes below the degree of organizational actorhood. In defining this first degree,

Dobusch and Schoeneborn (2015) drew on a decision-based organization theory perspective

referring to the works of Ahrne and Brunsson (2011), and of Luhmann (2003). Consequently,

to explore the possibilities of organization without actorhood, we shall subscribe to such a

decision-based perspective on organizations (Ahrne et al., 2016; Luhmann, 2003; March &

Simon, 1958). While Dobusch and Schoeneborn only briefly referred to the decision-based

perspective when outlining the first degree of organizationality, we intend to elaborate it

extensively. Our aim is to uncover the full complexities possible on the level of organization

without actorhood and therefore on the first degree of organizationality.

The decision-based perspective puts decisions to the core of organization theory. It

traces back to March and Simon's (1958) seminal monograph 'Organizations', in which

decisions were introduced as the crucial element for understanding organizations. According

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[1] Although we did a thorough literature search, we, obviously, cannot be sure that there are no works that actually feature a network that is highly organized and nevertheless not constituted as an actor. Therefore, we do not claim that we are the first to inquire such a case. However, the aim of this paper is to explore the complexities of such phenomenon systematically and discuss its consequences thoroughly.

to March and Simon organization emerges because of the bounded rationality of individuals. Organizations and their structures hence motivate individuals to make certain decisions and allow to reduce uncertainty in decision-making. However, although March and Simon emphasized the decision as crucial they in fact focused on individuals and their behavior instead of the element of decision itself (Schoeneborn & Scherer, 2012, p. 964). They even used the analogy of 'assemblages of interacting human beings' (March & Simon, 1958, p. 4) to explain the notion of organization.

Newer works differ from this human-centered approach by focusing on the aspect of decision itself instead of human beings as decision-makers. In this newer understanding decisions are inquired as social operations and not as psychological events of individual decision-makers (Ahrne et al., 2016; Luhmann, 2003). Through this modern lens of decision-based organization theory it is possible to distinguish three aspects of organization: the structural aspect of organization, the processual aspect of organization, and the systemic aspect of organization (Apelt et al., 2017).

In this respect, Luhmann (2003) emphasized the importance of a process-view highlighting recursivity and interconnectedness of decisions when it comes to defining organization (Seidl & Becker, 2006). He argued that organizations are constituted by decisions and emerge from an ongoing recursive flow of *interconnected decision-making*, in which current decisions take reference to the foregoing ones and are the basis for subsequent decisions (Apelt et al., 2017; Luhmann, 2003; Seidl & Becker, 2006).[2] Decisions are thereby not only seen as important elements of organization but as *the* constitutive elements of it. Hence, '[o]rganizational processes […] are conceptualized as processes of decisions, whereby one decision calls forth ensuing decisions, resulting in a self-reproducing stream of

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[2] This aspect is also emphasized by Dobusch and Schoenborn when defining the first of three degrees of organizationality. According to them, this first degree is not only about instances of decisions or sole organizational elements, but – in reference to Luhmann (2003) – about 'interconnected episodes of decision-making' (Dobusch & Schoeneborn, 2015, pp. 1008-1009).

decisions' (Ahrne et al., 2016, p. 95). Organizations can, therefore, be understood as operatively closed systems of interconnected decision-making, which not necessarily implies that such a decision system has to be constituted as an actor by its environment.

As decision systems, organizations are further capable of making decisions on certain premises for making decisions. These decision premises serve as the structures of the system providing a fairly stable, yet always contingent, form of social order that subsequent decisions refer to (Apelt et al., 2017). Ahrne and Brunsson (2011) identified five organizational elements as such structures that one can decide on: membership, rules, hierarchies, compliance monitoring, and sanctions (see also Apelt et al., 2017). In respect to *membership*, they proposed to use the term broadly. Decisions about membership, therefore, define who belongs to a set of social relationships and who does not. It is further possible to decide about the establishment of *rules* for actions, which encompass instructions for behavior as well as the definition of certain goals to be achieved. One may also decide about *hierarchies*, which regulate certain positions responsible for making decisions for others. This can be done by centralizing power in one leading position or delegating it according to functions. The right to make decisions can be further given to single persons or certain councils, boards or committees. Additionally, it is possible to decide about *monitoring* instruments, i.e., decisions about who and what is about to be observed and in which ways. Finally, it is possible to decide about systems of positive and negative *sanctioning* (see Ahrne & Brunsson, 2011).

Membership, hierarchies, and rules, as well as monitoring and sanctioning instruments, serve as premises for the ongoing decisions (Apelt et al., 2017). However, an organization does not need to establish all of these elements to be constituted as an organization system (Ahrne et al., 2016). Those elements only pose possible ways for an

organization to decide on its structures and organizations can also decide not to decide on certain elements.

As systems of ongoing decision processes and decision structures, organizations consequently possess a degree of complex decision-making capabilities that other forms of social order do not have (Ahrne et al., 2016). These decision capabilities further imply a certain degree of *autonomy* (Ahrne & Brunsson 2008, p. 111; Kühl, 2013), i.e., the autonomy to make one's own decisions. "Something" can only be considered an organization if it has the capability to make its own decisions, and moreover, to decide on its own structures (Kühl, 2013; Luhmann, 2003). In organizations, members accept that the organization can make decisions for them to a certain degree. In this sense, organizations are more than the sum of its members and become capable of issuing decisions that a non-organized collective would not be able to make. Organizations consequently construct themselves by their own decisions and structures. In our reading of the decision-based perspective, this basic definition of organization, therefore, does not imply that an organization must be recognized by externals as an actor. Organization is, in principle, treated as a self-constructed and self-reconstructing phenomenon, that of course, stands in relation to its environment (see, e.g. Czarniawska, 2017), although this does not determine external attribution of actorhood. Therefore, the decision-based perspective provides a useful framework to understand the phenomenon of organization without actorhood.

Coming back to the concept of organizationality by Dobusch and Schoeneborn (2015) we want to conclude that an elaboration of the decision-based view provides an understanding of the structural aspects (Ahrne & Brunsson, 2011) as well as of the possible processual and systemic aspects (Luhmann, 2003) of the first degree of organizationality. On a processual level, the first degree of organizationality, therefore, involves the possibility of a system of *interconnected decision-making* processes that has a certain *autonomy*. On a

structural level, the first degree of organizationality involves the possibility to decide on *organizational elements*, i.e., membership, rules, hierarchies, monitoring and sanctioning instruments (see table A.1 for a summary). In contrast to Dobusch and Schoeneborn, we believe that this first degree can become considerably more complex and permanent than hitherto assumed and use the term "first-degree organization" to denominate the phenomenon more specifically.

--- Insert table A.1 here ---

4.   Research site

The case of our inquiry is a multifunctional event arena equipped with a closable roof and a heating system. It hosts sports, music, and other events with up to more than 60,000 visitors. Among these events are the city's soccer team's biweekly home matches, ice-hockey matches, international soccer matches, music concerts, stock-car races, and congresses. Concerning safety and security issues of these events, a collective of organizations has been established that works together regularly and closely. This collective involves at least nine organizations including the arena's operating company (ArenaOp), the police, and the municipal fire and emergency department (FED).

On a planning basis, this collective meets at least biweekly before each of the upcoming city's soccer team's matches. It meets additionally when there are other upcoming events. These 'traffic, safety, and security meetings' center on discussions of safety and security issues for the upcoming events. Here, decisions about concepts and rules for inter-organizational collaboration at specific events are discussed and mutually agreed upon. On the day of an event, the collective meets again immediately before the event begins and usually at least once during the event to discuss safety issues and to make collective decisions. The meetings are housed in a complex located at the top level of the arena—the so-

called 'rooftop-box'—providing a full view of the event space. In addition to a mutual

meeting room, the rooftop-box houses the command posts for the police, the FED, the private

security service, ArenaOp, and the medical service. From these command posts, the

organizations lead their own processes according to their mandates. However, the command

posts are located next-door to one another and are only separated by glass windows so that

the command posts can monitor each other and exchange information quickly. During events,

the police investigate criminal activity, the FED ensures fire safety, and so on. Their spatial

closeness in the rooftop-box allows for quick information exchange as necessary as, e.g.,

when the police need information from the security service for an investigation. However, the

collaboration goes beyond these autonomous operations and information exchange. The

organizations work together tightly in several respects according to mutual rules and

hierarchies, and they even monitor each other. Complex collective decision processes and

structures can be found in this collaboration.

5. Method

Our case of the arena collective is the result of an accidental discovery. In the context

of another broader investigation on inter-organizational relations (see Berthod, Grothe-

Hammer, Müller-Seitz, Raab, & Sydow, 2017), we encountered the case of the

multifunctional arena. After a first collection of evidence, we were under the impression that

the arena showed a high degree of organizational complexity without constituting an

organizational actor and therefore deviated from assumptions in the existing literature.[3]

Consequently, the decision to conduct a full inquiry was based on a theory-guided interest.

Although our case selection was based on an accidental discovery, we see the arena collective

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[3] In the aftermath, we presume that the accidental discovery of our case can be understood as coherent with our finding of organization without actorhood. As the characteristic of a lack of actorhood indicates, such phenomena are, by definition, difficult to find because they are not spontaneously visible.

as an adequate case for our research interest. We want to inquire and illustrate how complex

organization without actorhood can be. The arena collective represents an exemplary case

that allows exploring these aspects in general. It further allows for deriving assumptions on

the consequences of organization without actorhood. Single case studies are in this respect

useful for exploratory theory building but not for testing or validating. Our approach was

interpretive in nature (Lincoln & Guba, 1985).

In data collection, we relied on three sources of evidence: direct observations,

interviews, and documents.

Direct observations. We conducted several phases of observation. We accompanied

five different events and in many cases corresponding planning and debriefing meetings. To

ensure the coverage of differing vantage points, we selected diverse events and observation

perspectives. Since the arena collective is not a single addressable collective actor, we had to

negotiate field access with each of the related organizations separately. The types of events

we observed included one pop concert, one ice-hockey match, one international soccer

match, and two matches of the city's soccer team. For each event, we accompanied a

different member organization—including the FED, the security service, ArenaOp, the

medical service, and the city's public-transportation enterprise that runs the subway station in

front of the arena—to gain insights from diverse perspectives.

Interviews. The majority of collective decision processes in our case occurred in two

boards: a planning committee and a committee for ongoing events. Therefore, the number of

those representatives actually involved in the collective decision processes was relatively low

in comparison to the number of members of the individual organizations. During the planning

meetings, there were approximately 20 people in the room. During the ongoing events, there

were approximately 8 to 10 organizations involved in managing the inter-organizational

processes, with approximately 10 to 15 representatives somehow involved in collective

decisions at the top level. Of these organizations and representatives, we were able to

interview 15 people from 9 organizations, including all of the crucial ones. Interviews were

semi-structured or unstructured (Bailey, 2007, pp. 96-100; Cassell, 2009, p. 503).

Unstructured interviews took place spontaneously during the observations in cases in which

an opportunity emerged. Semi-structured interviews were scheduled. In both cases we wanted

to let the interviewees speak freely, so they would come up with narratives and topics about

aspects of coordination and cooperation in respect to the arena. Consequently, interview

lengths varied significantly from 15 minutes up to two hours and 25 minutes. In case of the

semi-structured interviews, we adapted the interview guides for every interview. However,

we usually started the interviews with narrative-generating questions about what the

interviewees or the organizations they work for are actually doing in the context of the arena.

Building on these narratives, we asked follow-up questions along topics we had noted in our

guides. These topics usually involved the following three aspects. First, we asked questions

regarding aspects specific for the interviewed organizations. We, for example, asked the

representatives of the security services how the services collaborate with each other. Second,

we asked questions clarifying observations we had made. Third, in the interviews that took

place later in our inquiry, we asked questions, if necessary, regarding organizational aspects

like hierarchies, membership, rules and how the collective is perceived by participants and

externals and how demands are addressed.

　　　Documents. Additionally, this study drew from documentary data. Official documents

about collective decision structures include checklists, protocols, concepts, and invitations.

Documents such as these are essential because they show the degree of explicit

organization—as demonstrated by codified rules, lists of members, the monitoring of

attendance and rule execution, and regulated communication hierarchies—that the arena

collective has. We found that these four organizational elements are explicitly regulated to

certain degrees. Due to the safety-related nature of these documents, many of them were

confidential; nevertheless, we were granted access to several documents, including the

mutual response plan for non-police incidents; four checklist-documents of events regulating

specific rules, communication hierarchies, and participating member organizations; the

FED's mission orders; and several other documents concerned with specific regulations.

In general, we applied a strategy of 'relying on theoretical propositions' (Yin, 2009, p.

130). We used the ontological understanding of organization as derived from the decision-

based perspective – however thereby aware that this ontology is the result of a specific

observation and interpretation used by us to interpret the way the field constructs itself. In

this sense, we observed how the field interprets and enacts the world by using theoretical

categories that allow for such an observation (Luhmann, 1993). Data collection and analysis

can be divided into three phases. As we mentioned, we found the case in the context of a

broader inquiry on coordination in inter-organizational relations (see Berthod et al., 2017).

Therefore, the organizationality of the arena collective was not our initial interest. However,

during the research process, we developed the impression that there is a lot more organization

present in this collective than one would assume on the basis of the existing research

literature. Therefore, we built our first proposition that the arena collective could be treated as

an instance of organization on the basis of two observed events and our first six interviews.

Consequently, in the second phase, we conducted the rest of our observations and interviews.

Our focus in this phase was to inquire the extent of organization occurring in the arena

collective. We looked for pattern matches (Yin, 2009, p. 136) to the existing theory and for

anomalies that challenged this existing theory. As a pattern-matching technique, we applied

the above-discussed characteristics of organization in analyzing our data. As proposed by

Apelt et al. (2017), we used the organizational elements suggested by Ahrne and Brunsson

(2011) as a taxonomy to determine the structural aspects of our case. Concretely, we used the

five organizational elements as deductive codes (Mayring, 2000). We coded our material using these codes, extracted the coded passages, printed these out and sorted them together. We then repeatedly read these sorted passages, created detailed descriptions (Creswell, 1998) and condensed these into a shortened form as displayed in section 6.1 (see also table A.2). We thereby laid one focus on how these elements were produced, reproduced and connected to each other allowing us to find instances of interconnected decision-making. Additionally, we reconstructed instances of 'chains of decisions' (as proposed by Besio & Pronzini, 2010) by producing detailed descriptions (Creswell, 1998) to indicate processes of interconnected decision-making and the related degree of decision autonomy. We used jottings (Miles, Huberman, & Saldana, 2014, p. 93) already during the data collection process to highlight corresponding instances. We especially identified the case of a subway station that is located in front of the arena as a promising example for complex interconnected decision-making. We ordered the material regarding the station by time (Miles et al., 2014, p. 194) to recreate the chains of decisions (see section 6.2). Finally, we turned to the aspect of actorhood. We extracted all passages that were concerned with how the arena collective is perceived as a network and/or an organization and how it is addressed (see section 6.3).

In our third phase of inquiry, we turned to the identified features of our case. Therefore, our analysis strategy shifted from pattern-matching to explanation-building (Yin, 2009, p. 141). Building on the identified deviances from theory in our data (i.e., a high degree of organization without constituting an actor), we started to cycle between data and organization theory. Specifically, we turned to the literature on actorhood and which characteristics and effects it has. We learned that actorhood is usually defined by several aspects that did not come together in our case. Moreover, actorhood typically produces responsibilities, which we learned is also different in our case. Therefore, we built on these differences to develop an understanding of the consequences of organization without

actorhood. We discussed our interpretations on several occasions with peers from network and organization research and came to the conclusions that we discuss in sections 7 and 8.

6.   The arena collective as organization without actorhood

6.1. Applying the organizational elements to the case

In this section, we present the results of our analysis, in which we applied the aforementioned characteristics of a decision-based notion of organization to our case. We start by asserting that the arena collective has defined *members*. Several documents regulate which organizations are part of the aforementioned meetings. The member organizations are ArenaOp (a private enterprise); the host of the specific event; the head private security service; the city's FED; the police; the city's municipal sports agency; the city's public-transportation enterprise running the subway station in front of the arena; the arena's traffic management company (a private enterprise); medical service agencies; and, optionally, the construction-supervision agency. These members are listed officially in mutual plans of action and mutual checklists. Furthermore, at least some members are interchangeable by decision. The positions of the security services, the medical services, and especially the host organization are interchangeable and not attached to specific organizations. In fact, the host organization changes with every event. The security service and the medical service are contractors that can be exchanged.

In addition, the collective gives itself specific mutual *rules*. There are several officially decided and written concepts, plans, and checklists that prescribe several rules that apply to the member organizations. These rules, e.g. determine the meetings of the collective. The rules, moreover, indicate who must participate in these meetings. Furthermore, there are mutual evacuation plans, according to which ArenaOp, security service, FED, police, and others must work together. During the event, there are prescribed communication channels

that have a specific, regulated hierarchy that stipulates which individuals (not just organizations!) are to communicate with whom and via which channels. Rules are also set before each specific event. According to a police director:

> 'For the match against Central City, we discussed many scenarios—and indeed not only police-related. We discussed mutually. (…) All these scenarios, who will do what, what is to be announced via the arena speakers, when do we do what. That we all discussed in the foregoing.' (Interview)

For example, before an event, the collective discusses mutual strategies about issues such as decisions about how police and firefighting units operate together in specific scenarios:

> 'We describe concrete scenarios, how we act on them. And we've made good experiences with that. The scenario in a block [a fire in a visitor's block], fire service decides. And we [police] have already a team ready on the block entrance. So that everyone would know what to do if the fire service would make the call to enter the block and we would go with them. So that the fire service does not have to call: "We need assistance from the police because we cannot reach the fire source." Instead, this is a scenario that we determined beforehand. We bring the fire team commander and the police team commander together. They already get acquainted in the foregoing to know then exactly: "We both go in there together with our people."' (Interview, Police Director)

Furthermore, the organizations *monitor* each other regarding the compliance of mutual rules. We observed this monitoring directly in different situations. First, the command posts of the most important organizations are located next to each other, separated partly only

by windows so each organization can watch what the others do. Moreover, the police monitor the work of the private security service and would intervene if the police commander found it necessary to do so. The FED monitors the work of the medical service and would take over command if necessary. Thus, the FED not only monitors the medical service from its command post but has observers who walk around the arena checking medical teams and first-aid posts directly. The medical service monitors the private security service with regard to the latter being able to identify potentially ill people, as mutually agreed, and so on. The following example illustrates this process:

> The visitor areas are separated by aisles of crowd control barriers. The security service is positioned with six people around each area. They are scanning for visitors in need of medical attention and pull them out. The visitors are then brought by the security staff to specific patient transfer points on the sides of the areas. These points were mutually determined by members of the security and the medical services. At the patient transfer point, medical units take over and bring the visitor to one of four first-aid stations. At the first-aid stations, security staff is waiting. After a visitor is successfully treated, a security staff member escorts him/her back to the visitor area. From their command posts in the rooftop-box, both the commander of the medical service as well as the commander of the security service monitor if this procedure works as agreed. (Excerpt from the observation protocol of a music concert, accompanying the medical service)

The arena collective has also implemented certain decided *hierarchies*. These hierarchies are not centralized in one lead position but distributed to several positions that are granted the right to issue commands for member organizations with respect to specific aspects. During the event, a 'checklist' document lists every representative, with decision

capabilities within the collective, by name and according to their positions. For example, before an event, a member of ArenaOp is defined that can order the 'stop of vehicular traffic' (document 'checklist'). This order is also valid for the FED, which usually would have decision autonomy granted by law for its own vehicles. Nevertheless, the collective decided that the FED can only override the traffic stop exceptionally, and the firefighters comply. Another example is that the mutual response plan for non-police emergencies prescribes the hierarchies between the FED and the medical service. Under a normal condition, the medical service processes medical emergencies on its own. In extraordinary cases, the FED would take over command of the medical service. This possibility of a command takeover is thereby regulated legally and is not a product of the collective. However, the arena collective decided to go beyond this legal regulation. In the mutual response plan, an elaborated organigram elaborates the exact hierarchies in case of an incident of this type.

Moreover, the most important hierarchical aspect of the arena collective is the establishment of a certain board for non-regular incidents. In such cases, the mutual rules prescribe that certain member organizations have the right to declare an exceptional state called 'arena 3000.' The mutual rules then indicate that in this case, the collective forms a mutual 'incident command' (document 'response plan for non-police emergencies'). Accordingly, in case of an incident, this incident command board makes decisions affecting its member organizations. For example, in cases of the use of pyrotechnics, the FED usually has the legal mandate to decide on its own whether to intervene. Despite this autonomous decision capability, the FED nevertheless transfers the decision about intervention to the joint incident command board, letting it decide to intervene or not, as the following interview indicates:

> [Asked about the response regarding illegal pyrotechnics:] 'We collect those only on the field. We only go into the crowd, if it was mutually decided: "Yes, we go

in there now and we get this stuff." Otherwise, we never go in.'

Interviewer: 'Could you as the fire service decide: "We have to extinguish this now.

Police assist us!"?'

Interviewee: 'Yes, of course. But this is discussed mutually. Do we go in there or

not?'

Interviewer: 'You could decide on your own?'

Interviewee: 'Yes. This is our very own mandate: fire.' (Interview, Deputy Fire Chief)

In another example, the police also give up part of their decision autonomy to the

arena collective:

'I am at a soccer match. It is relatively gross. The fans of the visiting team rip

out the seats and throw these forwards. A whole block. It begins, meeting, arena 3000.

The police say: "So if you [host organization] want a prosecution and a stopping

absolutely, we go in there. (…) But we suggest not to stop the property damage now,

for the sake of the match." (…) In the sense of law enforcement, you would have to

go in there with all you have got!' (Interview, Deputy Fire Chief)

Due to the criminal nature of such behavior and the imminent danger to other people,

the police would be legally in charge of deciding on its own whether to intervene and arrest

the rioters. Nevertheless, even in these cases, the police pass the decision-making task to the

joint incident command and act according to the collective's decision. Therefore, we

conclude that the arena collective not only displays four of the five structural elements of

organization as mentioned by Ahrne and Brunsson (2011) but that it gains a certain *autonomy*

in its decision capabilities that affects the autonomy of the member organizations.

As we have illustrated, the collective decides about rules that prescribe what members are supposed to do. In such cases, the member organizations do not decide on their own about certain rules they follow. Moreover, the arena collective has established hierarchies in which member organizations give up part of their autonomy to let the collective or other members issue commands. Decisions are often transferred to the collective incident command board, giving the collective a certain degree of decision autonomy. Part of this autonomy is the development of rather distinct collective purposes. Instead of pursuing their own organizational main purposes, the police and the FED comply with collective purposes 'for the sake of the match' (Interview, Deputy Fire Chief).

A surprising insight for us is that member organizations do not just only discuss decision options in the arena collective; they let the collective decide for them. As we have shown, there are specific cases in which the collective incident command board, in fact, issues commands for the police or the FED. As we also illustrated, there are cases in which one organization can take over direct command from others according to mutually decided hierarchies in which representatives of one organization can issue commands directly to others.

According to the outlined autonomy, *processes of interconnected decision-making* can also be found. In its operations, the arena collective decides about certain structures and puts them to practice. In case of non-regular incidents, e.g., the collective activates the state of 'arena 3000,' which refers to foregoing decisions about mutual structures. Moreover, existing rules are enacted and adapted from event to event. We observed that in planning meetings, collective decisions about certain rules and the outcomes from foregoing events were discussed and adjusted (by decision) for an upcoming event:

> A police officer is now explaining the "problem-situation." They expect 240
> problematic fans with up to 40 hooligans among them. Her superior officer adds: "I

hope that we will handle it better this time than the last one." Mr. Mills of the city's

soccer team explains this comment to the others: "Back then on October 17th, the fans

of the visiting team approached the entrance in a body. Their attempt to start running

was prevented by the police mostly. But then somebody gave the command that

everybody should step aside. The security service then stepped aside, and for a short

time, there was free entrance. This time, we will make the preparations according to

the specs of the last National City match." Mr. Mills then outlines the concept for the

private security service and the police. (Excerpt from the observation protocol of a

planning meeting)

In the interconnected decision processes, a high degree of complexity can be

achieved. By the interplay of several organizational elements—membership, rules,

hierarchies, and compliance monitoring—and the collective's autonomous decision

capability, complex structures and processes can be decided and implemented. We shall

outline this complexity in the following section by illustrating a specific example of complex

processes of the arena collective.

6.2. Complexity of interconnected decisions—the example of the subway station

In this section, we use the specific example of a subway station that is located in front

of the arena to illustrate the complex interconnected decision processes that take place within

the arena collective. As proposed by Besio and Pronzini (2010) we tracked this example as a

specific chain of decisions. Therefore, this section illustrates how decision processes are

recursively connected through time and how these decisions connect and are connected via

the organizational elements of membership, hierarchies, rules, and monitoring. We use

italicized terms to indicate the organizational elements.

Regarding the public transportation situation, the arena collective is faced with a certain challenge. Unlike in many other cities, the closest subway station is located only a few meters away from the arena. Consequently, after an event, tens of thousands of people simultaneously leave the arena heading for the subway station. In the past, the flow of people entering the subway station was unregulated. Sometimes, the density of people on the platform was very high, and some people even took a shortcut over the tracks. People were jamming onto the platform, creating a tailback into the arena. Having noticed this situation, the collective discussed this issue in its planning meetings (which we interpret as a result and an instance of *monitoring*). It decided that something had to be done to ensure the safety of visitors (decision on *rules*). The collective developed a detailed safety concept to deal with these flows of people that involves several of the organizations of the station collective (*membership; rules*). The member organizations agreed to develop a mutual safety concept that was then tested and adapted for several months (*monitoring*). A district fire chief described the process:

> 'Then there were measures taken to slow down the people headed for the subway station. And we monitored that for x weeks and modified it further. To minimize the pressure [of the people]. That was fascinating. With all these technical measures and organizational measures, with modification of the safety concept.' (Interview)

According to this concept, the flow of people coming from the arena is split up by the security service (*member*) and actively slowed (*hierarchy*). The flow of people is directed through different routes partly around half the station. One route passes the exit of the VIP parking garage. The arena traffic management (*member*) is then advised to block the garage as long as people are passing by (*rules*). The decision about when to close the garage is made

by ArenaOp (*member; hierarchy*). ArenaOp also sends representatives to three observation posts to *monitor* the situation. These observers not only watch but constantly make decisions about redirecting the flow of people (*hierarchy*). They decide which gates and ways would be opened or closed by the private security service (*member*) and issue corresponding orders via radio contact to the rooftop-box (*hierarchy*). The implementation of this process was observed:

> 10:15 pm: Approximately five minutes before the end of the match, John, Heinz, and Volkan, all with ArenaOp, get up. They take their posts around the arena. I am accompanying Volkan towards the southwest post. While we go there, Volkan explains to me that the VIP parking garage has already been closed. He was informed via radio. Now that we reach the post, I can see that myself. The match is over now, and I can observe that the security service opens the fences in the southwest and the southeast, according to the safety concept. (…) People are now passing by the parking garage.
>
> (…)
>
> 10:45 pm: Volkan and others radio the rooftop-box that the densities of flows are diminishing. They propose to close the southeast and southwest gates and to open the garage. At 10:48, I can see that the security service is starting to close the gates. (Excerpt from the observation protocol of a soccer match, accompanying ArenaOp)

Further, the police (*member*) *monitor* the whole situation via live video feeds and intervene (*hierarchy*) in case the private security service (*member*) does not work properly (according to the *rules*). The police also *monitor* ArenaOp (*member*) by sitting next to the assigned representative in the same room during this procedure. At the same time, the city's public-transportation enterprise (*member*) operates the actual subway station. According to

the concept, the subway trains leave from only one platform in two-minute intervals *(rules)*. This is also *monitored* by the observers of ArenaOp *(member)*, who otherwise command the security service *(member)* to reroute or block the flows *(rules; hierarchy)*. At the same time, another security service operates on behalf of the public-transportation enterprise *(member)* directly on the platform and uses crowd-control barriers to regulate how many people enter the subways and how quickly *(rules)*. If necessary, they block access using the barriers *(rules)*. In the station, a representative of the public-transportation enterprise (whom we also accompanied) *monitors* whether the subway trains are leaving according to the concept and whether the cars are filled properly *(rules)*. This observer also *monitors* the work of the arena's private security service *(member)*, while the arena's security service *(member)* *monitors* the concept's implementation in the subway station *(rules)*. The collective defined the criteria indicating when the platform is considered too crowded *(rules)*. This is actively controlled *(monitoring)* by both the representatives of the public-transportation enterprise *(member)* and the arena's security service *(member)*, as described in the following interviews:

'So one indicator is: How long do I need to get from there to there [from one end of the platform to the other]. The other indicator is: How is the situation on the stairs? Is there movement or stagnation? Stagnation on the stairs is always very bad, shit to be clear.' (Interview, representative of the city's public-transportation enterprise)

'The stairs have marking stripes, and we determined some of these on both sides of the platform as indicators for a possible overcrowding. Upstairs stands the security service. If that sees that there are people standing above the marking stripe, they radio the rooftop-box.' (Interview, representative no. 2, ArenaOp).

If one of these indicators manifests, the public-transportation enterprise (*member)* could decide to open another platform to relieve the density (*rules; hierarchy*). Furthermore, a coordination group of representatives from the public-transportation enterprise, police, FED, and ArenaOp meet to decide jointly on how to proceed (*rules; membership; hierarchy*).

We summed our findings from this and the previous subsection up in table A.2. Table A.2 shows the organizational elements and instances of interconnected decision-making and autonomy present on the first degree of organizationality. We distinguished between interconnectedness of decision-making processes through time and between elements to better display the present complexity. In this respect, a certain permanency of the organization in time is evident that goes beyond a solely temporary organizing at specific events (cf. Bakker et al., 2016).

--- Insert table A.2 here ---

6.3. External demands and the lack of actorhood

In this section, we report on the aspect of the lack of actorhood of the arena collective. While the example of the subway station showed a high degree of complexity, we learned that the station collective shows a lack of actorhood. External demands cannot be adequately addressed to the collective as a whole since it seems to be not addressable at all. This aspect became especially apparent for us in context of the above-outlined example of the subway station.

Specifically, the implementation of the described safety concept regarding the subway station faced major critics such as event visitors, local media, and political officials. Although the involved organizations agreed that this concept is appropriate for addressing safety issues, event visitors were annoyed about being slowed down, rerouted, or blocked because of the

measures taken. The news media reported and acknowledged the critics. Moreover, VIPs and some high-ranking local politicians complained about not being allowed to leave the parking garage shortly after an event.

'At that time, we extended our egress system. As a result, we had to close the parking garage for the VIPs at the end of an event. This resulted in huge discussions with the mayor.' (Interview, representative no. 1, ArenaOp)

However, the complainants were then faced with a certain challenge: They could not identify to whom to address their complaint. Different people tried to address different organizations without being sure about which organization is the correct one:

'Then these complainants, they complain to the public-transportation enterprise, some of them to the police, others to ArenaOp, still others to the city administration.' (Interview, Police Director)

To deal with these pressuring demands, the member organizations made then use of the fact that the arena collective is not perceived as an autonomous actor. They referred to the plurality of involved organizations to note that they were not (solely) responsible for the decisions about the safety concept:

'The advantage that this inter-organizational collaboration has is that one can say: it was simply this inter-organizational group that made the decision. (…) That way no one can exert leverage. The senior mayor cannot call Mr. Bruster [of ArenaOp] and say: "My friend, next time if I want to leave the garage... Do you understand me?" Instead, it is clear that there is just nobody one can grasp in this respect. That is a committee, and this mutually gauged and made a situation assessment and spoke in one voice, and this says: "This is the result." And the

committee made the decision, no one graspable.' (Interview, representative no.1,

ArenaOp)

[Asked regarding the pressure from VIP visitors:] 'Of course, Mr. Mills [of the

city's soccer team] could communicate (…) to the guests and VIP guests, that this is

of course also a police problem, a principal safety problem. And that everybody

concerned with safety sees this the same way that the measures are the right ones.

And because of that, the measures exist to the present day. It was tried to disestablish

it. Until the present day, the garage is closed.' (Interview, Police Director)

The fact that this strategy works as emphasized by the interview with a police director

underlines that externals do not recognize the arena collective as an actor. Moreover, these

interviews show that at least some individuals work strategically on the basis of the prevalent

lack of actorhood – whereby we have to add that only some interviewees admitted this that

openly. Moreover, one of our interviews indicates that the lack of actorhood might change in

the future. One fire officer explained to us that he was contemplating treating the arena

collective as an autonomous organization in the case of a large-scale incident. For us, he

made up a hypothetical example of a large-scale incident outlining this aspect:

'Even if I [as incident commander] would arrive there, (…) because of the

tight collaboration of this network [arena collective] I presumably would struggle to

take the lead. (…) I would assume that this is going to be very difficult because this

whole arena is de facto almost a distinct, autonomous organization. Hence, for me, is

the question: If we have a large-scale incident, why wouldn't I accept this whole

construct as an autonomous organization and just place my organization on top of it.'

(Interview, Deputy Fire Chief)

This account emphasizes an interesting aspect. On the one hand, it still confirms that the arena collective is not recognized as an actor, even by those people that have experience in participating in it – like the interviewed deputy fire chief. On the other hand, it indicates that the arena collective might have reached an extent of organization in which it is on the brink of becoming constituted as an actor.

7. Discussion

7.1. On the first degree of organizationality

We have illustrated that the arena collective reaches a high level of organization without constituting an externally recognized actor. The arena collective uses membership, mutual rules, compliance monitoring, and mutual hierarchies. Thereby, the complexity of decision processes unfolds in the interplay of these structural elements that do not remain isolated but are connected in these ongoing decision processes – constantly enacting and altering these organizational elements. In the particular example of the subway station, the arena collective can establish and maintain complex decision processes and interrelated structures that allow for dealing with demanding situations. Furthermore, it shows a certain degree of autonomy in its decisions. Accordingly, distinctive processes of interconnected decision processes occur in which current decisions reference foregoing decisions and decided structures, and lay the ground for subsequent decisions (see sections 6.1 and 6.2 and table A.2).

The decision processes occur on a distinctive collective level that is not reducible to single organizations and the interactions among them. As especially the example of the subway station with its fine-grained interplay of detailed structures and processes illustrates, the collective level of decision-making is more than the sum of its members. This became for

example clear when the Deputy Fire Chief in section 6.3 explained that he expects not to be able 'to take the lead' anymore in case of an incident, because of the autonomy of the arena collective. The amount of organization that takes place goes way beyond mutual discussion and decision-making in a collective, which, for instance, is apparent in the replaceability of certain member organizations and every involved individual.

In this sense, the collective is capable of collective action without developing a perceived actorhood. In contrast to works indicating that the aspect of being capable of collective action usually implies being perceived as an actor by others (King et al., 2010; McPhee & Zaug, 2000; Taylor & Cooren, 1997), our work shows that both issues can be treated separately. The identified first-degree organization is capable of collective action based on an autonomous level of interconnected decision-making. It, therefore, can be understood as an actor in the sense that it is capable of acting collectively. Nevertheless, this aspect does not necessarily lead to a state in which actorhood would be perceived by the environment. Moreover, contrary to common assumptions about the importance of externally attributed actorhood for the very constitution of complex organization (King et al., 2010; McPhee & Zaug, 2000; Taylor & Cooren, 1997), our study evidences that a complex organization can emerge without the external attribution of actorhood. Hence, we see this as a case of organization without actorhood – a primal instance of organization on the first degree of organizationality (Dobusch & Schoeneborn, 2015) in which the potential of becoming an actor, and therefore a full organization, is inherent.

Our insights go beyond what has been reported so far in other studies on organization without actorhood. As outlined above, other studies so far only inquired certain aspects – mostly few organizational elements – occurring outside formal organizations. This led scholars to the assumption that the potential of organization on the first degree of organizationality would be rather limited in complexity. Our results indicate that this

assumption should be revised. Although one could argue that in our case, we only found four out of five possible organizational elements; we see no particular reason for why it should not be possible, in principle, to include all five organizational elements in instances of first-degree organization. Moreover, we showed the occurrence of the relative persistence of ongoing and recursively connected decision-making paired with a certain degree of autonomy. Our study evidences that highly complex organization is possible without actorhood.

7.2. Consequences of organization without actorhood

The absence of actorhood of an organization implies certain consequences in comparison to conventional (full-scale) organizations. Generally, organizations face a multiplicity of demands from their environments. As we have outlined in section 2, organizations are usually addressable as actors by other actors and can be held responsible for their decisions. There is a long-standing tradition of research highlighting strategies and mechanisms of how organizations cope with external demands by buffering their operative core activities from these very demands (Oliver, 1991; Thompson, 1967). For instance, scholars uncovered how organizations establish facades (Meyer & Rowan, 1977; Kühl, 2013), apply symbolic impression management (e.g. Elsbach & Sutton, 1992), do not implement symbolically adopted standards and programs (e.g. Fiss & Zajac, 2006) or apply hypocrisy (Brunsson, 1989) to decouple their core activities. Therefore, organizations have (at least) two sides: an informal one dealing with core activities and a formal one applying the listed possibilities of buffering to cope with external demands (Meyer & Rowan, 1977).

However, this is different when dealing with a first-degree organization. Having a formal side implies that an organization is recognized as an actor to which external demands can be addressed to. In case of organization without actorhood, this characteristic is missing.

In our case, the arena collective was able to dilute responsibility for its decisions because of its lack of addressability. We conclude that the first-degree organization can be understood as an instance of organization lacking the typical two-sidedness of organizations. A first-degree organization only has its core activities – it only has an informal side.

This aspect connects to broader discussions on collective responsibility in inter-organizational relations. In particular, scholars of public administration have highlighted the so-called 'problem of many hands' (Thompson, 1980). Inter-organizational forms of collaboration lacking an addressable single authority usually imply the problem that in the end, no one can be held responsible (Agranoff & McGuire, 2001). However, existing research on responsibility in inter-organizational constellations usually deals with mandated accountability. In such cases, an authority mandates actors to achieve something, and those mandated actors must report back on how they performed (Hodge & Coghill, 2007, p. 676). Studies that problematize diluted responsibilities in inter-organizational collaborations usually deal with constellations in which certain mandates are allocated to several actors simultaneously, and therefore, lines of accountabilities are blurred. In this respect, our case is a different one. In case of the arena collective, the official mandates of the participating member organizations remain separated. The police are mandated with policing responsibilities and therefore, responsible and accountable for policing; the FED is mandated with firefighting duties, and so on. The existence of a level of first-degree organization above the level of single organizations does not obliterate this fact. On the contrary, because the arena collective is not recognized as an autonomous entity, there is no way that accountability for anything could be attributed to it and therefore to the collective level, because without (perceived) autonomy, there can be no accountability (Olsen, 2015). Therefore, the member organizations cannot refer to the collective level when it comes to accountability for their core mandates.

A dilution of responsibility, as we describe it, is only achieved on the sole collective level of decisions – the actual actions of the arena collective as a system of interconnected decisions. In this respect, we argue that the arena collective uses the characteristics of the so-called 'problem of many hands' without actually producing such a problem. On the level of the arena collective, responsibilities are concentrated internally – by being organized – while only simulating the existence of many responsible hands to the outside. Indeed, since the arena collective is not mandated by any external authority, there is no accountability to externals. However, accountability exists internally regarding the member organizations within the collective (see Bardach & Lesser, 1996). This internal recognition of responsibilities is visible by the fact that the arena collective has implemented a broad variety of monitoring processes.

Further, we would argue that the existence of a first-degree organization on the collective level that is not perceived as an actor, in fact, strengthens the ability of the member organizations to fulfill their mandates for which they are accountable for. The purpose of the arena collective is to increase safety and security in general, which supports the fulfillment of the mandates of the member organizations. On the one hand, the existence of a first-degree organization allows achieving a higher degree of decision complexity than it would be possible on the level of single organizations. On the other hand, by not being perceived as an actor by others, the arena collective can consequently operate solely according to its operational rationality, which, in this case, is safety-related reliability. As we have seen in our case, by being not addressable to others, the arena collective can protect its internal purposes and processes from external influences, i.e., from external demands of visitors and politicians that may mean having to abandon safety procedures. This, we would argue, actually supports the fulfillment of the given mandates of member organizations like the police or the FED, which can increase safety and security while avoiding political and other interferences. In this

respect, we want to highlight that existing research repeatedly has emphasized that such political interferences can be considered problematic when it comes to ensuring public safety (Henstra, 2010; Waugh, 2006; Webb, 2007) – as for example in case of the Love Parade disaster in 2010, when 21 people were killed due to crowd turbulence during an electronic dance music festival. Political pressures and a lack of organization among involved organizations seem to have contributed to the fatal development of the event (Helbing & Mukerji, 2012).

Nevertheless, we also see that it could eventually become problematic to have such high degree of organization without even potentially being accountable to some external authority. While in this example safety issues are strengthened, we believe that it is, in principle, possible that the arena collective could make decisions that could be much more questionable. In these cases, the described dilution of responsibilities would indeed become problematic.

8.   Conclusive remarks

Generally, our study evidences the existence of highly complex organizations that become constituted by their own decision-making capabilities while not becoming an externally perceived actor. In reference to the work of Dobusch and Schoeneborn (2015), we termed this kind of organization, first-degree organization. Our study thereby contradicts works that state that organizations depend crucially on the external attribution of actorhood to become constituted as complex organizations (King et al., 2010; McPhee & Zaug, 2000; Taylor & Cooren, 1997). Organizations can emerge and become highly complex without external recognition. We moreover discussed the crucial consequence that without actorhood an organization can avoid to take responsibility for its decisions. This distinguishes first-

degree organization significantly from conventional organizations that spend great efforts in coping with external demands.

To derive these insights, we developed a framework that allows for a detailed understanding and exploration of the first degree of organizationality as defined by Dobusch and Schoeneborn (2015), i.e. organization without actorhood. By elaborating and applying the decision-based understanding of organization it is possible to achieve fine-grained views of the degree of organization within the first degree of organizationality.

On a methodological level, we want to note briefly that although there have been numerous accounts emphasizing the enormous potential the Luhmannian notion of organizations as decision-based and self-reproducing systems holds for organization studies (see only for a few examples Apelt et al., 2017; Czarniawska, 2017; Hernes and Bakken, 2003; Schoeneborn, 2011; Seidl and Becker, 2006), there has been only very limited application yet (see for rare exceptions Besio and Meyer, 2015; Blaschke et al., 2012). In this respect, our study shows that the Luhmannian notion of organization can be fruitfully used in empirical research.

We also see some managerial implications we can draw from our study. An organization that avoids the external recognition as an actor allows for getting rid of many aspects otherwise typical for organizations. Conventional – full-scale – organizations normally have to spend great efforts in coping with external demands. A large portion of organization is usually concerned with addressing, balancing or disguising external demands. An organization that lacks actorhood need not be concerned with these issues. It can concentrate on its core activities – because it only has these core activities. Managers could contemplate establishing first-degree organizations to pursue certain goals for which external interference should be avoided. Especially for managers concerned with public safety issues,

it could be a viable option to engage in highly complex inter-organizational collaborations that deliberately avoid creating some kind of actor that could be externally addressed.

However, in this respect a related question comes up: At which point would a first-degree organization become an organization as actor? Although we cannot answer this question satisfyingly, our data suggest that the arena collective is on the brink of becoming perceived as an actor. We believe that one reason for this could lie in the huge extent of organization prevalent. If something establishes complex structures like the arena collective and maintains interconnected decision processes as well as decision autonomy over a longer period, we assume it simply becomes difficult not to be perceived as some kind of an autonomous actor. Moreover, as soon as this organization needs to interact with its environment, it would need to become an actor.

9. Limitations and implications for future research

We conducted a single case study to explore in detail the possibilities inherent in organization without actorhood. Naturally, our approach has limitations. First of all, we must take into account that in our study we inquired a kind of a regional inter-organizational collective with recurring face-to-face interactions and a concentration on a very specific place (Sydow et al., 2016). The arena collective is moreover a first-degree organization that has organizations as its members. However, organizations that have organizations as their members are usually called 'meta-organizations', whereby the notion implies certain characteristics that differ from organizations that have individuals as members (Ahrne & Brunsson, 2008; Berkowitz & Bor, 2017). In light of the non-existing actorhood of the arena collective, the usual fundamental differences between meta-organizations and individual-based organizations are not existent in our case. Meta-organizations e.g. typically threaten the autonomy of their members by being actors that can make decisions for their members

(Ahrne & Brunsson, 2008). Since the arena collective is not recognized by others as an actor, there is no threat to the member organizations of not being perceived as autonomous actors. Nevertheless, it could be an interesting topic to explore, if there are other differences in this respect. Another question that comes up in this respect, is: Would the high degree of organization without actorhood as we observed on the inter-organizational level be even possible in case of individual-based first-degree organizations?

An important question will also be how prevalent the phenomenon of organization without actorhood is. No assertion is possible on the degree of expansion the phenomenon has in general. Future inquiries should explore this to assess the relevance of organization without actorhood in our society. Are there similar settings in which collectives also developed large extents of organization without actorhood and does this also lead to a dilution of responsibilities? Can we observe similar effects or do other collectives use a lack of actorhood to strategically avoid responsibility in rather problematic ways? While our study explores the possibilities of organization without actorhood in general, we cannot predict that such complex organization without actorhood also exist in other settings than local inter-organizational collectives. For future inquiries it will be an interesting question to explore if such a complex first-degree organization is possible without the strong coupling to a certain place or region. Can e.g. global networks also develop such complex organization without actorhood or must they always rely on some kind of meta-organization (Gulati et al., 2012) or network administrative organization (Provan & Kenis, 2008) when there is no spatial proximity? Can we even find complex organization without actorhood as we describe it in other contexts such as markets (Brunsson, Gustafsson, & Tamm Hallström, 2018)?

Taking into account that the arena collective seems to be on the brink of becoming an actor, we see further promising questions for possible future research: What would happen if externals would start to recognize the arena collective as an actor? Would the result be a

breakdown of the first-degree organization because the informal transfers of decision autonomy to the collective conducted by the police and the FED are officially not possible? Or would there be a formal constitution of some kind of organization, in which certain practices like the transfer of decision autonomies would simply remain (or be re-established) on an informal level? Would we then experience the establishment of facades, impression management, and similar instruments to buffer such informal activities from external notice? In this respect, we see the potential for possible future inquiries focusing on such phenomena.

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References

Agranoff, R., & McGuire, M. (2001). Big Questions in Public Network Management Research. *Journal of Public Administration Research and Theory*, *11*, 295–326.

Ahrne, G., Brunsson, N., & Tamm Hallström, K. (2007). Organizing Organizations. *Organization*, *14*, 619–624.

Ahrne, G. (2015). The partial organization of intimate relations. *Le Libellio d' AEGIS*, *11*, 7–19.

Ahrne, G., & Brunsson, N. (2008). *Meta-organizations*. Cheltenham, Glos, UK: Edward Elgar.

Ahrne, G., & Brunsson, N. (2011). Organization outside organizations: the significance of partial organization. *Organization*, *18*, 83–104.

Ahrne, G., & Brunsson, N. (Eds.) (forthcoming). *Organization outside organizations*. Cambridge: Cambridge University Press.

Ahrne, G., Brunsson, N., & Seidl, D. (2016). Resurrecting organization by going beyond organizations. *European Management Journal*, *34*, 93–101.

Ahrne, G., Brunsson, N., & Seidl, D. (2017). On the fruitfulness of the concept of partial organization: A rejoinder to Apelt et al. *European Management Journal*, 35, 297–299.

Apelt, M., Besio, C., Corsi, G., Groddeck, V. von, Grothe-Hammer, M., & Tacke, V. (2017). Resurrecting organization without renouncing society: A response to Ahrne, Brunsson and Seidl. *European Management Journal*, *35*, 8–14.

Aspers, P. (2011). *Markets*. Cambridge: Polity Press.

Bakker, R. M., DeFillippi, R. J., Schwab, A., & Sydow, J. (2016). Temporary organizing: Promises, processes, problems. *Organization Studies, 37*, 1703-1719.

Bardach, E., & Lesser, C. (1996). Accountability in Human Services Collaboratives: For What? and To Whom? *Journal of Public Administration Research and Theory*, *6*, 197–224.

Berkowitz, H., & Bor, S. (2018). Why Meta-Organizations Matter: A Response to Lawton et al. and Spillman. *Journal of management inquiry*, *27*(2), 204-211.

Berthod, O., Grothe-Hammer, M., Müller-Seitz, G., Raab, J., & Sydow, J. (2017). From High-Reliability Organizations to High-Reliability Networks: The Dynamics of Network Governance in the Face of Emergency. *Journal of Public Administration Research and Theory*, *27*(2), 352–371.

Berthod, O., Grothe-Hammer, M., & Sydow, J. (2018). Inter-organizational ethnography: Promises and problems. In A. Bryman & D. A. Buchanan (Eds.), *Unconventional methodology in organization and management research* (pp. 212–230). Oxford: Oxford University Press.

Besio, C., & Pronzini, A. (2010). Inside Organizations and Out: Methodological Tenets for Empirical Research Inspired by Systems Theory. *Forum: Qualitative Social Research*, *11*.

Besio, C., & Meyer, U. (2015). Heterogeneity in World Society: How Organizations Handle Contradicting Logics. In B. Holzer, F. Kastner, T. Werron, & M. Albert (Eds.), *From globalization to world society: Neo-institutional and systems-theoretical perspectives* (pp. 237–257). New York, New York, Oxfordshire, England: Routledge.

Blaschke, S., Schoeneborn, D., & Seidl, D. (2012). Organizations as Networks of Communication Episodes: Turning the Network Perspective Inside Out. *Organization Studies*, *33*(7), 879–906.

Brunsson, N. (1989). *The organization of hypocrisy: Talk, decisions, and actions in organizations*. Chichester, New York: Wiley.

Brunsson, N., Gustafsson, I., & Tamm Hallström, K. (2018). Markets, Trust, and the

　　　Construction of Macro-Organizations. In N. Brunsson & M. Jutterström (Eds.),

　　　Organizing and reorganizing markets (pp. 136–152). Oxford: Oxford University Press.

Cassell, C. (2011). Interviews in Organizational Research. In D. A. Buchanan & A. Bryman

　　　(Eds.), *The SAGE handbook of organizational research methods* (pp. 500–515).

　　　Thousand Oaks, CA: SAGE.

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five

　　　traditions*. Thousand Oaks, Calif: SAGE.

Czarniawska, B. (2017). Bruno Latour and Niklas Luhmann as organization theorists.

　　　European Management Journal, *35*, 145–150.

Dobusch, L., & Schoeneborn, D. (2015). Fluidity, Identity, and Organizationality: The

　　　Communicative Constitution of Anonymous. *Journal of Management Studies*, *52*, 1005–

　　　1035.

Drori, G. S., Meyer, J. W., & Hwang, H. (2006). Introduction. In G. S. Drori, J. W. Meyer, &

　　　H. Hwang, (Eds.), *Globalization and organization: World society and organizational

　　　change*. (pp. 1–22). Oxford: Oxford University Press.

Dyer, J. H., & Nobeoka, K. (2000). Creating and Managing a High-Performance Knowledge-

　　　Sharing Network: The Toyota Case. *Strategic Management Journal*, *21*, 345–367.

Elsbach, K. D., & Sutton, R. I. (1992). Acquiring Organizational Legitimacy through

　　　Illegitimate Actions: A Marriage of Institutional and Impression Management Theories.

　　　Academy of Management Journal, *35*, 699–738.

Fiss, P. C., & Zajac, E. J. (2006). The Symbolic Management of Strategic Change:

　　　Sensegiving via Framing and Decoupling. *Academy of Management Journal*, *49*, 1173–

　　　1193.

Fortwengel, J., & Jackson, G. (2016). Legitimizing the apprenticeship practice in a distant environment: Institutional entrepreneurship through inter-organizational networks. *Journal of World Business*, *51*(6), 895–909.

Geser, H. (1992). Towards an Interaction Theory of Organizational Actors. *Organization Studies*, *13*, 429–451.

Grothe-Hammer, M., & Berthod, O. (2017). The programming of decisions for disaster and emergency response: A Luhmannian approach. *Current Sociology*, *65*(5), 735–755.

Gulati, R., Puranam, P., & Tushman, M. (2012). Meta-organization design: Rethinking design in interorganizational and community contexts. *Strategic Management Journal*, *33*, 571–586.

Helbing, D., & Mukerji, P. (2012). Crowd disasters as systemic failures: Analysis of the Love Parade disaster. *EPJ Data Science*, *1*(1).

Henstra, D. (2010). Evaluating Local Government Emergency Management Programs: What Framework Should Public Managers Adopt? *Public Administration Review*, *70*, 236–246.

Hernes, T., & Bakken, T. (2003). Implications of Self-Reference: Niklas Luhmann's Autopoiesis and Organization Theory. *Organization Studies*, *24*(9), 1511–1535.

Higgins, W., & Tamm Hallström, K. (2007). Standardization, Globalization and Rationalities of Government. *Organization*, *14*, 685–704.

Hodge, G. A., & Coghill, K. (2007). Accountability in the Privatized State. *Governance*, *20*, 675–702.

Hond, F. den, Bakker, F. G. de, & Smith, N. (2015). Social Movements and Organizational Analysis. In D. Della Porta, & M. Diani (Eds.), *The Oxford Handbook of Social Movements* (pp. 291–305). Oxford: Oxford University Press.

Human, S. E., & Provan, K. G. (2000). Legitimacy Building in the Evolution of Small-Firm

Multilateral Networks: A Comparative Study of Success and Demise. *Administrative

Science Quarterly*, *45*(2), 327–365.

Johns, J. (2010). Manchester's Film and Television Industry: Project Ecologies and Network

Hierarchies. *Urban Studies*, *47*(5), 1059–1077.

King, B. G., Felin, T., & Whetten, D. A. (2010). Finding the organization in organizational

theory: A meta-theory of the organization as a social actor. *Organization Science*, *21*,

290–305.

Krücken, G., & Meier, F. (2006). Turning the university into an organizational actor. In G. S.

Drori, J. W. Meyer, & H. Hwang, (Eds.), *Globalization and organization: World society

and organizational change*. (pp. 241–257). Oxford: Oxford University Press.

Kühl, S. (2013). *Organizations: A systems approach*. Farnham: Gower.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, Calif.: SAGE.

Luhmann, N. (1993). Deconstruction as second-order observing. *New Literary History, 24,*

763–782.

Luhmann, N. (2003). Organization. In T. Bakken, & T. Hernes (Eds.), *Autopoietic

organization theory: Drawing on Niklas Luhmann's social systems perspective* (pp. 31–

52). Herndon, VA: Copenhagen Business School Press.

March, J. G., & Simon, H. A. (1958). *Organizations*. New York: John Wiley & Sons.

Mayring, P. (2000). Qualitative Content Analysis. *Forum: Qualitative Social Research*, *1*(2).

McPhee, R. D., & Zaug, P. (2000). The communicative constitution of organizations: A

framework for explanation. *Electronic Journal of Communication*, *10*.

Meyer, J. W., & Bromley, P. (2013). The Worldwide Expansion of "Organization".

Sociological Theory, *31*, 366–389.

Meyer, J. W., & Jepperson, R. L. (2000). The 'Actors' of Modern Society: The Cultural Construction of Social Agency. *Sociological Theory*, *18*, 100–120.

Meyer, J. W., & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, *83*, 340–363.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Los Angeles: SAGE.

Moretti, A., & Zirpoli, F. (2016). A Dynamic Theory of Network Failure: The Case of the Venice Film Festival and the Local Hospitality System. *Organization Studies*, *37*(5), 607–633.

Nielsen, K. R. (2018). Crowdfunding through a partial organization lens: The co-dependent organization. *European Management Journal.* Advance online publication. https://doi.org/10.1016/j.emj.2018.01.006

Oliver, C. (1991). Strategic Responses to Institutional Processes. *Academy of Management Review*, *16*, 145–179.

Olsen, J. P. (2015). Democratic Order, Autonomy, and Accountability. *Governance*, *28*, 425–440.

Park, S. H. (1996). Managing an Interorganizational Network: A Framework of the Institutional Mechanism for Network Control. *Organization Studies*, *17*, 795–824.

Podolny, J. M., & Page, K. L. (1998). Network Forms of Organization. *Annual Review of Sociology*, *24*(1), 57–76.

Powell, W. W. (1990). Neither market nor hierarchy: Network forms of organization. *Research in Organizational Behavior*, *12*, 295–336.

Provan, K. G., Fish, A., & Sydow, J. (2007). Interorganizational Networks at the Network Level: A Review of the Empirical Literature on Whole Networks. *Journal of Management*, *33*, 479–516.

Provan, K. G., & Kenis, P. (2008). Modes of Network Governance: Structure, Management, and Effectiveness. *Journal of Public Administration Research and Theory*, *18*, 229–252.

Rasche, A., Bakker, F. G. A. de, & Moon, J. (2013). Complete and Partial Organizing for Corporate Social Responsibility. *Journal of Business Ethics*, *115*, 651–663.

Robichaud, D., Giroux, H., & Taylor, J. R. (2004). The Metaconversation: The Recursive Property of Language as a Key to Organizing. *Academy of Management Review*, *29*, 617–634.

Schoeneborn, D. (2011). Organization as Communication: A Luhmannian Perspective. *Management Communication Quarterly*, *25*(4), 663–689.

Schoeneborn, D., & Scherer, A. G. (2012). Clandestine Organizations, al Qaeda, and the Paradox of (In)Visibility: A Response to Stohl and Stohl. *Organization Studies*, *33*(7), 963–971.

Scott, C. R. (2015). Bringing Hidden Organizations Out of the Shadows: Introduction to the Special Issue. *Management Communication Quarterly*, *29*, 503–511.

Scott, W. R., & Davis, G. F. (2007). *Organizations and organizing: Rational, natural, and open system perspectives*. Upper Saddle River, N.J.: Pearson Prentice Hall.

Seidl, D., & Becker, K. H. (2006). Organizations as Distinction Generating and Processing Systems: Niklas Luhmann's Contribution to Organization Studies. *Organization*, *13*, 9–35.

Starkey, K., Barnatt, C., & Tempest, S. (2000). Beyond Networks and Hierarchies: Latent Organizations in the U.K. Television Industry. *Organization Science*, *11*, 299–305.

Suddaby, R., Elsbach, K. D., Greenwood, R., Meyer, J. W., & Zilber, T. B. (2010). Organizations and Their Institutional Environments—Bringing Meaning, Values, and Culture Back In. *Academy of Management Journal*, *53*, 1234–1240.

Sydow, J. (2004). Network Development by Means of Network Evaluation?: Explorative

    Insights from a Case in the Financial Services Industry. *Human Relations*, *57*, 201–220.

Sydow, J., Schüssler, E., & Müller-Seitz, G. (2016). *Managing inter-organizational*

    relations: Debates and cases. New York: Palgrave Macmillan.

Sydow, J., & Windeler, A. (1998). Organizing and Evaluating Interfirm Networks: A

    Structurationist Perspective on Network Processes and Effectiveness. *Organization*

    Science, *9*(3), 265–284.

Taylor, J. R., & Cooren, F. (1997). What makes communication 'organizational'?: How the

    many voices of a collectivity become the one voice of an organization. *Journal of*

    Pragmatics, *27*, 409–438.

Thompson, D. F. (1980). Moral responsibility of public officials: The problem of many

    hands. *American Political Science Review*, *74*, 905–916.

Thompson, J. D. (1967). *Organizations in Action*. New York: McGraw-Hill.

van den Ende, J., van de Kaa, G., Uijl, S. d., & Vries, H. J. d. (2012). The Paradox of

    Standard Flexibility: The Effects of Co-evolution between Standard and

    Interorganizational Network. *Organization Studies*, *33*(5-6), 705–736.

Waugh, W. L. (2006). The Political Costs of Failure in the Katrina and Rita Disasters. *The*

    ANNALS of the American Academy of Political and Social Science, *604*, 10–25.

Webb, G. R. (2007). The sociology of disaster. In C. D. Bryant, & D. L. Peck (Eds.), *21st*

    century sociology: A reference handbook (pp. 278–285). Thousand Oaks, Calif: SAGE.

Yin, R. K. (2009). *Case study research: Design and methods.* (4th ed.). Los Angeles, Calif.:

    SAGE.

Table A.1: The three degrees of organizationality with detailed framework for the first degree as used in subsequent Table A.2

1st degree of organizationality (our focus of interest)			2nd degree of organizationality	3rd degree of organizationality
Possible organizational elements (structure) • Membership • Hierarchies • Rules • Monitoring instruments • Sanctioning instruments	*Interconnected decision-making (process)*	*Decision autonomy on an emergent level (systemness)*	***Actorhood** of the autonomous system*	***Collective identity***

Table A.2: Decision-based framework of the first degree of organizationality (as visualized in table A.1) applied to our case. Examples are short descriptive summaries from our data.

Organizational elements		Interconnected decision-making		Autonomy
	Examples	*Examples for interconnectedness through time*	*Examples for interconnectedness between elements*	*Examples*
Membership	Decided member organizations of the arena collective in plans of actions and checklists Replaceability of many members: security services, medical services, host organizations	Event host organizations change from event to event	Collective *monitors* ongoing activities like handling of flows of people towards the subway station and discusses. Collective decides new *rules* and *hierarchies* as well as *monitoring* instruments. Implementation of the concept is continuously *monitored* by a coordination group. Decisions on *adaptions* of the concept and procedures (*rules* and *hierarchies*) based on *monitoring*. During events predefined positions *monitor* situation and make decisions based on safety concept.	Collective decides for members Collective has organizational elements valid for its members Collective develops its own emergent purposes ('for the sake of the match')
Rules	Mutual checklists prescribing meeting dates, participants, i.a. Mutual evacuation plans Safety and security concepts Communication plans	Specific safety and security concepts are adapted continuously Mutual plans are continuously updated and modified		
Monitoring	Organizational command posts in one location. Monitoring each other via glass walls Police monitors private security services FED monitors medical services Security services monitor each other	CCTV surveillance system is adapted and modified continuously FED continuously adapts intensity of monitoring medical services Establishment of an additional "inter-org room" in rooftop box		
Hierarchies	Document lists decision capabilities of certain individuals Defined ArenaOp members can order members of other organizations FED positions can command medical service members Mutual incident command board can make decisions for all	The four medical service organizations rotate command staff from event to event		