When it takes one paradox to navigate another – a process study of a Swiss hospital during COVID-19

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by

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Beware – you enter the territory of an early-stage paper

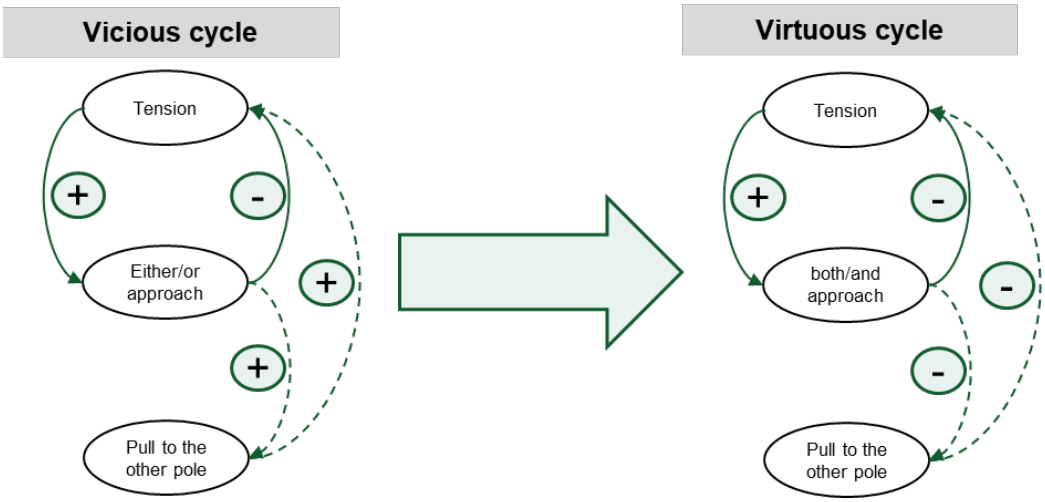
1 New Background: problematizing virtuous cycles

1.1 Status quo

The paradox lens argues that virtuous and vicious cycles result from actors' responses to paradoxes (Schad et al., 2016; Smith & Lewis, 2011): "virtuous and vicious cycles … are iterative spirals that grow out of the ways that actors respond to contradictions" (Putnam et al., 2016: 19). More specifically, the paradox lens tends to associate both/and approaches with virtuous and either/or approaches to contradictory tensions with vicious cycles. These associations contain the following reasoning:

- *Vicious cycles*: So-called defensive responses either tend to ignore paradox (Tsoukas & Cunha, 2017: 399) or include for giving priority to one of the contradictory interrelated elements over the other. Since these elements persist, the pull and associated tensions towards the other – unattended element – increases over time (Clegg et al., 2002). Such an either/or approach corresponds with a strive for consistency (Smith & Lewis, 2011) as well as short-term over long-term success (Tsoukas & Cunha, 2017). When such responses reproduce and create patterns sometimes corresponding beliefs, they feed back by maintaining or amplifying the experienced tensions that triggered these actions in the first place. Accordingly, Tsoukas & Cunha (2017: 402) summarize the argument of the paradox lens: "vicious cycles are the result of unsophisticated (i.e., defensive) approaches to paradoxical tensions." Hargrave & van de Ven (2017: 324) highlight that the paradox lens associates conflict with such unsophisticated approaches to paradoxical tensions, and instead promotes dialogue between conflicting actors.
- *Virtuous cycles*: In comparison, pro-active responses "can be a means to fostering virtuous cycles" (Schad et al., 2016:32). Such both/and (Smith & Lewis, 2011), or active (Jarzabkowski et al., 2013), or more/than approaches (Putnam et al., 2016), foster and require paradoxical thinking, i.e. the capacity to think in opposites and tensions as integral to organizing (Miron-Spektor et al., 2017). They promote doubt, reflection, and creativity through which actors can envision synergies between the element (Smith, 2014; Luescher & Lewis, 2008), allow oscillating between both elements (Poole & van de Ven, 1989), or transcend the paradox when re-considering the element's relation or by placing the elements in a different context (Putnam et al., 2016; Pradies et al., 2020). Hargrave & van de Ven (2017: 324) read the dynamic equilibrium model

(Smith & Lewis, 2011) that "synergy as a process in which managers purposefully iterate between contradictory elements in order to ensure attention to both. This enables them to avoid "paralyzing and often vicious cycles" and instead initiate "virtuous cylces of learning and enhanced organizational performance. (Smith & lewis, 2011: 761).



1.2 Movement from vicious to virtuous cycles

Based on the associations of cycles resulting from different response approaches, recent empirical studies explore the movement from vicious to virtuous cycles. These studies analyze how organizational members turn from either/or towards both/and approaches, thereby implying that the organization changes the trajectory from possible vicious towards virtuous cycles:

- Jarzabkowski et al., 2013
- Pradies et al., 2020
- Huq et al., 2017
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1.3 Sustaining virtuous cycles

- Jarzabkowski et al., 2013: importance of embedding "active responses"
- Pamphile 2022: role of paradox peers (outsiders to the organization, but insiders to the paradox) for individuals to live with paradox
- Huq et al. 2017: "protecting the paradox"

Others elaborate on successful handling of paradoxical tensions through both/and approaches, like studies on national leaders of handling the COVID-19 pandemic (Macron-Paper; New-Zealand-Paper).

1.4 Occurrence of vicious circles

- Gaim et al (2021) trace the process of the emission scandal at Volkswagen. Their work highlights that besides shifting paradoxical tensions from upper to lower hierarchical levels, the inability to address the challenges with the proposed both/and approach resulted from a "fearful and intimidation-filled decision-making context" (p. 962). Furthermore, their case illustrates that "not all oppositions can be integrated" (p. 963) indicating that there are limits to both/and approaches, despite their prevalent positive impression in paradox literature.

1.5 Problematization

However, the association of vicious cycles and defensive responses, and virtuous cycles with both-and approaches has rather been implied than investigated. Luescher & Lewis (2008), for example, indicate that the studied both/and means of working through paradox might not last. Jarzabkowski et al. (2013) point out the importance of embedding both/and approaches into processes and structure to enhance their persistence and thereby foster the avoidance of vicious cycles and the promotion of virtuous ones instead. Likewise, Pradies et al. (2020) point out to further study the persistence of virtuous cycles. Although these studies call for the further research on how virtuous cycles can persist, they still associate them with both/and approaches.

Others question this association. Gaim et al (2021)… (see 1.4)

Within the argument of the association, there is the (implicit) assumption that organizational members share the goal of unfolding paradoxical tensions. Berti & Simpson (2021) argue to be cautious because power differences of actors pursuing different interests with different degrees of agency can limit their possibilities to address contradictory tensions. Smith (2014) points out in her study that the particular way of enacting a both/and approach risks confusing organizational members which in turn can undermine the chosen both/and approach. Knight & Paroutis (2017) highlight the difficulties senior leaders encounter when fostering a both/and

approach. Others have pointed out the potential for conflict between organizational members that can impair the aim for pursuing both/and approaches and the possibility for virtuous cycles (O'Connor, 1995). Abdallah et al (2011) show that leaders' discourses of transcendence to foster both/and approaches can dilute the paradox. Furthermore, organizations might pursue impossible both/and approaches as in the VW scandal (Gaim et al, 2021) that might induce trajectory towards organizational failure.

These observations lead us to question the often accepted association between both/and approaches and virtuous cycles, as well as that between either/or approaches and vicious cycles.

In order to reconsider these associations, there are four possibilities: the two prevalent ones; an association between both/and approaches and vicious cycles, and one between either/or approaches and virtuous cycles. In this paper, we focus on the former and ask: "How can a both/and approach induce a trajectory towards a vicious cycle?"

1.6 The role of "conditions" in navigating paradoxes.

Within the paradox lens, there is a wide-held belief that navigating contradictory tensions requires the salience of paradox. Paradoxes surface under three conditions (Smith & Lewis, 2011): resources scarcity, plurality, and change.

- Resource scarcity triggers the need for decisions, that pressure actors to make choices of allocating resources to the contradictory elements… EXAMPLE
- Plurality means that there are different perspectives, understandings, and interests that surface contradictory elements as actors enunciate their different perspectives. EXAMPLE
- Change surfaces contradictory tensions as it calls into question previously held beliefs… EXAMPLE

It is interesting to note, that many studies do not further consider the impact on these conditions when organizations and their actors navigate contradictory elements. Without consideration, it appears to be assumed implicitly that the conditions remain unaffected by the approaches to navigate contradictory elements.

In this paper, we question this assumption. We expand the scope to trace the impact of navigating contradictory elements on the conditions of paradox salience over time. Thereby, our goal is to observe the dynamic relationship between paradox, approaches, and the conditions

for paradox salience in order to explain how and why both/and approaches can provide the path to vicious cycles.

1.6.1 The underlying lack of feedback loops

Observations in the literature:

- De Rond & Bouchikhi (2004: 67) – taking a dialectic perspective – highlight the importance of a circular causality, when arguing for unintended consequences action as a change engine.
- In a similar way, Abdallah et al. (2011: 338) argue for a circular causality by including the consequences of actions and their impact on the setting which triggered these actions in the first place.
- However, models in paradox literature seem to be limited in this regard:…
- The model proposed by Hargrave & van de Ven (2017: 330) to combine dialectics and paradox perspectives, also excludes how managerial action on salient and irreconcilable elements effects the conditions for their salience. Rather the transformation (dialectics) or the synergy achieved (paradox) impact unspecified on the "salient and irreconcilable" elements.

2 Starting point: Process view (SST)

In early paradox scholarship, Putnam (1986) did not conceive of cycles as results of responses, but as phenomena located on an analytical level between contradictory messages (on the level of interactions between individuals) and system contradictions (on the level of the organizations when contradictory elements are built into the structures and processes of an organization).

Jay (2013) asks to further explore the organizing processes from which paradox emerge

Tsoukas & Cunha (2017) suggest turning our line of inquiry around to conceive of organizing as a circular process that can be expressed as vicious or virtuous cycles depending on goals and circumstances.

2.1 Reconstruction: the 2-dimensional space…

What we learn from these studies of vicious cycles, sustaining virtuous ones and moving from the former to the latter.:

- Individual conditions, like a paradox mindset is important
- Interactive conditions: a mode of engaging with tensions that is exploratory rather than exploitative. This distinction resonates with that by Sundarmurthy & Lewis (2009) who introduced the distinction between affective and rational conflicts. Exploitative mode of interaction highlights the partial interests of actors and their association with one pole of the paradox (see also Kahane, 2017) that associates with power differences (Berti & Simpson, 2021). We call it "exploitative" to indicate that actors make use of the resources at hand to pursue their interests. An exploratory mode, in comparison, highlights a learning mindset of reflection and envisioning (Pamphile, 2022) that also can include one's own actions and their effect in creating or reproducing a situation at hand (Pradies et al., 2022) in a dialogical approach (see Jarzabkowski et al., 2013).
- These two conditions are inter-twined so that Andriopolous & Lewis (2009), for example call for research on their relation. Putnam et al. (2016) highlight the importance of such a mode of interacting in order to foster paradoxical mindsets. Luescher & Lewis (2008) and others (Dercks et al., XXXX) illustrate such a mode on team-settings.

We use these insights to approach an explanation for how both/and approaches can lead to vicious circles. Adjoining this insight with the distinction of either/or, or so-called defensive approaches and both/and or so-called active approaches, the provide a space to locate the above studies in terms of their approach and their association with virtuous or vicious cycles.

The two dimensions give rise to four fields, and provides room for trajectories (DEFINITION, see Langley Stensaker) between them to specify existing insights and open issues.

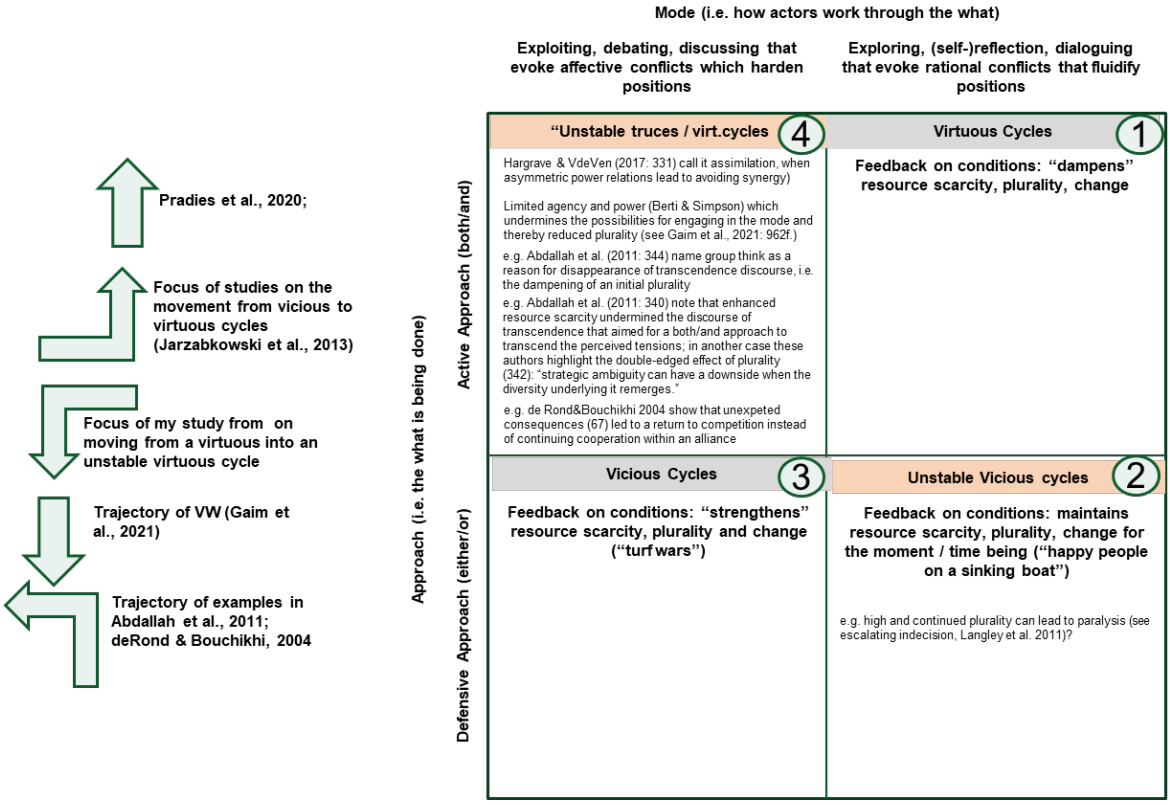
Virtuous cycles (Field 1) received attention since Lewis (2000) and Smith & Lewis (2011)…

Vicicous cycles (Field 3) have been investigated in early paradox studies and concepts (Putnam, 1986; Watzlawick et al., 1967) but also more recently (Gaim et al., 2021).^

Unstable vicious cycles (Field 2) mainly received attentions as transitory states, as organizations move from Field 3 to Field 4. As a rare example, "escalating in-decision" (Denis et al.,

2011) indicates that an explorarotive mode with a commitment to collaborate of actors, remained in a defensive approach due to each participant's context of competing demands.

Unstable virtuous cycles have more attention recently. Hargrave & van de Ven (2017) call it assimilation, when one pole becomes integrated in the other in an imbalanced way. Berti & Simpson (2021) mobilize power differentials to explain assimilation (Field 4) or the avoidance of one pole which implies a vicious cycle (Field 3). Similarly, the resulting states of process studies might be placed here, be that avoidance of collaboration as unintended consequences of staff changes (de Rond & Bouchikhi, 2004), or that group think or resource restrictions evoked an exploitative mode despite pursuing a both/and approach (Abdallah et al., 2011).



Process studies that trace movements over time display the following trajectories:

- Aiming for virtuous cycles is the prevalent trajectory, so that organizations move from field 3 towards 1 by passing through field 2. Pradies et al. (2020), for example, illustrate this movement by which actors experiencing tensions enacted an exploratory mode (Field 2) in order to envision and enact new ways of navigating tensions (Field

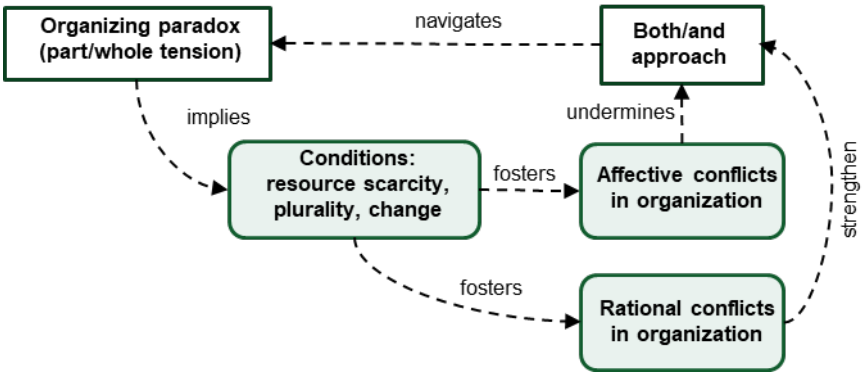
4). Jarzabkowski et al. (2013) depict a similar process of moving from a possible vicious cycle during a change process towards a possible virtuous one by altering the mode of exploiting towards exploring, which they call “dialogue”. In a similar way, “paradoxical inquiry” (Luescher & Lewis, 2008) offered an exploratory mode to the involved actors to move from field 3, through 2 towards 1. Pamphile (2022) recently highlighted the possibility of using an exploratory mode outside the organization in order to sustain tensions in a virtuous form inside the organization.

- However, some studies indicate trajectories towards vicious cycles (Field 3). Gaim et al. (2021) study of the Volkswagen scandal exemplifies how the organization moved from a claimed both/and approach into a vicious cycle that resulted from an exploitative mode (Field 4). Due to the technological limitation, the both/and approach appeared a goal too stretched to achieve, while the exploitative mode limited the space to find alternatives that would avoid a vicious cycle that resulted in the scandal.
- While their study implies that both/and approaches can be limited (Gaim et al., 2021: 963), we still know little of trajectories that lead to vicious cycles when enacting a both/and approach to competing demands.
- In particular, we still miss an understanding of why such trajectories occur. To further advance our understanding from a process perspective, it is necessary to consider the effects of navigating paradoxes in the situation that triggered these actions in the first place. As Abdallah et al. (2011: 338) point out: ““actions lead to consequence that are evaluated by observers, and unexpected events my contribute to derailing optimistic projections”. They argue that the very reasons that give rise to the emergence of promoting both/and approaches might over time lead to their demise (ibid.). It is thus timely to make use of a circular causality (Tsoukas & Cunha, 2017) in order to provide a more nuanced view on the relation between vicious and virtuous cycles with defensive and active approaches to paradox in general, and that of active approaches with vicious cycles in particular. Therefor, the research question is: how and why can a both/and approach to paradox lead to vicious cycles? Placed in the above figure, my focus is on a trajectory from Fields 1 to 3.

3 Theorizing: a model of paradoxical dynamics

The findings section elaborated on an organizing paradox that contains the contradictory elements of demands for two related sets of organizational activities, in this case COVID-19 related activities and treating the other patients. In addition, the findings show the both/and approach to dynamically adjust but pursue both sets of activities over time. Finally, the findings section highlighted that the resources for this approach became increasingly scarce with conflicts between organizational units and actors.

From a paradox lens, the organization navigated the organizing paradox with a both/and approach. As a result, the conditions that surface contradictory tensions – here resource scarcity – became more severe, triggering conflicts. These conflicts risked to undermine the both/and approach in that it led to a restricted capacity to pursue both contradictory elements. As a consequence, the potential for conflict increases and so did the resource scarcity in terms of work pressure that risked further deterioration of resources. Over time, the studied organization risked the vicious cycle as it pursued a both/and approach to navigate the organizing paradox.



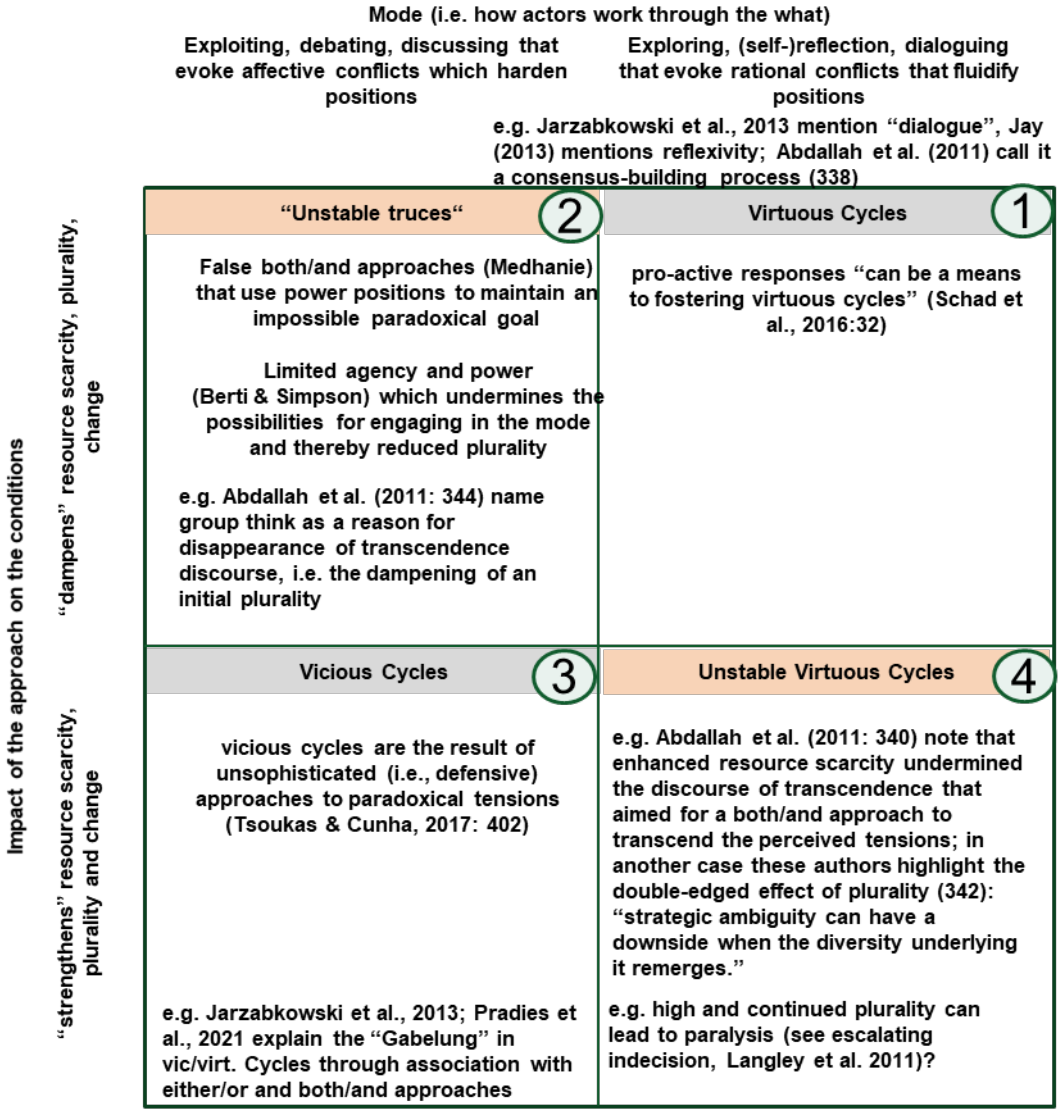
Why did this process occur?

There are two reasons that help to explain why this process occurred:

- A first reasons lies in the impact of the both/and approach on the resources, i.e. on the conditions for paradox salience.
- A second reason lies in the handling of the condition for paradox salience in question. In this case, it led to so-called affective conflicts, turf wars.

4 Discussion: Further generalization for future research

These two factors allow us to generate a space of four different associations between approaches of navigating paradoxes and their trajectories of vicious and virtuous cycles.



This pace enables to picture the dynamics of paradox, approach and conditions in terms of four different trajectories:

4.1 Virtuous cycles (trajectory 1)

"Virtuous cycle" requires an exploring mode and in effect a dampening of the conditions for paradox salience.

4.2 “unstable truce” (trajectory 2)

4.3 Vicious cycle (trajectory 3)

4.4 Unstable virtuous cycle (trajectory 4)

In essence, an unstable virtuous cycle becomes probable even if the involved actors pursue an explorative mode, when the conditions of paradox salience – resource resctrictions, plurality, change – increase over time. Raising the conditions prompt difference and conflicts, may lead to further resource deterioration through exits of staff as in my case, which undermine an exploring mode and risk switching to an exploiting mode. Also, particularly rising resource restrictions limit increasingly the possibilities to pursue the both/and approach.

4.5 Positioning the case

The above study positions itself in trajectory 4, an “unstable virtuous cycle”.

4.6 Trajectories between the fields: 4 to 3

Raising conditions can have a further effect within field 4: they surface other contradictory elements or paradoxes, like that between professions (Huq et al., 2017) or – as had been pointed out by Jarzabkowski et al., 2013 belonging and performing paradoxes. Their tensions can lead to changing the mode from exploratory to exploiting so that the unstable virtuous cycle (4) becomes a vicious cycle (3)

4.7 Trajectories observed in paradox studies

Empirical process studies in the paradox often explore the movement towards field 1, either from field 2 or field 3, see and explicate that in Pradies (2020) and Jarzabkowski et al. (2013)

4.8 Undermining potential of a virtuous cycle (1)

With dampening conditions, an enacted virtuous cycles can potentially undermine itself. This is the case in the paradox of success (Miller, 1992).

4.9 General core insight:

Summarizing the core insight that applies to all the four trajectories is the following: the chosen approach (either/or or both/and) carries on into the future, when it recreates its own conditions, while it does not when it undermines its own conditions over time. This circular causality (Tsoukas & Cunha, 2017) occurs because actions lead to consequences which in turn are evaluated by observers (Abdallah et al., 2011: 338).

5 Contributions

- This view helps to enhance the precision of what it means to have “unsophisticated” approaches to navigating contradictory tensions (see Tsouks / Cunha 2017: 402).

6 Introduction

This paper reports a longitudinal case study of how a hospital coped with the COVID-19 pandemic. In this extreme context (Hällgren, Rouleau, & De Rond, 2018) health professionals had to "develop the playbook on the fly" (Ciuchta, O'Toole, & Miner, 2021: 289) under the risk of self-infection and the uncertainty of an ongoing, global disruption with volatile intensity (Tuckermann & Schwaninger, 2022).

Crisis and resilience literature theorize the process of navigating disruptions as a temporal sequence with normal activities before, improvised coping during and a return to normal activities after a disruption (Duchek, 2019; Linnenluecke, Griffiths, & Winn, 2012; Williams, Gruber, Sutcliffe, Shepherd, & Zhao, 2017). This sequential process emanates from studies on localized events like natural disasters or terrorist attacks, and often from research on specialized organizations like fire fighters, emergency response teams (Faraj & Xiao, 2006). The sequential understanding assumes a finite disruption as a given, around which actors can align their activities to navigate the disruption.

We still know little on navigating a potentially enduring disruption like the COVID-19 pandemic (Rouleau, Hällgren, & De Rond, 2020) by non-specialized, so-called naïve organizations, the core activities of which are not geared on handling disruptions (Hannah, Uhl-Bien, Avolio, & Cvarretta, 2009). The pandemic posed a new situation for these organizations: First, hospitals cannot switch from their core activities –treating all patients – to treating solely COVID-19 patients without risking further damage. Second, the pandemic affected the hospital actors in different ways (Kahn et al., 2018) with some coping with COVID-19 and others pausing their activities to provide resources. Third, the temporal expansion, volatile intensity and speed create a continuous tentativeness regarding the disruption and its handling (Tuckermann & Schwaninger, 2022). These aspects call into question the above sequential understanding and prompts our exploratory research question: How does a hospital navigate a potentially infinite disruption?

Because the COVID-19 pandemic surfaces numerous paradoxes (Carmine et al., 2021; Sharma et al., 2021), we introduce the paradox lens to answer our research question. The paradox lens investigates how individuals, teams or organizations navigate persistent, interrelated yet contradictory elements (Putnam, Fairhurst, & Banghart, 2016). We address the lack of paradox studies on the extreme context like the COVID-19 pandemic (Lê & Pradies, 2022; Simpson, Rego, Berti, Clegg, & Cunha, 2022), address the calls for "less retrospective

and more ethnographic" research of organization studies of disruption (Duchek, 2019: 24) (Hällgren et al., 2018) and aim to expand the prevalent sequential process understanding.

We adopt a process perspective that assumes a world of flux and organizations as temporal stabilizations (Tsoukas & Chia, 2002). Organizations stabilize through decisions that produce and reproduce patterns of who decides on what, when and how (Luhmann, 2000) which is particularly the case during a disruption (Kornberger, Leixnering, & Meyer, 2019). As pluralistic organizations, hospitals are challenging in this respect: actors are relatively autonomous. Leaders require the consent of the led (Denis, Lamothe, & Langley, 2001: 832), who often question leaders' decisions (Faraj & Xiao, 2006; Lozeau, Langley, & Denis, 2002).

The background section elaborates the sequential understanding and introduces the paradox lens. The method section contains our choice for a longitudinal single case study to generate process data which is analyzed through temporal bracketing (method section) (Langley, 1999). First, the findings section shows that the unfolding pandemic surfaces the organizing paradox of pursuing both normal and pandemic activities. Second, and navigating this paradox surfaced the paradox of individual and collective decision-making (Currie, Gulati, Sohal, Spyridonidis, & Busari, 2021; Giustiniano, Cunha, V., Arménio, & Clegg, 2020). The two paradoxes provide an answer as to how the hospital navigated the pandemic.

The discussion section relates the literature of paradox with that of coping with a disruption to illumine the dynamic process coping with disruptions. This process exemplifies a both/and approach of navigating two entangled paradoxes that expands the prevalent understanding of sequential stages as an either/or approach. The paradox lens provides a frame for both approaches thus enhancing the repertoire for organizing during disruptions, and we underscore the importance of participatory, relational, post-heroic or compassionate leadership during disruptions (Currie et al., 2021; Sanfuentes, Velenzuela, & Castillo, 2020).

7 Process of coping with disruptions and the paradox lens

Studies of extreme contexts (Hallgrän et al., 2018), of organizational resilience and crisis management (Williams et al., 2017; Duchek, 2019; Linneluecke et al., 2012; Kahn et al., 2018) explore how individuals, teams, communities, or organizations cope with disruptions. Disruptions are events that hardly allow for preparation (Hällgren et al., 2018: 125) and that may exceed the organization's capacity and can result in intolerable damage (ibid. 113).

The prevalent understanding of the process to cope with disruptions implies a sequence of normal activities, crisis-related activities to cope with the disruption and resuming normal activities afterwards. Duchek (2020, p. 225) and others (Williams et al., 2017, p. 751) have further conceptualized this basic understanding by elaborating on anticipating disruptions (Duchek 2020: 225-227), identifying possible risks prior to their escalation (e.g. Ortiz-de-Mandojana & Bansal, 2016) and preparation (e.g. Lengnick-Hall et al., 2011). The coping stage (Duchek, 2020, pp. 227–229) consists of accepting the problem (e.g. Hamel & Välikangas, 2003), and developing and implementing solutions (e.g. Weick, 1993; Weick et al., 2005). Coping requires improvisation (Ciuchta et al., 2021), sensemaking (Sutcliffe & Vogus, 2003, p. 97), and actors use resources, routines, practices of the organization's temporarily paused normal activities (Oscarsson, 2021). After the disruption ends, organizations resume normal activities and might adapt (Duchek, 2020, pp. 230–232) through reflection and learning (e.g. A. C. Edmondson, 2002). Despite acknowledged overlaps and interdependence (Duchek, 2020: 232; Williams et. al., 2017: 750) the fundamental idea remains that of a linear sequence of an organization pursuing its normal activities, switching to coping with the disruption and resuming its normal activities afterwards.

Such a linear sequence (Duchek, 2020: 225) applies to disruptions that occur as an event and where "risks are highly predictable and verifiable, and remedies are relatively safe" (Wildavsky, 1988: 238). For example, scholars have studied this sequence in response to earthquakes (Williams & Shepherd, 2016), bushfires (Barton, Sutcliffe, Vogus, & DeWitt, 2015) or extreme weather events (Linnenluecke et al., 2012).

However, the pandemic differs due to its possible continuance, and its handling by so-called "naïve organizations" (Hannah et al., 2009). With respect to the possible temporal continuance, pandemics (Rouleau et al., 2020) are similar to climate change (Linnenluecke et al., 2012) or war (e.g. Parkinson, 2013). Here, the end is often not in sight and the disruption is dynamic itself as observed by the different "waves" during the COVID-19 pandemic (Tuckermann & Schwaninger, 2022). Such a disruption not only calls for specialized organizations, but for "naïve organizations" that pursue non-crisis related activities which become jeopardized and temporarily paused by the disruption (Hannah et al., 2009).

These difference call into question the prevalent sequential understanding: Coping with a potentially infinite disruption like the COVID-19 pandemic does not allow to suspend normal operating. The temporal extension of the pandemic increasingly requires organizations to pursue disruption-related and normal activities in parallel. We still know little what such a

process looks like empirically as well as conceptually, which would further help to illumine the dynamics of coping with disruptions (Duchek, 2019; Kahn et al., 2018).

Given the requirement of parallel normal and crisis-related activities, decision-making for coping with the disruption (Kornberger et al., 2019) becomes more complex in at least two respects: First, decision-making needs to address both crisis-related and normal activities by allocating resources to both, whereas resources shift to coping with the disruption within the prevalent sequential understanding (Williams et al., 2017). Second, decision-making becomes more complex of who takes part in decision-making. The disruption calls for temporary organizations (Harborth & Geiger, 2021; Wright, Meyer, Reay, & Staggs, 2021) that fulfill the needs for speed, expertise and acceptance to enhance coping, both within (Oscarsson, 2021) and between organizations (Kornberger et al., 2019). Within the sequential understanding, temporary organizations replace pre-existing modes of decision-making, at times leading to tensions and conflict (Wolbers, Ferguson, Groenewegen, & Mulder, 2016). In comparison, the pandemic required both modes of temporary and permanent organization for decision-making, which is further complexified because actors are subject to the disruption in different ways (Kahn et al., 2018).

These two aspects point out the relevance to reconsider the prevalent understanding of navigating disruptions. The sequential understanding builds on a disruption as a finite event. The COVID-19 pandemic calls for further developing this understanding to include the need to pursue both pandemic-related and normal activities in parallel. Therefore, we ask: How does a hospital navigate a potentially enduring disruption, like the COVID-19 pandemic?

To answer this question, we invite the paradox lens as a meta-level perspective (Smith & Lewis, 2011). Scholars showed various contradictory tensions that surface through the pandemics (Carmine et al., 2020; Sharma et al., 2020). More specifically, the need to pursue normal and crisis-related activities in parallel triggers the conditions of resources restrictions, change and plurality that are known to surface paradoxes (Smith & Lewis, 2011): First, there are competing demands between coping with the disruption and upholding normal activities. Second, allocating restricted resources heighten tensions and need for decisions. Third, establishing a temporary organization for decision-making changes the pre-existing modes that trigger issues of who decides on what, and when. Fourth, the uncertainty of the unfolding pandemic and the time-lapses of the impact of responses trigger plurality of understandings and views on responding to the disruption (Tuckermann & Schwaninger, 2022).

Paradoxes are two opposing yet interrelated elements that persist over time (Putnam et al., 2016; Schad, Lewis, Raisch, & Smith, 2016; Smith & Lewis, 2011), like exploration and exploitation that entails the tensions between today and tomorrow (Andriopoulos & Lewis, 2009), change and stability (Farjoun, 2010), social and business logics (Jay, 2013; Smith & Becharov, 2019), centralized and decentralized decision-making (Cunha & Putnam, 2017; Huq, Reay, & Chreim, 2017), or integration and differentiation on an organizational level (Jarzabkowski, Lê, & van de Ven, 2013).

A first insight to navigate paradoxes (Putnam et al., 2016; Smith & Lewis, 2011) is that organizations, teams or individuals cope with paradox by working towards a dynamic equilibrium in which both poles are left intact – so called both/and approaches – versus shifting from one pole to the other, so called either-or approaches (Smith & Lewis, 2011). Conceptually, the paradox lens promotes both/and approaches because it assumes that both of the contradictory elements persist, so that prolonged and increase focus on one pole raises the tensions to the other pole (Clegg, Vieira da Cunha, & Pina e Cunha, 2002). Developing a both/and approach requires paradoxical thinking (Miron-Spektor, Ingram, Keller, Smith, & Lewis, 2017), sensemaking (Jay, 2013) to envision workable solutions (Luescher & Lewis, 2008) and their experimental implementation (Jarzabkowski et al., 2013; Pradies, Tunarosa, Lewis, & Courtois, 2020).

A second insight is that paradoxes are nested so that one pair of opposites is entangled with other such pairs (Rosales, Gaim, Berti, & Cunha, 2022; Sheep, Fairhurst, & Khazanchi, 2017) that dynamically unfold over time on the level of organizations, groups and individuals (Jarzabkowski et al., 2013).

Following this insight, a third one is that navigating paradoxes is a dynamic process that can contradictory itself (Cunha & Putnam, 2017). Smith (2014), for example, showed that leaders pursued a "consistently inconsistent" decision-making pattern to handle the organizing paradox of exploration and exploitation. Leaders attended to either pole or both creating a zigzagging (Ashforth & Reingen, 2014) in order to relate the poles over time. So-called guardrails limit that the organization in falling off either side, i.e. by solely pursuing one of the poles (Smith & Besharov, 2019).

We use these insights of the paradox lens to explore how a hospital navigated the COVID-19 pandemic.

8 Longitudinal process study on coping with COVID-19

The underexplored phenomenon of navigating paradox during the COVID-19 pandemic calls for a case study approach (Yin, 1994). Because of the pandemic's temporal dynamics, I adopt a process perspective that assumes a world of flux, in which organizations are temporally stabilized accomplishments (Tsoukas & Chia, 2002).

Following recent insights of crisis literature (Kornberger et al., 2019), the analytic focus is on decision-making. Decision-making stabilizes organizational action because it produces and reproduce patterns of who decides on what, when and how (Luhmann, 2000). Such patterns serve to navigate paradox (Smith, 2014), which can be analyzed in their factual, social, and temporal dimension (Andersen, 2003). Our focus is on the social dimension, i.e., who is involved in decision-making within the organization and how such participation changed over time. This focus addresses the pluralistic setting of relative autonomous actors who tend to challenge decision-making by others (Denis et al., 2001; Lozeau et al., 2002).

The studied hospital is a central teaching hospital with 6'000 employees and 36'000 in- and 530'000 outpatient visits. An executive board, presided by the CEO, is the highest decision-making body. It consists of the heads of the two main medical departments (internal medicine and surgery that harbor over 30 clinics with their own heads and leadership constellations), the nursing department and several administrative departments, namely finance, infrastructure, and logistics. The hospital is a typical pluralistic organization of semi-autonomous experts therefore harboring different interests, and logics (Smith & Becharov, 2019) and aiming to treat the patients of the region while ensuring economic viability (Glouberman & Mintzberg, 2001). Leaders require the consent of the led (Denis et al., 2001: 832) and health workers often question managerial decisions (Lozeau et al., 2002). Thus, a pluralistic setting is highly challenging for navigating paradox, especially during the COVID-19 pandemic.

The field phase started with the first pandemic wave in early March 2020. I had access to the task forces as central decision-making bodies for handling the pandemic. Until December 31, 2021, the data set contains the four sources:

Type	Sources	Number
Documents	**Internal:** daily reports on the COVID-19 situation, meeting minutes of taskforces (hospital, infectiology), internal staff information, concepts, emails	187
	External: official statements by cantonal and national authorities, media coverage (newspapers, websites), medical publications	76

Type	Sources	Number
Observations (detailed field notes, minutes)	**Task force (hospital)**: non-participant observation since March 2020 of the meetings to develop, decide and monitor hospital-wide decisions for coping with the COVID-19 pandemic **Taskforce (Infectiology):** non-participant observation since March 2020 of the weekly meeting to decide on and monitor measures of testing, treating, protecting, vaccinating staff and patients	36 55
Semi-structured interviews (recorded, transcribed)	**Series 1**: all taskforce and selected organizational members on their experience during summer 2020; duration, 60-90 Min. each **Series 2** selected Taskforce and organizational members on their experience during summer 2021; duration, 60-90 Min. each	26 17
Repeated open interviews (recorded)	**Nursing:** daily (March-April 2020), weekly conversations of the immediate events and experiences with a nursing director, duration, 30-60 Min. **Medicine**: daily (March-April 2020), weekly open conversations of the immediate events and experiences with a leading medical doctor of infectiology, duration, 30-60 Min.	92 88

Table 1: data set until December 31, 2021

The *analysis* theorizes from process data (Langley, 1999) and iterates between data and literature: First, I developed a rich case study of the unfolding events, decisions, and the development of the internal context of the hospital, complemented by the developing regional and federal regulations.

Second, we distinguished episodes along the pandemic waves for temporal bracketing. In each episode I identified the hospital's challenges and decisions to address the pandemic. The literature on extreme contexts confirmed that the hospital followed the known sequence of anticipation and coping during wave 1, but without adaptation. Existing explanations did not fit the data because organizational members explained the lack with "catching up" on postponed normal activities instead of preparing for wave 2 they expected in Fall 2020.

Third, and to explain this observation, the paradox literature suggests that shifting to one pole – pandemic activities – increases the pull to the other pole - normal activities (Clegg et al., 2002). The paradox lens also helped to reveal the both/and approach when the hospital pursued normal and pandemic activities in parallel since wave 2. Therein, data contains numerous incidents of confusion, non-compliant behaviors by some actors, and conflicts between actors on different issues, which indicate a paradoxical relationship between normal and pandemic activities. I systematized these incidents using the analytic categories of a factual, social, and temporal dimension (Andersen, 2003). The factual dimension refers to facts and contents. The social dimension points to the involved actors. The temporal dimension refers to the varying time-pressure. These analytic categories elaborate the paradox without presupposing types (Cunha & Putnam, 2017).

Fourth, we carved out the decision-making pattern of each episode by identifying the social spaces of recurrent formal and informal meetings (Bucher & Langley, 2016) in which the participants discuss and decide arising questions. These inter-related spaces mark the decision-making pattern through which the hospital coped with the COVID-19 pandemic, i.e., how it navigated the paradox of normal and pandemic activities. Fifth, we compared the patterns across the episodes. They vary in terms of actors' participation which points out a paradoxical relation between individual and participatory decision-making.

9 Navigating two paradoxes during the pandemic

The empirical findings contain an overview of the paradox of normal and pandemic activities, the pattern of decision-making, and its dynamic across the episodes.

9.1 The unfolding pandemic - normal and pandemic activities

On the organizational level, the pandemic posed the organizing paradox of pursuing normal and pandemic activities. *Normal activities* comprise all the hospital's non-pandemic related patient treatment, administrative tasks, and development projects. *Pandemic activities* include the testing, treating, protecting, and vaccinating activities and numerous support activities to handle the pandemic.

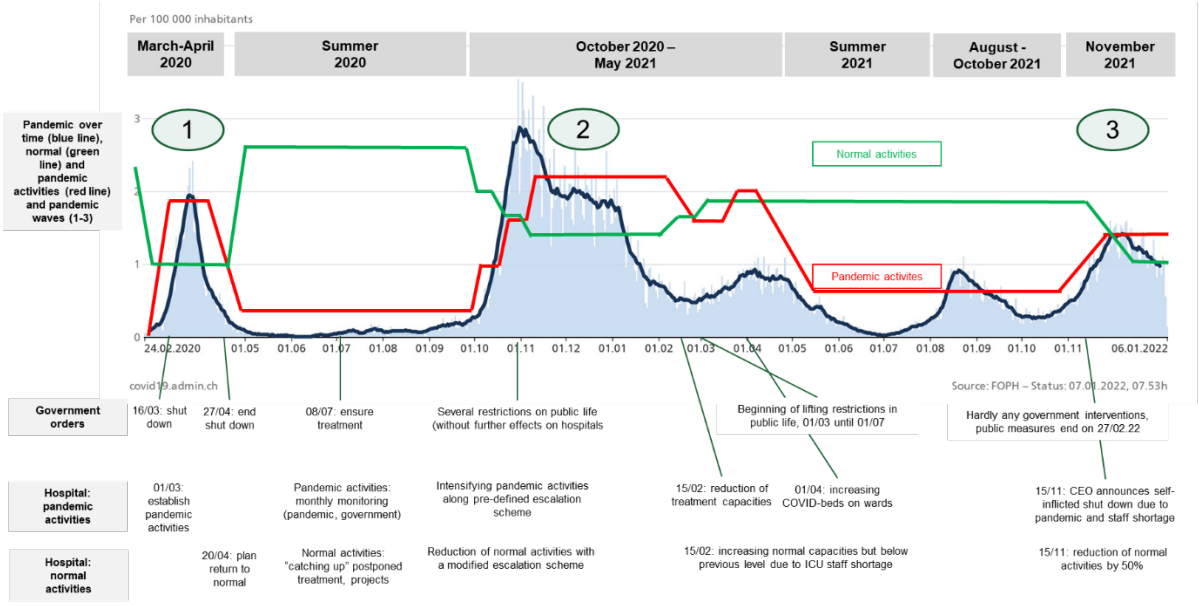


Figure 1: COVID-19 pandemic and activities

The hospital reduced normal activities by about 50% during wave 1 in Spring 2020 and resumed them during summer 2020, thus following the known sequence of switching from

normal to crisis-related pandemic activities and back (Duchek, 2019). Since wave 2, normal and pandemic activities occurred in parallel and fluctuated with the intensity of the pandemic. This movement is depicted by the red (pandemic activities) and the green line (normal activities) in relation to the hospitalizations (blue line) of COVID-19 patients from February 2020 until January 2022 (Figure 1).[1]

Overall, Switzerland reported its first case of Covid-19 on February 25, 2020, and its first death in early March, when the virus had spread to several cantons. The spreading was fast, placing Switzerland second on the list of the rate of newly infected patients – Italy being on top – at the time. The federal office of public health (FOPH) declared an "extraordinary" situation on March 12, one day after the WHO called Corona a world-wide pandemic. The FOPH declaration shifted decision power to the federal level: Decisions included a national shut down on March 16, ordering hospitals to reduce all non-urgent medical activities and shift these re-sources to treating COVID-19 patients that were expected to push the healthcare system to its limits. These limits were reached in the cantons of Ticino (bordering Italy), Geneva and Vaud (bordering France) during March and lasted until April 27, 2020.Due to the spreading, the region of the hospital studied expected the wave of patients in early April: "*The numbers rise now, and I think the wave starts*" (Warren, virologist, interview April 2, 2020). However, this expectation did not come true. The curve of positive cases flattened during April. The government released hospitals from the shot-down on April 27, 2020 and on that day the studied hospital resumed its normal activities which it had prepared for during the weeks before.

In summer, government continued to reduce restrictions and the epidemiological situation continued to improve. During this time, the main issue was related to contact trancing, quarantine guidelines and travel restrictions. Generally, epidemiologists and HCW expected that COVID-19 returns in winter in a second wave combined with the seasonal flu. At the same time, hospitals wanted to catch up postponed surgeries and treatments to compensate their financial slump due to government restrictions in spring. Interview respondent explained that in July, they almost caught up all postponed treatments because they were running at 120% capacity (green line). In August, numbers of COVID-19 infections started to rise slowly again (blue line), because of citizens returning from travels.

[1] Due to privacy reasons, we cannot disclose the actual numbers of treated patients during this period.

In mid-October, the epidemiological situation worsened quickly, and infections rose sharply (blue line). The second wave had arrived, and Ulla recalled: "*You are standing on the shore and you are seeing this tsunami coming. And you can't run away. You can't go up on the roof*" (leading nurse ICU – internal medicine, interview June 17, 2021). The infections rose much higher than in the first wave. It led to significantly increased hospitalizations and deaths, which a leading doctor commented on in the taskforce in December: "*We have three patient exit paths: the normal ward, rehabilitation and pathology*". This time, the government did not prohibit normal treatment activities, but required hospitals to provide sufficient COVID-19 treatment capacities. In October, government restricted gatherings to 15 people and intensified mask wearing guidelines. Numbers continued to rise during November and HCW started to realize that this second wave would not come to a rapid end as in the first wave. In December further restrictions were announced: Restrictions of gatherings in restaurants, then lock hour at 7pm for restaurants, bars and similar cultural activities and their closing on December 22. On January 18, not-life relevant markets and stores had to close and social gatherings had been limited to 5 people.

Only in March, first discussions of openings started but were postponed multiple times. On March 22, first restrictions were lifted, infection numbers continued to fall but the situation remained fragile: "*You never knew whether a daily rise in infections or patient numbers is now announcing a third wave. You are always on the edge*" (Gregor, medical director ICU – internal medicine, interview June 18, 2021).

The third wave began in fall 2021. It was not as severe as the second with regards to infections and hospitalizations. The hospital continued to pursue its aim of the second wave: "*Our premise was that we continue our normal activities as much as possible and simultaneously have the resources available for the COVID-patients*" (Tom, clinic head of anesthesiology, June 23, 2021). At this time, however, staff availability was significantly reduced. In particular, the nurses of surgery and inner medicine departments were substantially fewer than before dure to sick leave, quarantine regulation or because they had quit. As a result, nursing directors of both medical departments announced the closure of beds from November 2021 onwards, that restricted both normal and pandemic activities, until the present day.

9.2 The organizing paradox of pandemic and normal activities

Normal and pandemic activities are interdependent because they draw on the same resources of staff, and beds for patients on wards and ICUs. This interdependence implies that normal

and pandemic activities support and limit each other, thereby indicating a contradictory relationship between the two.

A central issue regarding the capacities for normal and pandemic activities were the number of beds which depends on the availability of staff resources. The challenge of staff shortage arose with wave 2, according to the weekly interviews with Rachel, a nursing director. In comparison, she highlighted the strong support, individual motivation, and readiness of staff members to cope with the pandemic during Spring, 2020 (Rachel, daily / weekly interviews during March and April 2020). However, from fall 2020 onwards, searching for staff internally, and recruiting nurses became a major task in her daily work. One of the head nurses of the ICU recalls: *«We had to scrape staff together from the various clinics, bit by bit. That caused numerous discussion. Some clinics just continued with their normal treatment"(Ulla).*

Over time, the tensions increased and conflicts between clinicians and nurses intensified. While the latter accused the clinics of burning out their staff, the former lamented the nursing departments lacking capability of recruitment and their limited capacities to endure a time of high workload (Rachel, weekly interviews). The tensions between the professions also intensified due to a structural reason: while medical doctors and clinics decide on admitting patients to the hospital, the nursing department decides whether to close beds due to lack of staff. Thus, the closure of beds, that started in December 2020 and lasts until the presence breach clinical autonomy on the issue of admitting patients.

Besides these tensions, normal and pandemic activities also supported each other in several respects. Normal activities provided beds and staff to pursue pandemic activities. Such complementarity was particularly visible during wave 1, when organizational members talked of the strong "solidarity" and "mutual support" (Interviews Rachel, Margie, Guiseppe). Vice versa, the safety measures of pandemic activities – obligation to wear masks, restriction of visitors, rules for staff to work with a COVID-infection etc. -, assisted to uphold both pandemic and normal activities. These measures were aimed at avoiding "a system breakout", or, as a medical doctor said: "*We have to avoid a situation like northern Italy*", where the health system was overrun during Spring 2020.

Across the episodes, there was a pull towards normal and pandemic activities over time, that intensified along-side the number of hospitalizations of COVID-19 patients. During wave 1, the federal shut-down postponed all non-urgent medical treatments. However, the CEO announced in April with the expected end of the shut-down, to prepare the return to normal

activities, on April 15, a week before the date was officially published. By beginning of May 2020, Rachel reports, that several clinics are fully back on treating normal patients, and the clinics reported that they had caught up with postponed treatments by August 2020 during the holiday season that previously allowed for less workload.

From wave 2 onwards, and with the aim of pursuing normal and pandemic activities in parallel, the pull for normal and pandemic activities shifted from the hospital-level of wave 1 to the level of clinics and departments, resulting in the ongoing search for nurses, while some clinics continued with their previously planned normal activities. This strive for maintaining one's level of normal activities occurred during wave 1 with some clinics offering such limited resources voluntarily, that the vice-CEO erupted in a taskforce meeting on March 20, 2020, criticizing that clinics were undermining all efforts everybody else showed. During wave 2, other clinics did the same, requiring interventions by the CEO and colleagues, which respondents refer to as "nachdoppeln"[2] to ensure compliance with reduction decisions. With increased staff shortage during wave 3, the situation intensified, so that the CEO declared a partial hospital-wide shut down via email on Dec 13, 2021: "*The order, that all clinics have to reduce their patient entrances by 25%, is mandatory!*", also threatening that any further inquiries by clinics for re-defining the reduction would mean that the reduction were to be increased. In a later interview, the CEO explained that he had been fed up with the situation, where many clinics comply with the decisions, but a few deviators risked to "*rock the boat*" (Interview CEO, April 2022).

Overall, these pulls show the tensions of addressing normal and pandemic activities, either sequentially (wave 1) or simultaneously (wave 2, 3). This shift from a sequential either/or to a simultaneous both/and approach became possible for the hospital due to the changed governmental regulation. The shut-down with the required shift from normal to pandemic activities was replaced by the requirement that hospitals had to provide the COVID-19 treatment capacities. In addition, the shift addressed the worry of clinicians that postponing treatments would increase health risks particularly as the duration of the pandemic was uncertain.

The above empirical observations on the relationship of normal and pandemic activities point to the organizing paradox on the level of the organization that emerges from coping with the pandemic while pursuing normal activities. This paradox applies particularly for so-called "naïve organizations" (Hannah et al., 2009). Like the studied hospital, they are charged with

[2] «Nachdoppeln» is a colloquialism indicating that a prior decision had to be reaffirmed, implying pressure.

both tasks that turn into competing demands that surface due to restricted resources. For organizational members the objectively temporarily limited pandemic posed a potentially enduring disruption with an unknown persistence of both elements, which is why I frame these tensions as a paradox for the time of coping with the disruption.

9.3 The "calibrating mode" for a paradox in decision-making

The so-called "calibration mode" (a term suggested by us and taken up by the research partners – the CEO called their decision-making "rational muddling") provides an answer as to how the hospital unfolded the organizing paradox. The label "calibration mode" refers to the core task, that is the calibration of resource needs for COVID and Non-COVID patients (see wave 2, in Figure 1).

Navigating the pandemic required intense decision-making. States a medical doctor: *"During the pandemic, you cannot not decide. Even if you do not answer, or say you do not know, it is a decision. That really is the catch and what makes getting through these times so challenging."*

Decisions to navigate the pandemic are subject to a range of contradictory demands (Tuckermann & Schwaninger, 2022). Decisions need to be fast enough for the unfolding pandemic situation and the continuously changing situation of regulations. At the same time, decisions require acceptance to be carried out in range of different settings of the clinics and departments. States the CEO: "*You not only need a good quality in your decisions, but also acceptance. Otherwise, nothing much happens around here*".

Gaining such acceptance triggered the need for participation in decision-making which became a daunting task at times throughout the pandemic: *"And that is what makes it so difficult. You have to react and change things, while everybody already means that they know what these changes should look like" (Warren, infectiologist).* His colleague Mathew (head of hospital hygiene) agrees*:"There was a whole bunch of people who thought they now became experts in infectiology and hospital hygiene. I mean, when I have a gallstone, then I also do not go to the gynecologist" (Mathew, head of hospital hygiene)*

These quotes point to the expectation to participate in decision-making, which is prominent in pluralistic settings due to the knowledge-intensive work from which actors draw a demand of autonomy and the requirement of agreeing to decisions (Denis et al., 2001). At the same time, decision-speed by a small group was critical. The CEO explained in a taskforce meeting in

Mach 2020: *"the extra-ordinary situation requires fast decisions that we implement with commitment."* This tension points to the tensions that managing the pandemic requires both individual or centralized and collective and de-centralized decision-making (Currie et al., 2021). To address both competing demands, a decision-making pattern evolved which we call the "calibration mode" depicted in Figure 2 so that the hospital could navigated these tensions of decision-making as well as pursue normal and pandemic activities simultaneously.

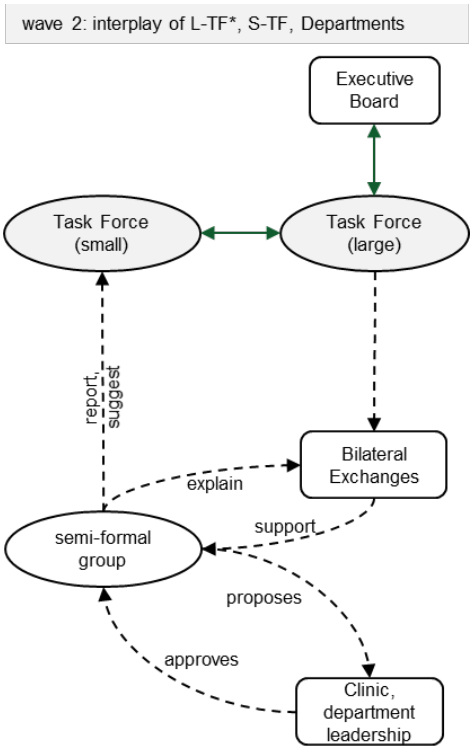


Figure 2: "calibration mode" (decision-making pattern, here of wave 2)

The large (L-TF) and the small (S-TF) taskforces are central to the decision-making pattern. Initiated by the CEO, the L-TF served to develop (wave 1) and to formalize decisions of enacting pandemic activities proposed by the S-TF (end of wave 1 until wave 3). The L-TF met on a regular basis with about 30 members of different departments and clinics, selected for their expertise on addressing the pandemic (see Table 3).

The S-TF met situatively to decide on hospital-wide reductions in normal activities and was made of selected L-TF members – initially: CEO, nursing director, heads of the two intensive care units, and the clinic head of inner medicine (see Table 3). The CEO argued the establishment of the S-TF in the taskforce meeting in March 2020 as follows: *"the extra-ordinary situation requires fast decisions that we implement with commitment. For that we need two measures: First we will install the small task force which monitors the situation on a daily basis and reaches operative decisions. Second, we will temporarily distance ourselves from our*

participatory way of decision-making. That works well for normal times, but now we need to be capable as a hospital to decide fast and implement quickly."

These two decision-making bodies express the formalized temporary organization the hospital established for coping with the pandemic (as ovals in Figure 2). Besides, and to process these decisions, the task forces relied on further decision-making bodies, which were partly those of the previously enacted permanent organization (clinic, department heads meetings, displayed as rectangles) or informally formed ones like the "semi-formal groups" (displayed as oval in Figure 2). These decision-making platforms located on the departmental level concerned the daily adjustments of normal and pandemic activities. Each of the hospital's major departments of surgery and inner medicine with their own ICUs formed so-called "semi-informal groups". These meetings of clinic heads and ICU heads served the timely adjustments of normal activities, e.g., clinic of orthopedics and anesthesiology (surgery department), or the cardiological and general internal medicine clinic (inner medicine department). These groups assessed the needed capacities for COVID-19 patients on a weekly and sometimes daily basis.

"With the clinic of cardiology, we could coordinate on short notice so that they stop certain treatments from one day to the other. We had a daily meeting with the cardiologists, every morning at 7 am, and that is the moment to stop certain treatments. Well, we had very short paths in communicating and that allowed us to acquire the capacities we needed at the ICU." (head of ICU, inner medicine)

"Our ICU (or surgery) belongs to the clinic of anesthesiology, so we are basically very close together. This makes paths for coordinating very short. We meet weekly or sometimes daily, all the medical doctors in charge and the head nurse. There, we can make the decisions how many and what kinds of surgeries are possible or not so that we get what we need for the COVID-patients" (head of ICU, surgery)

Adjustments triggered meetings of the S-TF and were also entered into clinic heads meetings for approval, or into the pre-existing commission within surgery that decided on how to distribute surgery times among the different clinics.

In addition, such adjustments involved occasional bilateral conversation with selected clinic heads to reinforce their compliance and reduce their normal treatment activities. For example, a clinic head remembers such an intervention and explains: "*Well, we had excessive protection measures, more testing and all which got us through the pandemic pretty well.*" When asked about his "bilateral conversation" with the CEO and the head of hospital hygiene, he

replied: *"Well, he (head of hospital hygiene) understood at the end, that we are so close to the mouth and nose in our treatment, that we need more protection. So, he said 'do what you think is right and I just claim that I don't know.' That was our agreement. He saw why we did it our way but could not officially support it."*

The CEO announced the occurrence of these and other bilateral conversations to enhance compliance of selected clinics with the Task force decisions in the Task Force meetings. A medical doctor recalls in the weekly interview: "*The colleague told me that his clinic head was summoned to the CEO. It was not a pleasant conversation, and frankly, I do not get it: I mean they try to protect their staff and patients additionally. And then comes the CEO and orders him to reduce these measures.*" (Warren, infectiologist weekly interview, May 2020). Other interview respondents talked of the necessity to ensure compliance with the decided general reductions of normal activities – the above mentioned "nachdoppeln". The CEO, in turn, explained in one of the meetings of the L-TF (TR-1-1, O-TF1-01): *"Everybody just has to follow what we decide in here, including those who are present. This apparently works in some departments, but less well in others. It just doesn't make much sense that we all sit in here and out in the hospital not much happens then."*

Calibrating the capacities required intense communication and bilateral conversations of clinicians with their peer clinic heads: *"It is like this: when the numbers go up again, then we have to say to the clinics 'look you have to free beds and staff again'. Communication is key here that they stay on board»* (I-2-08). The nursing directors experienced it as begging, because they faced the need to provide staff for the pandemic activities, that was not sufficiently available when clinics did not reduce their normal activities: «*We spent days and days for weeks and months now to recruit new and to mobilize existing (nursing) staff who could help out […] We have to beg and beg, who could still help or who knows somebody etc*.» (I-2-10)

These data illustrate the tensions in decision-making between the demands for normal and pandemic activities. At the same time, the calibration mode allowed adjusting the pandemic and normal activities. The following table contains the decisions during wave 2, when the L-TF decided whether normal activities should be further reduced. Such was the implication of moving from one "escalation level" to another, which the L-TF had defined at the end of wave 1. The overall scheme contained three levels: A for pursuing normal activities, B for a first reduction, and C for substantial reductions (later differentiated into a C1, and C2):

Date	Level	Implikation	Source
26.10.2020	A	But ICUs adjust capacity needs daily All clinics prepare for reductions.	D-TF2-18
29.10.2020 02.11.2020	B	In effect by November 2, 2020, increasing ICU capacity, and re-assigning a non-COVID ward to one for COVID-patients	D-TF2-19
09.11.2020	B	All clinics and ICUs prepare for level C by Nov 16., 2020 (further re-labeling of wards for pandemic activities, increasing ICU beds	D-TF2-21
12.11.2020 16.11.2020	B (wards) B (ICUs)	On wards, decision of further differentiation of C into C1 and C2 decided (C2 implies larger reductions of normal activities than C1).	D-TF2-22
30.11.2020	B (wards) C1 (ICUs)	Reduction of 2 ICU beds due to lack of staff	D-TF2-24
07.12.2020 14.12.2020	B (wards) C1 (ICUs)	L-TF calls all clinics to comply with the escalation steps, also announcing bilateral conversations (“nachdoppeln”)	D-TF2-25
21.12.2020	B (wards) C1 (ICUs)	Further reduction of 2 ICU beds due to staff shortage over Christmas	D-TF2-27
11.01.2021	B (wards) C1 (ICUs)	ICU beds increased by 2	D-TF2-28
18.01.2021	B (wards) C1 (ICUs)	Announcement: reductions of normal activities are in effect until beginning of February	D-TF2-29
25.01.2021	B (wards) C1 (ICUs)	Reduction of 2 ICU beds due to staff shortage	D-TF2-30
01.02.2021	B (wards) C1 (ICUs)	Announcement: reductions of normal activities are in effect until the middle of February	D-TF2-31
15.02.2021	B (wards) C1 (ICUs)	Preparation for increasing normal activities and reduction of pandemic activities (COVID wards returned to their prior area)	D-TF2-32
22.02.2021 01.03.2020	A	Normal activities on old level, pandemic activities reduced	D-TF2-33
29.03.2021	A	Warning: prepare for level B	D-TF2-36
03.05.2021	A	Normal activities on previous level	D-TF2-38

Table 2: L-TF decisions to calibrate capacities

The above table illustrates the calibration of the capacities during wave 2 as decided by the large Taskforce. It also shows the increasing staff shortage which further intensified such decisions and the tensions between normal and pandemic activities. Besides these dynamics of decisions, the pattern of who participates in the calibration mode also shifted over time across the three pandemic waves.

9.4 Dynamic of the calibration mode

The dynamic of the calibration mode manifested structurally in shifting the central decision-making from the large Taskforce (wave 1), the interplay with the small taskforce (wave 2) to a redefined small taskforce (wave 3), thereby also changing the participation in decision-making across the three waves.

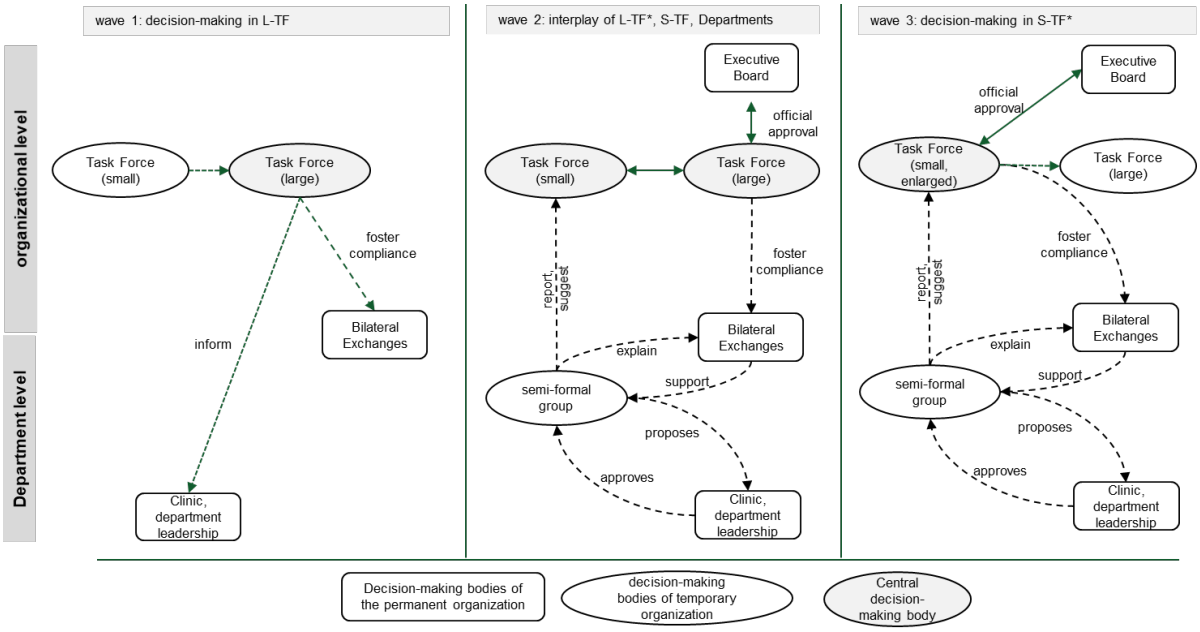


Figure 3: navigating between individual and collective decision-making building on permanent and temporary organization

During wave 1, the L-TF was central for developing and running the pandemic activities. Its decisions guided those on the level of clinics and departments that implemented reductions of normal activities by postponing treatments, ensured equipment and material or devised protection guidelines etc. Their status reports informed subsequent decisions in the L-TF.

During wave 2, the small and large task forces shared the decision-making to adjust the capacities between normal and pandemic activities. The S-TF aimed for speed and weekly or daily adaptations which were officially approved by the L-TF in its weekly meetings and made firm in its official meeting minutes (see also description of the calibration mode, which refers mainly to wave 2).

During wave 3, the S-TF became the central platform for decision-making. The S-TF had a double meeting structure: daily virtual reports regarded monitoring the pandemic vis-à-vis treatment capacities. Depending on the need to reach reduction decisions timely, the S-TF met

in physical presence on a weekly basis. Most visibly for the shift in the role as the central decision-making body was that the S-TF issued the official minutes. These informed all members of the large L-TF which met three times during wave 3.

These shifts from the L-TF (wave 1) to the interplay with the S-TF (wave 2) towards the S-TF (wave 3) resonated with the membership. Table 3 reports on these changes in detail:

	Wave 1		Wave 2		Wave 3	
	Large Taskforce	Small Taskforce	Large Taskforce (changes)	Small Taskforce (changes)	Large Taskforce (changes)	Small Taskforce (changes)
Executive Board	▪ CEO (leads), and vice-CEO ▪ all but 2 executive board members	Members		Only CEO	As in wave 2	
Medical departments	▪ Heads of both ICUs (inner medicine, surgery ▪ Head of inner medicine department ▪ Clinic heads of pneumology, emergency care (all inner medicine department) ▪ Head of surgery department ▪ Clinic head of infectiology and hospital hygiene	Members Members Member	▪ Clinic head of cardiology ▪ Clinic head of anaesthesiology ▪ Clinic head of Nose, Ears, Throat ▪ Clinic head of transplantation surgery ▪ Clinic head of radio-oncology ▪ Clinic head of oncology ▪ Clinic head of eyes	Member	As in wave 2	Member (cardio) Member (anaest.) Member Member (pneumo) Member (transplation) Member (emergency)
Nursing	▪ Head of nursing department ▪ Nursing director of inner medicine ▪ Nursing director of surgery ▪ Nursing director of emergency care	Member	▪ Nursing director of both ICUs	 As guest As guest	As in wave 2	 Member Member
Para-medical	▪ Head of pharmacy ▪ Head of cooperations with nursing homes		▪ Head of laboratory		As in wave 2	
Admi-nistration	▪ Head of Communication ▪ Head of Logistics, gastronomy ▪ Head of Human Resources ▪ Head of corporate development	Member	▪ Head of finance		As in wave 2	Member Member
Size	22	6	32	8	32	16
Rhythm	3 times a week for 3 hours each	daily, 30 Min. (whatsapp)	1 per week for 1 hour	3-5 times a week, 1 hour	3 meetings overall for 1 hour	1 a week, 1 hour (physical), daily monitoring (whatsapp)
Role	Decision-making body that monitors situation, discusses proposal for pandemic activities by clinics, and issues the binding minutes	Monitoring, fast decisions to be proposed to large Taskforce	Decisions on escalation level, hygiene, visitors and protection, approval of decisions by the small task force, issues minutes	Monitoring and deciding on capacities as triggered by ICUs	Being informed, and broad decisions on hygiene and visitor restrictions	Decision-making body that issues the minutes

Table 3: Large and Small Taskforce across the waves (source: meeting minutes, observations)

During wave 1, the CEO formed the L-TF with those members whose expertise he expected to be needed to establish and run the pandemic activities. Due to the diversity of issues the L-TF had 22 members who could meet not as frequent as the need for speed in decision-making required. Thus, a selection of 6 L-TF members formed the S-TF who led those hospital parts who were at the forefront of the pandemic.

During wave 2, membership of the L-TF enlarged to also include those clinics and departments that were affected by task force decisions, thereby strengthening that taskforce decisions were more widely accepted. The L-TF now had 32 members, while also the S-TF adapted to 8 members to adjust for the challenges in staffing (nursing directors as permanent guests) and the head of anesthesiology who oversees the surgical staff that was needed for the ICU.

During wave 3, the decision-making shifted to the S-TF which was now enlarged to almost the composition during wave 1. In comparison, the L-TF remained almost as during wave 2 but now mainly served information purposes.

These shifts of the decision-making pattern illustrate how the hospital navigated the tensions between centralized and de-centralized decision-making of both less and more collective decision-making by weaving the temporary organization of task forces into the permanent organization of relative clinical autonomy. This autonomy was addressed by including the necessary expertise as members into the L-TF (wave 1), while enhancing acceptance of decisions by enlarging the L-TF during wave 2. Thereby, those actors whose normal activities were affected by reduction decisions participated. However, the pull towards normal activities during wave 3 also under the conditions of reduced nursing staff and bed closure led to shift the decision-making from the L-TF into the S-TF. The S-TF – initially small with those at the forefront of the pandemic – enlarged to those clinics and departments that oversaw most of the staff to calibrate between normal and pandemic activities.

9.5 Summary: two paradoxes for coping with the pandemic

In sum, how the studied hospital coped with the pandemic, involved two paradoxes. First, there is the paradox of contradictory and perceivable persistent tensions between normal and pandemic activities. This is an organizing paradox that surfaces because both demands draw on the same resources (Jarzabkowski et al., 2013). On this level of the organization, we observed, that the hospital moved from an either/or approach during wave 1 to a both/and approach from wave 2 onwards. The former corresponds with the government strategy of the shut down during Spring 2020. The latter answers the governments requirement of ensuring pandemic treatment capacities, while allowing for pursuing normal activities.

Second, and to navigate the organizing paradox, the required decision-making was paradoxical which let to the “calibration mode”. This second paradox emerges from the competing demands of fast decisions by a few actors and of participation. Furthermore, the hospital

weaved its temporary organization for coping with the pandemic into the pre-enacted decision-making mode for normal activities. In the above case, the decision-making paradox surfaced on fast and accepted decisions, which imply a centralized and de-centralized mode of decision-making. While the dynamics of the organization paradox was driven by the shifting intensity of the pandemic – i.e., the pandemic waves -, the decision-making paradox was driven by the tension of centralized and fast centralized and decentralized accepted decision-making. This dynamic resulted in the shifting roles of the taskforces and their members.

In other words, the organizing paradox contains the paradox of centralized and decentralized decision-making, with the latter navigating the former, while the former implying dynamics for the latter. The following figure provides a sketch of this theoretical model of the two inter-related or nested paradoxes (Sheep et al., 2017).

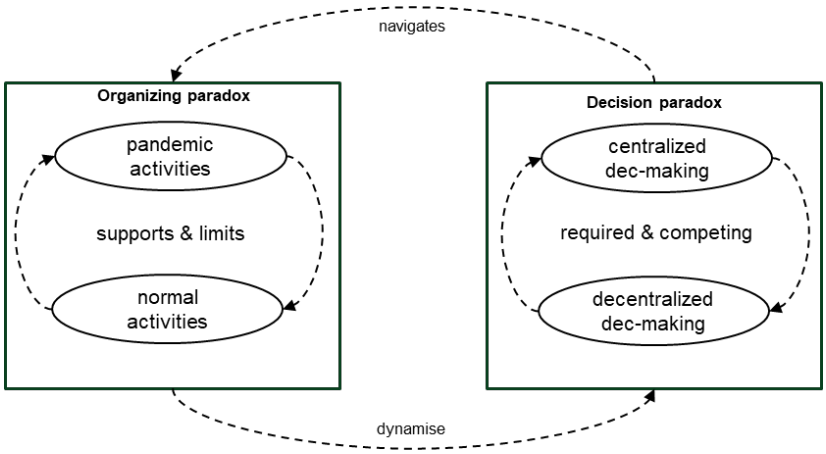


Figure 4: Inter-related organizing and decision paradox

10 Paradox lens for coping with (enduring) disruptions

We introduce the paradox lens to explore how the studied hospital coped with the COVID-19 pandemic. Using the paradox lens answers calls in resilience and crisis literature to further investigate the dynamic process of coping with an adversity (Duchek, 2019). In addition, we address the lack of paradox studies in this field (Carmine et al., 2021; Sharma et al., 2021).

10.1 Organizing paradox of normal and pandemic activities

Navigating the pandemic contains an organizing paradox. This paradox results from the competing demands of coping with the disruption through the pandemic activities while pursuing

normal activities. The paradox manifested in tensions over allocating resources for the treatment of COVID-patients and the other patients (Smith & Lewis, 2011). At the same time, both domains of activities supported each other by providing resources for pandemic-related activities, or by protecting all staff through pandemic-related activities.

To navigate the competing demands, we initially observed the prevalent understanding of a sequential process that resonates with anticipation, coping and adaptation (Duchek, 2019; Linnenluecke et al., 2012; Williams et al., 2017), that is the shifting from normal to pandemic and to normal activities. Later, the hospital pursued both activities in parallel by adjusting its capacities continuously. This movement from a sequential to a parallel enactment of normal and pandemic activities resulted from the pandemic's potentially infinite duration. Table 4 **Fehler! Verweisquelle konnte nicht gefunden werden.**provides a summary of the sequential and the parallel enactment:

	"Sequential enactment" to cope with disruption	"Parallel enactment" to cope with a disruption
Literature	e.g. Williams et al., 2017; Duchek, 2019; Kahn et al., 2018	z.B. Tuckermann & Schwaninger, 2022
Event	Finite disruption (see table X) 	Enduring disruption (see table X) 
Process	Sequential stages: normal activities before, coping during, and resuming normal activities after the event	Parallel enactment: normal and coping activities occur in parallel
Organi-zation	Temporary organization to focus on coping with the disruption fast – disruption	"Calibration mode" of decision-making that combines temporary with previously enacted organization to relate normal and coping activities
Source of tensions and for dynamics	Different affectedness of organizational actors while coping with the disruption (Kahn et al. 2018)	Result from: ▪ competing demands of pursuing normal and coping activities ▪ Different involvement in decision-making ▪ Different affectedness (dito)
Approach (paradox lens)	Either/or of temporal oscillation between normal and coping activities	Both/and of simultaneously enacting normal and coping activities

Table 4: sequential and parallel coping with a disruption

The paradox lens allows adjoining the sequential and the parallel enactment as an either/or and a both/and approach. The former resonates with the prevalent understanding of a sequential process that applies to finite disruptions (e.g. natural disasters) (Linnenluecke et al., 2012), and to organizations specialized for these events, like fire fighters(Barton et al., 2015),

emergency response teams (Faraj & Xiao, 2006) or specialized actors for handling pandemics etc. (Harborth & Geiger, 2021; Wright et al., 2021).

A potentially infinite disruption that so-called naïve organizations address implies a both/and approach. For these organizations there is an increasing pull from disruption-oriented towards the normal activities, because both competing demands persist (Clegg et al., 2002). Each demand makes sense in isolation but turn into tension as they adjoin (Lewis, 2000).

In this way, a paradox lens of coping with a pandemic helps to not only the sequential understanding as an either/or approach but also the parallel enactment as a both/and approach, thereby including potentially infinite disruptions. In addition, the paradox lens points towards further dynamics, tensions and conflict as organizations navigate normal and disruption-oriented activities. In this case, the dynamics emerged from the capacity decisions which implied to postpone patient treatment in light of increasingly restricted staff resources. Conflicts emerged between professions (Huq et al., 2017), and between those at the forefront of the pandemic and those who were affected by the capacity decisions (Kahn et al., 2018).

10.2 Centralized and de-centralized decision-making

Besides the organizing paradox, its navigating reveals a paradox of who is involved in decision-making over time. This paradox is particularly relevant in pluralistic settings due to the relative autonomy of experts and their required acceptance of decisions. The so-called "calibration mode" illustrates how the hospital navigated this paradox in a dynamic process as illustrated both by the ongoing adjustments and the shifts of participation within the calibration mode. These dynamics indicate the contradictory tensions between centralized or individual and de-centralized and collective decision-making which are both required when coping with a potentially infinite disruption (Currie et al., 2021). The literature on coping with disruptions further highlights the importance of local "heroes" at the forefront (Kars-Unluoglu, Jarvis, & Gaggiotti, 2022), a relational (Sanfuentes et al., 2020), compassionate (Simpson et al., 2022) or post-heroic leadership for coping with the pandemic (Rouleau et al., 2020). These insights underscore the problematization of the implicit or explicit assumption that organizations cope with a disruption as if they were a single actor or aligning towards individual leaders (Kahn et al. (2018).

The paradox lens further strengthens these insights. First, it reveals the underlying tension of centralized or more individual decision-making while a plurality of relatively autonomous voices (Huq et al., 2017) calls for collective and de-centralized decision-making (Rosales et

al., 2022). The involvement of pluralistic voices is known as a trigger for surfacing contradictory tensions (Smith & Lewis, 2011), while necessary in making sense of an uncertain, dynamically evolving situation that requires acting (Jay, 2013). Second, the paradox lens also assumes that navigating this paradox is a dynamic process. Organization zig-zag (Ashforth & Reingen, 2014) or their leaders enact a consistently inconsistent decision-making (Smith, 2014).

The dynamic of navigating paradox also associates with the inter-relation of different paradoxes within the same setting (Jarzabkowski et al., 2013; Sheep et al., 2017). Therefore, and third, organizations need to develop modes of decision-making that are both centralized and decentralized. The empirical calibration mode is an example of such a mode of decision-making that shifted between a more centralized and a more de-centralized pole. The paradox lens invites to accept the ambivalence of individual or centralized and collective and de-centralized decision-making. In line with the emergence of a post-heroic approach, leaders take care of the decision-making processes (Rüegg-Stürm & Grand, 2019). This dimension means that leaders are in charge of ensuring that the organization decides, for example by situatively deciding of who is involved at which point in time and in which role due to their expertise, their affectedness, and their formal and informal competence of decision-making (Tuckermann, 2017). Leaders focus on the decision-making rather than the decisions being made, thereby concerning with the tensions of centralized and de-centralized decision-making that is needed in coping with the tensions of centralized and decentralized decision-making.

In addition, the post-heroic role of leaders is important because an enduring disruption like the pandemic implies to relate the temporary organization for coping activities with the permanent organization for normal activities. By addressing normal and pandemic activities simultaneously, the “calibration mode” included and relied on new forms of temporary organization and pre-existing ones of normal activities.

In comparison, the literature on finite disruptions foregrounds the establishment of temporary organizations that requires enhanced decision-making speed, inclusion of special expertise and coordination of actors (Kornberg et al., 2019; Rouleau et al., 2020; Wright et al., 2018). For an enduring disruption, organizations need to establish a mode of decision-making that embeds such a temporary organization within the otherwise enacted organization to combine coping with normal activities over time.

11 Concluding remarks

This exploratory study aimed to better understand the dynamic process of coping with a potentially enduring disruption. The paradox lens allowed to expand the prevalent sequential understanding by highlighting the parallel enactment of normal and disruption-related activities. Navigating this organizing paradox surfaced the paradox of individual or centralized and collective or de-centralized decision-making. Conceptually, the paradox lens expands literature of coping with disruptions. The paradox lens includes the above empirical insights which resonate with a both/and approach, besides the either/or approach of the prevalent understanding of a sequential process of coping with a disruption. Thereby, a paradox lens on coping with disruptions further illumines the dynamic nature of organizing in extreme contexts in which coping with disruptions calls for navigating paradoxes.

These insights provide but a starting point for further work: Future studies could explore in more detail the understanding of leaders and how they navigate between centralized, individual decision-making while ensuring participation and emphasize those actors at the front line, for example by investigating how they ensure decision-making as the situation unfolds. Other studies could further explore the dynamic interplay of different actors within an organization, thereby advancing our understanding on how the different degrees of affectedness and involvement with a disruption impacts on coping with a disruption. Also, the temporal dimension offers avenues for future research: We still know little on adapting and learning while an organization copes with a disruption, and how such learning can be used for future disruptions. Another issue on temporality is on the tension of focusing on the presence of coping with the disruption and the future orientation, regarding the handling of impacts like long-term resource shortages and other longer-term effects. Viewed from a paradox lens, these issues adjoin in the presence further complexifying on how to respond to a disruption. Also, we still know little on the time periods of transition both at the beginning and at the end of a disruption. “Creeping developments” (Kahn et al., 2018) require idiosyncratic decisions to announce the disruption and its end with regards to infinite or potentially enduring disruptions. In comparison, finite disruptions like earthquakes are pre-defined as to their duration.

While this paper aimed to show the potential of the paradox lens to illumine the dynamics of coping with disruption, this literature holds also important lessons for paradox scholars. One is on the role of leaders. In paradox studies, senior leaders are often central to foster understanding (Knight & Paroutis, 2017), absorb contradictory tensions (Smith, 2014), create

responses (Luescher & Lewis, 2008) and both/and approaches (Pradies et al., 2020). Literature on coping with disruption increasingly recognizes collective efforts, and what these imply for the roles of leaders (Currie et al., 2021; Lê & Pradies, 2022; Sanfuentes et al., 2020; Simpson et al., 2022) in becoming post-heroic leaders who nurture relationships, facilitate decisions, ensure participation, and provide conditions for organizational members to prevail at the forefront of an extreme context. After all, in extreme context of potentially enduring disruptions like the COVID-19 pandemic the heroes are all those at the forefront, rather than those at the top (Kars-Unluoglu et al., 2022).

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