



AALBORG UNIVERSITY
DENMARK

Aalborg Universitet

Navigating among islands of certainty

Coordinating as communicative practices of temporary organizations experiencing crisis

Stingl, Verena; McClellan, John G.

Published in:
International Journal of Project Management

DOI (link to publication from Publisher):
[10.1016/j.ijproman.2023.102540](https://doi.org/10.1016/j.ijproman.2023.102540)

Creative Commons License
CC BY 4.0

Publication date:
2023

Document Version
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

Citation for published version (APA):
Stingl, V., & McClellan, J. G. (2023). Navigating among islands of certainty: Coordinating as communicative practices of temporary organizations experiencing crisis. *International Journal of Project Management*, 41(8), Article 102540. <https://doi.org/10.1016/j.ijproman.2023.102540>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

Take down policy

If you believe that this document breaches copyright please contact us at vbn@aub.aau.dk providing details, and we will remove access to the work immediately and investigate your claim.



Navigating among islands of certainty: Coordinating as communicative practices of temporary organizations experiencing crisis

Verena Stingl^{a,*}, John G. McClellan^b

^a Department of Materials and Production, Aalborg University, Fibigerstræde 16, 9220 Aalborg East, Denmark

^b Department of Culture and Learning, Aalborg University, Denmark

ARTICLE INFO

Keywords:

Coordination
Practices
Communicative constitution of organization
Crisis management

ABSTRACT

This research explores temporary organizing in crisis. Recognizing crises in temporary organizations as involving the existential loss of meaning for plans and prospects, we present a qualitative study of the complex negotiation between integration and fragmentation of a temporary organization experiencing crisis. Embracing communication as constitutive of organization (CCO) theorizing, we analyse the real-time, digital communication during the crisis as episodes of temporary organizing. Our analysis reveals three interdependent communicative practices for coordinating—framing, co-creating, and connecting—that constitute “islands of certainty” or ephemeral instances of integration providing orientation for otherwise fragmented coordinating. These findings contribute to understanding coordinating as a sophisticated communicative practice of meaning negotiation about the possible future of a temporary organization in crisis. Specifically, this study reveals increased integration communication when the integrity of a project’s future is contested, yet high degrees of communicative fragmentation when there is a shared prospection of the project’s future.

1. Introduction

On April 11, 1970, a Saturn V rocket launched Apollo 13 with the mission to land people on the moon for the third time in history. However, two days into the journey an explosion of the spacecraft’s oxygen tank transformed the purpose of the mission from landing astronauts on the moon, to a rescue mission ensuring their survival. To succeed, the mission crew were forced to leverage their internal creativity and problem-solving capabilities to fundamentally re-invent the mission’s purpose and activities (King, 1997). Moreover, a challenging stakeholder environment, generated by increased public interest in the mission, required quick adoption of new communication practices with potentially long-term effects on the political landscape (Kauffman, 2001).

The Apollo 13 mission is an extreme example of a temporary organization in crisis, understood as a situation in which normal functioning is suspended to overcome a disruptive condition that puts the viability of the organization at risk (Hällgren, 2007; Williams et al., 2017). Given the inherent future orientation of temporary organizations (Pitsis et al., 2003), such crises typically mean that after a disruption there is no “status quo” to which to return. Instead, these crises involve processes of

sensemaking around a “fault line between the past and the future” (Roux-Dufort, 2007, p. 109) requiring a re-invention of the future the project serves to create. This paper is interested in the processes of organizing that unfold in the tensions inherent in re-negotiating the future while still moving forward. In other words, we are interested in studying how members of temporary organizations in crisis coordinate on not only “what to do” but also “where to go”. To study these processes, we embrace coordinating as an inherently communicative practice (Kuhn et al., 2017; Taylor & Robichaud, 2004), and thus recognize coordinating as happening *in* communication. Our aim is therefore to uncover the communicative mechanisms through which actors in temporary organizations negotiate meaning, plans, and structures during crisis.

We explore these negotiations through an in-depth study of communication among an exceptional case of temporary organizing in crisis: the relocation crisis of the recurring, participatory event “The Borderland” in 2018. The loss of the event site six weeks prior to the event transformed a (relatively) smoothly operating temporary organization, tasked to create the material and immaterial frame of the event, into a state of crisis where both the goals and the means to reach them were put into question. Analysis of the digital communications among

* Corresponding author.

E-mail address: vstingl@mp.aau.dk (V. Stingl).

<https://doi.org/10.1016/j.ijproman.2023.102540>

Received 9 January 2022; Received in revised form 12 October 2023; Accepted 13 October 2023

Available online 18 October 2023

0263-7863/© 2023 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

members of the temporary organization during this six-week period revealed ten unique episodes of temporary organizing. Supplementing these digital communications with retrospective interviews, we qualitatively examined how the temporary organization concerned with the preparation of the event renegotiated means and meanings, despite a continued series of fundamental disruptions. We conclude by discussing these communicative practices as processes of coordinating that constitute temporary organizing in crises through both fragmentation and integration and suggest implications for theory and practice.

1.1. Crises of temporary organizations as negotiations of the future

The idea of temporary organization has served as an important lens for project scholars since the mid-1990s (Lundin & Söderholm, 1995; Packendorff, 1995), extending the ways projects are conceptualized. As a concept, temporary organization refers to “a temporally bounded group of interdependent organizational actors, formed to complete a complex task” (Burke & Morley, 2016, p. 1237). This definition encompasses both commercial engineering projects, but also other, more elusive organizations, such as mountaineering expeditions (Hällgren, 2007; Musca et al., 2014), festival planning (Pisotska et al., 2022; Tonga Uriarte et al., 2019), or artistic productions (Goodman & Goodman, 1976; Stjerne & Svejnova, 2016).

A unique aspect of temporary organizations is that they have an in-built termination at which goals and expectations are either achieved or the temporary organization is abandoned as unsuccessful (Jacobsson et al., 2015; Lundin & Söderholm, 1995). Thus, temporary organizations are always concerned with the imagination and creation of the future (Comi & Whyte, 2018; Stingl & Geraldini, 2023; Winch & Maytorena, 2011). As Sergi (2022) explains, temporary organizations oscillate between anticipation and action. This future focus of temporary organizations reveals how their crises also encapsulate disruptions of future expectations of achievements. Hence, the element of anticipation suggests that crises of temporary organizations include not only disruptions of the normal functioning in the present, but also disruptions in the prospect of what – if anything – the organization will have achieved at its termination.

Attending to these prospective elements of crisis identification, some scholars have examined the role of cognitive biases when judging the future trajectory of the organization (Alvarez et al., 2011; Kutsch et al., 2011). Similarly, drawing on sensemaking theory, Simard and Laberge (2018) explored different pathways of sensemaking concerning the implications of the current state for the organization’s future. These lines of research emphasise the notion that crises are interpretive processes in which organizational members attend to “weak signals” (Ansoff, 1975) or other indications to conclude they are in crisis (Roux-Dufort, 2007; Williams et al., 2017). Yet, the future orientation of temporary organizations does not only constitute a particularity for the identification of a crisis, but also for the response to an identified crisis.

During the response or recovery phase of any organizational crisis, the organization realigns their structures and assumptions (Ansoff, 1975; Williams et al., 2017). For a temporary organization this realignment also concerns the understanding of the fundamental purpose – or *raison d’être* – of the organization, triggering processes of renewal and co-construction of the meanings that guide the expectations of the future (Musca et al., 2014). Hence, while in permanent organizations a crisis is an opportunity for changing the status quo (Roux-Dufort, 2007, p. 111), temporary organizations in crisis *must* change (or fail) as there is no status quo to which to return. Following the argument of Hällgren et al. (2018), the response to a crisis in which existing structures (plans and goals) are no longer viable can also be conceptualized as instances of temporary organizing in which actors gather and engage in practices of coordination and structuration (Bakker et al., 2016) to overcome the disruption.

For this study, we thus define crises of temporary organizations as a process in which organizational members experience a loss of meaning

for existing structures and the organization’s *raison d’être*, and engage in temporary organizing through practices of coordination and structuration in order to reinstate meaning and the ability to act. The literature has firmly established that a temporary organization’s ability to coordinate and communicate is essential for it to overcome crises (e.g. Hällgren & Wilson, 2008; Iftikhar et al., 2021; Loosemore, 1998).

However, studies of temporary organizations that attend to the concrete processes or practices of coordination are typically concerned with situations that constitute “routine hardship” (Williams et al., 2017) or “risky contexts” (Hällgren et al., 2018) rather than a crisis. These are situations that the temporary organization can handle within their existing structures and practices without questioning their fundamental goals and assumptions. For example, while the coordination of emergency response teams (Weick, 1993; Wolbers et al., 2018) serves to overcome crises of groups external to the emergency organization, the emergency response team itself is in a state of normal functioning with procedures and routines designed for resilience in turbulent environments (Weick & Sutcliffe, 2015). Other studies of coordination practices in temporary organizations, such as Bygballé et al.’s (2016) or Cicmil and Marshall (2005) studies in construction projects, also focus on coordination to deal with “normal” change and uncertainty in typical project settings. The aim of this paper is, however, to explore temporary organizing as processes of coordinating (Jarzabkowski et al., 2012) among members of a temporary organization that is pushed outside normal functioning capabilities.

1.2. Coordinating as integrative or fragmented practice when facing crisis?

Coordination is a fundamental activity of organizations, typically understood as emergent and designed practices (or coordination mechanisms) serving to *integrate* activities toward an aligned objective (Okhuysen & Bechky, 2009). The crisis literature acknowledges that coordination is fundamental for a temporary organization to overcome a crisis (e.g. Hällgren & Wilson, 2008; Iftikhar et al., 2021; Loosemore, 1998) and realign the organization (Williams et al., 2017). However, the crisis literature often discusses coordination as a capability or practice, rather than as a process, leaving the question open *how* coordination happens in crisis (Bundy et al., 2017).

Jarzabkowski et al. (2012) offers such a processual perspective on coordination, highlighting that coordination mechanisms are in themselves in flux, being subjected to a dynamic process of *coordinating*. In this process, disruptions are enacted, interpreted in their effect on available coordination mechanisms, and new elements or patterns of coordinating are created, formed and stabilized. While not directly linking their work to organizational crises, Jarzabkowski et al.’s (2012) process of coordinating shows processual similarities to – and can inform – the crisis-as-process literature.

Both literatures acknowledge that a disruption is a construct that the organization brings into being and eventually will consider resolved. Jarzabkowski et al. (2012) suggest that the coordinating organization enacts and interprets disruptions, attending to absences in their existing coordination mechanisms. Eventually, actors will view the new, iteratively emerging elements and patterns of coordinating as “relatively stable set of interdependent activities that can be called on in the process of coordinating” (p. 919). The crises-as-process literature instead highlights the role of sensemaking (Roux-Dufort, 2007; Simard & Laberge, 2018), acknowledging that a crisis follows a potentially long period of incubation during which the organization develops a sense of crisis. Members of an organization would strive to re-align sense and meaning, eventually entering a post-crisis phase (Roux-Dufort, 2007), when they arrive at a stabilized phase integrating learnings from the crisis (Bundy et al., 2017).

Both literatures put forward that, in coordinating, the organization discovers new ways of acting. For in-event crisis management, Williams et al. (2017) note that organizations rely on “ad hoc capabilities, such as

improvising decision-making activities [...], identifying and mobilizing resources [...], and establishing order through emergent communication and coordination techniques” (p. 738). They further explicate that the crisis literature emphasizes the capabilities and characteristics of both leaders and teams that enable effective in-event crisis management through coordination. However, as Bundy et al. (2017) explain, the literature does not address how these capabilities are performed and practiced. Here, Jarzabkowski et al.’s (2012) conceptualization of coordinating as an iterative, dynamic, and emergent process offers a valuable lens to study how coordinating happens in the response phase of crises of temporary organizing.

The literature on coordinating, however, introduces a further complication, concerning the question what coordinating aims to achieve. The majority of the coordination and coordinating literature suggests that the aim of coordinating is to *integrate* (Okhuysen & Bechky, 2009) the mechanisms of coordination, for example through stabilization of new patterns of activity (Jarzabkowski et al., 2012), shared sensemaking (Patriotta & Gruber, 2015), and negotiated structures such as organizational roles (Bechky, 2006). However, this view has been challenged by Wolbers et al. (2018), who argue for a *fragmentation* perspective, pointing to fragmented organizing enacted by commanding officers in emergency organizations – namely ad-hoc adaptations (working around procedures), pockets of control (delegation of tasks), and multiplicity of interpretations (demarcating expertise). This is of particular relevance to temporary organizations, where fragmentation is inherent (and necessary) and is enacted through practices of bracketing and partitioning (Lundin & Söderholm, 1995), the navigation of a multiplicity of values (Zerjav et al., 2021), and embracing different interpretations of ambiguous goals (Lenfle, 2016). As such, exploring coordinating in crisis of temporary organizations involves attending to both tendencies toward integration and fragmentation. Contemporary communication perspectives offer a useful lens to study how temporary organizing happens – specifically, how members of temporary organizations navigate between fragmentation and integration when coordinating during a crisis.

1.3. Communication and coordination

Contemporary organizational communication scholarship recognizes communication as more than the simple transmission of information; instead communication is embraced as “the ongoing, dynamic, interactive process of manipulating symbols toward the creation, maintenance, destruction, and/or transformation of meanings, which are axial—not peripheral—to organizational existence and organizing phenomena” (Ashcraft et al., 2009, p. 22). With this understanding of communication, many organizational scholars recognize that communication does not simply occur in organizations as a tool for accomplishing organizational tasks. Rather, organizing is seen as being accomplished “in” communication. Such communication as constitutive of organization (CCO) perspectives attend to organizations as fundamentally and inherently communicative (e.g., Basque et al., 2022; Schoeneborn et al., 2014). These approaches emphasize the relational quality of organizational experiences, and redefine the connection between communication and organizing (McClellan, 2011; Schoeneborn et al., 2019). Specifically, organizations are conceptualized as ongoing accomplishments created, maintained, and changed in tension-filled communication processes (Cooren et al., 2011). This perspective offers a meaningful theoretical orientation for exploring coordination as a communicative practice and has recently also been introduced as a lens to study organizing in temporary organizations such as projects (Sergi, 2022).

CCO theorizing offers a more fluid perspective of organizations as emergent and evolving in communicative interactions (Nathues et al., 2021), suitable for conceptualizing coordination as the complex interaction of integration and fragmentation. This fluid outlook among CCO scholars results in attention to organizations as sites of struggle for

meaning and attends to meanings as always tension-filled, partial, and incomplete (Putnam et al., 2016).

CCO perspectives reorient the focus of crises related to temporary organizations in two fundamental ways. First, the focus on communication as a meaning-making practice emphasises how coordination processes in crises require the (re)negotiation of meaning to overcome existential disruptions. Similar to the ways Ford and Ford (1995) conceptualize change as a process that occurs in different types of conversations, CCO perspectives allow us to reconceptualize coordination when a temporary organization experiences crises as the reconstitution of plans and possibilities for the future. Second, order and disorder are seen as only momentary accomplishments that unmake each other as organizational participants work to address disruptions (Putnam, 2019). As such, CCO perspectives not only redirect attention to communication as *the* practice in which coordination occurs but attends to the inherent tensions arising when disruptions manifest, and the negotiation of meanings that is needed to navigate crises of temporary organizations. In this way, CCO perspectives reimagine coordination efforts as the communicative interplay between integration and fragmentation practices. By exploring communication among members of a temporary organization in crisis, we aim to reveal the complex ways in which order and disorder arise as momentary accomplishments. Understanding coordinating as a communicative process allows us to investigate the following research question: *How do members of a temporary organization communicatively navigate the complexities of coordinating during a crisis?*

2. Methodology

To respond to this question, we examined the communicative practices of coordinating during a 6-week period of crisis during the preparation of the 2018 annual Borderland event. We used an embedded single case-study design (Yin, 2009), with individual episodes of temporary organizing emerging around distinct disruptions as units of analysis. Following a unique qualitative methodological approach of constructing vignettes as a way to expose and order the disparate digital communication, we analysed the communicative practices of coordinating during ten such episodes of temporary organizing. This analysis of digital interaction was complemented by retrospective interviews with central actors of the crisis, a review of contemporary documents, and the first author’s in-depth knowledge of the organization. This approach revealed a rich picture of the communicative processes of negotiating tensions between integration and fragmentation, and their interdependencies in relation to specific characteristics of each disruption. Embracing an abductive approach (Alvesson & Kärreman, 2007), our analysis iterated between immersion in the empirical data and the literature, and was suitable for developing theories about these dynamic processes of coordination.

2.1. The case

“The Borderland” is an annual participatory art festival in Scandinavia, inspired by the Burning Man principles (Chen, 2009), with about 2,500 international co-creators. Each year, a team of voluntary co-creators re-imagine, plan, and implement the material and immaterial frame: permits, infrastructure, site layout, sale of memberships, etc. Grounded in Lundin and Söderholm’s (1995) characteristics of temporary organization, we can describe the organization concerned with pre-event planning as *time bound* with the annual event as its ending point. It is moreover composed of a cross-functional *team* attending to numerous *tasks* that emerge throughout the processes of temporary organizing, with the novel frame created for each annual event serving as its *transition*.

Similar to other cases of festival organizing (Pisotska et al., 2022; Tonga Uriarte et al., 2019), this temporary organization for pre-event planning is embedded in a permanent organization – the community

–who shares certain values and organizational practices. The most important of these shared values and practices is their belief in pluralistic, self-guided coordination of everyday operations, following Frederik Laloux (2016) ideas of self-organization and distributed leadership. As a non-commercial, purpose-driven community, operating under the maxim “everyone is an organizer”, The Borderland constitutes an extreme case of a less-hierarchical organization (Lee & Edmondson, 2017).

In June 2018, the temporary organization concerned with The Borderland event preparation experienced a significant crisis. Six weeks prior to the planned start of the event, the team learned that they could not use their confirmed event site. This constituted unexpected and unprecedented adversity, effectively eliminating the *raison d'être* of the temporary organization, as, without a site, the event could not happen. Temporary organizing ensued to find and adapt the event to a new site. Yet, the crunched time meant that the temporary organization could not rely on “normal functioning” for negotiating with site owners, liaising with authorities and stakeholders, and planning the physical design of the event according to the “lay of the land” (processes that usually take around six months). Instead, they needed to coordinate ad hoc and flexibly, adapting to emerging circumstances and further adversities that challenged the nature of the event – such as the ban on loud music (a consequential restriction for an event with numerous music stages), or a national fire restriction affecting both practical issues and prohibiting the eponymous “Burn” of temporary art at the conclusion of the event. Various members of the community, in shifting compositions, took on these existential, consequential, and pragmatic needs within distinct episodes of temporary organizing.

As a global, digitized and transparent organization, many of the communicative interactions took place via the community’s digital platform “Talk” and Facebook. Although analysed *post hoc*, the real-time digital communication provided unique and rich insights into the formation and enactment of coordination during the crisis. The Borderland relocation crisis thus offers an extreme and revelatory case of temporary organizing in crisis, well suited for theoretical exploration (Siggelkow, 2007).

2.2. Data collection

The data for this study primarily consisted of digital communication, supplemented by interview transcripts, and other relevant documents. The digital communication mainly took place on *Talk*, the online communication platform used by The Borderland community. Data from *Talk* consisted of publicly accessible message board posts reflecting conversations among the many co-creators engaged in organizing during the 6-week period of crisis. It also included online conversations among a loosely formed leadership group who used a private message board during this timeframe (for which we attained consent to access from all contributing individuals). The digital conversations extracted from *Talk* included edit-histories and comments (e.g. when several members co-wrote a text, or when posts served to keep track of ToDos). Data for this study also consisted of publicly available posts on The Borderland Facebook page. All Facebook posts informing the wider Borderland community about significant developments during the crisis were captured along with all related comments to these posts during the period being studied.

The digital communications attained from *Talk* and Facebook discussion threads were augmented by face-to-face interviews and other relevant documents. Semi-structured interviews (Tracy, 2020) were conducted in 2019 with 11 co-organizers to gain additional insights into the real-time digital communication being studied. These participants included eight (of the 13) individuals who were retrospectively considered the “leadership” group in the crisis, as well as three other co-creators leading coordination activities (coordinating respectively: the design and set up of the electrical grid, the development of permit application documentation, and site-scouting activities). The interviews

provided useful details regarding the timeline of events and supplemental interpretations of the varied digital interactions. The interviewees also provided insightful documents as well as informed consent to access the one private message board on *Talk*. In total, the primary and supplementary data for this study included 751 pages of text (see Table 1).

Additionally, the first author had been part of the Borderland community as co-creator in the events in 2016, 2017, 2019 and 2022, with resulting social connections to numerous members of the community. These experiences provided insider knowledge to contextualize the data within the history, culture, and identity of the organization. The second author served as “outsider” challenging the first author’s “insider”-perceptions, thus ensuring the validity of the interpretations (Fetterman, 2010).

2.3. Data analysis

To analyse the data for this study, we engaged in a “constructed vignette approach” (Tracy, 2020, p. 207) involving iterative data analysis, oscillating among interpreting the primary sources and abstracting findings through reflection against the literature, increasing the level of abstraction with each iteration. Specifically, we developed vignettes that served to order chronologically and thematically the communication interactions from the primary data (the online communication). Enriched and contextualized with statements from the interviews, we created exposed accounts of the disruption events as detailed narratives capturing the complex communicative interactions. This exposed presentation of communicating served then as a foundation to describe concrete communicative practices, contextualized within the specific characteristic of the disruption event.

To create the vignettes, we first used the interview data on how the interviewees experienced the unfolding of the crisis, to structure a general series of events. We then engaged in careful review of the timing of digital posts and other digital documents (e.g. e-mails, minutes of meetings), to validate this series of events, and place the events on a detailed timeline of the crisis (Fig. 1 in the supplementary file; see also Fig. 1 for a simplified visualization). This timeline was shared with the informants for comments and validation. The resulting timeline served as a foundation to search for and structure the 6-week period into distinct, yet often parallel and overlapping, episodes of disruption. Aligned with our earlier definition of a crisis as a situation where the temporary organization needs to re-negotiate means and meaning, we analysed the overall timeline for instances in which the organization engaged in renegotiation of their future, manifested as suspensions of previous plans and activities and discussions concerning goals. Through this process, we identified six “disruption episodes”.

Table 1
Data sources.

Data type	Data items	Length
Primary data		
<i>Talk</i> discussion threads from public discussion boards	43 documents	342 pages
<i>Talk</i> discussion threads from the private discussion board of the leadership team (incl. editing history)	14 documents	66 pages
Facebook posts and comments	14 documents	111 pages
Supplementary data		
15 hours of recordings from 11 semi-structured interviews	11 interview transcripts	139 pages
Other documents (e.g. maps, e-mails, spreadsheets, meeting minutes, planning documents, post-mortems, spreadsheets)	11 documents	93 pages
Structured data		
Vignettes of individual episodes of disruption (incl. quotes, images, etc. linked to primary sources)	6 documents (covering 10 disruption episodes)	70 pages

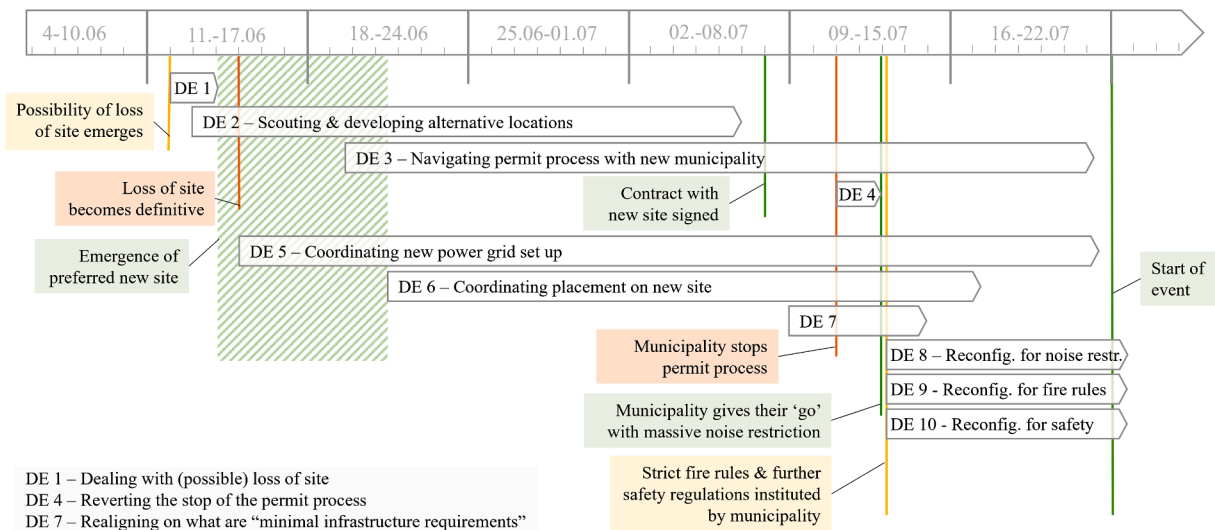


Fig. 1. Simplified visual timeline of the analysed disruption episodes (labelled as "DEx") with distinct manifestations of temporary organizing.

For each disruption episode, we then crafted a separate detailed vignette. Specifically, we compiled exhaustive documents capturing the verbatim, real-time communication in the six disruption episodes (6-12 pages each), enriched by short contextualization. This constructed vignette approach was useful in that it created structured representations of the fragmented and often disparate conversations taking place via digital posts among different participants across multiple platforms, on different discussion threads, over several days or weeks. Embracing CCO perspectives, the vignettes allowed us to focus on actual communicative events during the crisis, as the detailed vignettes included both direct citations from these various communication platforms, ordered chronologically and by event, and were augmented by quotes from the interviews to contextualize the digital communication. Thus, these vignettes served as detailed documentation of the ongoing communication in these episodes of temporary organizing. Due to their structured presentation of the primary data, they allowed a more focussed analysis of the complex interactions, tensions, and negotiations among the participants engaged in coordinating efforts suitable for analysis. Fig. 2 in the supplementary file provides an anonymized excerpt of such a vignette.

Both authors discussed the vignettes, and by comparing the characteristics and qualities of the disruption episodes (Eisenhardt & Graebner, 2007), two focal areas emerged: the characteristics of the disruption (i.e., how was the disruption perceived as rendering plans and assumptions obsolete or meaningless?), and the communicative practices of coordinating (i.e., was communication integrating or fragmenting activities during the disruption?). Through the process of reviewing the vignettes, we recognized that two of the vignettes covered distinct episodes of temporary organizing that were better if analysed separately, resulting in a final tally of ten unique disruption episodes (Fig. 1, see also Table 1 in the supplementary file for more details). These episodes capture individual instances of temporary organizing, with a clear start and end, and complex, novel tasks that differ from established procedures.

Attentive to the characteristics of the disruption and the communicative interactions, we then conducted a thematic analysis (Gioia et al., 2013) of the ten vignettes to understand the various types of disruptions with regard to how they were perceived as challenging the existing plans and projections and how coordinating happened through communication. Through several iterations of coding, we identified, challenged, and refined the emerging themes resulting in four distinct *disruption episode types*, each characterized through specific problem framings, disruption triggers, roles, communication practices, and practices of fragmentation and integration (see comparison in Table 2).

After characterizing four disruption episode types, using the initially

identified themes as a starting point, we engaged in an iterative abductive process (Alvesson & Kärreman, 2007) moving between a tabular presentation of the episode types, the vignettes, the primary data, and the coordination and temporary organizing literature. Through this analysis, we developed refined themes resulting in three aggregate dimensions directly relating communication with coordination practices (Fig. 2). We then analysed the vignettes against these three types of practices, to discuss how and when individuals deliberately and purposefully engaged in communicative practices to shape instances of integration in an otherwise fragmented context. In this way, the construction of detailed vignettes allowed the primary data from the digital platforms to be triangulated with the interviews (and other supporting documentation) and current conceptualizations of communication as an essential coordinating activity.

3. Findings

Interpretive analyses of the ten comprehensive vignettes revealed distinct categories of disruptions in which different combinations of communication practices, enacted through different communicative roles, manifested. As such, the findings are comprised of two main discoveries: four types of disruption episodes, and three distinct communication practices arising in observed relationships among disruption types and individual practice.

3.1. Types of disruption episodes

Thematic analysis of the ten vignettes (Table 1 in supplementary file) allowed us to distinguish four types of disruption events, based on shared characteristics of the disruption, and similar patterns of communication and coordination (Table 2). Acknowledging crises as processes in which the temporary organization strives to reinstate meaning and the ability to act for the organization, the four disruption types are characterised by which aspects of meanings are disrupted, and how processes of coordinating manifests in the wake of these disruptions as temporary organizing. Thus, each episode type differed in terms of how the temporary organization made sense of the disruption in terms of its potential effects on plans and goals, as well as the nature of the external disruption-trigger, the duration of the disruption, and the specific communicative and coordinative practices related to integration and fragmentation. Further, across the episode types, we identified seven different emergent role behaviours, characterized by distinct sets of communicative practices, which became salient in the coordination of the different disruption episode types.

Table 2
Type of disruption episodes.

	Deadstop	Search for a new future	Changing circumstances	Concurrent frames
<i>Problem framing</i>	Existing plans are no longer adequate for reaching specific desired future – without a new plan, the desired future is existentially threatened.	The formerly desired specific objective is no longer attainable – alternative desirable futures, along with feasible plans, need to be found.	Continuously changing circumstances or emerging knowledge require recurrent updating of the plan and expected future outcomes.	Realization that the plan only aligns with one of several concurrent versions of the “desired future” co-existing in the organization.
<i>Disruption-Trigger</i>	Concrete and singular information revealing the existential threat .	Concrete and singular call for action revealing the new need (typically following a deadstop episode)	Ambiguous and multiple bits of information altering previous understandings.	Concrete and singular notification of the absence or change of a taken for granted resource .
<i>Duration</i>	Short (days)	Medium (1-2 weeks)	Long (4-6 weeks)	Medium (1-2 weeks)
<i>Communicative practices</i>	(1) Restricted subgroup interpreting and framing the disruption for wider community (2) Carefully crafted messages from subgroup to community with specific situational information and next steps	(1) Co-developing ideas/options across community (2) Reporting back on ongoing activities/updates to general community and specific individuals (3) Creating structured overviews of ongoing activities	(1) Asking questions and requesting help in concrete task areas (2) Sharing information among activities – often through listening in (3) Updating others on past activities and requests for help with next steps	(1) Explicating particular preferences and illustrating potential futures (2) Asking for co-creation of ideas supporting a particular frame (3) Challenging other frames
<i>Coordinative practices</i>	<i>Fragmentation</i> : Separate pockets of control (Demarcating expertise through information gate keeping) <i>Integration</i> : Common understanding of <i>situation and means</i> , created in subgroup and shared through specific framing with rest of temporary organization.	<i>Fragmentation</i> : Delegation of tasks/ separate pockets of control in development of options <i>Integration</i> : Common understanding of <i>objective</i> through pro & con lists, explicit preferences, creation of overview documents	<i>Fragmentation</i> : Ad-hoc adaptations in separate pockets of control (delegation of tasks at several levels) <i>Integration</i> : Common understanding of emerging <i>situation</i> through information flow between pockets of control	<i>Fragmentation</i> : Multiplicity of interpretations, creation of pockets of control without explicit delegation of tasks <i>Integration</i> : Common understanding of <i>situation</i> across community; common understanding of <i>objectives</i> divided by subgroups.
<i>Specific roles</i>	<i>Information gatekeepers</i> : small group interpreting and handling initial disruption, defining next steps, and informing community	<i>Free agents</i> : Individuals or groups independently developing alternatives or options within an explicit or understood frame. <i>Self-appointed secretaries</i> : Individuals creating an overview of the ‘free agents’ activities, developing option summaries, and aligning them against given action boundaries	<i>Doers</i> : Individuals with procedural expertise, who lead the implementation of a solution <i>Spiders-in-the-web</i> : individuals keeping an overview of ongoing activities and relaying information (or connecting people) across different activities	<i>Tribe members</i> : Individuals within a subgroup sharing their understanding of the need, working toward meeting that understood need (independent of groups or individuals with different understandings of the need) <i>Tribe leaders</i> : Individuals articulating a strong understanding of the need or means to meet the need and aiming to convince others through discourse or enactment.

In the following section, we present the four disruption episode types. To illustrate each episode type we first offer a synopsis of one exemplary disruption episode. We then explain the coordinating processes associated with the type of disruption. Our aim is to reveal the unique communicative interactions and communicative roles constituting coordination activities for each type of disruption as observed in the online conversations across the different digital platforms.

3.1.1. Deadstop

Episode synopsis: On June 11, when Lasse¹ was asking questions related to the permit application, he learned from the Danish coastal authority that the event site – which had been used for similar events for years – fell under coastal protection law. The authority had not known about events hosted at this site and any such events would require a special dispensation – a bureaucratic process that could take months and was unlikely to succeed. With only a few weeks before the planned start of the Borderland event, Lasse immediately posted on “Board and Advisors” (B&A), a restricted online forum, telling the story of what he discovered, explaining that he “poked the sleeping beast... and it’s bad!” The B&A group quickly drafted a response to the coastal authority, but deliberately kept the situation confidential toward the wider community until they knew more. The following day Lasse received a call from the coastal authority informing him that applying for special dispensation would be futile. He posted the details on the B&A group, concluding that “we are a heartbeat from cancellation.” Within the next few hours, the B&A group coordinated via the B&A board and Facebook Messenger, and held a crisis meeting in Stockholm with other members attending via video link, to determine how cancellation could be avoided. This

coordination effort produced strategies for continued negotiations with the coastal authority, alternative modes of action, and communicative strategies for informing the community. After the group reached agreement, Tom, a member of the B&A group, posted a co-created announcement for the community on the evening of June 12 on Facebook. The post provided comprehensive information regarding the situation, optimistic and community evoking language, and two outlined plans (Plan A: pursue a special dispensation for the original site, and Plan B: find a new event site). This announcement also listed a number of “DON’Ts” and “DOs” attempting to guide the community’s responses to the current situation, with the “DOs” deliberately placed at the end of the post. When Lasse received the final rejection from the coastal authority on June 14, he informed the B&A group and Tom posted on Facebook: “It’s time for plan B.”

This synopsis of a disruption episode is illustrative for the event type *Deadstop*, where a sudden existential threat to the entire organization rendered most current activities and underlying plans obsolete. In our case, there were two such *Deadstop* episodes: loss of the original event site (the above example) and the threat of stopping the permit process at the new site. The main actors in these *Deadstop* episodes were a small group of *Information Gatekeepers* who first received the disruptive news and held it confidential for a short period before carefully crafting an announcement to the entire community.

Assessment of the conversations among *Information Gatekeepers* during both *Deadstop* episodes reveals communication processes by which a sense of order emerged and was sought in conversations. Responding to concrete information revealing a sudden existential threat, the small, restricted group quickly engaged in interpreting the situation and determining pragmatic responses that would keep the event going. Following the purposeful communication, both *Deadstop* episodes concluded with the *Gatekeepers* co-authoring and then posting

¹ All names are changed

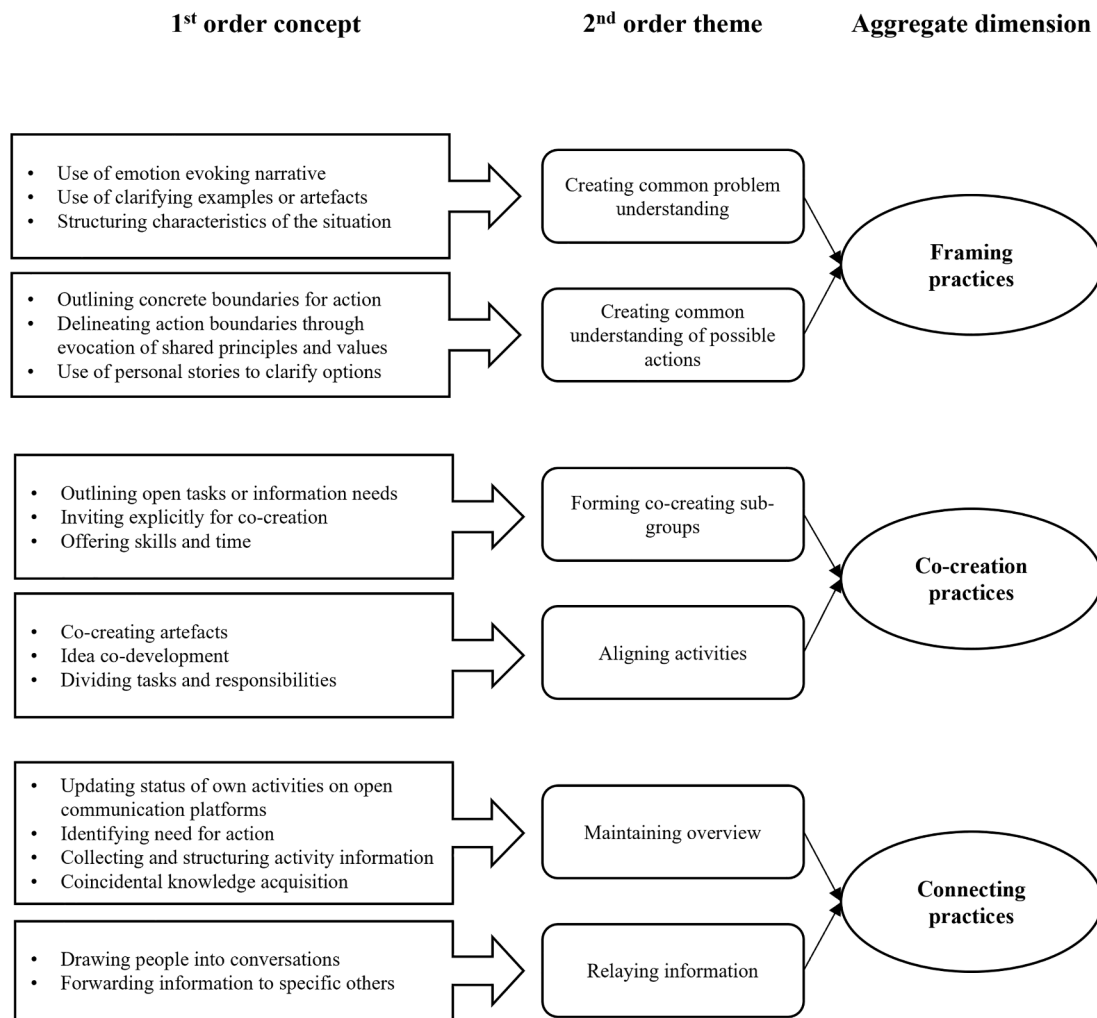


Fig. 2. Data structure on the identified communicative practices (for more detailed examples and quotes related to the 1st order concepts, see Table 2 in the supplementary file).

a carefully crafted message to the larger community providing a common understanding of the problem, how it challenged their shared objective, and detailing the specific plans as well as boundaries for action. In these situations, the Gatekeepers thus negotiated a sense of order within the disruption by carefully framing the challenge(s) and course(s) of action in a way that – they hoped – would maintain the event and prevent other existential disruptions.

In Deadstop episodes, a small group of Gatekeepers negotiated order from disorder by developing a common understanding of the existential threat and then framing actions as the best means of maintaining the desired future that provided grounds for the temporary organization’s existence. Thus, coordination practices included fragmentation in terms of the Gatekeepers operating in separate “pockets of control” (Wolbers et al., 2018) due to their differing degree of knowledge. However, from these pockets emerged integration through creation of a common understanding of the situation and the appropriate path forward, across the entire organization.

3.1.2. Searching for a new future

Episode synopsis: Following the threat of losing the event site, the Board & Advisors posted on Facebook: “[Plan B:] We would need to find a location that will not be too painful to relocate to. This means prioritizing locations close, but we are open to alternatives.” The community had known they would eventually outgrow their current location, so community members had previously identified potential alternative sites and now initiated contact with

these locations. Other individuals used their personal knowledge about potential locations and started contacting the owners of other possible sites. Within ten days of the announcement, five independent teams from the community had identified and started negotiating with six different potential sites. The first meeting with what would ultimately become the new site, took place even before the permit-rejection for the old site was final. These “scouting” activities followed a clearly expressed mandate for everyone to pursue options, following the “Plan B”-Facebook post, and was guided by a shared understanding of what a “suitable location” might look like. The individual teams reported back from their scouting activities with pictures and descriptions on both the Talk platform and Facebook. Other individuals, not involved in scouting, started to create a Google Document that structured the information of the scouting activities as tables including the location of the site, contacts of those involved, benefits of the site and potential challenges. Although a clear preference among the community for one of the options emerged quickly, all options were pursued in earnest until a contract with the owners of the preferred location was signed.

This synopsis illustrates a typical Searching for a New Future (SNF) disruption episode in which members of The Borderland experienced the loss of a central element of the plan and consequentially reconstituted both their prospection of a desired future, and the plans suitable to get there. Typically following the call-to-action resulting from a Deadstop episode, SNF episodes coordinated efforts to replace an essential aspect of the desired future, which was no longer attainable. We analysed three such episodes: scouting for new site locations (the above example), the

music projects' response to noise restrictions, and responding to the fire ban. The most prominent emerging role in these episodes were those of *Free Agents* acting on their own volition, without managerial oversight and to some degree competing with others to find the best option. The Free Agents were supported by the role of *Self-appointed Secretaries* who independently structured information provided by the Free Agents. Those Secretaries created overview documents, spread sheets, visualizations, or "To-do" lists that helped gather and organize possibilities for review, prioritization, and collaboration.

Assessment of the emerging interactions between Free Agents and Secretaries during SNF episodes reveals unique communicative processes in which order emerged smoothly within otherwise unstructured activities. When Gatekeepers posted specific needs or calls for action, Free Agents (as individuals or groups) generated ideas or options (often collaboratively), independently pursued possible alternatives, and reported their progress or ideas on public communication boards. During this process, Secretaries gathered information from the message boards and created summary overviews of ongoing activities, incorporating community feedback on the needs, and reiterating specific boundary conditions established by the Gatekeepers.

Overall, in these SNF episodes, common understanding emerged through the prioritization of the most suitable (or immediately viable) options and delineating preferences among possible options. These coordination practices included both integration and fragmentation activities. The Free Agents, pursuing what each thought might be a best option, generated fragmentation (as well as some competition). Yet, the overviews created by Secretaries served as integration by not only informing the community about possibilities as they emerged but allowing Free Agents to act quickly in relation to other's activities as they continued to pursue feasible options.

3.1.3. Changing circumstances

Episode synopsis: *In spring 2018, Jeppe volunteered to lead the power grid responsibility at the Borderland event. As a professional event electrician with previous experience at the original event site, he expected a straightforward task of establishing power for camps and installations. However, with the event moving to a new site, he and his loosely organised team suddenly faced many unexpected challenges. For instance, there was no existing connection to the local power grid, the site layout was much more complex and unknown, and coordination with different municipal authorities was needed. Moreover, as the community adapted to the new physical design, numerous iterations of the placement maps affected the planning of the grid. Finally, less than two weeks before the event, a nationwide fire ban required participants to switch from gas to electric cooking, thereby substantially increasing the power demand and grid scaling. The Power Team thus was at the centre of a constant information flow. Other community members – with specific roles and knowledge or simply an overview of current activities – regularly updated the power team on new circumstances and needs as conditions changed. Simultaneously, the power team publicly posted the developments of their work. Both the members of the power team and other community members relayed information from these updates to other members potentially affected by changes to the power grid, such as those responsible for permits or budget.*

This synopsis illustrates the *Changing Circumstances* episode type, in which members of the organization coordinate the fulfilment of specific needs under conditions of uncertainty, with partially disrupting new knowledge about the present and the possible future arising from new or changing contexts. We analysed three such episodes as emerging situations extending over a period of several weeks: power grid coordination (the example above), permit applications, and the placement of camps and art projects. Within The Borderland organization, the coordination of these tasks is typically the self-chosen responsibility of a single person who collaborates with others but has no superior to whom they are accountable. Because the realization of these tasks is dependent on numerous contextual conditions (e.g., physical lay of the land, specific municipal regulations), moving to a new site complicated these tasks as

they coordinated with new authorities and navigated a largely unknown physical context. Consequently, critical uncertainties arose from emerging information arising across numerous activities, thereby challenging or out-dating plans and assumptions.

Within these *Changing Circumstances* episodes, two prominent roles appeared. First, *Doers* (a self-reference often used in the community) emerged as individuals with specific, contextual expertise for the tasks, responsible for planning and execution. Doers could be individuals with trade skills or specific professional expertise, or simply individuals willing to try and learn rapidly. These individuals assumed task responsibility voluntarily through what the community calls "stepping-up". Second, we observed another role we called *Spiders-in-the-web* (a metaphor used by two interviewees) who supported Doers by relaying ad hoc information among different fields of activity.

Assessment of the communicative interactions arising during *Changing Circumstances* episodes reveals communicative processes by which order was maintained in ongoing conversations among the Doers and Spiders. As conditions changed or new information surfaced, Doers would quickly interpret messages through their expertise, and act upon the emerging knowledge in the context of their responsibility. Often Doers would ask clarifying questions and request help for specific task areas and share information when listening in or being drawn into on conversations. Simultaneously, Spiders positioned themselves within many conversations across the community and kept an overview of (a part of the) ongoing activities. They would selectively share emerging relevant information, explain how changing conditions might affect specific tasks, provide supporting documentation, and invite certain Doers into conversations.

Overall, *Changing Circumstances* episodes involved coordination among *Doers* and *Spiders-in-the-web* as they engaged in a constant process of sharing and updating information to negotiate a sense of order from the disruption, to accomplish the many activities needed for the episode. As Doers assumed responsibility for particular tasks or objectives and operated mainly within separate pockets of control they contributed to the fragmentation of the coordination efforts. Spiders, however, connected these separate spheres of activity by maintaining a higher level of situational understanding through what one interviewee referred to as a "motherly gaze." Capable of recognizing issues needing attention and directing others toward opportunities, Spiders contributed to integration as they liaised information from one bubble of activity to another and aligned situational understanding in the otherwise highly fragmented coordination activities. As a role behaviour, rather than an assigned role, we saw many individuals switching between Doer and Spider behaviour dependent on contextual needs.

3.1.4. Concurrent frames

Episode synopsis: *Two weeks before the start of the event at the new site, Rasmus, who was coordinating placement of camps and infrastructure, assembled a list of ongoing infrastructure activities. Attempting to keep track, he posted: "Showers and bathing: Who is in charge of this?" He received two conflicting interpretations of his question. Some members of the organization expressed a need for a person responsible for developing a solution for communal showers. Yet, others explained that providing showers was not a communal responsibility but an individual problem. The proponents of the "communally provided showers" were concerned with the potential impact on the ecosystem of the two small lakes located on the new site if community members used them for bathing in absence of showers. The proponents of "individual responsibilities" invoked the shared principle of radical self-reliance, stating e.g.: "if we can't even expect people to clean themselves, exactly where do you find the 'radical' in radical self-reliance? More like radical infantilization." Thus, while some individuals worked on developing a communal shower solution, others offered suggestions for self-reliant hygiene. While the debate among communal and self-reliance took place online, individuals supporting the communal showers took initiative to develop showers on site for all to use. However, in the post-event reflection, one proponent of the communal shower project conceded that their implemented solution was a*

“top-down idea” and not what the event needed, concluding that in the future “[they should] lean back to our values and self-management principles when taking decisions”.

This synopsis illustrates a *Concurrent Frame* episode in which an identified lack or loss of a taken for granted resource results in a disruption by highlighting a pre-existing misalignment between members’ understanding of the desired future. As a community that cherishes diversity, different sub-groups within the temporary organization are likely to develop differing perspectives, or frames in the sense of Kaplan (2008). While we encountered many smaller instances of competing and concurrent frames in the data, we analysed two particular episodes where concurrent frames led to fragmented coordination and a sense of crisis: the discussion around communally provided showers (as shown above) and the response to the noise restrictions. While in these situations, plans required adjustments following the disruption, the revealed diverging notions of the preferred future heightened the impression of a crisis.

Within these *Concurrent Frames* episodes, two roles were salient. First *Tribe Members*, as individuals representing a particular sub-group in the community. Tribe members expressed a shared understanding of the problem against a desired future and engaged in joint efforts to fulfil the need from that perspective. For instance, in the above example, the activities for those considering showers as a necessity to avoid damage to nature developed entirely different solutions than those considering it an individual problem. Additionally, in these episodes *Tribe Leaders* emerged. These individuals held no special authority or official leadership role, but actively framed perspectives based on their understanding of the situation, desired future, or conceivable way forward.

Assessment of the discourses constituting the *Concurrent Frames* episodes reveals communication processes by which disorder was negotiated across Tribes and their Members and Leaders. When the absence of a known resource was recognized, online posts emerged exhibiting a variety of perspectives about the issue at hand, with some debating over the “best” or “most appropriate” course of action. While Tribe Members quickly associated themselves with a particular position and would offer support for their perspective, Tribe Leaders would make persuasive arguments for one perspective, challenging the others. Using their personal experience or their social influence within the temporary organization, Tribe Leaders would often press for specific solutions (such as the communally created showers) and work to enact a desired future by constructing the reality. These *Concurrent Frame* episodes resulted in fragmented understandings, often with simultaneous efforts to fulfil both perspectives. When tribes could pursue their needs in parallel without interference, the concurrent frames would persist without an emergent consensus or conflict. For example, in response to noise restrictions those promoting a “silent event” and those wishing to “dance to music” operated in parallel without conflict. However, in the case of the communal showers, such co-existence was not possible. Conflict emerged as the implementation of one solution negated the other perspective, increasing the expressed tensions between the tribes.

Overall, *Concurrent Frames* episodes were unique in terms of tensions within fragmentation efforts. In these cases, assessment of the coordination activities revealed that some integration was achieved through the implementation of a particular framing through creation of a physical or practical reality. However, the fragmented, multiple interpretations – or opinions – remained.

3.2. Islands of certainty in a sea of ambiguity²

Within the four event types, we identified distinct communicative and coordinative practices that constituted concrete episodes of temporary organizing, as processes of coordinating (Jarzabkowski et al., 2012). In these processes of coordinating, members of the organization communicate to imbue a disruption with meaning and negotiate new patterns for coordination: new plans, goals, prospects, or structures. Following the argument of Wolbers et al. (2018) that coordinating can be fragmented, we further analysed these distinct coordinating processes as interplay of fragmentation and integration. Thus, subsequent analysis of the communicative practices across the distinct types of disruption revealed general types of communicative practices serving to navigate integration and fragmentation of coordinating.

Specifically, our findings provide a series of concrete communicative practices that constitute instances of integration, particularly related to creating or reshaping common understandings (Okhuysen & Bechky, 2009) when the temporary organization experiences a loss of meaning for pre-existing understandings, plans, or prospectations. However, these instances were emergent and dispersed, and served predominately as points of orientation for the surrounding, often deliberate fragmentation. Thus, we refer to these instances as *islands of certainty*, created in communication, when members experience certainty as temporary, fluid moments of consensus or understanding within a sea of ambiguity. While these islands of certainty provide orientation, they also allow and sustain the fragmented coordinating necessary to develop alternative anticipations and actions in the time-pressed and highly uncertain context of temporary organisations in crisis.

3.2.1. Communicative practices of coordinating

Our findings suggest that during the processes of coordinating, islands of certainty emerged as an outcome of three types of interdependent communicative practices (Fig. 2): *framing practices*, *co-creating practices*, and *connecting practices*. Similar to the ways Ford and Ford (1995) discussed change as occurring in different types of conversations, in this study we reveal three types of relational practices by which members engaged in sensemaking, within particular emergent roles, to negotiate integration and fragmentation during a crisis. In the following, we first introduce these communicative practices in general and then discuss how the interactive enacting of these practices, through distinct roles, emerge in the context of specific disruptions of meanings.

Framing practices refer to communicative actions that position perceptions of an issue, problem, or its solution in a particular frame (in the sense of Kaplan, 2008). These framing practices shape common understandings of the problem in the context of the desired future and/or the room for possible action following the experienced disruption. The framing practices relied on several communicative strategies, including the deliberate use of narrative structures to convey a shared feeling about the situation, appeals to shared values such as transparency, kindness or playfulness, and the use of sensemaking artifacts (Weick, 2012) such as maps, lists, photos, memes, or even the community’s principles and history. Framing was practiced by individuals or groups in both deliberate and implicit attempts at sensegiving (Foldy et al., 2008; Gioia & Chittipeddi, 1991). While participants from across the organization engaged in framing practices, individuals with less social influence in the organization tended to perform framing practices rather ad hoc within their sub-groups, promoting the alignment of meanings associated with specific activities. Contrarily, members with higher social influence often engaged in framing practices more purposefully in

² We acknowledge the (unintended) similarity of titles with Brookes et al. (2017) article in this journal “An island of constancy in a sea of change”. While engaging the same metaphor, our phenomenon of interest however is substantially different from their understanding of long-lasting megaprojects as (in their article not further specified) “islands of constancy”.

attempts to re-align meanings across the temporary organization and its stakeholders in the community, often related to an entire re-telling of the organization's future. Framing practices thus produced islands of certainty by imbuing meaning, or focusing attention, to promote a particular understanding of an issue or disruption in the context of a specific desirable future, and subsequently frame possibilities for further coordinative action within the uncertainty of the unfolding crisis.

The second practice contributing to the formation of islands of certainty were *co-creating practices*. Often initiated through framing practices, co-creating practices produced new understandings in communication associated with collaborative creation and action. While framing practices shaped a common understanding of the problem to address and the appropriate solution space, co-creating practices deepened this mutual understanding through engagement with others. As situations required change, co-creating practices brought subgroups together to generate solutions or possibilities for action through practices such as brainstorming, co-developing ideas and suggestions, or collaborative work creating digital or physical artefacts. Moreover, task delegation also emerged as an important co-creating practice, as long as the delegation happened through open ended ask for help, setting the task's objective (a vision of a desired future) without instruction for specific execution. As such, the subgroups engaging in co-creative practices resembled individual pockets of control (Wolbers et al., 2018), in which the alignment of meanings remained localized. Co-creating practices created islands of certainty by collectively constituting concrete (yet evolving) understandings through action within sub-groups.

The third practice through which islands of certainty arose were *connecting practices*. In connecting practices, communication created targeted information flows among fragmented ongoing activities. Thus, connecting practices served to bridge individual co-creating activities. When local sub-groups had established a collective understanding and agreed upon activities, connecting practices served as ad hoc links to other ongoing activities resulting in coordination among groups. Connecting practices were predominately performed extemporaneously by individuals with a strong overview on the developing event, who observed ongoing activities (akin to the practice of "listening in" described in Roth et al., 2006) and relayed information, or invited individuals into conversations. Often, they reflected the impact of ongoing activities against their projection how the temporary organization was moving towards the desired outcomes. Other practices such as posting updates on the status of different activities, creating overviews of activities being executed in parallel, and creating shared documents also served as connecting practices bridging fragmented activities. Connecting practices created islands of certainty through ad hoc bridges of shared knowledge and collective understanding, crafted to avoid excessive drifting of fragmented activities. Manifest as temporary and fluid communication practices, these connecting practices differ from institutionalized modes of formal interfaces and integration processes between separate activities in complex temporary organizations (e.g., Davies & Mackenzie, 2014).

Across the different types of disruption episodes, we identified a salient pattern through which these three practices interacted. *Framing practices* typically followed a crisis trigger in which the temporary organization came to acknowledge a disruption of existing meanings and structures. Thus, framing practices served to re-create – at the global or local scale – an alternative shared frame regarding the organization's direction for collective, co-creating action. However, *co-creating practices* typically happened in fragmented pockets of control – thus catering to the fast-paced and complex nature of the crisis response. In turn, *connecting practices* bridged these pockets, drawing from a (more) global understanding of the temporary organization, its objectives and means (Fig. 3).

3.2.2. Contextually dependent role behaviour

When contextualized within the specific disruption episode types,

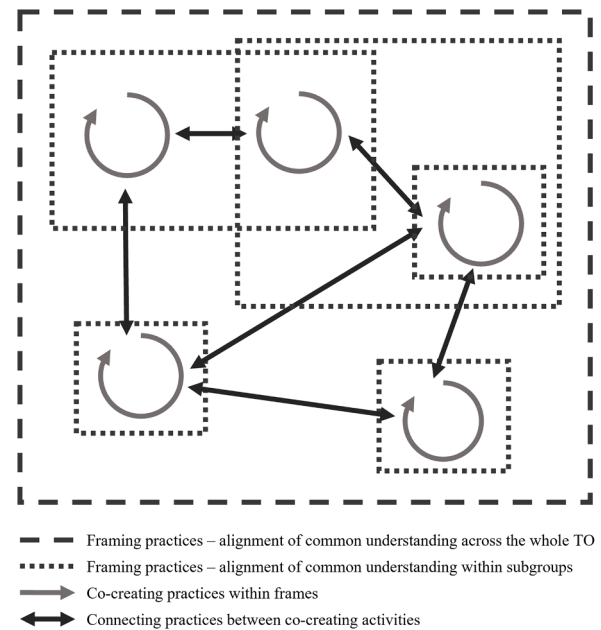


Fig. 3. Interactions between communicative practices of coordination during a temporary organization in crisis (not depicting the change of frames over time).

our analysis revealed how members of the temporary organization practiced distinct roles, through performing different communicative practices, depending upon the nature of the disruption. These roles were neither pre-defined nor commonly understood, nor did individuals explicitly inhabit such roles. They emerged as behavioural patterns embraced by individuals as appropriate and necessary, based on their understanding of the situation, their relations with others, and their experiences with the organization.

Two roles, the *gatekeepers* and the *tribe leaders*, were mainly exercising framing practices with a strong orientation toward integrating. In both cases, the individuals exercising these roles experienced a substantial threat to their desired future of the temporary organization (i.e. their perception of their *raison d'être*) and in turn engaged in communication to construct concrete frames for what they considered suitable response action. However, they crafted these frames typically in co-creative practices with others, either as a group of gatekeepers, or through exchange with tribe members. In doing so, they purposefully suppressed or aimed to reduce fragmentation of sensemaking concerning the disruption – successfully so in the case of the gatekeepers that controlled the interpretation of the disruption, less successfully so for competing *tribe leaders* who engaged in communications akin to Framing Contests (Kaplan, 2008). In our case, this behaviour followed disruptions that either put the global understanding of the temporary organization's future and the means to reach it into question or at least constituted a severe threat to central aspects of its *raison d'être*. Moreover, these disruptions followed concrete, unambiguous triggers, thus the framing was mainly concerned with outlining the new boundaries for moving forward, not with an interpretation of the implication for action.

On the other hand, for disruptions with higher complexity or ambiguity, we observed not only high levels of fragmentation, but also communicative behaviour that actively fostered such fragmentation. The connecting practices exercised by the roles of *spiders* and *secretaries* enabled fragmented activities by acting as flexible bridge between these activities, and thus providing orientation whilst not limiting the independent activities of *doers* and *free agents*. Moreover, the *secretaries* engaged in more subtle forms of framing practices, by structuring the collected information and thus imbuing meaning through focusing attention through the structure.

4. Discussion

In response to our research question, we revealed how temporary organizing in a crisis of a temporary organization manifests as complex negotiations between integration and fragmentation, performed through three types of communication practices enacted via emergent roles. Thereby, members communicatively constituted ephemeral “islands of certainty” that catered to the needs of the surrounding fragmented activities. In other words, the findings of this interpretive study of The Borderland relocation crisis, reveal that the meanings constituted in communication during a crisis simultaneously provide points of orientation (integration) that are necessary for the development of alternative possibilities and actions (fragmentation) during the negotiation of uncertainty associated with a temporary organization in crisis. The tensions between integration and fragmentation are thus closely connected to the context, complexity, and perceived severity of the specific disruption unfolding during a crisis of the temporary organization. Specifically, integrating role behaviour served to protect the integrity of the temporary organization, especially when a disruption challenged the main objectives or *raison d'être* of the temporary organization. In this way, coordination in times of crisis included integrating behaviours serving to re-establish a shared frame regarding a desired future and boundaries of the temporary organization in times of existential threat. Conversely, fragmentation behaviours guided coordination for the complex, moving parts that contributed to the fulfilment of the overall objectives within the shared frame, and thus supported flexible reaction to the conditions emerging throughout the crisis response. Overall, the outcome of our qualitative exploration of the communicative practices associated with unique episodes of disruption shows increased communicative integration when the integrity of a project's future is contested, yet high degrees of communicative fragmentation when there is a shared prospection of the project's future.

This study offers three meaningful contributions to the literature. First, our findings contribute to the studies on temporary organization by drawing and expanding upon the coordination literature in organization studies to reveal prospective qualities of meaning making during crisis. Specifically, by highlighting the idiosyncratic future orientation of temporary organization, we illustrate that coordination during crises does not only concern questions of “what to do?” but much more importantly also of “where to go?” In other words, coordinating in temporary organizations revolves around an ambiguous and uncertain future. Moreover, by discussing the process of coordinating for individual “disruption episodes” in which a group of actors accomplish concrete tasks and transitions, we show how episodes of temporary organizing manifest around disruptions. The described coordinative practices – while enhanced through the crisis – may thus also serve to conceptualize temporary organizing in other situations of high uncertainty that may not be experienced as a crisis, given the grey zone between “routine hardship” and “discontinuous events” (Williams et al., 2017).

Second, our analysis contributes to the coordination literature in organizational studies by expanding on Wolbers et al. (2018) work on fragmentation in coordination, through a contextual discussion of the interplay between integration and fragmentation. Specifically, we establish this interplay as the co-creation of “islands of certainty” – fluid, temporary points of orientation for otherwise fragmented activities, created through three distinct communicative practices.

Third, by exploring communication as the locus of coordinating our findings contribute to the growing body on CCO literature and extend the notion of organizing as a tension-filled communicative practice. Specifically, by focusing on the communicative practices in which coordinating took place via the online platforms, we revealed how the members re-constituted the organization in the communicative interplay among integration and fragmentation activities.

While we cannot generalize these findings unqualified to other types of temporary organizations in crisis – in particular: formalized projects –

the case offers several unique insights that suggest themes for further inquiry. First, as a purpose driven, volunteer organization, the members of the studied temporary organization possess motivations different from those we would expect among members of commercial project organizations. Through our interviews, we learned about the extreme exhaustion resulting from the weeks of relentless crisis fighting, which those individuals only took upon themselves because of a deep inherent motivation. This motivation was not rooted in proxies (such as money or career-building experience) but in the shared values among the co-creators and their desire to experience the outcome of their activities, i.e., the event. Hence, future research could consider the role of motivation when experiencing disruptions – and personal buy-in to the objectives of the project – for the adoption of specific coordinative practices.

Second, as a less-hierarchical organization (Lee & Edmondson, 2017), the existing organizational routines already established a tendency for fragmented coordination within a generally agreed upon frame. Thus, we did not so much observe a switch from a tightly coupled to a loosely coupled system (cf. Hällgren, 2009), but rather a continuation or possibly an amplification of existing practices when experiencing this crisis. This tendency for fragmentation manifested in a practice that the community calls “stepping up”, where members assume tasks or responsibilities voluntarily without having them assigned or delegated. This ad hoc behaviour contributed substantially to the handling of the disruptions in the analysed case. Organizations with entrenched processes, roles, and hierarchies might encounter stronger structural and behavioural barriers for responsive adoption of different communicative practices and coordinative roles. Thus, future research might consider the effect of structures or (perceived) empowerment on the enactment of coordinative practices through organizational actors.

Third, at the start of the Covid-19 pandemic in 2020, we observed disengagement from the preparatory activities, as co-creators realized that all large gatherings would be prohibited. However, new frames and objectives emerged within the permanent community, shaping new temporary organizations. For example, in the months that followed the 2020 cancellation, a loosely organized group emerged, focused on buying land for the community to use for its future events. This behaviour suggests a link between the perceived feasibility of the temporary organization's desired future and the engagement that enables flexible adoption of coordinative practices – an insight that might be considered for exploratory projects (Lenfle, 2016) where feasibility is not necessarily a given.

Fourth, by embracing CCO theories, our study highlights communication as the practice by which coordinating occurs. By analysing digital communication, we were able to observe at the micro-level how communicative practices among members of temporary organizations result in coordination, as participants negotiated tensions between integration and fragmentation. Future CCO research might consider focusing on other forms of digital communication as the site at which coordination occurs, while being attentive to tension-filled qualities of organizational communication.

5. Conclusion

While The Borderland losing its event site was less dramatic than the Apollo 13 mission, the insights gained in terms of how communication is a necessary part of negotiating temporary organizing in crisis remains uniquely insightful. As we reveal in this case, the processes of coordinating among members of temporary organizations experiencing crises involves a delicate negotiation between integration and fragmentation dependent upon the different nature of the disruption of meaning. Recognizing the varied types of communicative practices for coordinating – and their particular prospective dimension – deepens our understanding of how temporary organising happens in crisis and directs attention to the complex ways through which fundamental meanings and plans for the future are reinstated when facing crises.

Acknowledgements

The authors would like to thank the many members of The Borderland community that contributed to this research as interview partners and through informal discussions.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.ijproman.2023.102540](https://doi.org/10.1016/j.ijproman.2023.102540).

References

- Alvarez, J. F. A., Pustina, A., & Hällgren, M. (2011). Escalating commitment in the death zone: New insights from the 1996 Mount Everest disaster. *International Journal of Project Management*, 29(8). <https://doi.org/10.1016/j.ijproman.2011.01.013>. Article 8.
- Alvesson, M., & Kärreman, D. (2007). Constructing mystery: Empirical matters in theory development. *Academy of Management Review*, 32(4), 1265–1281. <https://doi.org/10.5465/amr.2007.26586822>
- Ansoff, H. I. (1975). Managing strategic surprise by response to weak signals. *California Management Review*, 18(2), 21–33. <https://doi.org/10.2307/41164635>
- Ashcraft, K. L., Kuhn, T. R., & Cooren, F. (2009). 1 Constitutional amendments: “Materializing” organizational communication. *Academy of Management Annals*, 3(1), 1–64. <https://doi.org/10.5465/19416520903047186>
- Bakker, R. M., DeFillippi, R. J., Schwab, A., & Sydow, J. (2016). Temporary organizing: Promises, processes, problems. *Organization Studies*, 37(12), 1703–1719. <https://doi.org/10.1177/0170840616655982>
- Basque, J., Bencherki, N., & Kuhn, T. (Eds.). (2022). *The Routledge handbook of the communicative constitution of organization*. Routledge.
- Bechky, B. A. (2006). Gaffers, gofers, and grips: role-based coordination in temporary organizations. *Organization Science*, 17(1), 3–21.
- Brookes, N., Sage, D., Dainty, A., Locatelli, G., & Whyte, J. (2017). An island of constancy in a sea of change: Rethinking project temporalities with long-term megaprojects. *International Journal of Project Management*, 35(7). <https://doi.org/10.1016/j.ijproman.2017.05.007>. Article 7.
- Bundy, J., Pfarrer, M. D., Short, C. E., & Coombs, W. T. (2017). Crises and crisis management: Integration, interpretation, and research development. *Journal of Management*, 43(6), 1661–1692. <https://doi.org/10.1177/0149206316680030>
- Burke, C. M., & Morley, M. J. (2016). On temporary organizations: A review, synthesis and research agenda. *Human Relations*, 69(6), 1235–1258. <https://doi.org/10.1177/0018726715610809>
- Bygballé, L. E., Swärd, A. R., & Vaagaasar, A. L. (2016). Coordinating in construction projects and the emergence of synchronized readiness. *International Journal of Project Management*, 34(8), 1479–1492. <https://doi.org/10.1016/j.ijproman.2016.08.006>
- Chen, K. K. (2009). *Enabling creative chaos. The organization behind the Burning Man Event*. The University of Chicago Press.
- Cicmil, S., & Marshall, D. (2005). Insights into collaboration at the project level: Complexity, social interaction and procurement mechanisms. *Building Research & Information*, 33(6), 523–535. <https://doi.org/10.1080/09613210500288886>
- Comi, A., & Whyte, J. (2018). Future making and visual artefacts: An ethnographic study of a design project. *Organization Studies*, 39(8). Article 8.
- Cooren, F., Kuhn, T., Cornelissen, J. P., & Clark, T. (2011). Communication, organizing and organization: An overview and introduction to the special issue. *Organization Studies*, 32(9), 1149–1170. <https://doi.org/10.1177/0170840611410836>
- Davies, A., & Mackenzie, I. (2014). Project complexity and systems integration: Constructing the London 2012 Olympics and Paralympics Games. *International Journal of Project Management*, 32(5). <https://doi.org/10.1016/j.ijproman.2013.10.004>. Article 5.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1). Article 1.
- Fetterman, D. M. (2010). *Ethnography: Step-by-step* (3rd ed.). SAGE Publications.
- Foldy, E. G., Goldman, L., & Ospina, S. (2008). Sensegiving and the role of cognitive shifts in the work of leadership. *The Leadership Quarterly*, 19(5), 514–529. <https://doi.org/10.1016/j.leaqua.2008.07.004>
- Ford, J. D., & Ford, L. W. (1995). The role of conversations in production intentional change in organizations. *Academy of Management Review*, 20, 541–570.
- Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12(6), 433–448. <https://doi.org/10.1002/smj.4250120604>
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: notes on the gioia methodology. *Organizational Research Methods*, 16(1). <https://doi.org/10.1177/1094428112452151>. Article 1.
- Goodman, R. A., & Goodman, L. P. (1976). Some management issues in temporary systems: A study of professional development and manpower-theater case. *Administrative Science Quarterly*, 21(3), 494–501. <https://doi.org/10.2307/2391857>
- Hällgren, M. (2007). Beyond the point of no return: On the management of deviations. *International Journal of Project Management*, 25(8). <https://doi.org/10.1016/j.ijproman.2007.05.005>. Article 8.
- Hällgren, M. (2009). Mechanisms of deviations: Observations of projects in practice. *International Journal of Managing Projects in Business*, 2(4), 611–625. <https://doi.org/10.1108/17538370910991188>
- Hällgren, M., Rouleau, L., & de Rond, M. (2018). A matter of life or death: How extreme context research matters for management and organization studies. *Academy of Management Annals*, 12(1), 111–153. <https://doi.org/10.5465/annals.2016.0017>
- Hällgren, M., & Wilson, T. L. (2008). The nature and management of crises in construction projects: Projects-as-practice observations. *International Journal of Project Management*, 26(8), 830–838. <https://doi.org/10.1016/j.ijproman.2007.10.005>
- Ifitkhar, R., Müller, R., & Ahola, T. (2021). Crises and Coping Strategies in megaprojects: The case of the islamabad-rawalpindi metro bus project in Pakistan. *Project Management Journal*, 52(4), 394–409. <https://doi.org/10.1177/87569728211015850>
- Jacobsson, M., Lundin, R. A., & Söderholm, A. (2015). Researching projects and theorizing families of temporary organizations. *Project Management Journal*, 46(5). Article 5.
- Jarzabkowski, P. A., L. J. K., & Feldman, M. S. (2012). Toward a theory of coordinating: creating coordinating mechanisms in practice. *Organization Science*, 23(4), 907–927. <https://doi.org/10.1287/orsc.1110.0693>
- Kaplan, S. (2008). Framing contests: Strategy making under uncertainty. *Organization Science*, 19(5). Article 5.
- Kauffman, J. (2001). A successful failure: NASA’s crisis communications regarding Apollo 13. *Public Relations Review*, 27(4), 437–448. [https://doi.org/10.1016/S0363-8111\(01\)00099-6](https://doi.org/10.1016/S0363-8111(01)00099-6)
- King, M. J. (1997). Apollo 13 Creativity: In-the-Box Innovation. *The Journal of Creative Behavior*, 31(4), 299–308. <https://doi.org/10.1002/j.2162-6057.1997.tb00801.x>
- Kuhn, T., Ashcraft, K., & Cooren, F. (2017). *The work of communication: Relational perspectives on working and organising in contemporary capitalism*. Routledge.
- Kutsch, E., Maylor, H., Weyer, B., & Lupson, J. (2011). Performers, trackers, lemmings and the lost: Sustained false optimism in forecasting project outcomes—Evidence from a quasi-experiment. *International Journal of Project Management*, 29(8). <https://doi.org/10.1016/j.ijproman.2011.01.010>. Article 8.
- Laloux, F., & Appert, E. (2016). *Reinventing organizations: An illustrated invitation to join the conversation on next-stage organizations* (First Edition). Nelson Parker.
- Lee, M. Y., & Edmondson, A. C. (2017). Self-managing organizations: Exploring the limits of less-hierarchical organizing. *Research in Organizational Behavior*, 37, 35–58. <https://doi.org/10.1016/j.riob.2017.10.002>
- Lenfle, S. (2016). Floating in space? On the strangeness of exploratory projects. *Project Management Journal*, 47(2), 47–61. <https://doi.org/10.1002/pmj.21584>
- Loosemore, M. (1998). Organisational behaviour during a construction crisis. *International Journal of Project Management*, 16(2), 115–121. [https://doi.org/10.1016/S0263-7863\(97\)00039-2](https://doi.org/10.1016/S0263-7863(97)00039-2)
- Lundin, R. A., & Söderholm, A. (1995). A theory of the temporary organization. *Scandinavian Journal of Management*, 11(4). [https://doi.org/10.1016/0956-5221\(95\)00036-U](https://doi.org/10.1016/0956-5221(95)00036-U). Article 4.
- McClellan, J. G. (2011). Reconsidering communication and the discursive politics of organizational change. *Journal of Change Management*, 11(4), 465–480. <https://doi.org/10.1080/14697017.2011.630508>
- Musca, G. N., Mellet, C., Simoni, G., Sitri, F., & de Vogüé, S. (2014). Drop your boat!": The discursive co-construction of project renewal. The case of the Darwin mountaineering expedition in Patagonia. *International Journal of Project Management*, 32(7). <https://doi.org/10.1016/j.ijproman.2014.02.006>. Article 7.
- Nathues, E., van Vuuren, M., & Cooren, F. (2021). Speaking about vision, talking in the name of so much more: A methodological framework for ventriloquial analyses in organization studies. *Organization Studies*, 42(9), 1457–1476. <https://doi.org/10.1177/0170840620934063>
- Okhuysen, G. A., & Bechky, B. A. (2009). Coordination in organizations: An integrative perspective. *Academy of Management Annals*, 3(1), 463–502. <https://doi.org/10.5465/19416520903047533>
- Packendorff, J. (1995). Inquiring into the temporary organization: New directions for project management research. *Scandinavian Journal of Management*, 11(4). [https://doi.org/10.1016/0956-5221\(95\)00018-Q](https://doi.org/10.1016/0956-5221(95)00018-Q). Article 4.
- Patriotta, G., & Gruber, D. A. (2015). Newsmaking and sensemaking: Navigating temporal transitions between planned and unexpected events. *Organization Science*, 26(6), 1574–1592. <https://doi.org/10.1287/orsc.2015.1005>
- Pisotska, V., Winch, G., & Sergeeva, N. (2022). Project governance interface and owner organizational identity: The Venice Biennale case. *International Journal of Project Management*, 40(6), 658–670. <https://doi.org/10.1016/j.ijproman.2022.07.001>
- Pitsis, T. S., Clegg, S. R., Marosszeky, M., & Rura-Polley, T. (2003). Constructing the olympic dream: A future perfect strategy of project management. *Organization Science*, 14(5). <https://doi.org/10.1287/orsc.14.5.574.16762>. Article 5.
- Putnam, L. L. (2019). Constituting order and disorder: Embracing tensions and contradictions. In C. Vásquez, & T. R. Kuhn (Eds.), *Dis/Organization as communication: Exploring the disordering, disruptive and chaotic properties of communication* (pp. 17–35). Routledge.
- Putnam, L. L., Fairhurst, G. T., & Banghart, S. (2016). Contradictions, dialectics, and paradoxes in organizations: A constitutive approach. *Academy of Management Annals*, 10(1), 65–171. <https://doi.org/10.5465/19416520.2016.1162421>
- Roth, E. M., Multer, J., & Raslear, T. (2006). Shared situation awareness as a contributor to high reliability performance in railroad operations. *Organization Studies*, 27(7), 967–987. <https://doi.org/10.1177/0170840606065705>
- Roux-Dufort, C. (2007). Is crisis management (Only) a management of exceptions? *Journal of Contingencies and Crisis Management*, 15(2), 105–114. <https://doi.org/10.1111/j.1468-5973.2007.00507.x>
- Schoenborn, D., Blaschke, S., Cooren, F., McPhee, R. D., Seidl, D., & Taylor, J. R. (2014). The three schools of CCO thinking: interactive dialogue and systematic comparison. *Management Communication Quarterly*, 28(2), 285–316. <https://doi.org/10.1177/0893318914527000>

- Schoeneborn, D., Kuhn, T. R., & Kärreman, D. (2019). The communicative constitution of organization, organizing, and organizationality. *Organization Studies*, 40(4), 475–496. <https://doi.org/10.1177/0170840618782284>
- Sergi, V. (2022). What's in a project? Extending inquiries into projects with a CCO perspective. In J. Basque, N. Bencherki, & T. Kuhn (Eds.), *The Routledge Handbook of the Communicative Constitution of Organization* (1st ed., pp. 325–338). Routledge. <https://doi.org/10.4324/9781003224914-24>.
- Siggelkow, N. (2007). Persuasion with case studies. *Academy of Management Journal*, 50(1). Article 1.
- Simard, M., & Laberge, D. (2018). Development of a crisis in a project: A process perspective. *International Journal of Managing Projects in Business*, 11(3), 806–826. <https://doi.org/10.1108/IJMPB-08-2017-0093>
- Stingl, V., & Gerdali, J. (2023). Imagining futures: Cognitive processes of desirable or undesirable project prospectations. *Technological Forecasting and Social Change*, 194, 122701. <https://doi.org/10.1016/j.techfore.2023.122701>
- Stjerne, I. S., & Svejenova, S. (2016). Connecting temporary and permanent organizing: Tensions and boundary work in sequential film projects. *Organization Studies*, 37(12). <https://doi.org/10.1177/0170840616655492>. Article 12.
- Taylor, J. R., & Robichaud, D. (2004). Finding the organization in the communication: Discourse as action and sensemaking. *Organization*, 11(3), 395–413. <https://doi.org/10.1177/1350508404041999>
- Tonga Uriarte, Y., DeFillippi, R., Riccaboni, M., & Catoni, M. L. (2019). Projects, institutional logics and institutional work practices: The case of the Lucca Comics & Games Festival. *International Journal of Project Management*, 37(2), 318–330. <https://doi.org/10.1016/j.ijproman.2018.09.001>
- Tracy, S. J. (2020). *Qualitative research methods: Collecting evidence, crafting analysis, communication impact* (2nd Ed.) (2nd ed.). Wiley-Blackwell.
- Weick, K. (1993). The collapse of sensemaking in organizations: The Mann Gulch disaster. *Administrative Science Quarterly*, 38(4), 628–652.
- Weick, K. (2012). Organized sensemaking: A commentary on processes of interpretive work. *Human Relations*, 65(1), 141–153. <https://doi.org/10.1177/0018726711424235>
- Weick, K., & Sutcliffe, K. M. (2015). *Managing the unexpected: Sustained performance in a complex world* (Third Edition). John Wiley & Sons, Inc.
- Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *Academy of Management Annals*, 11(2). <https://doi.org/10.5465/annals.2015.0134>. Article 2.
- Winch, G. M., & Maytorena, E. (2011). *Managing risk and uncertainty on projects: A cognitive approach oxford handbooks online managing risk and uncertainty on projects: A cognitive approach* (November 2018). November 2018, Article November 2018. <https://doi.org/10.1093/oxfordhb/9780199563142.003.0015>.
- Wolbers, J., Boersma, K., & Groenewegen, P. (2018). Introducing a fragmentation perspective on coordination in crisis management. *Organization Studies*, 39(11), 1521–1546. <https://doi.org/10.1177/0170840617717095>
- Yin, R. K. (2009). *Case study research: Design and methods* (Second Edition). Sage.
- Zerjav, V., McArthur, J., & Edkins, A. (2021). The multiplicity of value in the front-end of projects: The case of London transportation infrastructure. *International Journal of Project Management*, 39(5), 507–519. <https://doi.org/10.1016/j.ijproman.2021.03.004>