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## Art Thinking: Turning an Ill-defined Phantom into a Paradigm for Intrapreneurship

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**Abstract:** In innovation practice, the term Art Thinking has been introduced in a notional analogy to Design Thinking, albeit with the promise of transcending common approaches to business and product innovation by borrowing attitudes and creative strategies from the arts. A review of the relevant literature and other sources corroborates the notion that the term is fuzzy and its interpretations are hardly linked to the artistic realm, although the wording suggests otherwise. Against this backdrop, this conceptual paper develops an understanding of Art Thinking that is consistently derived from given empirical research on the artistic process. Artistic practice represents a mindset and an action model that is not based on rationality and deterministic methods but implies a playful and embodied mode of inquiry. Therefore, Art Thinking is not conceptualized as a method but as a specific form of sensemaking with bifocality, multivalency, ambidexterity, improvisation, and embodiment as key elements.

**Keywords:** Ambidexterity; art; Art Thinking; creativity; embodiment; improvisation; innovation; intrapreneurship; sensemaking.

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### 1 Introduction

In a complex, dynamic, uncertain and ambiguous business environment often labeled VUCA-world, creativity is a key resource. Essential competencies employers will be looking for in the near future are critical thinking, analytical skills, creativity, and the ability to solve complex problems. Employees are expected to acquire new skills, while access to know-how is no longer a problem. Instead, mindfulness, empathy, the ability to cooperate, and a willingness to innovate are the traits most sought after (World Economic Forum, 2020).

This is particularly true for intrapreneurs who, apart from specialist knowledge and leadership qualities, must have strong willpower to pursue their dreams, be open to change, and show the ability to act despite uncertainty. Executives must approach business opportunities and problems with curiosity and an open mind in order to generate ideas, discover opportunities and develop solutions. Intrapreneurs not only need to be highly creative but visionary and proactive, with a keen awareness of uncertainty and risks (Matthews et al., 2009; Zhu et al., 2014). From a business perspective, these are future skills linked to an entrepreneurial mindset. For artists, they come naturally.

Artists seem to be ideal role models for leadership, inventiveness and intrapreneurship (Adler, 2006; Lally, 2011; Sandberg & Reckhenrich, 2021) because

uncertainty is a necessary precondition for artful creation (Brater et al., 2011). Artists are able to transfer the unknown and the unexpected into novel works of art. They tend to embrace rather than avoid ambiguity. In this sense, the artistic process has served as a blueprint for agile methodologies and radical innovation (Austin & Devin, 2003; Bozic & Olsson, 2013). The artistic mindset is esteemed for disruptive ideas as well as non-analytical, intuitive and embodied paths to knowledge (Kuiper, 2012; Jacobs, 2018; Sandberg, 2019).

Consequently, companies have tried to tap artistic knowledge for innovation management by observing and emulating artistic working attitudes and practices during joint collaborations or by directly transferring artistic behavior patterns to non-artistic problems (Sandberg, 2019; Sandberg, 2020). The latter approach is about adopting a specific style of thinking attributed to artists and applying it to idea generation, decision-making and other innovation-critical activities. In an unstated analogy to Design Thinking, which reflects a desire for feasible—allegedly foolproof—methods, this cognitive style has been called Art Thinking.

Despite growing interest in intersections between innovation management and the arts both in academia and business practice, Art Thinking has not been convincingly conceptualized yet. Although it seems to be a promising approach in dealing with uncertainty other than by innovation-hostile risk minimization, Art Thinking is widely underexposed both in scientific literature and other sources. The aim of this conceptual paper is to explore the current erratic understanding of the term, to discuss the true nature of Art Thinking as rooted in artistic practice and suggest a viable concept relating to the innovation context.

First, a review of how Art Thinking is framed and contextualized both in scientific literature, guidebooks and other sources is presented. Second, relevant qualitative and quantitative studies both on artistic thinking styles and the artistic process as well as reports on practical knowledge and reflections on artistic practice are compiled and analyzed. Based on this material, two possible levels of meaning are explored: Art Thinking as a methodology and Art Thinking as a form of sensemaking. The paper establishes a conceptual understanding of Art Thinking as a specific form of sensemaking, which is finally linked to insights on the value of sensemaking for innovation management.

## **2 Current notions of Art Thinking**

It was artist Luis Camnitzer who distinguished art making from a “way of organizing and acquiring knowledge” (Guggenheim Museum, 2014, 27 sec) while pleading for a new form of art education (Camnitzer, 2015). Later on, businesspeople started using the term Art Thinking referring to a transfer of insights from the art into the business world, supposedly without being aware of conceptual antecedents in the art world. In the non-artistic realm, Art Thinking has gained wide dissemination and recognition through Amy Whitaker's eponymous guidebook (2016). She describes Art Thinking as “a framework and set of habits to protect space for inquiry” (Whitaker, 2016, p. 12). In this sense, Art Thinking is outlined as an arts-based view of management tools favoring divergent over coherent thinking (Whitaker, 2016).

Whitaker recommends this approach both on an individual and organizational level: “Be an artist in the very construction of your actual identity” (2016, p. 290) and “an artist

of enterprise” (2016, p. 255) while combining an artistic mindset with business tools. However, the artistic base for Whitaker’s recommendations on self-management and business decision-making is erratic. Some statements even contradict artistic practice, such as imagining a project “at the outset in some kind of idealized form” (Whitaker, 2016, p. 263) or staying in one’s comfort zone, where you are most efficient. In addition, Whitaker does not provide any clear conceptual delimitation from Design Thinking.

Likewise, other authors who share a professional background in design or business, take design as a starting point for interpreting Art Thinking, instead of strictly looking at it from an artistic perspective. In an effort to integrate Art Thinking into design education, Jacobs (2018) compares essential features of artistic practice to design-like ways of doing things. Beyond a range of overlapping features in creative practice, she identifies a set of genuinely artistic cognitive strategies. Prolonged research, problem-creation, conversation with the work and delaying closure are four distinctive behavior patterns.

Robbins (2018) classifies Art Thinking as a dimension of Design Thinking that scores with introducing artists into the co-creation process. Art Thinking is characterized by “its focus on options, not outcomes; on possibilities, not certainty” (Robbins, 2018, p. 16). On closer inspection, however, the non-profit reorganization case he presents as an Art Thinking application is modeled after a scrum framework.

Nobeoka and Kimura (2016) describe how car manufacturer Mazda introduced Art Thinking to the design process. They qualify Design Thinking as short-term-oriented, customer-centric method, and differentiate Art Thinking as a strategic- and value-oriented approach. During product development, designers at Mazda are acting out their individual desire for expression in an independent, artist-like manner not prejudiced by customer expectations.

For Shima et al. (2019), who relate to systems engineering at Mazda, Art Thinking is a method for aligning the metacognition of all stakeholders during product development. In this view, the artists’ ability to reflect on a socially mediated creative process (Sullivan, 2002) is the key feature.

In the context of the Ars Electronica Tokyo Initiative, Art Thinking is understood as an arts-based style of thinking and a multi-step method for exploring visions of the future while questioning the impact of cutting-edge technology (Tanaka, 2018). Further manifestations of Art Thinking are to be found in higher education and executive training. A course at the Kyoto University of Art & Design applies the term Art Thinking to a four-step approach to conceptualize individual vision (Kyoto University of Art & Design, 2018). For a program at ESCP Paris, Art Thinking is described as an “agile method” (Bureau, 2018) consisting of a sequence of six essential practices that are supposed “to create the improbable with certainty” (Bureau, 2018). In this concept, reconceiving solutions in several iterations is key.

In summary, the catchy term Art Thinking is ill-defined. Moreover, most given treatises fall short of a solid foundation in artistic practice. Except for Jacobs’ (2018) comprehensive presentation, all other approaches limit Art Thinking to selected aspects of artful creation: inquiry (Whitaker, 2016; Robbins, 2018), intrinsic motivation, authenticity and quality claims (Nobeoka & Kimura, 2016), or relating oneself to the environment (Shima et al., 2019). Other approaches turn arbitrarily selected artistic habits into methods that submit idea generation to phase models (Tanaka, 2018; Kyoto University of Art & Design, 2018; Bureau, 2018).

In the end, Art Thinking is presented as a Design Thinking variant, not as a concept in its own right. Although the artistic process has a lot in common with the design process (Cross, 2007; Glaveanu et al., 2013), aligning Art Thinking to Design Thinking is incongruous because there is a clear demarcation line between art and design: a lack of purpose and prescribed outcome vs. the existing functional requirements of the work (Lehnerer, 1994).

### **3 Characteristics of artistic practice**

Making art is a profoundly personal and complex endeavor based on trust in the process (McNiff, 1998; Carabine, 2013). The artistic process is open-ended and unstructured. It starts with an intention and an issue, question or problem, but without an objective and a prescribed method. At the outset, artists consciously waive any idea or concept. They actively abandon preconceptions and ignore spontaneous connotations. There is no planning in the sense that artists do not determine the way they will materialize their intentions in advance. While there is neither a preconceived outcome nor a scheme of adequate behavior, objectives are specified and modified during the work process. (Brater et al., 2011; Glaveanu et al., 2013).

There is no rational approach to the artistic process. It is operated by experience of the moment and the “behavior” of the emerging artwork (Brater et al., 2011). The idea, the artistic process begins with, is submitted to research, reflection and exploration. It takes a concrete form while artists perform incremental changes to the piece and lead a conversation with the material (Glaveanu et al., 2013). Artists do not impose their intentions on the object. Instead, it is the material that poses questions and guides the process (Botella et al., 2013; Carabine, 2013; Glaveanu et al., 2013). This notion of working on material is not limited to substances processed in the visual arts but also refers to working on and with text, composing and interpreting a score, or choreographing bodies.

Artists think in a medium (Sullivan, 2001)—be it an object as in the visual arts, a linguistic and/ or physical manifestation as in the performing arts, or sound in music. Making art always has a physical dimension, as it is an embodied activity that involves materials and techniques (Merleau-Ponty, 1962). The artistic process is based to a large extent on tacit knowledge, a physical knowledge bound to movement that is acquired by working with a medium or the body itself over a long period of time. A “feel” for the material is an expression of bodily intelligence or embodied cognition that cannot be conveyed verbally (Hämäläinen, 2007; Grant, 2017).

The artistic mindset is characterized by openness to experience and playfulness. Artists are constantly switched-on, and they deliberately delve into the unknown, embracing uncertainty in order to extensively explore possibilities and create something original (Carabine, 2013). They approach both familiar and unfamiliar situations with an almost naive, nonjudgmental vision and the ability to let themselves be surprised (Brater et al., 2011). Artists are susceptible to what emerges in their creative process without being concerned with the outcome (Brater et al., 2011; Carabine, 2013). They consider their working process as an experiment that does not follow any conventional rules. In the artistic process, there is neither right nor wrong (Brater et al., 2011; Hetland et al., 2013). Consequently, there is a high readiness and tolerance for creative failure (Böhle et al., 2012; Bozic & Olsson, 2013; Carabine, 2013).

The artistic process unfolds in a continuous interplay of action and perception, with the latter in the lead (Brater et al., 2011). In this process of exploration, there is a constant shift between the realization of inspiration on the one hand and intuitive reflection on the material's appearance on the other (Bozic & Olsson, 2013). During the artistic process, decision-making is not an expression of planning but the result of an interaction between artist and work (Mace, 1997; Mace & Ward, 2002). Solutions unfold organically while jumping from details to holistic view and back. The emergence of an artwork is not a linear process. It does not follow a chronological or any other order but lives from momentum (Cawelti et al., 1992; Bozic & Olsson, 2013).

In sociological theory, there are several labels for this action model, which is characterized by the fact that both objectives and paths leading there are not predetermined but emerge during the activity: reflection in action (Schön, 1983), situated action (Suchman, 2007), intuitive-improvisational action (Volpert, 2003), creative action (Joas, 1992) and subjectifying experienced-based action (Böhle, 2011; Böhle et al., 2016).

From this theoretical point of view, artists are exploring the new while they work. They experience through action an intense perception in a dialogical, discovery-oriented mode (Böhle et al., 2012, 2016). This holistic perception, which covers all senses, does not capture reality by facts and explicit knowledge but adds an emotional and physical dimension to sensemaking (Munz et al., 2012). Artists refrain from early solutions and obvious steps in order to explore the whole range of possibilities. Likewise, they refrain from premature judgment in favor of experience (Walker, 2004). Consequently, they approach the final solution as an interactive process, working and reworking their piece (Glaveanu et al., 2013).

Their approach is playful, as artists are trying things out without aiming at a preconceived result. Hands-on testing serves as a form of reasoning (Carabine, 2013). For artists, this kind of unintentional play is a way to reduce complexity (Brater et al., 2011), although—or because—meanings will emerge later on (Carabine, 2013).

#### **4 The true nature of Art Thinking**

Artistic practice cannot be transferred one-to-one to non-artistic settings. Fairly similar to Design Thinking being a highly simplified abstraction of how designers actually work (Robbins, 2018), any concept of Art Thinking must translate relevant aspects of artistic creation into an applicable framework. Given the characteristics of artistic practice, what is the essence that might be applied to intrapreneurship?

The nature of Art Thinking can be discussed along two dimensions: Art Thinking as a methodology based on rules and techniques and Art Thinking as a way of individual and collective sensemaking. The first emphasizes action and conduct, whereas the latter refers to knowledge and cognition as conditions for doing.

Artistic practice follows rules of the craft but is not limited by any artistic guiding principles other than those that might be self-imposed or due to an inevitable thematic or technical framework while working under contract. On the contrary, the artistic process is often about breaking rules or behavior patterns and creating new ones. Ideally, successful results are not simply copied or multiplied but are a starting point for a fresh approach, such as in serial work. Likewise, other artworks serve as an inspiration for individual

exploration. If there is any Art Thinking rule, it is that there are no rules other than those of craftsmanship.

Artists use different work procedures, such as simplification, multiplication, permutation of elements, inversion, repetition and medium variation (Botella et al., 2013; Glaveanu et al., 2013). In music and the performance arts, improvisation is an important research practice and performance method. Despite these techniques, there is no common applicable methodology of art. An artwork can neither be planned systematically nor repeated (Lehnerer, 1994). Instead, artists commit themselves to the situation and work with it in a subjective, intuitive manner that defies any standardization (Munz et al., 2012). Art Thinking cannot be a methodology, given that artistic practice cannot be objectified.

Artful creation is based on a repertoire of practice. Although the artistic process is anchored in individual practice and routines of the craft, the personal behavioral repertoire is not used as a toolkit. In the process of creation, artists try to avoid repetition and deterministic thinking. There are no fixed patterns of which step to take in what kind of situation. Whether a piece is deliberately turned into a playground for incompatible opposites, grotesquely enlarged, or put into a different context is intuitively derived from the moment. Therefore, it does not make sense to interpret Art Thinking as a set of artistic strategies to be applied at random in order to achieve a preconceived result.

An essential characteristic of artistic labor is a searching, experimenting attitude as a way of understanding and shaping reality while not only tolerating but even provoking uncertainty and ambiguity to begin with. That points to sensemaking, the process of interpreting and constructing reality, as an essential part of making art. Sensemaking is a paradigm on how individuals or groups (in organizations) “develop a ‘vision’ or mental model of how the environment works” (Hill & Levenhagen, 1995: p. 1057).

As a socially constructed process, sensemaking is triggered by events that are associated with an excess of information (ambiguity) or a lack thereof (uncertainty). Occasions for sensemaking arise with deviations from routines. Facing confusion, people extract and interpret cues from their environment and try to put them into an order that allows them to understand the situation and eventually act on it. In this way, sensemaking links (intersubjective) beliefs to action, while the whole process is based on plausibility considerations rather than accuracy (Weick, 1995).

In the original concept, sensemaking refers to past events and involves comprehending a situation explicitly in words (Weick, 1995; Weick et al., 2005; Taylor & Van Every, 2000), whereby the use of metaphors unfolds particular power (Cornelissen, 2005). This traditional view describes sensemaking as “a rational, intellectual process” (Cunliffe & Coupland, 2012: p. 65) taking place in the mind. More current perspectives, however, consider sensemaking a prospective process (Gephart, Topal, & Zhang, 2010) that includes a nonverbal, physical dimension (Sandberg & Tsoukas, 2015; Meziani & Cabantous, 2020). This holistic view, which abandons the mind-body dualism, allows for framing Art Thinking as a specific form of sensemaking.

## **5 Art Thinking as a sensemaking paradigm**

In art, the act of thinking stands for “singular investigations of things that cannot be recognized in the usual ways—an intuition which one can then try to start to elaborate, formulating the particular problems or questions it poses” (Rajchman, 2013: p. 197). In

transferring the way artists construct meaning to Art Thinking in a non-arts environment, five core characteristics emerge: bifocality, multivalency, ambidexterity, improvisation, and embodiment.

### *Bifocality*

First of all, Art Thinking is characterized by an ongoing change of perspective. From an anthropological point of view, bifocal seeing is a way to explore and relate to different cultures from one's own position (Peters, 1997). In a broader sense, it implies the ability to switch between multiple visual ranges, going from detail to holistic perception and back as well as organically moving back and forth between different positions.

Regarding environmental cues, bifocality includes seeing more in the sense of looking farther, deeper or closer. Bifocality enables people to notice weak signals in their visual field, which they have not perceived before (Barry & Meisiek, 2010). Bifocality is also about seeing more by dealing with cues on the edges of vision, which is the area that people usually do not pay attention to (Day & Schoemaker, 2004). A third dimension of bifocality is seeing differently by taking another perspective and switching between the original and another, possibly contrary point of view. Such a change in perspective can be stimulated by putting an object into a different context with the help of a metaphor or an analogy that captures the situation, (Barry & Meisiek, 2010), or by taking a different angle while transcending familiar roles and schemata (Anderson & Pichert, 1978).

### *Multivalency*

In collective artistic practice, multivalency is a key feature, as different values and behavior patterns are appreciated and balanced (Alexandre, 2017). Accordingly, Art Thinking not only considers one perspective—e.g., the customer point of view—but establishes a participatory process as a play with ideas and interests of different actors.

In Art Thinking, there is no single framework under which environmental cues can be organized or interpreted. The thinking process is neither predetermined in the sense of examining a preassigned set of issues nor is it limited to selected aspects of perception (Alexandre, 2017). Thinking in right or wrong dichotomy and premature judgement are replaced by openness to experience (Walker, 2004).

### *Ambidexterity*

As “there is ... a fundamental ‘illiteracy’ in the processes of thinking in arts” (Rajchman, 2013: p. 196) and a deep trust in both process, craft and experience at the same time, Art Thinking points to the concept of ambidexterity as the dynamic ability to simultaneously explore novel and unconventional solutions and exploit proven concepts (O'Reilly & Tushman, 2008). Ambidexterity can also be understood as a combination of different learning processes. While the so-called “exploit” mode focuses on feedback learning from experience, the “explore” mode aims at feed-forward learning that is less about the past and more about orientation to possible futures (Bucic et al., 2010).

Art Thinking means challenging the status quo while exploiting previous experience. Therefore, it requires an interplay between building on precedents on the one hand and questioning them on the other (Alexandre, 2017). Deeply rooted in subjectifying experienced-based action (Böhle, 2011; Böhle et al., 2016), Art Thinking requires

consciously letting go of preconceptions and mental models, although they might be helpful in interpreting environmental cues. The analysis of an issue starts all over again each time, and each time the outcome is uncertain (Rajchman, 2013). The process is unconstrained by past solutions because repetition is not considered desirable. Preexisting rules or patterns are largely taboo. Instead, actors build on a flexible repertoire in finding solutions.

### *Improvisation*

During the artistic process, diverse perspectives on a variety of different alternatives are processed simultaneously (Kay, 1991). Actors, dancers and musicians do not only use improvisation as a performing practice but as a form of inquiry. While exploring an issue, they generate a body of material that may serve as a starting point for creating a piece. After all, improvisation is a collaborative practice of expanding on the solution space without anticipation or prejudice. In this process, interpretation and spontaneous creation are intertwined and retrospection is instantaneously followed by action. Therefore, improvisation is a manifestation of sensemaking (Weick, 1998).

In Art Thinking, the range of options is neither prematurely constricted to the most obvious ones nor focused on those with predominant approval. Instead, issues are thoroughly examined by exploring multiple possibilities and viable alternatives (Haworth, 1997). Improvisation requires a “yes, and” mindset that is basically open for any impulse to be accepted and enhanced. Although it builds on expertise and a framework to begin with, improvisation ultimately evolves from being present in the moment and intuitively responding to collaborators instead of following a plan (Vera & Crossan, 2005).

### *Embodiment*

Regarding the interplay between eye, hand and mind during drawing and other forms of embodied thinking (Pallasmaa, 2009), the artistic act of creation has been described as a mode “in which one ‘thinks with one’s body,’ not just with one’s brain or mind” (Rajchman, 2013: p. 198). The sensemaking process in artful creation has an embodied character that extends beyond cognitive information processing. It involves feelings, bodily sensations and sensory knowing (Cunliffe & Coupland, 2012), all of which are linked to logical reasoning by intuition (Meziani & Cabantous, 2020).

Accordingly, there is a strong physical quality about Art Thinking. The concept is based on the human body as a knowing entity and recognizes “perception, sensations and feelings as sources and forms of bodily knowledge“ (Hämäläinen, 2007: p. 56). As body and mind are reciprocally implicated in sensemaking, Art Thinking encourages experiencing and perceiving situations through bodily sensations and feelings so as to sense meaning. It allows for multimodal approaches to inquiry and arts-based methods to capture and express embodied experience.

## **6 Conclusion**

A review of the pertinent literature and applications of Art Thinking in practice brings to light a fuzzy term that arbitrarily reflects single features of artistic practice. So far, not



only the term itself but also its interpretations are characterized by a conceptual proximity to Design Thinking and Agile, possibly from a desire for manageable tools with deterministic modes of action.

However, a concept of Art Thinking that deserves this label needs to be derived from a holistic view on artistic practice. In its true sense, Art Thinking cannot be conceptualized as a method or a toolkit, because this would be a predetermination incompatible with openness to process and result, which is typical of artistic creation. As the artistic mindset and mode of action are based on experiential knowledge, Art Thinking can rather be conceptualized as a specific form of sensemaking with bifocality, multivalency, ambidexterity, improvisation, and embodiment as key features.

Innovation is often understood as a collaborative sensemaking process leading to a joint understanding of situations and events (Dougherty et al., 2000; Cunliffe & Coupland, 2012; Jay, 2013; Bellis & Verganti, 2020). Sensemaking capabilities are entrepreneurial early-warning mechanisms signaling opportunities for new ventures (Cornelissen & Clarke, 2010). They allow for developing unconventional scenarios and envisioning novel and useful solutions based on shared motives and understanding (Bellis & Verganti, 2020).

Except for embodiment, every single element of Art Thinking has already been discussed in an innovation context in itself. Bifocality, multivalency and ambidexterity have been identified as driving forces on imagination and idea generation (Hart & Sharma, 2004; Breuer & Gebauer, 2011; Brettel & Rottenberger, 2019) and improvisation is considered a form of uncertainty management in the product development process (Kyriakopoulos, 2011; Akgün & Lynn, 2002; Vera & Crossan, 2005).

In its own right, none of the five elements of Art Thinking are new. However, when they are combined to a sensemaking paradigm a distinctive approach to innovation management emerges. In addition, Art Thinking draws attention to the importance of embodied sensemaking for innovation. Although embodiment is considered an integral part of sensemaking (Cunliffe & Coupland, 2012), the area as such is widely under-researched (Cornelissen & Schildt, 2015). As far as innovation management is concerned, embodied sensemaking seems to be completely neglected by both scholars and practitioners. This gap offers a promising area of research as well as challenges in professional development.

Given features of the so-called VUCA-world and the associated search for coping strategies, the Art Thinking approach shows how to nimbly navigate under uncertainty without applying rule-bound toolkits. Detaching Art Thinking from the Design Thinking discourse, introduces it as an independent form of thinking and doing. Regarding its five core elements, Art Thinking is suitable for complementing the paradigms of predict and control and unconditional customer orientation (Laloux, 2014). It seems to be well suited for situations in which executives need to explore business opportunities, like an artwork in the making. However, concrete areas of application for Art Thinking still need to be identified and tested for their potential.

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