Improvisation to face permacrisis: lessons from art for resilient organizations

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Abstract :

In the face of unpredictable turbulences and growing interlocking crises, organizations aim to develop their resilience, as dynamic ability to preserve functioning despite adversity. In this context of permacrisis, existing resources allocation, plans and procedures may be no longer be adequate, requiring novel adaptive solutions. Therefore, resilience relies on improvisation to resolve stability/adaptability challenge. Despite considerable advances in studies of organizational improvisation, the literature leaves a void in comprehending why and how (through what mechanisms) improvisational process occurs in order to draw lessons for resilience development. Though an explanatory qualitative study exploring artists' experiences of improvising, we aim to gain greater understanding of improvisation process to develop resilience in permacrisis context. Our study contribute to resilience and improvisation literatures streams by revealing underlying principles and mechanisms of improvisational process and its interactions.

Keywords: resilience, organizational improvisation, art, mindfulness, affordance

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1. INTRODUCTION

Permacrisis, i.e. an extended period of instability and uncertainty due to the interlocking crises (such as environmental, health, economic, social, technological, etc.), seems to become an actual lens in social debate as well as a growing preoccupation of organizations. Permacrisis is characterized by a high level of complexity and environmental uncertainty and requires adapting organizational behaviours to face the related risks of permanently stressed and changing systems. One of the common organizational answers to crisis dangers is the reinforcement of controlling and policing. However, in such context of high uncertainty, reliance on existing plans, structures, routines, can be disrupted or inadequate. Therefore, organizations aim to develop resilience as ability to absorb strain and preserve functioning despite the presence of adversity (Sutcliffe & Vogus, 2003), by adapting and initiating change (Barton & Kahn, 2019; Pinheiro et al., 2022; van den Berg et al., 2021)[1]. However, the need to simultaneously enhance stability and adaptability, echoing order/disorder balancing (Brown & Eisenhardt, 1997; Quattrone, 2015), makes resilience challenging and requires improvisation (Adrot & Garreau, 2010; Fisher & Barrett, 2019; Hardy et al., 2020; Mannucci et al., 2021; Weick, 2024; Williams et al., 2017).

Improvisation allows to reconcile this tension by proposing adaptive answers to emergent events (Bigley & Roberts, 2001; Fisher & Barrett, 2019; Vera & Crossan, 2005; Hardy et al., 2020; Bechky & Okhuysen, 2011). Seminal studies on organizational improvisation rely on artistic metaphor to explore improvisational process (Barrett, 1998; M. M. Crossan, 1998; Vera

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[1] Le cadrage théorique de cette communication s'appuie partiellement sur mes travaux de thèse (Jubault Krasnopevtseva, 2022).

& Crossan, 2004) articulating links between arts and more conventional organisations (Fisher & Barrett, 2019). Despite considerable advances (Ciuchta et al., 2021; Hadida et al., 2015), authors call for more research on principles that help improvisation occurs (Ciuchta et al., 2021, p. 17), as well structural conditions supporting the improvisational process (Essuman et al., 2023; Fisher & Barrett, 2019, 2019; Hardy et al., 2020; Vera & Crossan, 2004). How improvisational process enfolds, what helps and constrains it? This understanding will allow a more nuanced approach to theorizing and applying the improvisation concept in organizational resilience and crisis studies (Adrot & Garreau, 2010; Bigley & Roberts, 2001; Essuman et al., 2023; Hardy et al., 2020; Rankin et al., 2013). This understanding of resilience through improvisation is relevant for large panel of organization, not only innovation-seeking (Brown & Eisenhardt, 1997), but also less obvious contexts, such as public administration (Mergel, 2023), supply chain (Essuman et al., 2023), but also organizations operating in high-risk and extreme contexts (Adrot & Garreau, 2010; Bigley & Roberts, 2001; Schulman, 1993; Weick, 2001; Wiedner et al., 2020).

Following the call of transdisciplinary resilience research to engages cross-fertilization, this paper uses artistic metaphor to examine the improvisational process (Fisher & Barrett, 2019; Kamoche & Cunha, 2001; Vera & Crossan, 2004, 2005) and contrast it with accounts of improvising in the organizations. Though qualitative explanatory study, we explore artists' experiences to offer greater understanding of improvisation process to develop resilience in permacrisis context.

The paper is structured as follows. First, we review the literature on resilience and improvisation. Second, we present our methodology. Third, we describe the main preliminary findings. Finally, we discuss the contributions and limitations of our research.

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2. THEORETICAL FOUNDATIONS

2.1. RESILIENCE IN FACE OF CRISES: ROLE OF IMPROVISATION

Recent organizational studies consider resilience as the capacity to understand the specificity of current situations (here and now), to switch adaptively among customized responses (Lengnick-Hall et al., 2011), to adjust (Williams et al., 2017), and to adapt proactively to abnormal and unexpected disturbances (Boin & van Eeten, 2013). More precisely, resilience is based on early sensing of weak signals of upcoming events and designing of customized responses to unexpected situations (Bigley & Roberts, 2001; Hardy et al., 2020; Lengnick-Hall et al., 2011; Weick & Sutcliffe, 2007) to preserve functioning. This means that organization must proactively develop adaptability to address unpredictable events alongside the establishment of stability-enhancing procedural barriers, such as traditional risk management and managerial control (Barton et al., 2015a; Hardy et al., 2020; Weick & Sutcliffe, 2007). However, stability-seeking order implying bureaucratic systems (regulation, procedures, formal authority, policies) – *controlling*, impedes organizational flexibility and ability to cope with complex and changing environments – *sensing or improvising* (Bigley & Roberts, 2001; Grote et al., 2009; Hardy et al., 2020; Maguire & Hardy, 2013).

Organizational resilience studies point to effective and creative implementation of existing rules and routines in face of dynamic problems (Bechky & Okhuysen, 2011; Bigley & Roberts, 2001; Le Bris, 2019; Schulman, 1993; Zohar & Luria, 2003) to reconciling controlling and improvising. Organizations should value the capacity for real-time discovery as much as the ability to impose standardized anticipatory control through real-time renegotiation of formalized procedures (Schulman, 1993) to perform "at the edge of chaos" between order and disorder (Brown & Eisenhardt, 1997). In the same vein, Zohar and Luria (2003) study

behavioural meta-scripts, Le Bris et al. (2019) propose the notion of meta-rules, these setting define general principles, allow global vision and faster decision-making while allowing situation-based interpretation. Other illustration - in their study of incident command systems, Bigley and Roberts (2001) explore how the copresence' of bureaucratic structure and organizational flexibility is enabled by system modularity, which allows appropriate restructuring, constrained improvisation, role switching (i.e., switches between tasks) and authority migrating (from hierarchical authority to operational expertise) to respond to challenging and uncertain situations. Bechky and Okhuysen (2011) also mention role shifting, reorganizing routines and reordering the work describing organizational bricolage in responses to surprises. In addition, the situational slack production practices contributes to reliability (Leuridan & Demil, 2021). Some authors underline the role of artefacts in rules and routines creative implementation (Boxenbaum et al., 2018; D'Adderio, 2011).

In this perspective, existing structures (echoing semistructure (Brown & Eisenhardt, 1997) or minimal structure (Sonenshein, 2014)) are considered to be resources to actions rather than guarantees of success (avoiding mismatch between planned setting and real-life experience). Even if conceptually well-argued and attractive, in practice, elaboration and implementation of limitedly-flexible rules and routines remains unresolved and processes of interaction between stability and adaptability in resilient improvisation merit more academic attention (Adrot & Garreau, 2010; Bigley & Roberts, 2001; Hardy et al., 2020).

Resilience is especially important in complex and dynamic context of permacrisis, where turbulences are inevitable but unpredictable (Rankin et al., 2013). In such circumstances, a "return to normal" becomes impossible (Amalberti & Vincent, 2020); the high level of uncertainty and ambiguity incites improvisation. Resilient answers may require to deviate from predetermined practices, procedures, role and authority distribution (Hardy et al., 2020; Weick,

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2001), necessitating considerable efforts of sensemaking, expertise, tacit knowledge (Maguire & Hardy, 2013; Weick, 2001; Weick & Sutcliffe, 2007). Resilience requires improvisation to creatively leverage the available resources, attention and knowledge to cope with unknown and unpredictable situations (Williams et al., 2017). Bigley and Roberts (2001, p. 1294) suggest that appropriate (constrained) improvisation contributes to resilience by allowing "skilled, knowledgeable and resourceful people" to deal with an uncertain and dynamic task environment by adjusting existing routines, creation of new responses, transforming or violating rules in face of a unique condition.

2.2. ORGANIZATIONAL IMPROVISATION

Introduced in organizational studies few decades ago (e.g. Brown & Eisenhardt, 1997; Cunha et al., 1999; Moorman & Miner, 1998; Weick, 1993, 2001), organizational improvisation continues to attack the attention of management scholars (Ciuchta et al., 2021; Essuman et al., 2023; Fisher & Barrett, 2019; Mergel, 2023; Tabesh & Vera, 2020; Wiedner et al., 2020). Improvisation in recognized as complex process (Fisher & Barrett, 2019; Hadida et al., 2015; Mannucci et al., 2021) and its definition has several interpretations in the organizational studies literature. While Vera and Crossan (2004, p. 733) define improvisation as unpremeditated "*spontaneous and creative process of attempting to achieve an objective in a new way*", or, in the same line Hadida et al. (2015, p. 4) *"improvisation thus involves dealing with the unforeseen without the benefit of preparation"*, other authors nuance the degree of engaged novelty of improvisation (Adrot & Garreau, 2010; Ciuchta et al., 2021; Fisher & Barrett, 2019; Moorman & Miner, 1998; Weick, 1998): from total improvisation (novel action) to just partial adjustment (based on predesign and available resources). For example, Weick (1998, p. 551) sees improvisation as a "*a mixture of the pre-composed and the spontaneous*", Moorman and Miner (1998, p. 698) as "*the degree to which the composition and execution of an action converge in time*". According to authors, improvisation does not necessary change radically the anticipated

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plan/procedure/script, but rather complete or adjust it (Ciuchta et al., 2021; Feldman & Pentland, 2003; Tsoukas & Chia, 2002). In the same line, more recent studies also question the degree of spontaneity: Ciuchta et al. (2021, p. 4) outline "*the deliberate fusion of the design and execution of a novel production*", Hadjimichael et Tsoukas (2023, p. 100) also mention "*deliberate action, in which planning and execution converge to often produce novel outcomes*",

In general, in organization studies literature, improvisation is characterized by its 1) extemporaneity or spontaneity (Adrot & Garreau, 2010; Ciuchta et al., 2021; M. Crossan et al., 2005; Hadida et al., 2015; Vera & Crossan, 2004); 2) creativity or novelty (Ciuchta et al., 2021; Vera & Crossan, 2004); 3) unpredictability of the results of the improvisation (Vera & Crossan, 2004; Weick, 2001); 4) and finally by its organizational embeddedness (Ciuchta et al., 2021; M. Crossan et al., 2005; Fisher & Barrett, 2019; Hansson et al., 2022; Magni et al., 2018; Moorman & Miner, 1998; Vera & Crossan, 2004).

 While largely present in day-to-day practices (Vera & Crossan, 2004, 2005; Weick, 2001), improvisation is particularly salient in the crises contexts characterized by time pressure, ambiguity and uncertainty about access to resources and the outcome of actions undertaken (Adrot & Garreau, 2010; Rankin et al., 2013; Roux-Dufort & Vidaillet, 2003; Webb, 2004). The context of permacrisis, in a way, merge this two modes – crisis but in day-to-day time, highlighting a particular salience of improvisation process.

Literature mentions some difficulties of organizational improvisation, such as tendency to privilege planning and controlling (Hardy et al., 2020; Weick, 2001), lack of perceived value of the improvisation (Vera & Crossan, 2004), fear of blame or sanction. However, literature leaves a void in deep comprehending of enablers, barriers and related mechanisms of

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improvisational process (Adrot & Garreau, 2010; Fisher & Barrett, 2019; Hardy et al., 2020; Vera & Crossan, 2004). Therefore, by acknowledging processual nature of improvisation (Fisher & Barrett, 2019; Hadida et al., 2015), we aim to explore how this process enfolds and how enhances organizational resilience.

3. METHODOLOGICAL APPROACH

We apply an inductive qualitative approach that seems to us the most suitable to the nature of our research question. Though a semantic explanatory study (Cornelissen, 2017), we operate an artistic metaphor to examine the improvisational process.

Seminal studies explore improvisation through artistic metaphors of jazz (e.g. Hatch, 1998; Humphreys et al., 2012; Kamoche & Cunha, 2001; Newton, 2004) or improvisational theatre (M. Crossan et al., 2005; Vera & Crossan, 2004). First, metaphors are suitable to make sense of organizations from an alternative sources (Hadida et al., 2015). In addition, as mentioned by Mannucci et al. (2021), improvisation within organization is difficult to capture by observation, appealing to field study in less classical forms of organizations, such arts (Bamberger & Pratt, 2010; Ciuchta et al., 2021; Fisher & Barrett, 2019; Mannucci et al., 2021). We follow this traditional approach of improvisation studies, but we chose to explore improvisational experiences from different arts (performance, theatre, music, painting, etc.) to allow greater generalization of findings on improvisational process.

While art-focused field setting has some particularities (such as search for aesthetics outcomes, freedom of creativity, absence of direct hierarchy, etc.), an explanatory study helps to identify the non-case-specific patterns explaining the cause-and-effect relationship within improvisation phenomenon. We have started to collect empirical data though 7 semi-structured interviews (ongoing process). In each interview of 1 hour approximately we ask respondent artists (the field access is based on author's personal network) to tell us about their perceptions of

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improvisation practices in their creative process, related barriers and enablers, their experience of resilience. All interviewed artists have a job position in addition or in parallel of their artistic activities – some of these jobs are related to the arts (such as administrative position within artistic association), others – not related at all (such as position in health care sector). Interestingly, during the interviews, the respondents naturally made parallels between their improvisation in arts and their improvisation in more classical organizational settings. The data collection will be enriched by retrospective data (for example videos of performances, music recording, press articles, memories books, etc.).

In our data analysis, we rely on abductive reasoning by mobilizing existing knowledge (Harley & Cornelissen, 2022) to explain improvisation process. Data analysis follows the conventional coding process in line with Gioia et al.'s (2012) approach grouping coding categories, through successive levels of abstraction, presented in the data structure below (Figure 1).
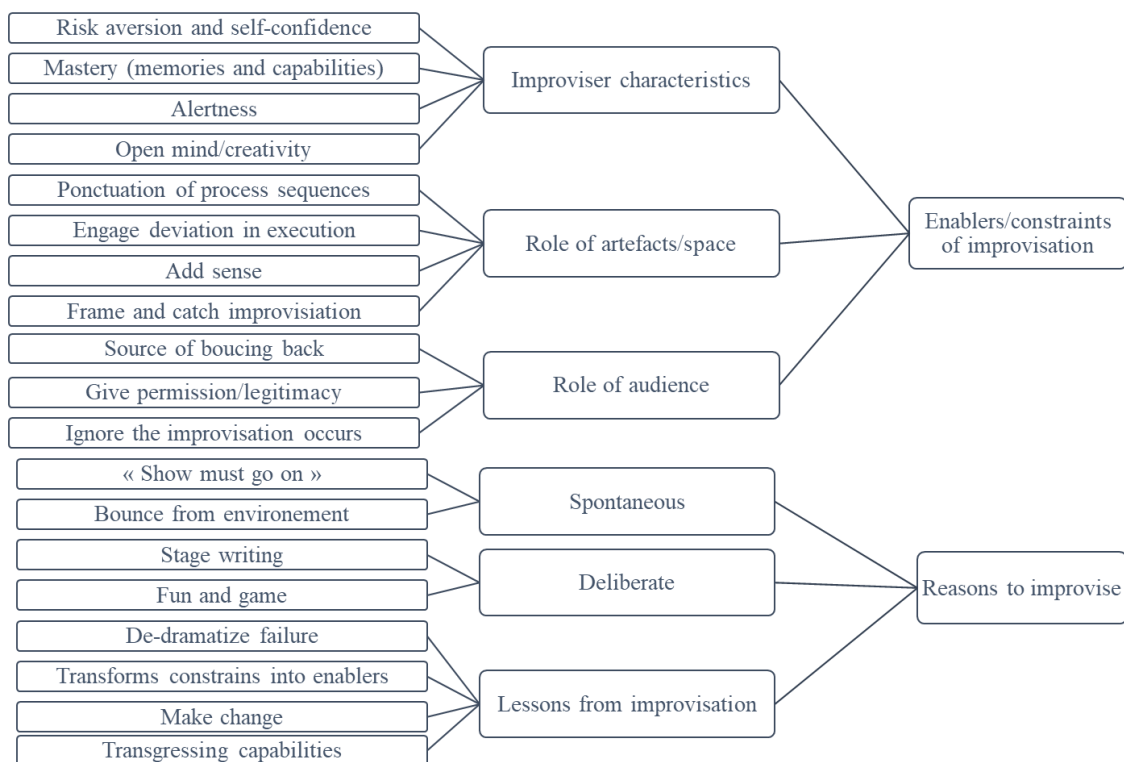

Figure 1. Data structure. Improvisational process

4. PRELIMINARY FINDINGS

Our research aims to explore improvisational process for resilience through artistic experience metaphor. While the data collection in still ongoing, we present preliminary results discovering enabling/containing elements of improvisation and reasons guiding improvisation.

4.1. ENABLERS AND CONSTRAINTS OF IMPROVISATIONAL PROCESS

Some elements emerge as key dimensions for improvisational process, that may be reinterpreted as enablers or as constraints.

Improviser's characteristics

First, our findings suggest improviser characteristics influencing the improvisational process. The **individual aversion to risk** appears as an enabler– if it is high ("*in art we constantly seek danger, there is no danger - there is no art" (IntK), "you need to accept the risk of failrure" (IntE))* or – if it low – barrier ("*working without a safety net is very weakening (IntS)")* to entry into improvisation. Interviewees mention the necessity of self-confidence to enact their risk aversion for improvisation *("putting yourself in danger" (IntSo)).* For example, the self-confidence allows to face unpredictable disturbances (e.g. difficult communication with sound control room technician during the concert; pressure from authorities to cancel a play performance). The required self-confidence is based on the **mastery**. One of the artists mentions:

> " *We're used to saying that Comedia del Arte is improvisational theatre, that people improvise, but that's not quite true. It's a form of theater that refers to the idea of making a profession out of one's character - for example, my profession in the XVI-XVIII centuries was Harlequin or Pantalone" (IntF)*
>
> *"It's hard to improvise if you don't have the know-how and mastery of a subject. Beforehand the word "art" itself evokes technique, mastery, know-how, which is what the word "art" means.*

When we talk about people in the arts - we're talking about people in the trade, people who know what they're doing in a particular field" (IntF)

This mastery relies on rich repertories (*"a toolbox: know-how of techniques of music, technical material, you need to listen a lot of music" (IntSo)* in music or *"to be a same character all the life and have a thousands of replicas in the head" (IntF)* in theatre) and related capabilities gained thanks to experience. This perceived mastery enhances legitimization of improviser's action and decisions.

However, a mastery of a wealth of repertoire is not enough to engage in a process of improvisation, the interviewees also underline the **alertness** as a key improviser characteristic: *"be in a state of alert, listening to every movement" (IntF).* The alertness is closely related to the attention to the environment and the "here and now" temporality: "*it's happening now: we can plan, but we can not anticipate everything" (IntE),* or as one of the artists summarizes *""the art of catching the present in flight"(IntF).*

Finally, the interviewees highlight **open-mind** and related **creativity**. A plastic artist mentions:

> *"The improvisation requires a problem without an easy solutions or with interdiction of easy solutions. I should go beyond the simplest solutions, I need to continue to explore and to search solutions and maybe at 50th I will find something new and interesting" (IntE).*

However, the creativity is constrained by structural barriers, as planning, budget, etc.

> *"The creativity works differently in artistic practice – there is much more of unpredictable and of unknown…As opposite to my artistic practice, in my designer job, there is the question of money. The time and money are limited and do not allow to go toward 50th idea, we will just pick up maybe one of the first three simplest solutions" (IntE).*

Depending on the identified characteristics of the improviser, entry into the improvisation process will be either facilitated or hindered.

Role of artefacts

Secondly, the role of artefacts appears to be another key element in improvisation, which can on the one side, block *("when I was a student I did a lot of performance improvisation, but there's a concern about keeping track of what I am doing." (IntK))* or, on the other side, enable the improvisation ("*accessories help get easier under the skin of the character and create situations" (IntS))*. As one artists explains that the use of a new material technique (artefacts) **punctuate** her artistic process:

> *"There is a succession of a lot of small decisions. When I start – there is a very vague idea, then I divide the work by steps and after every step I reevaluate and adapt my expectations and make changes" (IntE)*

Interestingly, the artefacts are not used as a tool for creation, but actually **engage the deviation** from "planned" execution of the creative idea, by enhancing the entry into improvisational process. For example, the imposed use of masks in theatre open new possibilities of actions:

> *"The mask allows you to turn away from yourself, because when you play barefaced, you are naked, whereas the mask allows you to distance yourself from yourself. Some people are not capable of distancing themselves and find in a mask the concrete possibility, through a transitional object, of being able to change their face and body."(IntF)*

In the same line, a visual artist expresses:

> *"Improvisation is a series of small decisions. I wanted to make a 3D photo project. I started with 3D software and trained myself… The gap between the idea conceived for the work and the practice is very wide. It never goes as planned, it's constantly being adapted and re-evaluated. The initial idea was to take a 3D photo of a building destroyed by a storm and transform it into a virtual object. But the capture wasn't perfect, and as I was learning about the possibilities of the Blender 3D tool and how it reacts, I switched from photos to video. This gave it a plastic aspect that tells a lot of stories" (IntE)*

Therefore, artefacts may also **enrich sensemaking** during improvisation. As an illustration, a performance artist used spoons for her costume during a performance artwork and the unanticipated cracking of spoon adding a sound add a layer of meaning to her work (IntK). Interestingly, while artefacts can trigger improvisation, the improvisational process can trigger the potential uses – affordance – of artefacts by appealing for a change in their use. A music artist mentions:

> *"I'm used to using my drum machine for structured songs, but thanks to our improvisation sessions I've rediscovered my machine and the new plasticity of its sound."(IntSo)*

Finally, artefacts are also used to catch, to **capture the improvisation** – the interviews highlight the importance of performance recording, allowing encapsulate ephemeral episodes, becoming then a part of memories and repertories

Role of public

Third, the role of the public seems to be a promising subject to explore. The observers' reaction is mentioned as one of **the triggers to bounce back** and to engage into improvisation – *("public…it's an incredible support, we can bounce off their reaction, a sneeze.. public is an unknown but predictable element, but still a challenge " (IntF))*, but became a source **of risk itself** (*"you can't control the public's reaction; you can't predict a visual or artistic effect."* *(IntK)).* The unpredictable public reaction to a performance is perceived as artistic challenge (e.g. a sneeze from the play performance public), for example a performance artist mentions "Rythme 0" performance by Marina Abramovic: "*She's looking for this danger to test human nature, and it's dangerous sometimes, she wants to have this group effect, how far can the human go when everything is allowed, can the human treat the other as human.*" *(IntK)".* An interviewee summarizes this related tension: *"publics don't always look for danger, you*

have to find a balance so as not to make the public feel uncomfortable, whereas artists love to make people feel uncomfortable" (IntK).

The public reaction is noted as a key success/failure factor of improvisation: *"the success depends on interaction with public" (IntS)").* The public **gives the improvisers permission and legitimacy**. The majority of interviewees highlight the importance of taking authority and asserting oneself. For example, a theatre manager spontaneously refuses a local authority suggestion to cancel a play performance because of perceived risk of youth protest in a deprived district. Without an official prescription from the local prefecture, he decides to maintain the performance by care of public, who were expecting the play.

The public aspires **to be surprised** and see the "problems" solved *("Public want to see people who have obstacles to overcome" (IntF))*, but at the same time the public want to **ignore the improvisation occurs**. This is related to the necessary feeling that everything is under control – *"some people are allergic to improvisation, not everyone can stand it - they want to control everything" (IntSo), "a lot of improvisation, but it's important that people don't realise that" (IntE)*. A following quotes of a theatre director makes an illustration:

> *"I've had a lot of unforeseen events where I've had to improvise on the spot, trying to make sure it didn't show. We work on illusion, and illusion means not showing until the end that we've broken down or that it's not working (such as stage poles broken by the wind)."(IntF)*

Therefore, the public appreciation plays an important role as enabler, trigger, and constrainer of the improvisational process.

4.2. REASONS TO IMPROVISE

Spontaneous improvisation

The data analysis reveals two different entries into improvisations: spontaneous and deliberate. First is spontaneous improvisation as an unplanned answer to a trigger, such as disturbance (e.g. material degradation during the performance) or solicitation (e.g. reaction to the partner or the public action). Facing the environmental disturbance (for example, to adapt a theatre character because of forgotten costume, do-it-yourself support for a stage mast with a pvc tube from the building site next to it, etc.) the interviews underlines the necessity to *"find a fallback solution, adapt and face the problem" (IntF), "to welcome, to embrace, to move forward"* (IntY) in their artistic practices. This quest for the performance continuity is encapsulated in the show business adagio *"show must go on"* (IntF).

Deliberate improvisation

Second type is the deliberate use of improvisation as a developmental method. For example, a theatrics group use the stage-writing process to create as scenario for a theatre play during rehearsals – "*we practice writing the show in rehearsal around a canva that describes the actions without any details- the actors improvise and we keep the best improvisation. This allows to working without public to build a story "* (IntF). In the same line, the music band *"use musical marker to start and then improvise together"* (IntSo), this is *"a way of making music with little forethought, enjoyment of playing with friends, freedom"* (IntSo).

In two cases, "*there are no false notes in improvisation, it's a proposition, an open form - like a walk in nature, if something is bothering you, you can leave, if you like the place, you can stay longer' (IntY)*. This idea is reinforced by the artistic freedom – "*as an artist, this is as difference, we are free to choose our own final result*" (IntE).

Lessons from improvisation

Finally, the interviews shared their lessons from improvisational experience. The interview analysis reveals an effect of the de-dramatizing of deviation from planned action: "*the very fact of improvising puts failure into perspective and makes it less dramatic, next time even if you have a very precise text and there's a problem - you know you can deal with it and manage it*" *(IntS)*. In interviews, this capability is closely related to the notion of resilience *"as the ability to overcome failure*" (IntS). As illustration a music artist gives her perception of resilience:

> "*Resilience - a balance between hope and frustration. If you've been through something that's got you down, you accept failure and find a new equilibrium*" (IntSo)

Moreover, the improvisational process transforms constraints into enables. As seen previously, the improvisational process requires "*being in tune with the environment*" (IntF), offering the opportunity to explore and take advantage of the possible interaction with the artefacts or the public. A deliberate process of improvisation may help, for example, through a practice of stage writing, to create a scenario in theatre or to add an additional sense to an unanticipated disruption during performance.

In addition, *"improvising - means knowing how to change".* In this sense, the arts have a power to overcome existing order of simple solutions*: "the artists open up the fields of possibility, find a new approach, propose a new solution*" (IntE). However, most importantly, the improvisational process allows to make an updated on organizing (structure and processes). As one of respondent summarizes – "*to destructure in order to create a new structure*" (IntSo).

Another lesson is that to achieve a new structure, is important to transgress an existing one - *"getting out of our comfort zone, exploring, extending our capacities, transgressing intimate and public spaces*" (IntK). Interview analysis reveals that by transgressing capabilities,

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improvisational process has a power to reinforce the self-confidence for resilience. A theatre artist mentions:

> *"this experience of improvisation train to letting go even is you don't feel in control, this learn to accept the unexpected and accept your own reactions to the unexpected" (IntS)*

In the same line, a music artist explains:

> *"Improvisation can be learnt, it's a way of calling on our resources and facing up to unforeseen situations more than once to see that we are creative." (IntSo)*

Therefore, interviewees learn from their improvisational experience to be more resilient by de-dramatizing failure, transgressing existing structure, gaining self-confidence to find timely adapted solution and new structure.

To summarize, preliminary data analysis reveals different elements, that may be reinterpreted at the same type as barriers and enablers of improvisational process: emotional and cognitive (such as improviser characteristics), relational (such as role of public), material (such as role of artefacts). Our findings also highlight the spontaneous and deliberated use of improvisational process as well as improvisational lessons for resilience.

Pursuing data collection and data analysis will lead to enrichment of these first finding, more particularly the nuancing of high-level abstraction dimensions, that could be reintegrated into a theoretical framework of improvisational process for resilience.

5. DISCUSSION

5.1. BUILDING CONCEPTUAL FRAMEWORK OF THE IMPROVISATIONAL PROCESS FOR RESILIENCE

On the basis of the first preliminary findings, we attempt to frame mechanisms of improvisational process, structural conditions enabling this process, as well as related lessons for resilience, and reinterpret them through organizational lens. The following Figure 2

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illustrates improvisation process for resilience, particularly important in the permacrisis context.
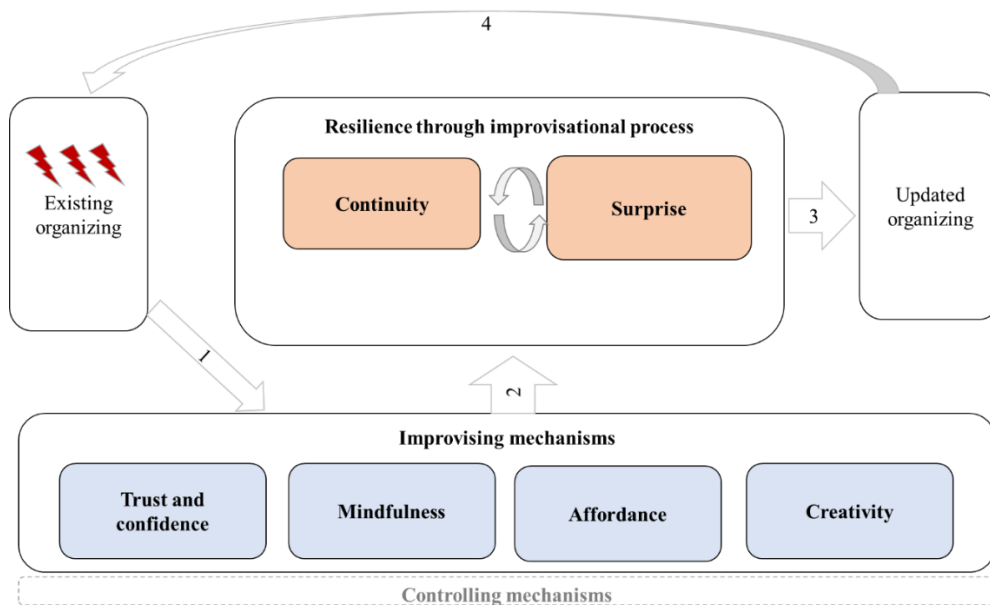

Figure 2. Improvisational process enhancing resilience

Organizations navigate in the permanence under the pressure of shocks and interlocking crises. Therefore, existing organizational structures may lose their relevance, requiring improvisation (Figure 2, arrow 1).

Our findings underline the mechanisms of the improvisational process, expressing a deep causal power explaining the links between events. Mechanisms have the irreducible property of always acting in a specific way, even if the consequences might be different, depending on the countervailing circumstances and other intervening mechanisms (Tsoukas, 1989). These mechanisms are not directly observable, are generic and exist independently of any organization. However, there activation depends on particular contexts. When activated, underlying mechanisms have causal powers that support the achievement of expected outcomes, but may be constrained. For example, a creativity mechanism may be constrained by a controlling mechanism, such as

compliance. In effect, although our results focus on the effects of the improvisation process on resilience, the impact of the control process must be taken into account.

Several mechanisms of improvisation for resilience emerged from our data analysis. First, trust and confidence, while activated, allows risk-taking, transgressing the comfort zone in order to explore unexpected solutions to unexpected challenges from the environment (Murphy et al., 2017; Shamir et al., 1993). To engage in such behaviour, the improviser needs to perceive trust from the public (depending on organizational setting, public may include hierarchy, peers, outsiders, civil society, etc.). Building and preserving trust enable resilience capabilities during periods of disruption (Gustafsson et al., 2021).

Second mechanism is mindfulness as present-moment awareness and construction of meaning from relevant cues (Dane, 2011; Sutcliffe et al., 2016; Weick, 1988). From this perspective, mindfulness allows to remain alert, to make sense and to find innovative answers to disruptions. Activated mindfulness mechanisms allows to react to improvisational trigger and to build sense of occurring events, thereby promoting resilience (Bechky & Okhuysen, 2011). Obviously, improvisation under uncertain and ambiguous situations allow new causal relations between events and actions (Burke et al., 2007; Mergel, 2023)

Third mechanism is affordance as a potential for possibilities emerging from the interaction between an artefact and an actor (Cecchi, 2022; Volkoff & Strong, 2017) in a specific organizational context. The role of artefacts in improvisation is multiple (as trigger, as tool, as limit) and depends on the action possibilities involved. Skilful and knowledgeable actors enact the most relevant of possibilities (Hadjimichael et al., 2024), according to resilience objective. Moreover, affordance may contribute to the creation of the situation slack resources (Kahn et al., 2018; Leuridan & Demil, 2021).

Finally, creativity as production of novel and useful ideas under unpredictable conditions (Sonenshein, 2016; Thompson, 2018) is another improvising mechanisms. Creativity allows the adjustments under pressure (Vera & Crossan, 2004), more particularly by recombining existing memory repertories in novel and original way (Moorman & Miner, 1998). In the context of permacrisis, creativity is closely related to the requisite imagination (Reason, 1998) or to the safety imagination (Pidgeon, 2010), appealing to use information in new ways and to go beyond prescribed patterns of thinking in order to make sense of potential hazards.

Therefore, the activation of each of these mechanisms should be accompanied by enhancing of the structural conditions allowing a certain degree of freedom and development: flexible rules, authority migration, exploration culture, learning practices, etc.

The activation of improvising mechanisms promotes resilience (arrow 2). Our findings crystalize two main principles guiding resilience through improvising: continuity and surprise. Our results suggest that the continuity is the guiding force behind "show must go on" – a commitment to persevere despite turbulences and crises by respecting the mission. In the arts setting, the mission may be to achieve an aesthetic result or the entertainment. In organizational setting, the continuity echoes notion of the reliability, seen as capacity to continuously and effectively produce and manage challenging and unpredictable working conditions (Bigley & Roberts, 2001; Weick et al., 1999). In parallel, the principle of surprise advocates embracing uncertainty (of the environment, but also of the improvisers' capabilities, of the resources availability, of the action possibilities in relation to the environment, etc.) and accept the equivocality of success/failure of the improvisation. Tolerance for surprise shape a permissible degree of improvisations (Hadida et al., 2015). In a crisis context, this step outside of the organizational limits involves potential opportunities (by transgressing normative spaces, routines, capabilities), but also related dangers (Farjoun & Starbuck, 2007).

Resilience through improvisation leads to a change and an update in organizing (arrow 3). However, in the permacrisis, this new organizing will be further challenged by upcoming turbulences and unpredictable conditions, reiterating then the circle of adaption (arrow 4) through improvising.

In summary, our framework presents an interaction of improvising mechanisms of improvisation for resilience, as well as its underlying principle (continuity and surprise). A teach circle of adaptation the mechanisms are activated and the organizing structure is updated, before the new shocks reintegrating the adaptation.

5.2. CONTRIBUTIONS

Our research contributes to theory in several ways. First, our research provides theoretical **contributions for crisis and resilience studies** in terms of understanding of main principles resilience through improvising and its mechanisms (Adrot & Garreau, 2010; Bigley & Roberts, 2001; Maguire & Hardy, 2013; Williams et al., 2017).

While the tensions between the need for organizational stability and flexibility are commonly highlighted in resilience literature (Barton et al., 2015b; Hardy et al., 2020; van den Berg et al., 2021), they have not yet been resolved (Linnenluecke, 2017, p. 19). The improvisation, understood as a "*a mixture of the pre-composed and the spontaneous*" (Weick, 1998, p. 551), has potential to reconcile this stability/flexibility tension (Kamoche & Cunha, 2001). Our findings characterize main foundational principles, guiding improvisation and thus enhancing resilience: simultaneous search for continuity and surprise. Continuity is not necessarily based on stability alone – on the contrary, structural changes are vitally important in dealing with interlocking crises (e.g. Bigley & Roberts, 2001). In the same vein, surprise does not necessarily rely on flexibility – existing structural elements may be surprisingly robust in face of uncertainty (e.g. Bingham & Eisenhardt, 2011; Meszaros, 1999; Zohar & Luria, 2003). This reconciling higher

order approach highlight the duality, rather dualism between stability and flexibility (Farjoun, 2010) and refocuses objectives while developing resilience. In a resources slack lens, the capability to embrace jointly continuity and surprise, may be reinterpreted as a form of conceptual slack (Schulman, 1993).

By discovering improvising mechanisms of trust/confidence, mindfulness, affordance and creativity, our work suggest avenues for improvement in order to develop resilience. This appeal to pay a closer look to structural conditions enabling activation of theses mechanisms (for example, requisite variety (Pinheiro et al., 2022; Reason, 1998)). In addition to cognitive capabilities of mindfulness, extensively discussed in previous research (e.g. Fraher et al., 2017; Sutcliffe et al., 2016; Weick et al., 1999) and related creativity (Bechky & Okhuysen, 2011; Levinthal & Rerup, 2021; Rerup & Feldman, 2011) our findings reveal the understudied role of artefacts (affordance) and public (trust and confidence) for improvising.

Finally, by underlying deliberate intention to use improvisation (and not only as spontaneous reaction imposed by turbulent environment), our article aims to highlight the avenue for resilience development through improvising learning (Vendelø, 2009), for example through training for emergency and crisis management (Barreto & Ribeiro, 2012; Mendonca & Fiedrich, 2006; Tabesh & Vera, 2020). While deliberate improvisation is particularly relevant for high uncertainty and complex environment (Mannucci et al., 2021), in high-risk environments, improvisational learning approach should be adapted to the limited trial-and-error (Weick, 1987) and serous potential harms in case of failure.

Second, we expect our findings contribute to **organizational improvisation studies**. Following the call to explore both the subjective experience of improvising and its processual nature (Fisher & Barrett, 2019, p. 16), we explore emotional, relational and material constraints and

enablers of improvisational process, their interactions and effects. Our findings offer an opportunity to complete the framework of organizational improvisation episode Cuichta et al. (2021, p. 16) by introducing roles of improvisers characteristics, artefacts and public. These roles are dynamic and contingent, echoing work of Mannucci et al. (2021) on social structures acting as both constraints and resources.

While the importance of individual skills for improvisational process is evident (M. M. Crossan, 1998), we confirm the relevance of the risk aversion attitude (Magni et al., 2018), the focus on the present moment (Bechky & Okhuysen, 2011; Fisher & Barrett, 2019; Vera & Crossan, 2004), the expertise (Moorman & Miner, 1998; Vera & Crossan, 2004). However, our findings complement the results of previous research by enriching improvisers characteristics. The risk aversion and alertness echoes the notion of mindfulness – both individual and collective (Vogus & Sutcliffe, 2012; Weick et al., 1999).

Moreover, while Hadida et al. (2015, p. 17) regret little attention to the role of public, our findings allow to answer this call. The exploration of the role of improvisation evaluators (public or, for example, superiors or outsiders in organizational contexts) underlines socially constructed nature of improvising (Fisher & Barrett, 2019; Hardy et al., 2020; Sonenshein, 2016).

In addition, our data analysis makes emerge the importance of the material artefacts for improvisation. The enriched and dynamic role of material artefacts (as process sequence cornerstones, triggers, barriers, creators of meaning, etc.) emphasises processual and embedded nature of improvising (e.g. Fisher & Barrett, 2019; Hadida et al., 2015; Moorman & Miner, 1998; Vera & Crossan, 2004; Weick, 2001). Moorman and Miner (1998) use the conversational metaphor for collective improvisation, we extend this idea – the improvisers entry into

conversation not only with other members of group, but also with environment, that afford their action or absence of actions. Our finding suggests, that improvising not only involves "interpreting the environment" (M. M. Crossan, 1998), but also affording the environment.

Finally, the theorizing of continuity/surprise principles unpacks the challenge of success/failure judgement about the improvisational process (Ciuchta et al., 2021; Hadjimichael & Tsoukas, 2023; Mannucci et al., 2021; Vera & Crossan, 2004): by embracing the equivocality of actions ("no false note"), improvisers search surprising solutions to preserve continuity of organizational performance ("show must go on"), echoing requirement of "wary understanding" (Weick, 2024, p. 148).

Our research also sheds light on the debate about deliberate (Hadjimichael & Tsoukas, 2023) or spontaneous (Hadida et al., 2015; Vera & Crossan, 2004) nature of improvisation. Our findings reveal that improvisation is not necessarily triggered by unanticipated events and fuelled by urgency, by also may be used as longer time technique for resilience development (e.g. stage-writing). Hadida et al. (2015, p. 7) refers to "*improvisational paradoxes of learning (learned improvisation and reflective spontaneity)*". Therefore, improvisation can serve for learning and capabilities development, but also for the structure creation (for example as process of new rules elaboration, referring to the "stage wiring" technique). This echoes generative improvisation described by Mannucci et al. (2021). This improvisational development is particularly relevant for resilience in permacrisis.

We also expect to offer managerial contributions in terms of strategies to develop creating favourable organisational contexts (Fisher & Barrett, 2019; Vera & Crossan, 2004; Weick, 2001) and improve improvisational capabilities through learning (M. Crossan et al., 2005; Hadjimichael & Tsoukas, 2023).

This research has some limitations, which suggest future research avenues.

Our data analysis focused on cognitive capabilities, however emotions and their role in improvisation process should be further explored (Fisher & Barrett, 2019; Hadjimichael & Tsoukas, 2023). For example, emotions studies may explain why improvisation is not acknowledged and even hidden while a perceived control (even illusory) is valued.

Moreover, while group dynamics are extremely important for improvisation (e.g. Bechky & Okhuysen, 2011; Hadida et al., 2015; Vera & Crossan, 2004), in this article, due to the methodological setting, focused on individual artists improvisers, we did not explore collective characteristics influencing improvisational process. Therefore, future research may investigate particular interface role of leadership (Hadida et al., 2015) and hierarchical interactions (Hardy et al., 2020). More specifically, while the role of executives is studied (for example interaction between comprehensive and highly intuitive decision-making (Tabesh & Vera, 2020)), there is a lack of studies about the middle managers in improvisation (Adrot & Garreau, 2010; Amalberti & Vincent, 2020; Mergel, 2023; Vera & Crossan, 2004).

6. CONCLUSION

While common answer to permacrisis is procedural strengthening, this may impede the ability to effectively face uncertainty through improvisation. This paper proposes creative art-management synergy by reinterpreting the experience of artistic improvisation from an organizational point of view in order to nuance the understanding of improvisation process for resilience by discovering underlying mechanisms and foundational principles and its interactions.

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