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Failure as a Process: Shaping What is Worth Doing in Creative Projects

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FAILURE AS A PROCESS: SHAPING WHAT IS WORTH DOING IN CREATIVE PROJECTS[a]

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ABSTRACT

Failure is commonly conceived either as a provisional state or as the unwelcome endpoint of a process. In both scenarios, failure occurs when there is a discrepancy between an expectation and result, presupposing a well-defined comprehension of intentions and anticipated outcomes. This assumption is particularly challenged when conferred to creative projects, where expectations are not always as explicitly defined and undergo frequent changes. To understand how failure evolves, this chapter analyzes failure experiences of individuals working in creative projects in the arts and sciences and investigates how shifts in expectations occur with setbacks experienced. We develop three interconnected dimensions of expectation in creative projects: uniqueness, do-ability, and resonance. Together, these create a malleable evaluative space within which a creative project is deemed worthwhile doing. Our findings suggest that disappointed expectations are met by either prioritizing certain expectations over others, or by realigning expectations with new opportunites, and in so doing shape and change the relative importance or meaning of these expectations. We argue that these responses transform the evaluative space in a way that keeps the creative project going. An endpoint failure only occurs when those involved in a creative project run out of possibilities to alter the evaluative space of the project. Our study overcomes the binary conception of failure as being merely the opposite of success and demonstrate that success in creative projects is not always output orientated. It also involves creating and maintaining sustainable ways to continue.

Keywords: Creative projects, failure, ideas, evaluative spaces, expectations, temporary organization

INTRODUCTION

Failure is commonly conceived either as a provisional state or as the unwelcome endpoint of a process. Small and frequent failures are usually understood as intermediate setbacks, adversities that threaten a project's performance or even survival. Yet, they are also considered part of the natural course of project management and can improve output, performance, and resilience (Stoverink, Kirkman, Mistry, & Rosen, 2020; Khanna, Guler, Nerkar, & Desai, 2016). In contrast, major and final failures comprise a definition of failure as an absolute state, denoting the cessation of operations (Dobusch, Köster, Schäfer, & Seckler, 2022; Habersang, Küberling-Jost, Reihlen, & Seckler, 2019) or project termination (Deichmann & van den Ende, 2014; Madsen & Desai, 2010). In both understandings, failure is defined as not meeting a stated goal, i.e. as the discrepancy between what is aspired to and what is accomplished (Dahlin, Chuang, &

[a] Published in: *Research in the Sociology of Organizations, 91*, 137-158. We are extremely grateful to the German Research Foundation (DFG) for the support provided to the Research Group "Organized Creativity" (FOR 2161).

Roulet, 2018). This presupposes a stable set of expectations against a pre-defined imaginary of future success (Knudsen, 2014; Anheier, 1999).

Failure as not meeting a pre-defined result is challenged when conferred to creative projects that are often characterized by uncertain, tentative, or frequently changing expectations (Hua, Harvey, & Rietzschel, 2022; Leoncini, 2017). Working in a creative project involves encountering constant and intermediate setbacks as an integral part of the process itself, which can serve as a source of inspiration, an opportunity for revision, or as a catalyst leading to the project's ultimate failure and the termination of the process (Otto, Schüssler, Sydow, & Vogelgsang, 2024; Coldevin, Carlsen, Clegg, Pitsis, & Antonacopoulou, 2019; Firestein, 2023; Gross, 2023). This fine line between either beneficial 'trial and error' or an accumulation of setbacks leading to 'big' or endpoint failure calls for a more nuanced treatment of the varying and changing expectations at play in creative projects. This is pertinent, as most studies on creativity focused on cases that eventually have resulted in "ideas judged as being creative or innovative" (Hua et al., 2022, p. 646; Adler & Obstfeld, 2007).

This chapter seeks to unravel the dynamics of failure in creative projects by identifying the dimensions of expectation that shape failure experiences and by exposing how, when these become disappointed, they affect the continuation of a project. By adopting a processual approach both to creativity and failure, our emphasis is less on identifying and evaluating a specific creative outcome or the lack thereof, but rather on how creatives navigate (failed) expectations in a project's evaluative space of what is deemed "worth doing and becoming" or not (Coldevin et al., 2019, p. 1370; Stark, 2007). We thus ask, *how do the multiplicity of expectations and the dynamics of fullfilling and disappointing them affect the course of a creative project*?

Our study is based on an analysis of 112 interviews with artists (musicians and producers) and scientists (engaged in pharmaceutical drug discovery and development), and is complemented with ethnographic observations of a recording studio and a scientific laboratory. Both domains offer themselves to the study of failure because of the general acknowledgement of disappointed expectations as being an integral part of the experimental nature of both music and scientific projects (Firestein, 2023; Le Feuvre, 2010).

Our interview data revealed three ideal-typical expectations that constitute the evaluative space of a creative project: *uniqueness* ('the project idea is original and different from others'), *do-ability* ('project participants possess the requisite skills, technologies, and legal affordances to carry out the project idea') and *resonance* ('the project idea generates trust, reputation/status and/or financial reward'). We further show how actors respond to setbacks regarding these expectations. For one, when expectations in one dimension disappoint, creatives can alter the evaluative space by prioritising another expectation dimension. Alternatively, creatives can realign a failed expectation to new opportunities.

Our study demonstrates that while these dimensions of expectation structure the evaluative space of creative projects, its form remains malleable, as actors respond to setbacks regarding these expectations. The interconnectedness of the three dimensions within this space allows for dissipating intermediate failure experiences, and thereby contributes to the ongoing-ness of the project. This means that creative projects can continue within this evaluative space, albeit possibly changing the scope and nature of the project in relation to the dimensions of expectation involved. The evaluative space hence enables, shapes and guides what is considered to be worth pursuing as part of the creative project (Stark, 2007, Zangerle, Dobusch and Weiskopf, 2024). We find that an endpoint failure only occurs when those involved in a creative project run out of possibilities to alter the project-specific evaluative space by reprioritizing or reframing its expectation dimensions.

These findings contribute to debates on processual accounts of creativity and failure by conceptualizing failure as an inherent part of the open, tentative, and changing nature of creative processes as it specifies the dynamics by which a creative project either fails or is deemed worthwhile pursuing (Leoncini, 2017, Coldevin et al., 2019, De Keyser, Guitette, & Vandenbempt, 2021). This approach is sensitive to the multifaceted experiences of failure in creative projects (Skaggs, 2023) and hence extends existing output-orientated definitions of failure as not meeting a stated goal (e.g., Dahlin et al., 2018). It shows that failure and success are not necessarily mutually exclusive opposites, as success also involves creating and maintaining sustainable ways to continue.

FAILURE AS A PROCESS

Intermediate Setbacks and Endpoint Failure

Failure is mostly understood as the inability to achieve a stated goal, and defined as "deviation from expected or desired results" (Cannon & Edmondson, 2005, p. 300). Extant literature distinguishes between small and frequent failures on the one hand, and big and final ones on the other (Khanna et al., 2016). The former refers to intermediate or temporary failure as being adversity-induced setbacks and challenges that occur when expectations are not met (Stoverink et al., 2020), such as managerial rejection of new ideas, technical mishaps, the loss of project members, or a lack of skills. The latter defines failure as the termination of a project (Deichmann & van den Ende, 2013; Madsen & Desai, 2010) or cessation of operations, which includes 'bankruptcy' or 'insolvency' (Josefy et al., 2017; Dobusch et al., 2022).

Given the frequency and inevitability of intermediate failures, many studies explore how organizations can harness failure experience to promote innovation and growth (McGrath, 1999 Dahlin et al., 2018) or organizational flexibility and learning (Sitkin, 1992). While this underlines the productive effects of intermediate failures, an accumulation of unacknowledged small failures is said to be quite likely to result in big or endpoint failure (Cannon & Edmonson, 2005).

These approaches understand failure as the disconnect between "what one wants or expects to occur as the result of one's action […] and that which actually occurs" (Carroll, Jeevendrampillai & Parkhurst, 2020, p. 14). Like traditional studies of project failure (Pinto & Slevin, 1988), this applies a means-end rationale to shaping the future, which is based on clearly defined expectations that are identifiable in advance of realizing them (Knudsen, 2014, Anheier, 1999). It assumes intentionality that suggests that failure can be avoided by steering and planning for success, efficiency, and resilience (Mica, Pawlak, Horolets & Kubicki, 2023).

In contrast, processual approaches to failure question the assumption of stable preferences and clearly defined expectations to study how failure unfolds over time, or "how failure plays out dynamically" (De Keyser et al., 2021, p. 239), by assuming that "imperfection" is likely to be the common project experience (Marrewijk, Stjerne, & Sydow, 2024). This perspective creates awareness of the temporality of failure as well as of the social mechanisms by which failure experiences are produced, such as the complex interplay of rigidity and conflict (Habersang et al., 2019), or how the surface level interventions of organizations are often hampered and halted by the organizations' informal structures and temporalities (Heracleous & Bartunek, 2021). Studying failure as a process rather than an outcome not only offers a sensitivity to the malleability of expectations, and may reveal how and why intermediate failure or setbacks can be generative and productive (DeKeyser et al., 2021), but also how a succession of setbacks can eventually turn a project into final failure.

Failure in Creative Processes

While studies of failure have already pointed to the fine line between what can be considered as unavoidable 'trial and error' and an accumulation of setbacks leading to 'big or endpoint failure', this line is particularly blurry with creative projects, which are often characterized by their incompleteness, uncertainty, and open-endedness (Hannigan, 2018; Le Feuvre, 2010; Knorr-Cetina, 2001).

Scientific experimentation is continuously shaped by mishaps, mistakes, and disappointments (Gross, 2023), which produce revision practices that are ultimately necessary for scientific success (Firestein, 2023). For example, studies in pharmaceutical drug discovery and development consider intermediate setbacks as an acceptable and legitimate experience in the exploration process, which will ultimately increase the quality of R&D outcomes (Khanna et al., 2016; Petit, 2023).

The successful creation of novelty is hence closely linked with the failure to confirm existing knowledge, and hence constitutes an active engagement with the limits of understanding (Brock, as cited in Gross, 2023, p. 407). Setbacks like failing to prove a hypothesis become a precondition for or indication of creating something new and unknown and are a positive sign of the dynamism of science (Firestein, 2023). From this perspective, success enforces current research strategies and models, while failure encourages the scientist to question and find alternative solutions (Barwich, 2019).

We find similar notions of failure as being critical for producing novelty in the arts, where producing originality is commonly linked to the act of disrupting a specific status quo. Failing to achieve success within the confines of a particular social order is then also an expression of challenging established norms and creating new forms of social interaction (Halberstam, 2011).

Thus, failure experiences are often considered to be essential for the creatives' motivation to exploring and pushing the boundaries of their work (Leoncini, 2017). The artistic practice of 'trying out' is arguably less confined to the idea of achieving a certain, clearly articulated goal or supporting a particular intention, but instead thrives in a process of exploring the possibilities that arise from the space between expectation and realization (Le Feuvre, 2010). Failure is therefore not necessarily an endpoint, but rather an iterative stepping stone in the "excruciating" process of making art (Lewis, 2014). Skaggs' (2019) study on how songwriters in Nashville deal with failure exemplifies this. Going beyond a focus on an individual's capacity to turn failure into a productive output, her study shows how artistic occupational communities collectively manage the experience of rejection. Skaggs shows that occupational strategies of normalizing rejection create new forms of cooperation and solidarity that change the socially constructed meaning of failure and success.

These studies show that, while failure in the arts and sciences is indeed experienced individually, it is also an expression of failing to fulfill certain socially constructed standards or norms of success, which in turn may be an expression of novelty and creativity.

Yet, despite its ubiquitous and elemental role in creative processes, there has been surprisingly little written about the phenomenon of complex and ongoing failure in creative projects (see Skagg, 2023 for an exception). Instead, research in creativity and innovation, including the more advanced approaches of 'idea work' (Coldevin et al., 2019) and 'creative practices' (Ortmann & Sydow, 2018), is biased largely towards documenting and analyzing successes (Adler & Obstfeld, 2007). This is hardly surprising, since creativity is (mostly ex post) located where new and valuable outcomes emerge (e.g., Hua et al., 2022).

Understanding the nature of the creative process as defined by uncertainty, open ended-ness, and set-backs calls for a more processual understanding of creativity (Fortwengel, Schüßler, & Sydow, 2017). This approach contests the notion of singular and reified creative

ideas as being finished objects emerging from individual excellence (e.g., Simonton, 2004) to move progressively from one developmental phase to the next (Perry-Smith & Mannucci, 2017). Instead of considering failure as not being able to turn a good idea into a concrete outcome, we argue that processual approaches to creativity and failure allow us to focus on how fulfillment and disappointment of expectations change the ideas and outcomes of a project. Creative outputs are thus always transient and 'partial manifestations' that shape and are shaped by the sequence of events – including experiencing failure – that appear in the course of the creative process (Otto et al., 2024; Knorr-Cetina, 2001; Hua et al., 2022).

This chapter seeks to understand how failure plays out in creative projects, as well as how actors respond to experiencing failure. Our aim is to explore the dynamics that emerge in the gap between what is expected and what is achieved. This implies two analytical steps: First, we unearth the various ways in which this gap opens up by considering the expectations that become disappointed throughout the creative project. Second, we analyze how actors react to the experience of disappointed expectations to keep a creative project going. Our research question is therefore: *How do the multiplicity of expectations and their dynamics of meeting and disappointing them affect the course of a creative project*?

METHODOLOGY

Research Setting

To investigate failure processes in both domains of the arts and the sciences, we study creative projects in music production (arts) and pharmaceutical drug discovery (science).

Music production is a particularly interesting case, because it has seen much change over the last two decades. At the turn of the century, music projects still centered on recording and selling CDs. Contemporary projects, however, are more indeterminate and fragmented, as music is created in many more formats and consumed in several different ways, indicated by the increased commercial significance of live performances and the rise of music streaming. The situation becomes even more complicated when, at least in the case of the record industry, the interests of the 'majors' or the large record companies as well as the organizational field's standards and regulations matter in shaping the course of a creative project.

Even more profoundly than in the field of music, creative projects in *pharmaceutical drug discovery* need to balance fervent scientific quests with the economic prospects of their endeavors because of the high costs and long development timespan involved in developing a drug (Styhre & Sundgren, 2011). The industry is well-known for the difficulty of translating early discoveries into marketable products. Pharmaceutical firms constantly generate and develop new ideas, as evidenced in their frequent patent registrations, but most of these patentented ideas never pass through the long process of preclinical and human trials to develop suitable drugs. The high attrition rate in the pharmaceutical industry is notorious, where "only one in 5,000 product-ideas is launched on the market" (Gassmann & Reepmeyer, 2005). What is more, observers report a massive decline in research output over the past 25 years because of late phase setbacks. Styhre and Sundgren (2011) argue that this leads to a high degree of frustration and 'decision-making anxiety' regarding investment and building company research portfolios in the industry.

Music production and pharmaceutical drug development, despite fundamental differences (e.g., with regard to temporality, and resource and regulation needs), share an experimental character; an extremely high likelihood of individual projects failing, and the normalization of rejection, which make them rich empirical fields to study the complex relationship between failure and the continuation of creative projects.

Both domains are thus characterized by the experience of frequent failures, but also by a common understanding of failure as an unavoidable risk factor before achieving success. Despite their difference, the contrasting domains of art and science provide a fertile ground for investigating creative processes, which has been demonstrated by previous research (Bruns & Long Lingo, 2024; Dobusch, Hondros, Quack & Zangerle, 2021; Coldevin et al., 2019).

Data Set and Analysis

This chapter is based on a qualitative data set of interviews and observations with and amongst musicians, music managers, scientists and science managers. Data was collected between 2016 and 2020 as part of a larger interdisciplinary research project titled "Organised Creativity". We analyzed 112 interviews (36 music/76 pharma), numerous observations and field notes, and created 10 case descriptions (5 music/5 pharma) to understand how creatives experience failure. We conducted our analysis in three steps: I) identifying how individuals working in creative projects experience failure; II) categorizing these disappointed expectations that define how failure is experienced by developing a model of three aggregated dimensions of expectation; and III) analyzing how creatives respond to experiencing failure regarding one or more of these dimensions over time, and how their responses shape the evaluative space of the creative project, i.e., shape what is worth doing.

Step 1 *"Identifying failure experiences in creative projects":* Two of the authors of this chapter and one research assistant analyzed our interviews with creatives from music production and pharmaceutical drug discovery and development, in which they reflect on their practices and experiences of idea development, creativity, and failure. Utilizing a systematic coding approach (Gioia, 2021), the first step of open coding identified instances in which creatives recalled a development considered to have led to a failed idea or project, or in which actors reflected on worries, threats, and risks that might herald potential failure. This included creatives experiencing both 'big' and 'small' failure (Khanna et al., 2016) as these were perceived to be threatening and corrosive for their creative project. We found that 'big' failure experiences included accounts of a failed start-up in the pharmaceutical industry, not finding a funder to develop a promising idea in pharma; a DJ quitting their job because of lacking success, or musicians failing to find a label or enough listeners for their music. 'Small' failures, by contrast, describe intermediate setbacks as a "generally accepted […], albeit unwelcome, outcome of the experimentation process" (Khanna et al., 2016, p. 437). In our data, small failures include examples such as receiving negative reviews, experiencing team conflict, not finding supporters, or working on an idea that only functioned for a short time.

We considered both small and big failure as a failed expectation (Dahlin et al., 2018) and included them in our analysis with equal rigor. This decision is based on our assumption that failure is a mundane experience, and that 'big failure' is commonly considered as the result of an accumulation of unacknowledged 'small failures' (Cannon & Edmonson, 2005). Including both types allowed us to provide a rich pallet that illustrates the multiple facets of failure experiences (Skaggs, 2023) as represented with the first-order codes of our data structure (Figure 1).

Step 2 *"Categorizing and aggregating dimensions of expectations that shape creative projects"*: Next, we developed secondary codes that related to some of the concepts used to describe creative processes in the extant literature (Gioia, 2021). We coded experiences of failure, amongst others, as induced by conflict, by deadlock because of excessive rigidity or flexibility (e.g., Habersang et al., 2019), by the lack of idea champions and public appraisal (e.g., Perry-Smith & Mannucci, 2017), as well as by the disparity between resources invested to produce a creative output and the likelihood of commercial success. We then categorized these secondary codes further to reflect that variety of disappointed expectations with creative projects. From these categories, we developed three different dimensions of expectations, which

we considered to be ideal typical constructs and which reflect evaluative principles (Stark, 2007) that inform an experience of failure. Given that our interviews covered both music and pharma, we view these dimensions as significant fot both fields. These dimensions are *uniqueness* ('the project idea is original and different from others'), *do-ability* ('project participants possess the requisite skills, technologies, and legal affordances to carry out the project idea'), and *resonance* ('the project idea generates trust, reputation/status and/or financial reward'). Figure 1 presents the data structure for this coding process.

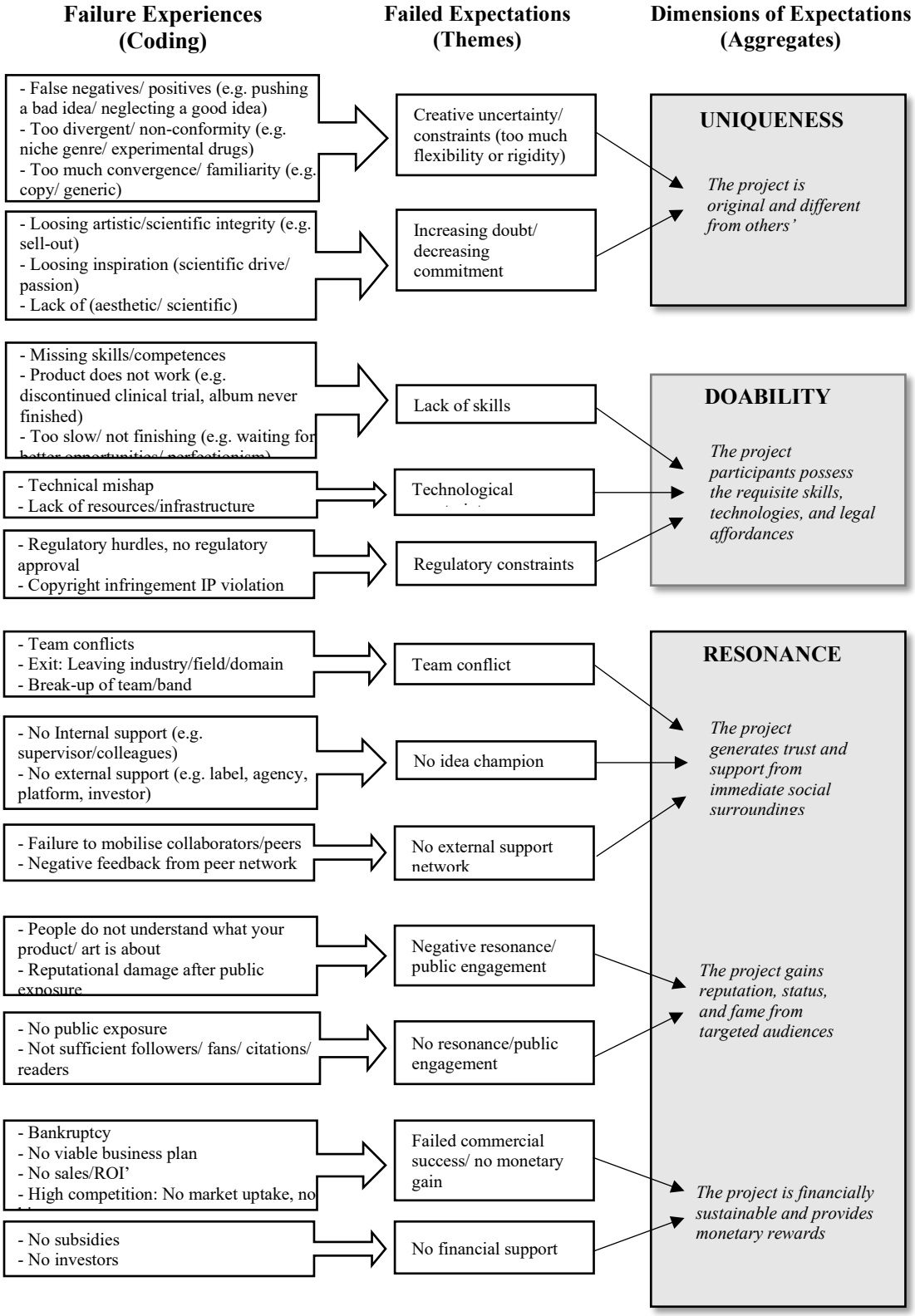

Fig. 1. Data Structure of Failure Experiences and Expectation Dimensions.

Step 3 *"Understanding responses to failure in expectation dimensions in a creative project"*: Equipped with this understanding, we focused on two specific creative projects: one in the domain of science and the other in the arts to look for our failure dimensions and analyze the responses of actors to setbacks. In the science field, we zoomed into the daily work of a research team at a research institute funded to discover molecules for new drugs. In the arts, we studied a band's creative journey as they produced their first studio album. Each project was followed by an author 1 and author 2 respectively for over two years, conducting multiple interviews with the participants. Using this data, each of these authors created a chronological narrative highlighting the setbacks and challenges faced by participants in the projects. We identified the nature of these setbacks as pertaining to the dimensions of expectation of the creative project, i.e., if they challenged the project's uniqueness, do-ability, or resonance, to analyze how actors acted upon project setbacks regarding each of these dimensions. In both cases, two coping practices stood out. We found that in the face of setbacks actors either prioritized one dimension of expectation over others to compensate for disappointed expectations, or they realigned certain project expectations to a new development opportunity in other dimension of expectation.

Following our analysis we describe how these two coping practices shape and constantly reconfigure a three-dimensional evaluative space that determines what is worth doing in creative projects. It illustrates the room that creatives have to manouver and thereby simultaneously shape a somewhat bounded space of interconnected expectations, which frames the possibilities of both failure and success experiences. We found that while the response of 'prioritizing' changes the relative importance of failure dimension in the evaluative space, 'realigning' changes the meaning of a specific expectation dimension. We hence concluded that responses to disappointed expectations can maintain the evaluative space and thereby maintain the ongoing-ness of the creative project. Figure 2 illustrates how the three dimensions of expectations constitute the evaluative space of creative projects.

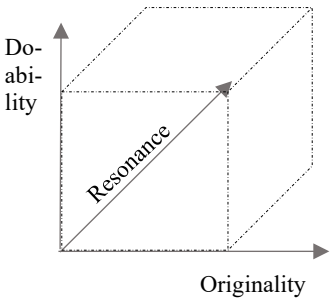

Fig. 2. A Three-dimensional Evaluative Space

FINDINGS PART I:
MULTIPLE DIMENSIONS OF EXPECTATION FOR CREATIVE PROJECTS

Our analysis revealed three dimensions of expectation, which shape failure experiences and opportunities in creative projects.

Expectation Dimension I: Artistic and Scientific Uniqueness

Actors expect their project to be scientifically and artistically original and different from existing projects in the larger field. We find that creatives describe the expectation as an ambition to produce something 'unique' and 'original', which in turn may fail if too much flexibility or freedom induces excessive *creative uncertainty*, or alternatively because of excessive *creative constraints* as the actors feel subject to rigid structures or formal requirements (second-order quotes) (Habersang et al. 2019). Failed expectations then emerge from having pushed the 'wrong' idea, or alternatively neglected a 'good' idea (i.e., 'false negatives', 'false positives'), or having invested in ideas that turned out to be too divergent from (e.g., an unsuccessful niche genre, an experimental drug) or too familiar (e.g., copy/generic) with their field to be considered unique (first-order codes). We also find that failed expectations emerge from *growing doubt* or *decreasing commitment* towards the creative project's uniqueness (second-order codes). These concerns are explained as losing one's self-imposed artistic or scientific integrity (e.g., becoming a sell-out, leaving research for the private sector), losing inspiration, passion and drive, or bemoaning the creative project's lack of aesthetic or scientific originality (first-order codes).

For example, in both music and pharma, a reappearing concern was the creatives' struggle to maintain their own artistic or scientific integrity while navigating the uncertainty of what it means to create novelty within their respective fields. This creates a dilemma between, remaining productive with regard to external demands and struggling to maintain a self-imposed creative authenticity. One artist states, '*At the end of the day, I want to look myself in the mirror'*, a sentiment mirrored in the quote from a scientist: '*I could be working my ass off and none of this works. I would say it is [inc.] personal, so I do not have any regrets later*.' This means that creatives carefully consider their personal investment and their labor alongside the proclaimed purpose or meaningfullness of the project, including the acceptance that the majority of their ideas will never see the light of day, i.e., not be considered novel enough or merit further appreciation.

Expectation Dimension II: Do-ability

The second dimension describes the collective failure experience of actors pertaining to the expectation that a project is *doable,* as project participants must have the skills, technologies, and legal affordances at their disposal to effectuate their ideas. Actors are disappointed if a certain *lack of skills* (second-order code) prevents the idea from being turned into a tangible output. This refers to a lack of competence, being too slow, too pedantic or too inefficient to finalize the product (first-order quotes). These sentiments pertain to the gap of what the project aims to achieve and whether the skills are available to make it happen, as illustrated by the following two quotes:

> There is a certain belief (…) that only that which is completely polished and perfect should be presented. (…). Every practice and skill has to have craftmanship (…). Don't you have to give yourself the permission to fail? Unfortunately, we don't seem to allow people to fail. There is this embedded message that (…) you can't create anything "half-baked" out of something. (m-170220iA: 70-73) (music)

> Now, when you are in a group where no-one has ever had to do with an experiment, no one in this group can say, 'What new thing can I develop, what new ideas should I have?' This is why we wandered throughout the entire building to find someone [with expertise]. (p-17-01-12.iFE)(pharma)

While a lack of skillful mastery, professionalism, or accuracy seems to constitute a disappointed expectation in the creative project, similarly, creatives also report *technological or legal constraints* that impede them from developing an artistic or scientific product 'that

works' (second-order quotes). They describe technical mishaps, regulatory hurdles, copyright infringements or IP violations as what constitutes and contributes to not meeting the expectation of do-ability (first-order quotes). We found several reports about the loss of songs or data because of technical mishaps ('*XX re-formatted my computer and the complete set of songs has just gone'*, m-14.11.17iA, music). The lack of skills and technologies or the imposition of legal requirements can thus hinder the development of a concrete creative output, such as a band failing to produce an album despite studio time, scientific proof that cannot be established even though many experiments have been conducted, or a drug compound not passing a clinical trial because it does not fulfil the expected legal requirements for efficacy or safety.

Expectation Dimension III: Resonance

The last dimension, *resonance,* describes the actors' disappointed expectations in relation to generating positive associations and recognizability within their project's field. This dimension refers to how the actors perceive the reaction of other stakeholders in the project (such as collaborators, supporters, audiences or customers). In accordance with the actors' experience, the project then fails to generate resonance in relation to three categories: a) mobilising trust and support from the immediate social surroundings throughout the creative process; b) enhancing their reputation, status, or level of fame among a targeted audience and in a wider external environment; and c) being financially sustainable or generating monetary rewards.

Expecation of generating trust and support from the immediate social surroundings. This category describes how a project may fail to sustain a team, an organization or a support network. This can be experienced as an internal conflict or the exit of team members, the lack of an 'idea champion' or failure to mobilize immediate external support (second-order codes). For example, internal conflict or an exit can relate to the break-up of a band, or colleagues leaving a project to move on to another domain or industry. Another common indicator of failing to push the creative project further is that supervisors or producers reject the scientists' or artists' ideas or ambitions, or that they do not even find a record label, or a donor as an 'idea champion' to support, and promote the project in the direction of success (Perry-Smith & Mannucci, 2017). The following quote illustrates how precarious the supportive relationship of a label can be for artists before they have 'proven their worthiness'.

> Hm, yes, this is such a well-known way of working for majors, which, of course, have a lot of artists they work with. And a lot of artists work like that, too. And, of course, with a major, especially if you're a newcomer, a bad experience with a video or a single is enough for them to stop believing in the project and simply drop it. (m-02/17/19) (music)

Similarly, creatives do not meet expectations when they fail to mobilize enough collaborators, or when they receive negative feedback from peers (first-order codes). For example, researchers report that their creative project may fail because the medical professionals on whom they depend in their clinical trials do not cooperate enough to conduct the trial in a satisfying manner.

> So maybe they don't want to pursue the study anymore. Or they don't have any patients at all, they just claimed to have patients. It is very often the case that they say "Sure, I have 100 patients". And then in the end they realize that they only have five. And then they don't feel like it either. (p-16.07.28iFM: 58) (pharma)

These quotes illustrate that if a creative project does not maintain a wider interest and generate socially supportive behavior from its immediate surroundings, aspects of, or even the entire project, can be experienced as failure.

Expectation to gain reputation, status, fame from targeted audience and external environment. This category describes how expectations can be disappointed due to a lack of resonance and public engagement (second-order codes). Negative resonance and lacking public engagement is experienced when people do not understand the creative work, which leads to negative peer reviews, rejection by the regulatory agencies, or to reputational damage following public

exposure (first-order codes). Insufficient resonance or public engagement is experienced through a failure to organize publicity and win critical acclaim, failure to mobilize followers, fans or citations, or their ability to outshine the competition for a market or hit (first-order quotes). A study may fail to be taken up by the peer community, for example, or an album may lack critical acclaim in the case of music, which is linked to clicks and followers on online platforms or citation counts.

In the music industry, a central concern regarding potential failure is the reputational damage that public exposure can cause following a published interview or music video. An artist and their manager report how they

> (…) received bad criticism from many different sides and opinion makers, because of what we included in the music video. (m-16.12.13iFE) (music)

Similarly, in pharma the failure to promote the importance of an unmet medical requirement will lead to reduced incentives for investors to support a research project. The lack of resonance extends to broader field dynamics such as the regulatory requirements and market expectations. The following two quotes show drug developers not being able to convince the regulatory agencies of the need for their new drug, and musicians failing to create resonance within an already saturated market:

> And Europe has made a value judgement that it would rather let its citizens die of existing resistance today than facilitate a novel and more progressive regulatory pathway to get our product approved in Europe. (p-14.9.2022iRM) (pharma)

> Every week, five or six songs get sorted out, as those places automatically go to the established bands because that is what the market demands. (m-16.11.24iFE) (music)

This unmet expectation is experienced in relation to making the creative project visible to opinion makers in the market or to a broader public, and is closely linked with expectations of approval, reputation, status, or fame.

Expecation of financial sustainability and monetary rewards. A project may disappoint the expectation to be given financial support from the very beginning or in the course of the process, or fail to achieve commercial success in the end. In such a case, a lack of monetary gain is seen as unmet expectation or not being able to mobilize financial support from investors because the prospects of the composition's profitability are meagre, given its 'treatment for orphan disease' status.

> The biggest problem is that you cannot make any money with such an approach, so people are just not investing in it. I mean these targets are still good, the targets are still fine. We were working on a first-in-class approach, that is a higher bar, there is more scientific risk involved there, and still the market is broke. (p-25.8.22iRM) (pharma)

Creatives in the music industry experience similar challenges of not receiving financial support for development efforts that do not seem to be promising in terms of profitability.

> You always have a problem when the first meeting ends in such a way that they still don't hear a hit. Because then it's a bit like "Ah, hmm". (…) That's merciless. If you don't have a hit, you don't need to release a record. For them it's just a utopian loss-making business, so they prefer to say "nobody's waiting for this, let it slide". (m-17.02.13iFE) (music)

This quote reflects the fact that the creative project must address a commercial demand directly to gain financial support. But even if a company manages to mobilize enough financial support to successfully develop a product, it may still fail to become profitable – despite its scientific success.

> Since [my company] went public in 2014, we have raised nearly 600 million dollars in dilutive and non-dilutive capital. To get to this point here today and in the many years before we went public, we privately raised 300 million dollars (…) capital. Yet we are still not profitable. We still cannot tell you today that we can stand on our own two feet. (p-14.9.2022iRM) (pharma)

The same coupling between producing a creative output without meeting the expectations of commercial success can be observed in the music industry.

> From a purely major company perspective, a conventional point of view, [album title] is not a success. (...) purely in terms of sales figures, it wasn't a success; not a huge success – as was expected. (m-171202iA_z2) (music)

In sum, this expectational dimension highlights the association between creative output and commercial success as threads that tie the creative project together.

FINDINGS PART II: SHAPING THE EVALUATIVE SPACE OF CREATIVE PROJECTS

The second part of the findings illustrates with the help of two case vignettes the responses of actors to experiencing project setbacks in each of these three dimensions of expectation.

Case Vignette of a Pharma Project: Discovering Novel Molecules in the Lab

This vignette focuses on a scientific team based at a research institute, who study a particular type of bacteria to discover new molecules for eventually developing novel drugs. The research project's original hypothesis and project goal was based on developing a particular miniaturizing technology, a mechanism that would reduce and thereby intensify cell material to speed up the analysis of a given molecule. To create and test the technology, the team needed many bacteria to allow them to isolate and analyze molecules. They initially relied on the common yet expensive practice of purchasing these bacteria from external providers. The project received notable funding to test and explore the technology, but did not produce any novel or unique results, as too many other similar mechanisms already existed (*uniqueness).* Moreover, the technology was slow and did not appear to be effective in terms of detecting and analyzing new molecules (*do-ability*). In consequence, the expectation of the project leader and their long-term goal of developing a commercially successful business case were disappointed time and again (*resonance*). The researchers started doubting if it was worthwhile continuing the project at all.

In an effort to save resources, the scientists began to collect samples to extract the bacteria themselves as an alternative to buying them from external providers. They mobilized their colleagues to collect these bacteria from different places and, over time, amassed a considerable collection of samples. Momentarily prioritizing the collection of samples to build a growing database of bacteria gave the researchers a new sense of purpose in terms of the do-ability of the project and deflected their efforts from the other two disappointed expectational dimensions (*uniqueness* and *resonance*). Finally, after a consultative discussion with the institute's leader regarding the stalled progress of the project, they discarded the idea of working on the miniaturizing technology in order to push the project into a new direction. The researchers decided to shift the focus of the project to the collection of bacteria that the team had accumulated over time, an initiative that had initially been developed only as a side project to save costs. Considering how much the collection had grown over the years, it was now appreciated as worthwhile in itself. The project team began to cooperate with bioinformatic researchers, for whom the sheer size of the collection provided a valuable source for developing big data analytics (*uniqueness*). The merged project received new funding to hire new researchers, who sustained the research group further over time. In other words, the miniaturizing project lacking *uniqueness* became the starting point for a new project in which *uniqueness* was reframed as owning such a large und unique collection of bacteria. This allowed them to develop a new *do-able* bioinformatic screening tool based on the masses of data the team had collected, with new promises regarding the *commercial* potential of the project. It now also coincided with other work at the institute and allowed for enrollment of other supporters (*resonance)*. In sum, the situation of prioritizing one expectation over others as a reaction to

setback enabled the team to maintain the ongoing-ness of the project (*do-ability)*. They eventually realigned the project with a new opportunity and thereby changed the reason for its uniqueness. This vignette illustrates how the project was able to continue despite disappointed expectations because the actors were able to change, reprioritize and realign their expectations.

Case Vignette of a Music Project: A Band Producing its Debut Album

The second vignette looks at a newcomer pop band that had produced its first debut album and was trying, through various activities such as concerts and video releases, to gain a foothold in the pop scene. The history of the band began while its individual members were still at school in a rural area not far from the capital. At the beginning, the project was intended as a 'fun project' (*resonance – trust*), and 'the joy of the thing' was in the foreground (interview singer). The band's expectations were that their rehearsals and concerts should be fun for them. After a year in existence, the band celebrated their first major successes with a YouTube video (*resonance – reputation*) produced by the band's keyboardist in the style of music videos of the 1980s. As a result, they received more concert requests and, soon after that, a first offer from a major label (*resonance – capital*). Up to this point, the band's history was a success story. Once a major label offered them a deal, however, the question arose as to what it would mean for the band and their expectations regarding artistic freedom (*uniqueness*), and whether they should commit themselves to the production of several albums for the label. Although this would secure them sustainability (*resonance – capital)*, it could also have a negative impact on their reputation, given the band's identity within the independent music scene (*resonance – fame*). After much deliberation, the band decided against taking up the offer, because they did not want to risk their reputation and their artistic freedom merely to fulfill the hope of having financial security – a decision that reinforced the band's existing self-identity. The label's offer was rejected and the band was able to finance the debut album via government sources.

The band then started to work on their debut album with a very successful pop producer. At this point, the band members felt confident and hopeful about their ensuing success. However, during their work on the album at the studio, conflicts arose between individual band members and songs were not prepared well-enough for proper recording sessions. The band members and the producer began to question the *do-ability* of the project. The producer decided, in consultation with the band, to divide the recording into two blocks with a four-month break in between, so that they could continue working collectively on the songs and resolve the conflicts, before re-entering the studio, in an effort to strengthen the trust and internal resonance. However, after four months the band had not resolved their quarrels, so the producer decided to work separately with individual members on selected songs, so that the recording process would not need to be stopped. The producer's decision was a response to the band's failure to solve their internal conflicts and that various songs were not finished (*do-ability)*. The band was under considerable pressure because they had invested a lot of energy and money into the production and had planned to make the album specifically original by choosing a wide variety of songs (*uniqueness*). In an unusual move, the producer changed his normal way of working to avoid cancellation of the project. He engaged in the band's internal disputes by arranging several crisis meetings. In the course of the second block of recording, the band managed to complete the remaining songs and recover from their internal conflicts. The album was completed and received good reviews.

However, the first concerts had to be canceled due to the Covid pandemic. As a result, the band 'fell into a hole' (interview bassist), as it could not satisfactorily present its work to an audience (*resonance – reputation*). Furthermore, the band found it difficult to switch beyond live music to alternative channels to successfully market the album. Due to the lack of concerts (*resonance – fame*) and the past conflict (*resonance – trust*), one member left the band. Again, the question arose as to whether it would still make sense to continue working. Neither the

financial backing nor the internal cohesion was secure. The member who wanted to leave was also an essential resource for the band for video productions and the design of the website (*do-ability*). The band members asked themselves whether they could change into a collective format, so that individual members would become interchangeable. Instead of regarding themselves as a band, the members decided to be an open collective. This shapeshifting process ensured the ongoing-ness of the creative project.

This vignette illustrates how the band's expectations, like the previous example of the pharmaceutical project, were initially equally pronounced regarding all three dimensions of uniqueness, do-ability and resonance (Figure 2) and could even increase over time, as the band accessed more resource and reached a wider audience. Yet, as the band first renounced investment from the major label and then struggled to create a new album, their expectations were disappointed regarding do-ability. In response, the producer prioritized the expectation of *do-ability*, even if that meant the album was not going to be as *unique* as expected. In addition, the band also experienced disappointed expectations in the dimension of *resonance* as they could not perform their new album in front of an audience. One member left the band. To cope with these setbacks, the band members realinged their *do-ability* expectations by developing a new collective identity (from band to collective), which allowed them to continue to play in a changed configuration under a name and with songs that had already generated resonance and achieved uniqueness.

Visualizing the Evaluative Space

The vignettes illustrate how creatives constantly react to and maneuver failed expectations to maintain the ongoing-ness of a project; in so doing they shape and change the relative importance or meaning of these expectations. It demonstrates how, in the face of setback, actors' responses boil down to two coping practices of *(re)prioritizing expectations* or *(re)aligning expectations with new opportunities.* This can generate new ways of continuing to work and creating new, potentially more promising projects or project configurations, despite the experience of failure.

The interconnected character of these dimensions of expectation can be describes as a malleable three-dimensional evaluative space within which the creative project takes place (Stark, 2007, Zangerle et al. 2023). This space is bounded by the expectations of *uniqueness*, *do-ability* and *resonance*. It frames what is worth doing in creative projects (Coldevin et al, 2019), and consequently, the possibilities of both failure and success. Figure 3 visualizes how the varying responses to disappointed expectations shape this space.

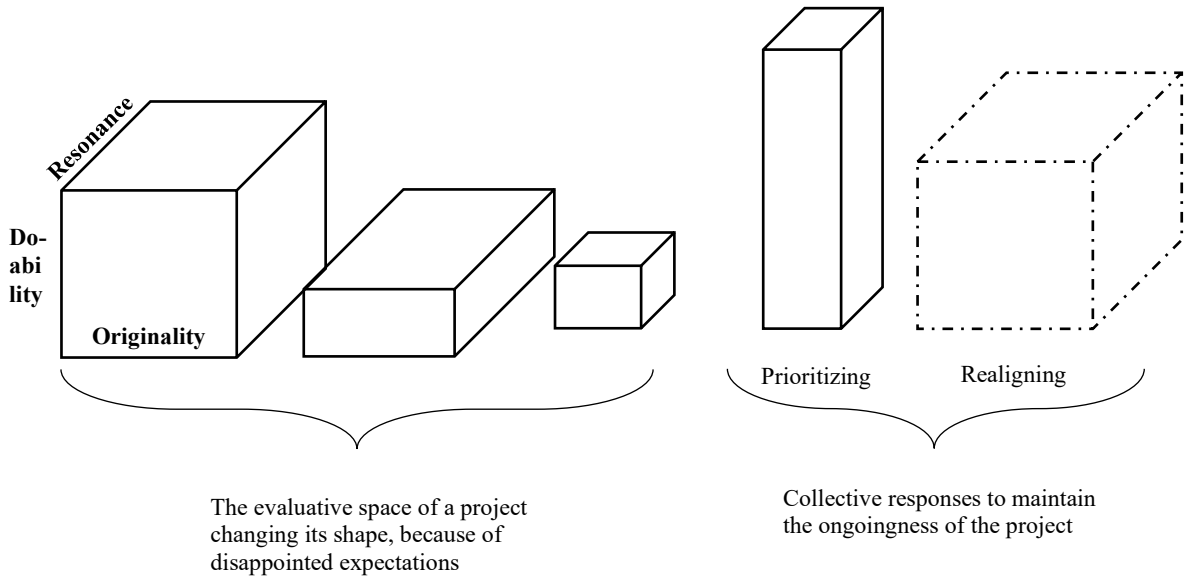

Fig. 3. The Changing Form and Volume of a Project's Evaluative Space.

The evaluative space that structures what is worth doing in a creative project can diminish, as expectations are disappointed regarding each dimension. The project threatens to reach an endpoint as the evaluative space leaves no more room to maneuver. However, by re-prioritizing one dimension over another, the evaluative space can open up to keep the project going. By realigning the project with new opportunities, the expectations can become re-imagined with new meaning and the project remains in place, even though its objectives may change. As long as sufficient space remains and is malleable, the project can continue.

DISCUSSION AND CONCLUSION

Extant work has long pointed at the integral and necessary role of failure as a sign of the 'dynamism of science' (e.g., Gross, 2023; Firestein, 2023) or as an attestation to artistic perseverance and ingenuity (Lewis, 2014; Halberstam, 2011; Le Feuvre, 2010). Echoing such attitudes to failure from the scientific and artistic fields, Cannon and Edmondson (2005, p. 300) understand the disappointment that failure produces as being "a first step in a journey of discovery and learning". Failure is predominantly defined as not meeting a previously stated goal (Dahlin et al., 2018), i.e., the non-success of a particular endeavour such as a failed change project (DeKeyser et al., 2021), failed learning (Cannon & Edmondson, 2005), or a failed business (Dobusch et al., 2022). This conceptualization of failure as based on more or less stable expectations becomes problematic when considering creative projects which are characterized by an uncertain, tentative, and open-ended process (Leoncini, 2017). This observation suggest that we should study failure by recognising that creative efforts are not linear and singular, but emerge from ongoing and iterative revision practices (Coldevin et al., 2019; Hua et al., 2022).

Our findings underline this understanding of creative projects as they illustrate how responses to failed expectations change what is worth pursuing or not. Following Stark (2007), we understand expectation dimensions as being distinct, yet interwoven evaluative principles against which creatives plot their actions and thereby create, maintain and change the evaluative space in which projects take place. This also means that any evaluation of achievement is contingent on changing project expectations. The dimensions of expectation that form the evaluative space allow for capturing common causes of failure as emerging both from external

or internal aspects (Mellahi & Wilkinsen, 2004), as well as failure stemming from excessive rigidity or flexibility, and conflict (Habersang et al., 2019).

This also means that, while these expectation dimensions are experienced subjectively, they are not expressions of individual preference or choices, nor are they independent and discrete entities. They are socially constructed parameters of an evaluative space that is essential for the development of a creative project, and which shape the 'social experience of failure' (Petit, 2023). The evaluative principles of creative projects are thus enacted, and reinforced as actors draw on them and respond to them being fulfilled or disappointed and in so doing simultaneously frame the evaluative space that guides their activities. This underlines the findings of studies on feedback and the collective character of creativity, which show that ideas are not merely evaluated in a systematic process of idea evaluation ex post, but that feedback and evaluation is an interactive process that influences the trajectory of the creative project throughout the entire process (Hargadon & Bechky, 2006; Harvey & Kou, 2013). In consequence, creative projects are evolving, complex compositions, which change in 'dialogic relationships' between ideas, their makers, and their users through a succession of 'evaluative moments' (Coldevin et al., 2019, p. 1390).

This answers the call for a processual conceptualization of failure that acknowledges the open, tentative, and changing nature of creative projects (Otto et al., 2024), while also emphasizing that failure has specific endpoints. An endpoint failure, then, occurs when those involved run out of possibilities to deploy the coping practices of (re)prioritizing or (re)framing expectations. Such a process view of failure enables researchers to capture the sequences, conditions, and events through which failure unfolds over time on different levels of analysis: individual, (project) team, organization (or its subsystems), interorganizational arrangement or field. For example, tensions caused by a failed change initiative stimulate organizational efforts and eventually provide new opportunities for the organization to reframe its failure experience into a new development (De Keyser et al., 2021). However, a process view of failure always risks overemphasising the relativity of failure (i.e., over time every failure can be reframed as a new opportunity) and can lead to competing explanations and conceptual confusion over how or why failure unfolds (Habersang et al., 2019). While our findings support the notion of malleable expectations, they simultaneously point to the fact that the three dimensions of expectation in relation to evaluative spaces for creative projects are enduring and bounded (Otto et al., 2020).

Using the three expectation dimensions (uniqueness, do-ability and resonance) as relating to evaluative spaces provides a nuanced, if not 'kaleidoscopic' understanding of failure in creative projects (Skaggs, 2023), which takes into account the multiple failure experiences that shape creative projects. For example, the album is not primarily made with the hope of becoming rich, it is also a matter of being part of a band that nourishes friendship and a sense of collectivity. The science project is not only meaningful as a commercial or scientific endeavour, it also responds to societal demands for public health improvement and nurtures the passions of individual scientists. Failure regarding these multiple expectations can then be conceived of as shades of grey rather than a binary understanding of success and failure in terms of output. This shows that success in creative projects also involves creating and maintaining ways to continue.

With the purpose of developing a general conceptualization of the role of failure in creative projects, our analysis concentrated on similarities rather than differences regarding failure in arts and science. The limitations of the study therefore relate to the commonalities of failure experiences in arts and science as specific fields, which may not be easily transferable to other creative domains and evaluative spaces. Future research should examine how the characteristics of a specific field, such as time frames, resource needs, and regulatory

environments could create different expectation dimensions and failure experiences, and highlight these differences to explore the specificity of different creative industries and their varying levels of tolerance concerning failure. This will provide a more comprehensive understanding of how different fields manage and react to failure.

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