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Shared Authorship in Research through Art, Design, and Craft

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Biography

Luis Vega is a designer-researcher specializing in cross-cultural collaboration. Informed by the dynamics of people, places, and processes, his work employs craft as a platform to investigate ways of socializing knowledge through materiality. He works as a doctoral candidate in the Department of Design at Aalto University.

Bilge Merve Aktaş is a postdoctoral researcher focusing on craft, design, and material interaction in the Department of Design at Aalto University. Her doctoral research (2020) examined thinking with materials, especially in the context of craft-making processes and shaping bodily movements.

Riikka Latva-Somppi is a curator and artist-researcher. She currently works on her doctoral research in the area of craft and environment in the Department of Design at Aalto University.

Priska Falin works as a doctoral candidate at Aalto University. Her research concentrates on the embodied nature of aesthetic experiences during ceramic practice, looking closely into tactility and contemporary production methods such as clay 3D printing.

Julia Valle-Noronha is a designer-researcher with a particular interest in the practices that take place between people and the clothes they wear. Holding a DA in Design (2019), she is Associate Professor in Fashion/Design at the Estonian Academy of Arts.

All authors are members of EMPIRICA, an interdisciplinary research group where practices of art, design, and craft are used as vehicles of inquiry. The group operates in the Department of Design at Aalto University, School of Arts, Design and Architecture.

Abstract

Conducting research through creative and artistic practices is becoming an established approach used to advance knowledge in various domains of the Arts. Although this approach tends to highlight the voice of the author through the first-person singular, practitioner-researchers working in the fields of art, design, and craft often involve other stakeholders in their practices, such as lay people, workshop participants, workshop co-organizers, other practitioners, and other informants. In some cases, these stakeholders can be said to attain the status of co-authors since their contribution not only informs the development of the practice but also influences the direction of the research. In this paper, we examine what other voices contribute to the production of knowledge through not always accounted forms of authorship. By discussing the inclusion of various stakeholders as co-authors at different stages of the investigative process, we explore the spectrum of shared authorship in research through art, design, and craft. The discussion draws on five research cases conducted by the authors of this paper. We conclude that examining shared authorship champions the emergence of more inclusive research practices, which not only propel the diversification of distinct ways of knowing but also value their operational role in the generation of new knowledge.

Keywords

Research through art, Research through design, Research through craft, Shared authorship, Inclusiveness

Introduction

The last three decades have witnessed an increasing level of participation of art, design, and craft practitioners in research. Numerous institutional efforts have contributed to this increase, resulting in policies, regulations, and academic guidelines that account for creative and artistic practices as legitimate vehicles of knowledge production. Consequently, the inclusion of art, design, and craft practitioners in academia has begun to become an established tradition (Mäkelä and Nimkulrat, 2018; Scrivener, 2002). This situation has propelled the advancement of knowledge from within these fields, although it has sparked a vivid debate on whether the personal nature of practice and the subjective input of the practitioner-researcher constitute valid means of inquiry.

Conducting research through creative and artistic practices, however, is rarely limited to the individual input of the practitioner-researcher. Practices of art, design, and craft do not emerge in isolation but are socially and culturally situated (Nimkulrat et al., 2019). This means that practitioner-researchers also rely, although not always explicitly, on the input of various stakeholders who participate in their practices. This broader array of participants may include, for instance, lay people, other practitioners, other researchers, or other nonhuman entities that contribute to the production of knowledge at various stages of the investigative process. To understand these stakeholders' roles and their influence on the research outcomes, we discuss shared authorship in the light of five cases in which art, design, and craft practices served as a platform of collective inquiry.

The implications of shared authorship have been at the heart of innumerable debates in the Arts, yet the focus of these debates varies according to the field that is being discussed. For instance, art theorist Eva Fotiadi (2014) contests the idea of individual authorship amid the emergence of collective practices in the field of contemporary curating. Similarly, new media researcher Raivo Kelomees (2007) asserts that shared authorship is essentially constitutive of creative practices. In the field of craft studies, sociologist Richard Sennett (2008) reminds us that closed-knowledge systems tend to have shorter lifespans as they prevent the collective evolution of practices. He suggests that having more open and shared knowledge systems, similar to those employed in traditional artisanship, can advance practices as interpersonal endeavors and still highlight the value of individual contributions to knowledge. Sennett's suggestion allows us to comprehend why the personal knowledge that operationalizes the research process should be as shareable as possible to be able to assess the validity of its outcomes. From a similar perspective, in this paper we examine how authorship in collective practices of art, design, and craft entails a process of intersubjective endorsement. Further, we recount how authorship is shared among various stakeholders and the type of contribution these co-authors bring to the practice, to the research, and to the knowledge that is produced when these two activities intersect.

Practices of art, design, and craft as a means of conducting research

Since the integration of art and design schools into the European research funding scheme in the 1990s, the notion of research has attracted a significant amount of attention across various domains of the Arts (Butt, 2017). The terms *artistic research* and *design research*, however, still suffer from a generalized lack of consensus even in their own academic circles. This circumstance relates, on the one hand, to the multiplicity of forms that research practices in such various domains can adopt. On the other hand, it concerns the institutional role of schools

in defining and situating these practices as legitimate ways of producing knowledge that can academically qualify as such.

Without entering into detailed discussion, we briefly introduce three ways of conducting research in the Arts as categorized by historian and educator Christopher Frayling (1993) almost three decades ago: research *into* art and design, research *for* art and design, and research *through* art and design. Drawing on *Education through Art* (1944), one of the seminal works of philosopher and literary critic Herbert Read, Frayling unveiled these three categories during a lecture held at the Royal College of Art (RCA) in the early 1990s. Ever since then, his paper *Research in Art and Design* (Frayling, 1993), which inaugurated the edited volumes of the proceedings of the RCA's Research Conferences, has become "perhaps the most cited ... document in [the field]" (Friedman, 2008, p. 153). And although these three categories have been contested, debated, and interrogated by many others, they have come to constitute one of the most authoritative points of departure in the literature of artistic and design research. Further, Frayling's distinction has led to the emergence of research programs, academic subfields, and special interest groups where new notions of artistic and design research are being coined in an attempt to demarcate themselves from other research approaches extant in the Arts at large.

To avoid demarcation issues while discussing shared authorship within artistic and design research, we follow a double strategy. First, we concentrate on the legacy of the third category mentioned above, i.e., research *through* art and design, to discuss various types of research orientations in which art and design practices play an operational role in the production of knowledge. Second, we include craft practices in this category, thus referring to practices of art, design, and craft as the vehicles that operationalize this kind of research.

The concept of research through art and design has evolved into multiple and, at times, divergent orientations. Different interest groups have developed distinct terminologies to identify such orientations as artistic research (e.g., Varto, 2018), practice-based research (e.g., Candy

and Edmonds, 2018; Vaughan, 2017), practice-led research (e.g., Mäkelä, 2007; Mäkelä and Nimkulrat, 2018), research through design (e.g., Stappers and Giaccardi, 2017; Zimmerman et al., 2007), or constructive design research (e.g., Koskinen et al., 2011), to name a few. Although these approaches vary in scope, objectives, levels of stakeholder involvement, and degrees of artistic intention, what ties them together is a shared stance that advocates for the employment of practice as a platform of inquiry. What differs between these and other ways of conducting research in the Arts is that, in these orientations, the practice neither constitutes the object nor the outcome of the study but the process that facilitates the investigation. Therefore, utilizing personal knowledge, building on one's previous experiences, and accounting for the subjective nature of practice also constitute one of the common foundations that all of the above research orientations rely on (cf. Valle-Noronha 2019a).

Numerous scholars have argued that since personal experiences inform how practitioners understand new situations, when practitioners adopt the role of researchers their personal knowledge shapes the research process significantly (Bolt, 2006; Mäkelä and Latva-Somppi, 2011; Mäkelä, 2007). Personal knowledge brings a subjective input to the research because practitioner-researchers draw on their intuition as much as on the objective information they can access at the moment of practicing (Jefferies, 2012; Polanyi, 1966). This kind of individual experience, nevertheless, is also embedded in social structures. There are cases in which the personal knowledge of the practitioner emerges collectively (Knorr-Cetina, 1999; Lave and Wenger, 1991), whether as a product of working together with other practitioners or as a result of involving multiple stakeholders in the creative process. Thus, it is not uncommon for research outcomes produced through this kind of process to derive from the interplay of multiple subjectivities.

Although some cases coming from the field of research through design have already discussed how this interplay contributes to the production of knowledge (e.g., Stappers and Gi-

accardi, 2017), most of them primarily account for the inclusion of other individuals only as a means to collect data or test research hypotheses (e.g., Mattelmäki, 2006; Wensveen, 2005). In other words, collective endeavors in this kind of research are hitherto considered integral to the investigative process only as a strategy for intersubjective validation. To further articulate the types of collective inquiry that partake in research practices that are operationalized through art, design, and craft, we examine which other voices participate in the investigative process and how they partake in it. By working with the notion of shared authorship, we tackle the roles that various stakeholders perform in the generation of knowledge, moving the discussion beyond the researcher's singular, first-person stance.

Authorship has been extensively discussed in the fields of art, design, and craft. Research in these fields often promotes discussions that concentrate on the authorship of practitioners and their authorial knowledge in the practice (Fotiadi, 2014); the authorship of the audience, e.g., users who participate after the making process (Kimbell, 2009); or the authorship of the researcher in the dissemination of knowledge, e.g., through authored publications (Ilhan and Oguz, 2019). However, we believe that research through art, design, and craft fundamentally entails the inclusion of a broader array of stakeholders, most of which are not always acknowledged as co-authors but rather remain in the background despite their substantial contributions. In the next section, we discuss different forms of shared authorship in research through art, design, and craft stemming from five cases that employ such research approaches in their own way. The practitioner-researchers who conducted these cases are the authors of this paper.

Making/knowing together with many

The notion of authorship bears multiple dimensions in research through art, design, and craft. Conventionally speaking, this notion refers to either the authorship involved in producing artifacts, which concerns the creative input of the practitioner, or the authorship involved in de-

veloping theoretical insights and contributing to the investigative process, which concerns the intellectual input of the researcher. Research through art, design, and craft, however, entangles both types of authorship at various levels. Not only does this entanglement imply that an author has to play a double role as a practitioner and researcher, "something that is known to be intellectually challenging" (Pedgley, 2007, p. 463), but it also denotes that multiple kinds of shared authorship may emerge from different levels of stakeholder involvement.

While traditional research conceives of shared authorship as the collective contribution of various researchers to a research project, we propose that shared authorship in research through art, design, and craft is not limited to the intellectual input of researchers but may also include the input of other stakeholders. In what follows, we recount how authorship can be shared and mobilized across the spectrum of practice and research, which accommodates various forms of contributions that range from predominantly creative to predominantly intellectual. Drawing on five research cases from the fields of art, design, and craft, we unpack how authorship is shared with participants, with other practitioners, and with nonhumans.

Shared authorship with research participants

In research through art, design, and craft, multiple types of participants may be included for a number of reasons. Here, we distinguish three types of research participants, highlighting the roles they play in the generation of knowledge and outlining how their involvement in the practice attains a certain level of authorship in the research process. First, we discuss how the inclusion of lay people may facilitate the comprehension of new angles to the research question. Then, we recount the shifting roles of users in illuminating novel sites of knowledge production. Finally, we review how workshop participants may influence the direction of the research. In all cases, participants are considered to be active contributors, whose perspectives inform the investigative process and have significant effects on its outcomes.

Designer-researcher Bilge Aktaş's research is operationalized through the practice of felt making. Her research involves the participation of people with no previous experience in this field. One reason for her to include these kinds of participants is to examine their fresh experiences and how they reflect on these experiences to create a new understanding of the practice or the knowledge that can be advanced from within it. By inviting them to practice felting and reflect on their learnings, Aktas collected information on how material interaction can be understood in a way that does not only rely on the maker's intentions but leaves space for challenging established perceptions of the self. By undertaking this approach, in her research, the participants, namely novice makers, worked with materials not to instantiate an intended artistic idea but to let the process emerge from the togetherness of the maker and the material (Ingold, 2013, p. 56). The participants were encouraged to focus on the processes of interacting with the material rather than making artifacts to then discuss the experience of making and interacting with artifacts, as well as rethinking their relationship with the material. The participants' reflections on these experiences, from the perspective of active materials, provided new insights to theoretically articulate how human-material interactions may change everyday material engagements (Aktaş and Groth, 2020). Therefore, the participants co-authored the generation of new insights.

Participants may also be brought into the research process to experience an already created artifact. In designer-researcher Julia Valle-Noronha's doctoral research, participants were invited as wearers to share their experiences with clothes made by her. The methodology developed for producing information on wearing practices included self-reflective diaries, group discussions, and one-to-one interviews (Valle-Noronha, 2019a), with participants actively producing and collecting data. This type of research takes advantage of the knowledge embodied by individuals and accumulated through their lifetime wearing experiences. Additionally, group discussions allowed participants to collectively examine their key takeaways from the ex-

periences. The information raised by these engagements helped understand the different ways people relate to the things they wear and shed light on new spaces of knowledge production. While looking at the wearers as sharing authorship on the knowledge produced, other forms of authorship came to light and were discussed in the research. For example, the notion of a designer as an author of a garment was questioned as wearers started *becoming with* the clothes deployed (Valle-Noronha, 2019b; Deleuze and Guattari, 1987). In other words, wearers felt that both themselves and the clothes have affected each other through the wearing practices and that the pieces were transformed into something that contained more of the wearer through their usership. In that sense, as time allowed experiences to develop and consolidate relationships between wearers and clothes, the authorship of these artifacts became blurred. Through time, the practitioner-researcher's role in defining and conceptualizing the artifacts changed and became shared with the wearers. This type of research practice illustrates how the findings are developed not only from the information that the participants provided but also *with* the participants themselves, since their experiences shape the researcher's perceptions and understandings.

Participants may also be understood as workshop partakers. Artist-researcher Priska Falin's doctoral research focuses on gaining embodied awareness through ceramic practice. In her research, among other practices, Falin used workshops as a platform of inquiry. To plan and facilitate two different workshops, Falin collaborated with another artist. This collaboration was later used as research material. Although the workshop participants were not the focus of Falin's investigation, nor were any 'data' collected from them, their participation greatly impacted the way in which the workshops unfolded, and they therefore became part of the knowledge production process. The experience acquired from the first workshop was used for iterating the methods that were used in the second workshop. The first workshop focused on gaining understanding of the personal connections and embodied responses with clay. In such a way, the participants of the first workshop played a role as co-authors in the design of the

second workshop. In the second workshop, the workshop participants similarly influenced the knowledge production process, but more in the role of validating the tested methods. In the end, Falin and the other artist co-authored an article to discuss the overall experience of their collaboration in the two workshops. This case evidences a shared form of authorship that is common in artistic activities but not sufficiently discussed in research contexts.

The examples presented above indicate that participants significantly contribute to the development of the research by bringing their own perspectives and subjective experiences, which also provide new insights for the researcher. By working with participants, researchers can add new information to their personal knowledge, produce new knowledge with participants, and validate their own assumptions. This feature of research through art, design, and craft sheds light on the need to further investigate different ways of sharing authorship in the field of artistic research at large.

Shared authorship with other practitioners

Research through art, design, and craft has begun to expand its epistemic boundaries to include interdisciplinary perspectives from other areas of academic and scientific inquiry. Nevertheless, the increasing attention paid to these other perspectives has come with a tendency to favour certain ways of knowing over others. To counter this, we analyze shared authorship through creative collaborative activity by recounting some of the roles that other practitioners may play in the production of knowledge. Here, we distinguish two types of shared authorship among practitioners. First, we discuss how collaboration between different types of practices allows for a dialogical process of knowledge creation. Then, we explain how research through art, design, and craft enables a process of knowledge production that occurs from *within* the practice and expands across other domains.

Designer-researcher Luis Vega anchors research through design and craft in social practice. By concentrating on collaborative craft processes such as woodturning, lacquer coating, and glass blowing, his study (Vega, 2018) sought to identify the type of knowledge that can be created when craftspeople and designers make artifacts together. Using cross-cultural case studies to attain this goal, Vega's research emphasizes how these processes do not only entail the collective handling of matter but also involve a shared meaning-making intention. Collaborative craft, according to this case, withstands hierarchical organization. This mode of working allows for the emergence of new types of social structures in which the collective input of craftspeople and designers dominates the bureaucracies of traditional craft, such as those observed in instructionism, apprenticeship, and other kinds of institutional schemata that reinforce the idea of knowledge dissemination as a vertical process.

Vega's case recounts how, through making, the socialization of tacit knowledge among practitioners steered the production of new explicit knowledge. In contrast to traditional craft practices, the case illustrates how this process of socialization occurred transversely rather than vertically, evidencing that this transversal dynamic not only permits horizontal exchanges but also recognizes the multidimensionality of knowledge. In other words, while instructionism and apprenticeship focus on the vertical transmission of skills within a fixed disciplinary setting, collaborative practices allow for the exchange of knowledge beyond hierarchies and across disciplinary cultures. Therefore, the case shows how collaboration between practitioners with different skills enables a dialogical research process that can only result from shared authorship in practice.

The case presented by artist-researcher Riikka Latva-Somppi combines environmental research methods on soil contamination with artistic research in the field of ceramics in the geological environment of the Venice Lagoon (Latva-Somppi, Mäkelä and Gündeşlioğlu, 2020). The research group involved in Latva-Somppi's project consists of craft practitioners at differ-

ent stages of their career and experts in soil contamination. In a manner similar to the previous case, this project recounts how craft practices can be employed as a platform for knowledge dissemination (cf. Vega, 2018). However, this case differs from the previous in that it discusses knowledge dissemination at three levels. First, the intermixing of various craft practitioners with different skills and backgrounds allowed for a horizontal knowledge exchange process. Conversations between craft practitioners and environmental experts deepened understanding of the topic for both parties, hence influencing the trajectory of the research. Second, knowledge was transmitted vertically through various activities in which younger practitioners could learn from an established ceramicist and absorb advanced ceramic knowledge from her. These learning activities applied the traditional master-apprentice model to the research group's work. Accordingly, more experienced practitioner-researchers shared their understanding with the less experienced ones. Third, a continuous multidimensional sharing of knowledge occurred during various stages of the research process, in which all practitioners were able to work together intensely for a long period of time (Figure 1).

Similarly, Falin collaborated with an artist to plan and facilitate two workshops. This collaboration is considered integral to the research contribution. Theoretical discussions and reflections between her and the artist enabled a more nuanced understanding of their personal practices, thus contributing to the development of methods for the workshops. Falin's collaboration with the artist is still an ongoing process which seeks to produce further research outputs.

Aktaş also worked with expert practitioners to examine their felting processes and embedded material knowledge. This was something she lacked at that particular time, since she was still emerging as a felt maker. The participants contributed to the research with their making processes, previous experience, and opinions on the practice, while also enabling the formation of Aktaş's new experiential knowledge. After documenting the interaction process, she investigated the relationship between the bodily and material movements to analyze the emergence of



Figure 1. In Latva-Somppi's case, group meetings allowed for the exchange of thoughts and practical ideas during the process. Photo credit: Seppo Salminen.

the dialogical act of making (Aktaş and Mäkelä, 2019). In this case, she, as designer-researcher, learned felting by observing how experts interacted with the material, as well as by making artifacts with them during the field study (Figure 2).

The examples presented in this section indicate that practitioner-researchers work with other practitioners, either from their own field or other fields, to facilitate knowledge construction and dissemination among various stakeholders. Through shared and collective processes, the exchanging of knowledge becomes dynamic and is furthered through active collaboration among practitioners.



Figure 2. Aktaş worked with expert felt makers to observe how their material knowledge shaped their interaction with the material. At the same time, she learned felting from them. Photo credit: Bilge Aktaş.

Shared authorship with nonhumans

Practitioner-researchers often utilize *thinking through making* or *thinking with materials* as an approach in their research process (Mäkelä, 2007; Nimkulrat, 2009). This approach entails the adoption of an open-ended research attitude that does not aim at achieving preconceived outcomes but is rather explorative and welcoming in nature. In such a way, practitioner-researchers think *through* the tools and materials that are familiar to them. The elements they work with influence their thinking and provide an extension to their repertoire of cognitive resources. Therefore, nonhuman entities such as material resources, objects, tools, and spaces that are involved in these practices can also play an operational role in the research process. Such nonhuman entities can be seen as ever-evolving organisms with an independent type of dynamism, which can significantly influence the direction of the research through their various agencies under different circumstances.

For instance, in Aktaş's case, the material that she works with, namely wool, provides situated understandings for how the body and the material couple while working. By examining the material behavior under various circumstances, she generated multiple descriptions for the material and shifted the definition of the practice, namely felting, towards a more open-ended one. Further, by focusing on the properties of wool, she developed a personal sensibility towards the material and proceeded to recognize its agency as a co-maker in the process (Aktaş, 2019). In a similar way, Latva-Somppi's case utilized various research methods to engage with contaminated soil in an embodied way. The immersive experience in the research environment (Figure 3) and the process of collecting soil samples allowed for a deeper understanding of the relationships between humans and the environment (Latva-Somppi and Mäkelä, 2020).



Figure 3. The research group getting to know the environment in Latva-Somppi's work. Photo credit: Maarit Mäkelä.

Artifacts and objects created in research through art, design, and craft may also inform the research process. In Valle-Noronha's work, garments (Figure 4) became informants as the wearer-worn engagements left marks on the pieces through practices of dressing, wearing, mending, altering, laundering, folding, and ironing (Valle-Noronha, 2019b). Although not al-

ways verbalized or remembered by wearers, the garments carried information crucial to the understanding of the wearer-worn engagements, which could be accessed via wardrobe studies (Klepp and Bjerk, 2014). In these studies, visits to participants' homes were merged with conversational interviews and object analyses. As a result of the exploration, Valle-Noronha was able to reconceptualize the role of clothing in wearer-worn engagements, placing the garments as affective entities able to act. This evidenced how wearing experiences overcome visual perception in such engagements by activating sensory or tactile perception.



Figure 4. Garments used in Valle-Noronha's work.

In Latva-Somppi's work, the finished artifacts were not considered the outcome of the research but part of the process of knowledge production (Latva-Somppi, Mäkelä and Gündeşlioğlu, 2020). Soil samples from contaminated areas were collected and processed into ceramic materials that were used to paint large vases made from local clay. With the aim of discussing environmental problems related to soil contamination, the practitioners produced ceramic objects which, as such, can be said to have a direct negative environmental impact when issues of material and energy consumption are concerned. The depth of this concept only emerged through engaging with soil over time.

These cases recount how other co-authors may include, for instance, materials, artifacts, and the environment. These nonhuman entities can significantly impact both the process of practic-

ing and the conceptualization of the practice itself, either through providing new experiences or by reframing existing questions. In other words, they can radically affect the emergence of the research process and its conceptual understandings.

Discussion

The examples presented in this paper indicate that various stakeholders contribute to the production of knowledge in different ways at various stages of the research process. We identified four types of shared authorship in research through art, design, and craft. These types emerge when practitioner-researchers: (1) collect data with stakeholders, (2) produce knowledge with stakeholders, (3) co-author practical outcomes with stakeholders, or (4) allow stakeholders steer the direction of the research. Additionally, we would like to mention one last type of shared authorship that is not reviewed in this paper but remains embedded in its research process, which is the co-authorship among researchers. The collective making of this paper is an example of such an effort.

In all cases, it can be observed that accounting for these forms of collective contribution substantially impacts the research outcomes. As practitioner-researchers, we configure sociomaterial situations in which the production of knowledge unfolds in both pre-planned and unprecedented ways. Other stakeholders, whether human or nonhuman, can thus become part of the research process at various stages thereof. Therefore, authorship is not a fixed, singular property but rather a shared and dynamic attribute. Authorship dabbles across a spectrum that changes as these sociomaterial configurations transform. This spectrum can thus accommodate multiple forms of shared authorship, whether simultaneously or at different places and times.

An important point to discuss here concerns the responsibility that comes with being an author. In research through art, design, and craft, the aim is often not to validate findings but to exhibit the plausibility thereof. At the heart of this issue lies the concept of accountability,

which posits that researchers hold responsibility for what they do and how they do it, including the ability to satisfactorily explain why their decisions, actions, and assertions are trustworthy and compelling.

Accounting for multiple co-authors thereby presupposes the strengthening of the research endeavor, especially because collective practices of art, design, and craft inherently necessitate the formation of shared understandings (Vega, 2018), which in turn allows for the inclusion of various stakeholders in the shaping of the categories by which the research process is made intelligible.

Although several stakeholders may hold a certain level of authorship at various stages of the process, the delivery of accountable research outcomes remains the responsibility of the practitioner-researcher. On the spectrum of shared authorship, stakeholders are entitled to different responsibilities that may last only for the time of their participation. By discussing the responsibilities of the stakeholders, the knowledge that research through art, design, and craft produces becomes operational for society as well, as it demands effective means of communicating the research outcomes to various publics.

Thinking of authorship as a collective responsibility renders the research process diverse and inclusive. Therefore, shared authorship entails the distribution of power as it questions individual authorities and values different ways of knowing. The socialization of personal knowledge also emphasizes the inclusion of multiple viewpoints: in creative and artistic practices, extensive sharing is required to make this personal knowledge articulate and explicit (Vega, 2018). And because this type of knowledge can facilitate conceptual inquiries in art, design, and craft practices (Mäkelä, 2007), we argue that sharing multiple ways of knowing, which are not limited to those of the practitioner-researcher, can assist in further explicating the development of the research process.

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References

- Aktaş, B. M. (2019). Using wool's agency to design and make artifacts. RUUKKU Studies in Artistic Research, 10. Retrieved from https://www.researchcatalogue.net/view/453632/ 453633
- Aktaş, B. M., & Groth, C. (2020). Studying material interactions to facilitate a sense of being with the world. *Design Research Society Biannual Conference*. doi: 10.21606/drs.2020 .229
- Aktaş, B. M., & M., M. (2019). Negotiation between the maker and material: observations on material interactions in felting studio. *International Journal of Design*, *13*(2), 55–67.
- Bolt, B. (2006). A non standard deviation: Handlability, praxical knowledge and practice-led research. *Speculation and Innovation: applying practice led research in the Creative Industries*, 1–15.
- Butt, D. (2017). Artistic research in the future academy. Chicago, IL: Intellect.
- Candy, L., & Edmonds, E. (2018). Practice-based research in the creative arts. Foundations and futures from the front line. *Leonardo*, *51*(1), 63–69. doi: 10.1162/LEON_a_01471
- Deleuze, G., & Guattari, F. (1987). A thousand plateaus. Capitalism and schizophrenia. Minneapolis, MN: University of Minnesota Press.
- Dewey, J. (2005). Art as experience. London, England: Penguin.
- Fotiadi, E. (2014). The canon of the author. on individual and shared authorship in exhibition curating. *Journal of an Art Historiography*, 11. Retrieved from https://arthistoriography .files.wordpress.com/2014/11/fotiadi.pdf
- Frayling, C. (1993). Research in art and design. *Royal College of Art Research Papers*, *1*(1), 1–5.
- Friedman, K. (2008). Research into, by, and for design. *Journal of Visual Arts Practice*, 7(2), 153–160.

- Ilhan, A. O., & Oguz, M. C. (2019). Collaboration in design research: An analysis of coauthorship in 13 design research journals, 2000–2015. *The Design Journal*, 22(1), 5–27. doi: 10.1080/14606925.2018.1560879
- Ingold, T. (2013). *Making: Anthropology, archaeology, art & architecture*. London, England: Routledge.
- Jeffries, J. (2012). Mangling practices. In M. Mäkelä & T. O'Riley (Eds.), *Art of research II* (pp. 32–51). Helsinki, Finland: University of Art and Design Helsinki.
- Kelomees, R. (2007). Shared authorship: Dispersal of the artist in electronic fields. *Kunstiteaduslikke Uurimusi*, 16(3), 82–84.
- Kimbell, L. (2009). Beyond design thinking: Design-as-practice and designs-in-practice. In Proceedings of the CRESC conference. Manchester, England: The University of Manchester.
- Klepp, I. G., & Bjerck, M. (2014). A methodological approach to the materiality of clothing: Wardrobe studies. *International Journal of Social Research Methodology*, 17(4), 373-386. doi: 10.1080/13645579.2012.737148
- Knorr-Cetina, K. (1999). *Epistemic cultures: How the sciences make knowledge*. Cambridge, MA: Harvard University Press.
- Koskinen, I., Zimmerman, J., Binder, T., Redström, J., & Wensveen, S. (2011). *esign research through practice: From lab, field, and showroom.* San Francisco, CA: Morgan Kaufmann.
- Latva-Somppi, R., & Mäkelä, M. (2020). Exploring ecological and material sensitivity through craft practice in the context of the Venice lagoon. *Aisthesis*, 13(1), 31–46. doi: 10.13128/ Aisthesis-10916
- Latva-Somppi, R., Mäkelä, M., & Gündeşlioğlu, Ö. (2020). Traces from the anthropocene: Working with soil. *RUUKKU – Studies in Artistic Research*, 14. doi: 10.22501/ruu .697190
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Mattelmäki, T. (2006). *Design probes* (Doctoral dissertation). Helsinki, Finland: Aalto University Press.
- Mäkelä, M. (2007). Knowing through making: The role of the artifact in practice-led research. *Knowledge, Technology, and Policy*, *20*(3), 157–163. doi: 10.1007/s12130-007-9028-2
- Mäkelä, M., & Latva-Somppi, R. (2011). Crafting narratives: Using historical context as a reflective tool. *Craft Research*, 2, 37–60. doi: 10.1386/crre.2.37_1
- Mäkelä, M., & Nimkulrat, N. (2018). Documentation as a practice-led research tool for reflection on experiential knowledge. *FormAkademisk*, 11(2).
- Nimkulrat, N. (Ed.). (2009). *Paperness: Expressive material in textile art from an artist's viewpoint* (Doctoral dissertation). Helsinki, Finland: Aalto University Press.
- Nimkulrat, N., Kuusk, K., Valle-Noronha, J., Groth, C., & Tomico, O. (Eds.). (2019). Proceedings of the EKSIG 2019 conference: Knowing together: Experiential knowledge in collaboration. Tallinn, Estonia: Estonian Academy of Arts.

- Pedgley, O. (2007). Capturing and analyzing own design activity. *Design Studies*, 28(5), 463–483. doi: 10.1016/j.destud.2007.02.004
- Polanyi, M. (1966). The tacit dimension. London, England: Routledge.
- Read, H. (1944). Education through art. London, England: Faber and Faber.
- Scrivener, S. (2002). Characterising creative-production doctoral projects in art and design. *International Journal of Design Sciences and Technology*, 10(2), 25–44.
- Stappers, P. J., & Giaccardi, E. (2017). Research through design. In R. Soegaard M. and FriisDam (Ed.), *The encyclopedia of human-computer interaction* (pp. 1–94). Interaction Design Foundation.
- Valle-Noronha, J. (2019a). *Becoming with clothes: Activating wearer-worn engagements through design* (Doctoral dissertation). Espoo, Finland: Aalto ARTS Books.
- Valle-Noronha, J. (2019b). The body within the clothes. *RUUKKU Studies in Artistic Research*, *10*. doi: 10.22501/ruu.410902
- Varto, J. (2018). Artistic research. What is it? Who does it? Why? Espoo, Finland: Aalto ARTS Books.
- Vaughan, L. (2017). Practice-based design research. London, England: Bloomsbury.
- Vega, L. (2018). Objects of knowing: Collaborative craft analyzed as a platform for knowledge articulation (Master's theses). Aalto University, Helsinki, Finland.
- Wensveen, S. (2005). A tangibility approach to affective interaction (Doctoral dissertation). Delft University of Technology, Delft, Netherlands.
- Zimmerman, J., Forlizzi, J., & Evenson, S. (2007). Research through design as a method for interaction design research in HCI. In *Proceedings of the SIGCHI conference on human factors in computing systems* (pp. 493–502).