

Conceptualising and Recognising Radical Creativity in Art, Architecture and Design

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Abstract: With a need for novel solutions to complex societal challenges, creativity has become essential. Various creativity and design concepts are used in organizations, often ambiguously. This qualitative study explores how design, art, and architecture faculty interpret radical creativity and its impact on their fields. A thematic analysis of 14 interviews reveals a focus on the transformative nature of radical creativity. The findings underscore challenges in assessing radicality, which might act as an indicator for its potential. Future research directions are suggested based on these insights.

Keywords: Design Creativity, Multi-/Cross-/Trans-Disciplinary Approaches, Innovation, Radical Creativity, Novelty

1 Introduction

Creativity and innovation have been noted as essential capabilities for professionals and organizations alike (World Economic Forum 2023; Anderson et al., 2014). Particularly with the rise of design thinking and service design, organizations are increasingly taking note of design beyond new product development (Knight et al., 2020). However, the plethora of different concepts and their varying usage in practice can create challenges in creating shared understanding in organizing for creativity.

As an example of an ambiguous concept, this study focuses on radical creativity. While the distinction between different types of creativity have been long recognized - such as little c and big C creativity (Simonton, 2013) - “radical creativity” has been less commonly examined. However, in the realm of innovation discourse, incremental and radical innovation have been distinguished, revealing partly differing enablers and antecedents (Ettlie et al., 1984; Slater et al., 2014). Disruptive innovation has the potential to introduce novel solutions that can address the complex challenges society faces today, including climate change, healthcare disparities, and resource depletion in ways that incremental improvements may not be able to achieve (Chivot, 2023). Similarly, Abel (2009:54) draws attention to the ability of radical creativity to redefine a domain, because “radical creativity transgresses and even jettisons the rules and basic patterns of an underlying generative system in order to usher in new rules and principles and thus organize the material in a fundamentally new way.” Defined as “ideas that differ substantially from an organization’s existing practices” (Madjar, Greenberg and Chen 2011), radical creativity offers practitioners an approach to question existing methodologies and reframe current practices. As such, better understanding of radical forms of creativity may enrich our understanding of the creative process and inform strategies for fostering disruptive innovation that can transform industries and societies.

The current study advances understanding of what radical creativity entails in design creativity, drawing from fourteen interviews of design, art, and architecture faculty to examine how they conceptualize radical creativity. We compare these conceptualizations to established creativity models and discourse to identify salient points of departure for further examination and future research.

2 Background

Creativity can be described as a dynamic force that propels innovation, fosters originality, and drives human progress, encompassing a diverse range of domains from the arts and sciences to everyday problem-solving. The definition of creativity as something that is both novel and useful (Stein, 1953; Sternberg and Lubart 1999; Boden 2004), or novel and effective (Runco and Jaeger, 2012) is often employed. To navigate the landscape of creativity, one must first acknowledge that it is a multifaceted phenomenon influenced by various cognitive, social, and environmental factors which is experienced at an individual or sociocultural level (Sawyer and Henriksen, 2024). Creativity theories and frameworks endeavour to navigate, and make sense of this complexity, to understand the creative process and its outcomes.

Existing theories of creativity seek to unravel how creative thinking unfolds, examining the interplay between imagination, knowledge, motivation, and the external context (Ivcevic, 2009). Early creativity frameworks include the Four Ps Framework (Rhodes, 1961) which defines creativity through *person* (individual characteristics, such as cognitive abilities, knowledge, and personality traits), *process* (creative problem-solving, from problem identification to idea generation and

implementation) *product* (the outcomes of creative endeavours) and *press* (the impact of the external environment on creativity). The Torrance's Creativity Model (Torrance, 1965), in turn, combines *fluency* (the ability to produce a large quantity of ideas), *flexibility* (the capacity to shift between different perspectives and approaches), *originality* (the unique and novel nature of ideas) and *elaboration* (the development and refinement of ideas into meaningful and detailed outcomes). As such, already these early models make some note of the role of novelty (originality) and external environment (press) on creativity. Defining key characteristics or influences on the creative process contribute to an understanding of the context in which creative thinking may occur but does not fully represent the complexity of creativity. To achieve a more holistic understanding of creativity, the relationship between the characteristics and influences must be understood in relation to the outcome of the creative process. Various process models, building on earlier theories and frameworks of creativity, have noted the role and embeddedness of assessment in creative processes. This focus contributes to a deeper understanding of creativity as the process and outcome can be evaluated to identify whether the process is indeed creative and the outcome novel.

One example of integrated evaluation of creativity as part of the process is Amabile's (1996) componential model of creativity, which includes three driving components: domain-relevant skills, creativity-relevant skills, and task motivations. The model presents the components as interconnected and interdependent. Five stages of creativity can be noted in the componential model of creativity: problem or task identification, preparation, response generation, response validation and communication and outcome, moderated directly or indirectly by the social environment, task motivation, learning, domain-relevant skills, and creativity-related processes (Amabile, 1996). The process either ends at the outcome phase, with the attainment of a goal or failing to generate a reasonable response possibility, or loops back to the process if some progress towards the goal is noted rather than success or failure. Here, the role of evaluation is particularly salient in two phases - during response validation, where in order to assess the response domain-relevant skills are referenced to determine the appropriate criteria or matrix to use, and in the outcome phase to distinguish success, failure and progress from one another.

Yet such assessment of creativity is far from straightforward, with research highlighting the subjectivity and subsequent need for reference points. Assessing the creativity implicit in the design of a product, for example, should be facilitated by an external expert against an established set of guidelines (Lee et al., 2020). The componential model of creativity provides input for creativity assessment through the four components of the social environment, domain-relevant knowledge, creativity-relevant skills, and task motivation (Hennessey and Amabile 1999). The Consensual Assessment Technique (CAT) emerged from Amabile (1983) work as a method to evaluate the creativity within both artistic and verbal 'products'. While more recent studies have highlighted a need to harmonize the assessment process and include more evidence to support the evaluation, the relevance and flexibility of the technique is still praised (Baer and Kaufman, 2019; Cseh and Jeffries, 2019; Barth and Stadtmann, 2021).

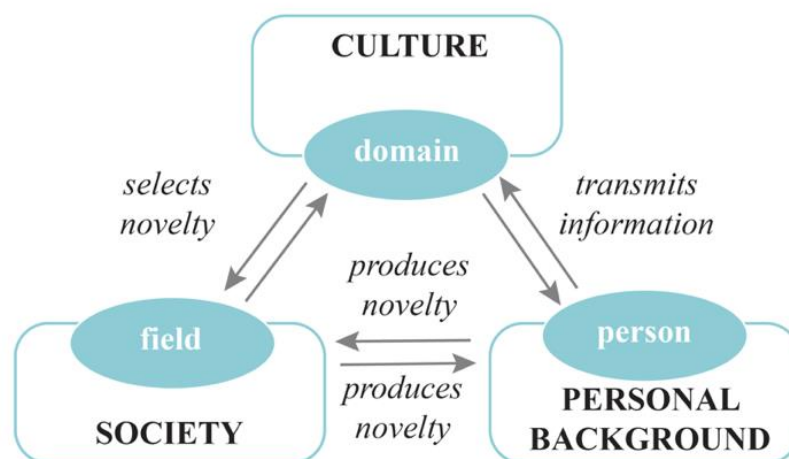


Figure 1. Csikszentmihalyi's (1999:315) Domain Individual Field Interaction (DIFI) Framework (recreated)

The understanding and evaluation of creativity is grounded in contextual experiences and processes, represented in the social environment component of the componential model of creativity (Amabile 1996). The interrelated nature of experience, context and creativity is further captured in Csikszentmihalyi's (1999) Domain Individual Field Interaction (DIFI) framework. The framework presents a 'more unified approach to studying human creativity that provides an integrated view of individual creativity within a social and cultural context'' (Saunders et al., 2010, p.104). The model (Figure 1) visualizes the social situatedness of novelty: novelty is selected in an interplay of society and culture or field and domain and produced and simulated in an interplay across field and person (Csikszentmihalyi 1999: 315). Here, the

domain is the cultural symbol system within a specific area of creativity, defined by rules and vocabulary, that varies across disciplines (Simonton, 2012). The *person* is viewed as the totality of their experiences and personal background, while the *field*, in turn, comprises individuals organized as gatekeepers who understand the domain's rules (Sawyer and Henriksen, 2024).

These models highlight the complexity of assessing novelty, despite its centrality in creativity. Indeed, even though novelty has been noted as the foundational criterion for creativity (Diedrich et al., 2015), both characteristics, as well as the need for possible alternative definitions or additional criteria, remains under discussion (Harrington, 2018; Mishra et al., 2018; Schubert, 2021). Given that theoretical conceptualizations of radical creativity highlight the transformative or disruptive potential of it (Abel, 2009:54), this poses an interesting question of how different types of actors recognize and conceptualize radical creativity. The current study sheds light on the perceived nature and characteristics of radical creativity based on a qualitative interview study with fourteen design, art and architecture faculty members.

3 Research Methods

This qualitative research study employs thematic analysis to investigate the nuanced conceptualisation of radical creativity of faculty members from art, design and architecture in a Nordic university. Fourteen semi-structured interviews were conducted with faculty members from various creative disciplines. Five participants were from various design (Designer1–5) disciplines, four participants were active in creative technologies and media based (CreativeTechnologist1-4) fields, two were active in design and the environment (CreativeEnvironmental1-2), two from architectural and built environment (EnvironmentDesigner1-2) fields and one from an art (Arts1) focussed field. The field codes are included in the participant codes to provide disciplinary perspectives. Participants were at different stages of their career, ranging from very recently having joined the institution to fully tenured. Interviews lasted on average 60 minutes and were transcribed verbatim. The questions posed to participants were open ended, asking them to share their understanding of radical creativity, and how, if at all, it manifested in their practice. Studies of creativity often recognise product, performance, behaviour, and outcomes measures as elements which can be evaluated (Mumford et al., 2012). Given the relative newness of radical creativity as a concept in the institutional context and its relative rareness in academic discourse of creativity, participants were encouraged to share their broad interpretation of the concept.

Thematic analysis, a widely recognized and flexible method within qualitative research, was chosen to delve into the rich and diverse accounts of participants, capturing the depth and complexity of their perceptions. Outlined by Braun and Clarke (2017), the process is an iterative cycle of identifying, analysing, and reporting patterns or themes within the data. The choice of semantic-level thematic analysis is particularly apt for this study because it allowed for a rigorous and systematic exploration of participant narratives. The method facilitates the identification of patterns and themes that emerge organically from the data, providing a nuanced understanding of the individual conceptualisations.

4 Results

Through an iterative process of coding and categorisation, a set thematic clusters emerged shedding light on the multifaceted conceptualisations of radical creativity. This section not only presents a synthesis of participant voices but also seeks to establish a meaningful connection between individual narratives. The emerging themes refer to transdisciplinary ways of working; creativity in framing, transformative, freedom to embrace alternatives, the requirement of validation and adjusted timescales.

4.1 Transdisciplinary ways of working: practice beyond a single domain or field

In the exploration of radical creativity, several participants noted that creativity is inherently tied to transdisciplinary collaboration and the integration of diverse knowledge domains. The concept of radical creativity was seen to be closely associated with engaging not only with epistemologically similar disciplines but also with those that are vastly different. Embracing the diversity of perspectives, methodologies, and terminologies were noted as a crucial aspect of this process. The goal was to open epistemologies, learn from each other, and discover novel methodological approaches that can lead to radically creative outcomes.

“I think a lot of novel and valuable things can be found if we look at what lies at the intersection of our disciplines [...] But maybe also, radical creativity might also be the vehicle to drive these projects” – CreativeTechnologist4

“When you bring together different knowledge from different fields. Then you might get a kind of new avenue of thinking or new material, a kind of combinations or something new, which only happens, when you bring these different knowledges, different, maybe it might be practical knowledge, maybe it might be some kind of technical knowledge, or

knowledge related to tradition or materials per se how they act. So, when you bring these together, then I think we are facing this radical creativity.” – Designer4

The essence of radical creativity was seen to lie in breaking free from disciplinary frames and preconceptions, actively seeking inspiration from various domains, and adopting unconventional approaches. This involved challenging the traditional boundaries of disciplines and acknowledging that different fields may perceive and approach problems in unique ways. The crosspollination of knowledge from different schools and tracks was emphasized, with the understanding that radical creativity transcends the confines of a single discipline.

“I do associate radical creativity quite closely with transdisciplinary research. But maybe transdisciplinary in the sense of involving interdisciplinarity not only epistemologically close disciplines but epistemologically also very diverse disciplines” – CreativeEnvironmentalist1.

Radical creativity was not seen as limited to the realms of arts or traditionally creative fields; rather, the participants described it extending to all disciplines, encouraging individuals to question their own disciplinary boundaries. The collaborative process was seen to demand an open-mindedness that goes beyond the notion of right or wrong, fostering a new way of seeing field-specific knowledge through multiple angles. The recognition that everyone has something to contribute, and that there is something beyond one's own disciplinary frame, were noted as key aspects of fostering radical creativity.

“How that relates to radical creativity, is that you open up your own understanding and [...] so it's not about judging anymore, it's not about right or wrong, it's not about this discipline has, is prior to the other, it's about a new way of seeing field specific knowledge through multiple angles. And that I've found is quite creative and quite radical, also, both at the same time.” CreativeTechnologist1

“We have to understand it if we want to pull this off, we have to work together to have the motivation to pull it off and the motivation to learn something about the other things.” CreativeTechnologist4

The narrative also touched upon the relative nature of radicality, where an idea or approach may be considered radical in one field but not in another. The importance of questioning and evolving one's methodologies, rather than simply copying from other disciplines, was emphasized. Radical creativity, in this context, involved a continuous process of development and discourse, with a focus on the journey rather than a fixed outcome.

“I'm not protecting anything, I'm actually eager in expanding, and I'm also interested in, again, I mean it now positive, in misusing strategies from other disciplines for my own purpose, for a purpose which is targeted towards the challenge I'm working with.” CreativeTechnologist1

The discourse expanded to the role of creativity in driving projects and addressing complex challenges. Radical creativity was seen to bring together different forms of knowledge, leading to new avenues of thinking and innovative solutions. It was noted to involve a communal creativity that emerged from diverse perspectives, creating an exponential impact.

4.2 Creativity in framing: novelty beyond an outcome

The key insights of participants highlighted that creativity transcended traditional associations with art and encompassed a strategic and innovative mindset. Creativity, in this context, was not just about finding solutions but began with framing the right questions. It was seen to involve seeking answers to previously unanswered questions and creatively planning processes. The concept of radical creativity extended beyond established paradigms, as seen in the creative industries where solutions are sought for previously unrecognised problems.

“But in creative industries, what could radical approaches mean there, it could mean that we find some solutions that haven't been thought of earlier for some problems, or we might even figure out some problems that we didn't know exist. So those could be called radical findings or radical ideas [...] It's interesting, but the fact that we don't work on problem-solving seems to be sometimes quite radical, that we work more on this pre-problem area, kind of a pre-innovation field in most cases.” Designer3

The radical approach was noted to involve thinking in entirely new ways, questioning existing norms, and viewing things from fresh perspectives. Whether in problem-solving or the pre-innovation stage, the essence of creativity lies in this radical questioning and the ability to approach challenges with a new point of view.

4.3 Transformative: impact beyond our current situation

Participants also noted the transformative nature of radical creativity, reflecting on its profound impact across diverse fields such as research, sustainability, design, and creative practice. Within research, radical creativity was portrayed as a transformative endeavour, challenging the integration of knowledge and methodologies, thereby reshaping research approaches beyond traditional definitions. In the context of sustainability, it emerged as a catalyst for transformative change, envisioning meaningful and desirable futures that transcend anthropocentric viewpoints and fostering cohabitation. The design and creative industries were seen to witness the transformative power of radical creativity in responding to rapid global changes, necessitating innovations that break established structures and embrace new planning methodologies.

“Radical creativity, if that enables me to create meaningful and desirable futures, which are then allowing for cohabitation beyond the anthropocentric point of view, and which allows an equal understanding of importance of nature, humans or whatever kind of creatures we might have in the future living with us, or not living or non-living organisms, would be something I'm aiming for.” CreativeTechnologist1

“I think this radical creativity must be something that is encouraging, should be encouraging us to work not only in the regular ways, but to really find new ways to work. If we say radical creativity, I interpret it as something that is really making a big change, so some kind of a leap. So not only making these incremental innovations but doing something, which has a bigger impact, and really changes something.” Designer3

The transformative impact of radical creativity was noted to extend beyond incremental innovations, influencing various domains such as education and societal systems. It signified a departure from conventional problem-solving approaches, advocating for a paradigm shift and addressing implications through creative means. For example, the intersection of human behaviour and digitalization was seen to unveil transformative patterns that offered insights into culture, serving as a powerful tool for cultural understanding and behavioural transformation.

“We are aiming for transformations, aiming for new ways of totally thinking, what is important and what is not. New ways of using our time, maybe even finding new habits and so on. So, for me, it was really a kind of positive thing.” Designer4

Defending the term "radical" as aspirational, the faculty discourse emphasized the importance of embracing radical creativity for its potential to drive positive transformations in thinking, values, habits, and actions. Moreover, in the political sphere, radical creativity was seen to take on a transformative dimension, advocating for profound changes in political approaches to address global challenges, especially in the pursuit of sustainability.

“The world is brimming with tech and gadgets. So, the word radical can then become politically radical. What we need is we need radical politics to get there. You know, if you want to get to sustainability, you need something radical. So, the word still has meaning in that respect.” CreativeEnvironmentalist2

Within the realm of AI and creative practice, the transformative impact of radical creativity was seen as evident in its potential to induce a radical change in creative practices and offer novel perspectives on creativity. The exploration of AI adoption in creative practice was noted to reflect a transformative shift, raising questions about coexistence with or replacement of human creativity, and challenging our understanding of creative practices in the digital age.

“I think of radical creativity in terms of things that transform creative practice, that induce a radical change. I think that's one idea. And the other idea would be radical creativity as creativity seen from a completely new angle. And then the other side of things is radical transformation in creative practice or radical creativity as transformation and creative practice. So, what I recently became more interested in, is how do we not only engineer AI systems capable of exhibiting creativity, but how are such systems perceived and how can they be adopted by creative practitioners.” CreativeTechnologist4

4.4 Freedom to embrace alternatives: reimagining beyond disciplinary expectations and conventions.

The shared insights on radical creativity shed light on the profound impact it was seen to have on individual freedom to explore alternatives in the creative process. From a personal perspective within the institutional community, radical creativity was noted by some faculty members to be liberating, providing the freedom to think beyond established norms and expectations. It was viewed as a means to fully leverage individual competences and collaborate with others to create something that transcends conventional solutions. The notion that combinations of elements can result in an outcome unimaginable through traditional thinking was noted to encapsulate the essence of radical creativity.

“In addition to the term radical, that for me is, from my own point of view or the way how I'm working and operating within [organization], it's just, it was nice to hear them because for me, it was almost freeing the possibility to be creative anyhow, right, so that you can be even more out of the box, or that there are no kind of expectations that this has to be done like that, or this, we're only looking for this and that solution, so that we are actually free in the way how we are approaching the work we are doing, so that's for me radical creativity that I can kind of take full advantage of my own competences, plus the competences I found around myself, to create something to not 1 + 1 is 2, but like 1 + 1 is something I cannot even imagine.” CreativeTechnologist1

Moreover, the concept of constant "de-learning" was emphasized by several faculty members as an integral aspect of radical creativity. This involved shedding preconceived notions and approaches learned in the past, enabling individuals to embrace new combinations of ideas and flavours. The analogy of creatively replacing ingredients in a recipe resonated, emphasizing the importance of using one's own ideas and creativity to deviate from prescribed instructions. This creative autonomy was seen to allow for everyday acts of creativity within normal practices, challenging existing paradigms.

“You don't have exactly all the ingredients that you need for the pizza recipe that you want to bake, but you have something else in your kitchen, and then you creatively replace one ingredient with something else. So, you don't follow the instructions, but you use your own ideas and creativity, if you want to use that expression for that, then we do those things all the time, so every day is creative, but the creativity is linked to normal practices, so it doesn't really stand out. ... People speak of design and development, (people) need to think out of the box. We seldom do, but sometimes, there are people and processes and situations, where you think outside of the existing paradigm.” Designer1

“What radical creativity means in this context, I would say it's a kind of, for me, it means much new thinking, new avenues of thinking, how to perhaps combine different, already existing elements together with perhaps a new twist, how perhaps to bring together different elements from different field, which have not yet been tried out together what might be the outcome.” Designer4

The participants' perceptions also touched upon the intersection of radical creativity and innovation, highlighting the preference for radical creativity as a precursor to innovation. The willingness to deviate from established rules, take risks, and appreciate failure as part of the learning process characterizes the open-mindedness essential for radical creativity. It aligns with the idea that creativity is not merely a mindset but requires action, leading to tangible changes, whether big or small.

“For me, radical creativity is a lot more open-minded to radical innovation, because innovation is already the next step, when you're trying to utilize creativity. So, I prefer radical creativity.” Designer2

“You try things, you fail, you learn, you do a second round. So that's often how it happens in this scientific research as well, that there's a failure, and then you try something else, and then you might find something completely different, and then you can follow that part. So, it's not that, or then you need to try another way to go forward. But then you might find something that is a surprise, but very interesting.” Designer3

“You ignore some conventions, you ignore some typical expectations and you just find this new freedom through which we are hopefully finding some new discoveries.” EnvironmentDesigner1

The importance of fostering a culture of curiosity, embracing failure, and encouraging a mindset of constant exploration were underscored by several faculty members. Radical creativity was positioned here as a tool for navigating uncertainties and exploring alternative perspectives, often necessitating a departure from conventional thinking. It was seen to require the courage to challenge conventions, take risks, and appreciate the value of failure as an inherent part of the creative journey.

4.5 Validation and timescales: recognition beyond existing standards or frameworks

In essence, the faculty perceptions across the first four themes collectively reinforce the notion of radical creativity as a transformative force that empowers individuals to break free from established constraints, embrace curiosity, and forge new paths in the pursuit of innovative and impactful solutions. The concept was seen to emphasize the freedom to think differently, encouraging individuals to be open to diverse perspectives and to let creativity flourish beyond the confines of predefined boxes. However, this created a dilemma in assessing radical creativity, emphasized in the final thematic theme surfaced in the faculty reflections of radical creativity.

The validation of radical creativity was seen to be closely tied to the reception and acknowledgment it received from its audience, indicating that the impact and recognition of radical ideas depended on community response. Participants highlighted the crucial role of attention and action in determining the radicality of a creative concept. The idea that a smart and innovative concept, if not recognized or acted upon, may lose its radical essence underscores the importance of community acknowledgment. As Designer1 described, *“So how much it depends on the audience and the evaluation of that. It doesn’t really matter, how radical you are and how radical the idea is, but the radicality comes from the response and the attention that it gets.”* Yet the transformative and transversal nature of radical creativity created some ambiguity as to what or whose frame of reference should or would be used in such evaluation. While creativity was recognized as a fundamental aspect of their work, participants typically indicated that the radicality of an idea is contingent on the context in which it is presented. The variability in how radical creativity is perceived across different museums, galleries, or journals was acknowledged, highlighting the subjectivity of radicality and its dependence on the specific audience or context.

“So, we have been using different kinds of pedagogies there, which could be called radical from the point of engineering. But on the other hand, there’s nothing radical from the point of design, because we are just using the same methods and pedagogies that we have been using for ages in design. We’ve been adapting them and then combining them with these pedagogies from engineering and chemistry and then making these kind of blend. So, it’s again relative, so from which perspective you look at the activities that we are working with.” Designer3

Participants reflected on the impact of external factors, such as patents, journal publications and attention from the community, on the perception of successful creativity. The issuance of patents was mentioned as a potential measure of creativity, but participants questioned whether it truly reflects radical creativity if the ideas do not garner significant attention. This brings forth the notion that radical creativity is not solely an intrinsic quality but is deeply influenced by external validation and acknowledgment.

“By definition, there needs to be a way to solve a relevant problem. That was the main outcome of our work. Create IPR for the company... But those things haven’t really got that much attention. Or maybe that’s a kind of idea that could be maybe elaborated a bit, that how much the radical creativity depends on attention that others give on it.” Designer1

The discussion extended to the temporal aspect of radical innovation, questioning whether it is an immediate transformation or a process that unfolds over an extended period. This consideration underscores the dynamic nature of radical creativity, challenging the notion that it must be instantaneous and emphasizing that significant changes can evolve gradually.

“What is radical innovation, something that comes suddenly and changes things immediately, or can it be radical, if it takes several years or whatever, a longer period of time to happen. But that’s how changes often happen.” Designer1

On the other hand, in the context of built environments meant to endure for centuries, some participants also suggested that the radicality of an idea could diminish over time. This perspective challenges the common perception that radical creativity must maintain its novelty indefinitely and prompts a consideration of the long-term impact and relevance of creative concepts.

“But I think that that’s always, newness is not the only value. It’s somehow, if we think about built environments, it should last hundreds of years, and so radicality is a bit like, I think, it’s not so important, when you think of the long span of existing built environments. If it has been radical, when it was created, it won’t be radical anymore after 20 or 50 years.” EnvironmentDesigner2

5 Discussion and Conclusion

In an age where creativity is called for (World Economic Forum 2023), the potential for transformative impact of radical creativity and innovation (Madjar et al., 2011, Abel 2009; Slater et al., 2014, Chivot, 2023) can offer an intriguing avenue to better understanding how organizations and society might tackle the grand challenges we face today. Yet while novelty is a central consideration in creativity overall (Stein, 1953; Sternberg and Lubart 1999; Boden 2004; Runco and Jaeger, 2012), assessing and predicting the value and impact of novel ideas is notoriously difficult (Baer & Frese, 2003; Fuchs et al., 2019). This challenge can be exacerbated in the case of radical creativity. Indeed, already Diedrich, Benedek, Jauk and Nuebauer (2015) noted that when assessing highly novel ideas, perceptions of idea usefulness started to weigh more compared to assessing lower novelty ideas. This evaluation can be further complicated in the case of creativity that transverses or transforms meaning systems, as established models suggest domain expertise as well as field and domain norms shape such assessments (Amabile 1996; Csikszentmihalyi 1999). Indeed, as Sawyer and Henriksen (2024:214) note, the systems model of creativity continues the tradition of associating a creative endeavour with a domain of knowledge and a specific domain:

“At the level of the individual, a person creates an object, an idea, an artwork, or a new discovery. But to understand creativity at that level alone does not give us a full picture. Creativity also is influenced by the domain, a specialized area of knowledge and expertise, such as mathematics, biology, physics, art, law, and more. The domain is the knowledge system that people use to enact their creativity. It’s the tools, rules, conventions, knowledge, norms, and systems of techniques, codes, or symbols people have to know to create or discover in the domain. The domain includes knowing about “fields of work”: being familiar with the existing works in a domain and knowing how to base novel variations within that context. The field is a collective organization of “experts,” communities of practice, or a hierarchy of people and groups that have the knowledge, social capital, and clout to influence the domain (at the cultural or social level).”

Yet the current study revealed that design, art and architecture faculty strongly associated radical creativity with transdisciplinary practice, traversing different meaning systems as well as questioning and reinterpreting conventions. The perceived importance of freedom to embrace alternative perspectives, as well as the role of radical creativity in the framing rather than process or outcome of creativity per se, further highlight departures from widely shared meanings and frames of references. Radicality was seen to depend on both the assessment reference point (where something in one field or discipline could be radical but not in another) as well as temporal reference point (with radicality potentially being recognizable only in hindsight or for a time period). This raises the question of who and how radical creativity is assessed or validated as “radical”. If knowledge is applied across fields or disciplines, the ability of experts within that domain to assess the process or product as creative, or even radical, should be considered and models of radical creativity reimaged to reflect cross-disciplinary expertise.

Future research should also focus on the temporal nature of radical, or paradigm shifting, ideas and that the assessment of these may only be possible after a longer period. In order to achieve this, longitudinal studies could track the evolution of ideas over time. This can help researchers understand how radical solutions emerge and gain recognition over extended periods. Investigating non-linear models of creativity that account for the dynamic and emergent nature of radical ideas is also suggested. These models should consider factors such as serendipity, unexpected connections, and the role of intuition in creative breakthroughs.

Furthermore, the results shared in this study highlighted a nuanced conceptualizations of radical creativity already amongst a specific occupational group in a single institution - design, art and architecture faculty in a Nordic university. Such variability can be expected to be compounded on a collective level of potential assessors from a range of professions, disciplines, and organizational frames of reference. As such, although the current study is based on a small amount of qualitative research, we suggest that difficulties in assessing radicality or even difficulties on evaluating the appropriate framework for assessing the degree of radicality of creativity could be a possible early indicator for the potential of radical creativity.

Finally, transformative impact may entail acts of radical creativity creating a novel knowledge system, where investigating the emergence and negotiation of friction with extant knowledge systems could offer a fruitful avenue for further research in radical creativity. Taken together, the results of the current study suggest radicality is contingent upon both the assessment reference point and temporal reference point, with high degrees of transformational novelty both challenging widely shared meanings and potentially creating new frames of references, indicating a need to further examine how shared understanding of emerging novelty can be collaboratively negotiated as creative efforts unfold.

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