



Please cite the Published Version

Niedderer, Kristina  and Townsend, Katherine  (2025) Embodied craft practices: mindful flow, creativity, and collaboration as drivers for wellbeing. In: Craft and Design Practice from an Embodied Perspective. Routledge Advances in Art and Visual Studies . Routledge, New York, pp. 66-79. ISBN 9781032356815 (hardback); 9781003328018 (ebook)

DOI: <https://doi.org/10.4324/9781003328018-8>

Publisher: Routledge

Version: Published Version

Downloaded from: <https://e-space.mmu.ac.uk/636581/>

Usage rights:  [Creative Commons: Attribution-Noncommercial-No Derivative Works 4.0](https://creativecommons.org/licenses/by-nc-nd/4.0/)

Additional Information: This is an open access book chapter which first appeared in Craft and Design Practice from an Embodied Perspective, published by Routledge. It is deposited under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Enquiries:

If you have questions about this document, contact openresearch@mmu.ac.uk. Please include the URL of the record in e-space. If you believe that your, or a third party's rights have been compromised through this document please see our Take Down policy (available from <https://www.mmu.ac.uk/library/using-the-library/policies-and-guidelines>)

5 Embodied craft practices

Mindful flow, creativity, and collaboration as drivers for wellbeing

Kristina Niedderer and Katherine Townsend

Introducing craft practice and its complexities: material engagement, mindfulness, and wellbeing

In recent years, there has been an increase in the recognition and use of craft as a practice to promote mindfulness and wellbeing. We propose that this contribution is rooted in material engagement, the creative act of making, and the social nature of craft. We argue that experiential and social aspects of making foster the human(e) components of creativity and mindfulness through which craft can contribute to emotional satisfaction, social connection, and personal agency, and thus wellbeing.

Wellbeing is key to people's quality of life. Previous definitions of wellbeing have provided insights into different aspects of wellbeing, such as joy, inclusion, confidence among others, creating a number of overlapping, yet different definitions (Kaufmann & Engel, 2016; Kitwood & Bredin, 1992; Power, 2016; Strohmaier & Camic, 2017). Niedderer et al. (2022) have synthesized some of these aspects into one definition of wellbeing, to be developed further in this chapter. This new, overarching definition comprises three key components: *emotional satisfaction* is associated with safety/trust, comfort, feeling well, happiness, and joy; *social engagement* is related to inclusion, connectedness, and attachment; and *personal agency* comprises identity, confidence, optimism, meaningful occupation, autonomy, and growth. Niedderer et al. (2022) further explained that interconnections between each aspect of positive wellbeing beneficially influences the other, e.g., emotional satisfaction enhances the level and quality of social engagement and vice versa. Emotional satisfaction and social engagement are related to personal agency, defined as meaningful intentional action. The experience of having personal agency in one's life is an important determinant of wellbeing that can improve both confidence and optimism, with examples including learning, starting new activities, or decision making (Schlosser, 2015, Zeilig et al., 2019). While Niedderer et al. (2022) and Townsend et al. (2017a) have discussed wellbeing in the context of dementia care and clothing design respectively, their understanding of wellbeing is also useful in the context of this discussion as the aforementioned three components of emotional, social, and personal wellbeing can be identified and refined as key motivators within the crafts as will be demonstrated throughout this chapter.

Whether undertaken as sole or collaborative practices, craft and design require practitioners to learn and employ body-based knowing, i.e., skills developed through working with materials, as an intrinsic part of building their experiential knowledge. Such knowledge relies on embodied cognition (Johnson, 2015; Varela et al., 1991), a paradigm which recognizes that bodily actions play a significant role in how we engage with the

environment and thus how we make meaning. In his material engagement theory (MET), Malafouris (2013) argued for an ontological process that situates thinking in action, influenced by the enactive signs and practical effects of the material world on the extended mind. The idea that thinking is shaped by experience of the external world through our hands has been lucidly expressed by philosopher Elias Canetti (1960, p. 248) in his speculative reflection on the relationship of hands and object. Similarly, in her work with clay, Groth (2017) articulated this acquisition of embodied craft knowledge as a process of “making sense through hands”. Ingold (2013) used the example of pottery to illustrate further how “the mindful, or attentive bodily movements of the practitioner on the one hand, and the flows and resistances of the material on the other, respond to one another in counterpoint” (p. 101).

Mindfulness is closely associated with wellbeing and the embodied mind thesis. Building on Merleau Ponty’s (1962, 1963) perceptions of the body as intertwined physical (outer) and lived (inner) experiential structures, Varela et al. (1991) acknowledged how these biological and phenomenological aspects continuously circulate back and forth, saying that “we cannot understand this circulation without a detailed investigation of its fundamental axis, namely, the embodiment of knowledge, cognition, and experience” (p. xiv). Varela et al. also made connections between the mindful state reached through pragmatic and philosophical explorations and the Buddhist tradition of meditative practice (p. xviii). Both meditation-based and cognitive approaches to mindfulness are now well-recognized for their benefits to everyday life and mental health, i.e., as contributors to wellbeing. Mindfulness approaches are based on the key concepts of being in the present moment and of non-judgemental acceptance of emotions and events, which can aid relaxation and ameliorate stress and anxiety (Kabat-Zinn, 2003a, 2003b; Langer, 1990, 2010). Besides formal mindfulness training, often in the form of yoga exercises or meditation, arts and craft processes are increasingly recognized for their potential to offer a way to be mindfully “in the present moment”, manifest in the experience of a sense of *flow* (Huotilainen et al., 2018). Flow is a phenomenon based on the positive psychological effects occurring in the consciousness of an individual when undertaking autotelic activities (Csikszentmihalyi et al., 2014). Flow has indeed been recognized as being intrinsic to mindful craft practices and outcomes in formal and informal settings (e.g., Huotilainen et al., 2018; Singh, 2018) as we will discuss further throughout this chapter.

To explore the relationship of craft practice and wellbeing in detail, we need to look in more depth at what happens in the craft process. This involves a chain of events arising within often repetitive acts of making, embracing sensory and embodied experience of materials which can foster focus and an “in the moment” experience (Singh, 2018). Through experience of flow, the process itself can support the practitioner’s wellbeing. When experiential craft knowledge and activities are shared with others through design initiatives in social settings, it has the capacity to positively impact the wellbeing of groups and wider society (Manzini, 2015; Sennett, 2013). While there are many examples of how craft has been employed to augment the physical body, from fashion design to embroidered implants for orthopaedic surgery to the fabrication of bespoke prosthesis (see Townsend et al., 2020), we are particularly concerned with how the experience of craft practice can contribute to emotional, social, and physical wellbeing.

In this chapter, we explore and unpack the intuitive, sensorial, and socio-emotional nature of craft practice and its capacity for fostering emotional satisfaction, social connection, and personal agency. We explicate this capacity through three examples, one drawn from Niedderer’s metalwork and two from Townsend’s textile-based practice.

The first case explores the need for material sensitivity within the making process in silversmithing; how craft expertise learnt and wrought through repetitive actions is related to flow and mindfulness. The second case investigates material responsiveness in relation to the performance and aesthetics of the produced outcome, informing a “simultaneous approach” to crafting the textile and garment (Townsend, 2003). The hybrid (hand and digital) crafting methodology (developed in the second case) is discussed through its application in related, participatory research focused on the co-design of emotionally durable clothing in the third case. Using these examples, we reflect upon how hands-on engagement with materials and processes fosters skill development, embodied knowledge, and mindful flow. We further consider how they are related to, and able to embed, the three wellbeing aspects – emotional satisfaction, social engagement, and personal agency – within and through making and collaborative crafting contexts. In the three examples, we focus on these individual aspects despite overlaps between them. Reflection on our own creative practice is expanded by a discussion of selected examples of wellbeing derived from a wider application of craft and design.

Mindful flow in the making: an example from silversmithing practice

Just as a musician needs to practise a piece over and over again to master it technically and to understand each nuance and potential for interpretation, repetition is essential to craft practice, both to gain technical proficiency and to understand the creative potential inherent in the materials and processes involved. Through such repetition, embodied knowledge is formed through a deeper, experiential understanding of the materials, tools, and processes at hand. In other words, with repetition comes immersion, which is the unconditional and empathic attention to the material and process. Immersion without distraction creates flow, a recognized state of mind (Csikszentmihalyi et al., 2014) that can be achieved within and through dedication to, and continual practice of, a (craft) process (Huutilainen et al., 2018, Singh, 2018). The nature of *flow experience* is defined as the subjective state (or feeling) of moment-to-moment activity, when attention is fully invested in the task at hand, and the person functions at their fullest capacity which may include mastery, control, and other forms of autonomous behaviour (Csikszentmihalyi et al., 2014). Flow has further been related to emotional wellbeing, by promoting relaxation and reducing anxiety. Burt and Atkinson (2012) found that “although causality has not been proven, a reciprocal association between enjoyable states of flow and psychological wellbeing has been shown to exist” and that “the more people experience flow the more satisfied they are in life” (p. 58). Anyone pursuing a craft who has entered the state of flow will know the emotional satisfaction flow brings.

Within the practice of silversmithing, the experience of flow for Niedderer is epitomized in the process of planishing silver where the metal is gently tapped with the hammer repeatedly to produce an impeccably smooth form and a characteristic finely hammered surface pattern (Figure 5.1). The rhythmic and repetitive action requires full concentration, i.e., one’s entire embodied attention, to hit just the right point with just the right strength to develop the desired shape and smoothness of surface. It involves not only listening to the sound which the hammer makes in striking the silver and the iron stake underneath to ensure they are aligned but also sensing the surface with one’s fingertips to ascertain the smoothness of the surface. Since the fingertips have more sensory receptors than any other body part (Johansson & Flanagan, 2009), they tell the practitioner better than the eyes or any gauge whether the shape is well-finished or still uneven and needs more work. Although this process may begin as separate understandings of



Figure 5.1 Kristina Niedderer, four cups, 1994, surface finely polished. Photograph by Gunter Lepkovski, 1997. © Kristina Niedderer.

codified explicit knowledge and of a material's feel and the steps involved in a specific making process, through continued practice, the different aspects of knowledge meld into one holistic experiential understanding – embodied knowledge. As the different aspects become integrated, they create an intuitive understanding of the forces at play, e.g., how a piece of metal will stretch or how far it can be bent without breaking. Due to their multisensorial and embodied nature, such craft processes lead to immersion and to full in-the-present-moment attention, i.e., flow. The experiential process then enables creative development through embracing the tension between repetition and technical challenges which disrupts the flow and requires conscious mediation of the body's actions or conflicting technical realities. Sensory experience further enables the fine evaluation through sensitising and heightening the maker's physical and cognitive discrimination.

The key to achieving flow, from a mindfulness perspective, is the full attention and focus on the task in the present moment – to the extent that the task becomes automated and can move to the background of the practitioner's awareness. In practice, this requires a balance of practical competence (or skill) and challenge: If a task is too difficult, the flow of consciousness is likely disrupted when encountering difficulties, whereas if a task is too easy, this might lead to mindless repetition without full attention. While mindful flow may emerge unconsciously, through the automatic, embodied actions of the skilled practitioner, they may still move in and out of flow states to attend to the progression of the work. This tension between skill and challenge offers the opportunity for new creative interpretations arising from the process.

An example of silversmithing practice that shows how new creative opportunities evolve from immersive and longitudinal making is the work by Hiroshi Suzuki who

specializes in raised and planished metal vessels (Schroder, 2010). Through continuous practice, Suzuki has developed his work through incremental change arising from his embodied knowledge. As a process gets practised repeatedly and becomes more and more fine-tuned, masters of their craft learn how to traverse boundaries and, by doing so, achieve new technical and creative feats. This has allowed Suzuki to challenge and overcome established norms of form-giving within silversmithing. In doing so, it has allowed him to perceive new opportunities in the making of his vessels and to create unique shapes that any conventional metalsmith would think impossible to achieve.

The example of Niedderer's experience in silversmithing practice, complemented by Suzuki's mastery of silversmithing, is one of many others that could have been chosen here to illuminate the reliance of creative development on the importance of embodied knowledge and its role within craft making. It was chosen because of the author's own expertise and the experiential processes involved, whereby personal insight is essential to understand them and to recognize them in others' work. This example has demonstrated how immersion into a craft through continual practice is required to build embodied knowledge that leads to skill and expertise as well as creative foresight. At the same time, this immersion into making enables mindful flow to arise for the practitioner within and through the embodied making process.

Huotilainen et al. (2018) traced the physiological and cognitive aspects of arts and crafts making to explain how repetitive making enables the emergence of flow and how it is related to emotional wellbeing. They found that creative making activities can promote psychophysical wellbeing, e.g., through reducing blood pressure and stress, based on complex mechanisms and interplay between cognitive and motor-sensorial processes. This means that creative making can help regulate and balance mental states by providing a way to reach the state of flow. They explain that "the state of flow takes place when the explicit information processing system shifts into the implicit automatic, nonverbal, experience- and skill-based processing system" (p. 11) and that arts and crafts practices can play "an important role in controlling stress and enhancing relaxation" (p. 1). These creative making processes can further instil a sense of control and personal agency, which have an impact on self-perception, and can eventually insinuate feelings such as satisfaction and pleasure. Their work confirms the earlier study by Burt and Atkinson (2012), which investigated mindful flow in relation to quilting and found a reduction in stress and anxiety. Another, more recent study by Singh (2018) sought to investigate how arts and crafts practices support mindfulness and wellbeing, using the example of colouring books. Singh found that colouring activity, even without formal guidance, could enable mindful states and emotional wellbeing, especially the reduction of worry and rumination. All three studies found a positive correlation of craft, or craft-related activities, with emotional wellbeing, because of their ability to create a state of mindfulness, in particular, "flow".

Creative agency in the making: sensorial material engagement in textile practice

This case illustrates how sensorial material engagement supports the acquisition of experiential knowledge and skill, and how this in turn facilitates creative foresight and new expressions in hybrid crafting processes. Working creatively as a textile and clothing practitioner requires embodied craft knowledge, gained through engagement with analogue and/or digital material and technology, and longitudinal experience. Designing and constructing textiles and garments that work in harmony with the animated human form

depends upon the maker's theoretical and practical knowhow of diverse fabric qualities and techniques in relation to aesthetics and performance. Gaining textile expertise often begins with formal training in weave, knit, embroidery, and print, each requiring the learning of specialist skills through tactile material engagement in what artist Anni Albers called a "many sided" craft. Using weaving as an example, Albers said:

Besides surface qualities, such as rough and smooth, dull and shiny, hard and soft, it also includes colour, and, as the dominating element, texture, which is the result of the construction of weaves. Like any craft it may end in producing useful objects, or it may rise to the level of art.

(Albers cited in Coxon et al., 2018, p. 13)

Regarding printed (and surface designed) textiles, Woolley and Huddleston (2016, p. 92) noted that "the purpose of workmanship ... [is] to exploit the natural qualities of the base materials, for which an understanding of their underlying physical make-up is an important aspect of craft research and tacit knowledge". Learning how to mix and apply dyeing and printing techniques (cf. Wells, 2000) and devise repeating patterns (cf. Philips & Bunce, 1993) to transpose onto contrasting substrates requires both a technical/rational and aesthetic/intuitive approach to balance colour, motifs, and tactile effects. The printer may experience states of flow in the process of preparing and pinning down a base cloth, screen printing multiple layers of coloured dyes, steaming and washing the cloth, involving precise and repetitive bodily actions. Later manipulations such as transforming two-dimensional textiles into three-dimensional products require a different embodied skillset. As acknowledged by the renowned pattern cutter Winifred Aldrich (1996), to make garments that fit, are comfortable, and work with the body, the designer requires understanding of the fabric's "weight, thickness, drape, shear, stretch" (p. 7). Also known as "fabric hand", this qualitative sensory assessment of a cloth is learnt through the sense of touch (p. 7) and practical, technical, and aesthetic abilities are acquired through sustained sensorial engagement with materials, tools and processes. It can be argued that this embodied knowledge, learnt over time through haptic and tactile interactions, not only informs the crafting of objects but also contributes to the makers' wellbeing associated with the feeling of personal and creative agency and self-esteem due to their accumulated skills.

As with many contemporary craft contexts, the introduction of advanced materials and digital technologies have generated innovative, hybrid methods of making. For example, the performance fabric Lycra had a significant influence on fashion from the mid-1980s, enabling "garments to be cut to fit the contours of the human body" (Townsend, 2003, p. 5). This dynamic substrate, incorporating stretch and recovery properties, presented new opportunities for designers to respond to the material's inherent properties (Ingold, 2013), resulting in the creation of textiles as second skins encompassing "haptic and optical complexity, at once natural and synthetic, shiny and matt" heightening the "corporeal element" (Coxon et al., 2018, p. 28).

In the mid-1990s, computing reinvented the structural processes of textile design and production, calling for designers to develop a "digital hand", to complement their embodied knowledge of physical textile making with "intelligent practices [of] visual thinking, tacit knowledge of tools, experiences and affordances of the media" (McCullough, 1998, p. 271). Computer-aided design and computer-aided manufacturing (CAD/CAM) presented a new interface to experiment with and acquire virtual crafting skills, by

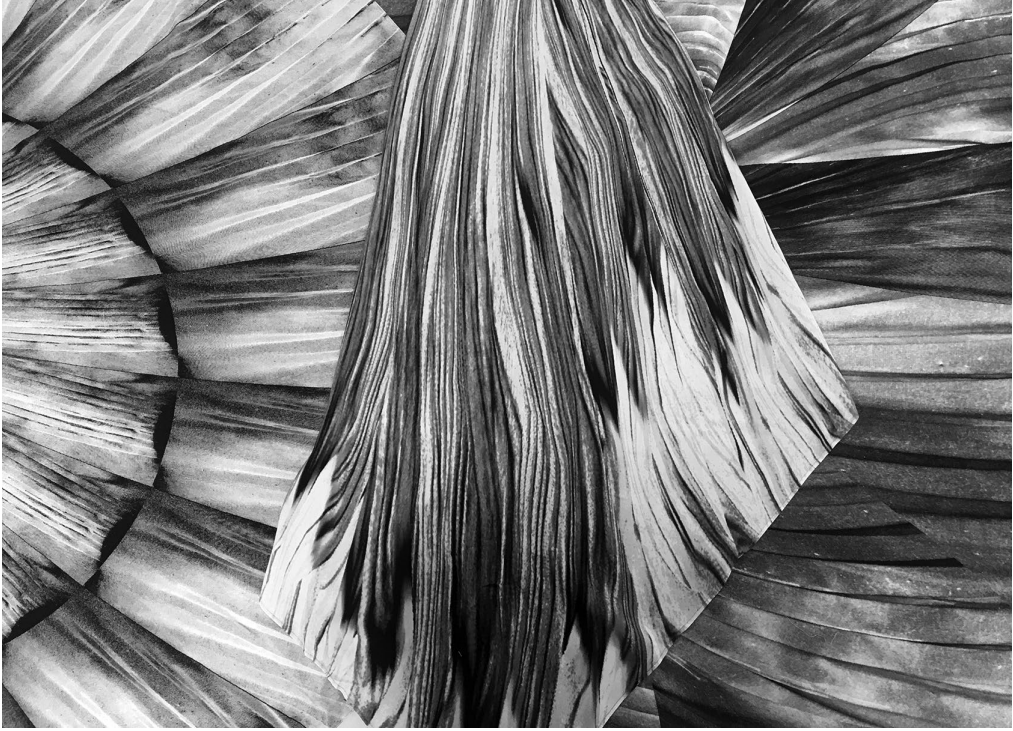


Figure 5.2 Katherine Townsend, inkjet-printed fabric forms featuring *trompe l'oeil* pleats, 2003. Photograph by Katherine Townsend, 2023. © Katherine Townsend.

making connections between traditional and advanced mediums whereby “it can be difficult to say where the tool ends, and the medium begins” (Woolley & Huddleston, 2016, p. 92). An example of this is illustrated in Figure 5.2, which shows three of Townsend’s inkjet-printed textiles featuring *trompe l'oeil* pleats, created using CAD to digitally manipulate scans of hand draped, pleated, and dyed cloth toiles.

In more recent research, the ability to draw upon sensorial (analogue) and simulated (digital) material knowledge has informed new methods and three-dimensional forms, such as “composite garments” whereby the tolerances of the textile, garment, and body shape are synthesized in the crafting process (Piper & Townsend, 2016). The use of hybrid technology has extended the parameters of textile making, and in turn the personal and creative agency of the maker. As the following section will discuss, holistic, participatory approaches have reinvented the act of making beyond craft and design problem-solving, by using co-creation to cultivate feelings of agency and capability through shared material engagement activities (Hanssen & von Busch, 2023; Shercliffe & Twigger Holroyd, 2020).

Co-crafting clothing for wellbeing: social engagement and personal agency

The following case illustrates how co-crafting may lead to social engagement and a sense of personal agency in the participants. In craft research there has been a palpable shift from independent creative practice towards using making processes to support “health, wellbeing and happiness” (Townsend & Niedderer, 2020). Between 2015 and 2017,

Townsend was able to test her “simultaneous design method” (Townsend, 2003) with a group of older active users of fashion in the co-crafting project, *Emotional Fit* (Townsend et al., 2017b). The participatory project enabled a group of fashion and textile researcher-practitioners to explore the evolving clothing identities of a group of women (n + 40, aged 55+) by sharing and exchanging their “expert” and “diffuse” knowledge of dress (Manzini, 2015). With combined experience of designing, making, wearing clothes, and ageing, the researchers were able to provide an empathetic design response to the group’s changing clothing needs, influenced by the impact of their ageing process. A co-crafting model was devised that gave voice to the participants through involvement in a programme of hands-on workshops, with the aim of co-creating a collection of personalized garment prototypes that met their expressed needs and preferences. Qualitative information was gathered through interpretative phenomenological analysis (IPA) of selected group members’ “lived experiences” of fashion and fashioning themselves (Eatough & Smith, 2017).

The engagement was supported by a “research through co-design” model, based on three ladders of participation dedicated to (a) gathering information, (b) collaborative making, and (c) disseminating findings and outcomes (Townsend & Sadkowska, 2020, p. 16). The collaborative aspect comprised five steps. *Step 1: Listening and communicating* covered introductions, project aims and objectives. *Step 2: Involving* encompassed interviews, wardrobe studies and workshops. *Step 3: Activating* applied the IPA methodology to analyse transcripts and identify themes relating to the participants satisfaction with clothing, highlighting the significance of textiles as a touchstone for embodied clothing practices and memories (Townsend & Sadkowska, 2018, p. 5). *Step 4: Consulting* invited the participants to feedback on working designs, where their kinaesthetic, bodily sensemaking of the emergent material outcomes informed the ongoing, co-crafting process, as illustrated in Figure 5.3. In *Step 5: Sharing and feedback*, a collection of garments were completed, and presented publicly.



Figure 5.3 Film still showing a researcher helping a participant try on one of the printed garment prototypes to inform the ongoing making process. Photograph by Katherine Townsend. © Katherine Townsend.



Figure 5.4 A group of research participants at the *Emotional Fit* public event, modelling the outcomes from their engagement in the co-crafting project. Photograph by Rebecca Lewis, 2017. © Katherine Townsend.

Fourteen of the women volunteered to model the artefacts at a research event in Nottingham in April 2017, where the project outcomes were shared with an audience of 150 participants, friends, academics, students, and industry (Figure 5.4). The collaborative crafting of clothing represented a “socially valid tool”, a notion based on the ideas of craftsman William Coperthwaite, whereby tools used democratically can lead to “socially valid designs” (Hanssen & von-Busch, 2023, p. 59). The benefits of the co-crafting engagement were acknowledged in feedback from the participants and audience as supporting feelings of self-esteem and personal agency, through recognition and activation of their embodied fashion knowledge.

Discussion: crafting wellbeing in the wider context

The first two examples of silversmithing and textile practice have explored the role of bodily engagement with materials for achieving individual aspects of wellbeing, such as emotional satisfaction, creativity, and personal agency. The third example has illustrated how practising craft together can result in social connectedness and the experience of agency. In this section, we discuss the insights gained from these cases and reflect on other examples from the wider field of craft.

Emotional satisfaction through sensorial making and flow

Niedderer's example from silversmithing has demonstrated how craft practice is rooted in the maker's personal experience of their practice and how this experience progresses over time to become internalized in the form of embodied knowledge and expertise (Groth, 2017). Through its simplicity, the process of planishing metal highlights the importance of sensory experience and embodied knowledge in craft making, for both the creative development and the evaluation of the work's quality. The importance of experiential and embodied knowledge towards creative, personal agency and wellbeing is also apparent in Townsend's practice as a textile and garment maker, where she learnt how to embellish and construct fabrics in two and three dimensions. This involved learning both science- and arts-based skills to develop sensory evaluations and craft knowledge (Molander, 2022), from weighing and mixing dyestuffs to print lengths of cloth to measuring, cutting, and manipulating the resulting embellished fabrics into garments.

Niedderer's example has further illustrated how the craft process affords the opportunity for mindfulness and experiences of flow and extends emotional wellbeing and satisfaction (Czikszentmihaly et al., 2014). Adams-Price and Morse (2018) offered an example related to wellbeing and ageing through their review of research regarding the benefits and impact of participating in culturally meaningful, creative activities on older people's quality of life. They found that creative hobbies can have major benefits when practised long-term, and that practising them can improve cognitive performance and social connectedness, promoting life satisfaction and successful ageing. In a different case, Bunn (2020) has investigated basket-making as a vehicle for recovery for ex-servicemen affected by trauma and memory loss. Like Adams-Price and Morse, Bunn (2020) recognizes the importance of flow within the making process of learning basketry skills (p. 39).

Crafting relational interactions towards social engagement and agency

In the third case, the *Emotional Fit* project, the experiential aspect is expanded through social interaction. Here the researcher-practitioners' expertise of making textiles and clothing was juxtaposed with a group of older women's lived experiences of "making themselves" through clothing (Townsend & Sadkowska, 2020). By formally exchanging learnt skills and personal experiences, it was possible to create something beneficial and of shared value to both parties (Sennett, 2013). Using the relational design of emotionally durable clothing as a socially valid tool, the enquiry drew on ideas of how "problem-solving is learnt in practice" by exploring how knowledge exists and can be generated through "communities of mutual learning" (Molander, 2022, p. 227).

With their varying levels of non-specialist knowledge, i.e., learnt from home dress-making as young women and through lifelong sewing, altering, and repairing skills, the participants' access to and engagement with the co-crafting process were enabled by the presence of the researcher-practitioners with expertise in fashion, textile design, and pattern cutting. In turn, the participants shared their personal and sometimes emotive insights into the rationale or meanings attached to keeping well-worn garments, how they had developed their fashion/ing know-how through sustained material engagement, and their active bodily practice in the world (Malafouris, 2013; Molander, 2022). The workshops engendered mindful working towards a shared goal through relational activities

(e.g., textile selection, trying on and fitting sessions, dress rehearsals, filming, and photo shoots), many of which were new experiences for the group.

The translation of discipline-based and emotional knowledge using hybrid and bespoke methods (e.g., the digital scaling of prints within made-to-measure garment shapes) highlighted craft practitioners' facility to uphold human traits through material understanding and practice (Niedderer & Townsend, 2014). This "agency-oriented" approach (Hanssen & von Busch, 2023, p. 66) restored a sense of empowerment to individuals from a demographic who generally feels overlooked by the clothing industry and to some extent society. The participants expressed the positive impact of the project on their sense of personal agency in a documentary film (Townsend et al., 2017a).

Emotional Fit involved participants as both research subjects and co-researchers, demonstrating a "model of practice" that highlights the value of the making experience in and of itself, alongside "learning with" participants (Shercliffe & Twigger Holroyd, 2020; Townsend & Sadkowska, 2020).

Looking further afield, both Rodgers (2018) and Zeilig et al. (2019) have explored co-creation processes regarding the wellbeing of participants, specifically people with dementia in the context of design and arts (music, dance), respectively. Both studies found that the joint engagement in the creative process demonstrates significant wellbeing benefits for those involved. The wellbeing aspect that arises from the social "togetherness" and collaboration within the process comprises social engagement and a sense of personal agency. Zeilig et al. (2019) explained that co-creativity in their study helped to support wellbeing through promoting a relational approach to creativity that nurtures inclusivity and equality:

Co-creativity for this group was distinguished by a number of characteristic features, including empathic connections, a sense of equality and the generation of a safe space that enabled creative involvement and sharing.

(p. 22)

Zeilig et al. (2019) also stressed the agential nature of co-creativity in that it required participants to take ownership of their feelings within the process and the social group, having to decide how much to disclose and contribute, and whether or when to be an active or passive participant.

The agential and relational nature of craft is further explored by Martindale et al. (2021) and Schnittka (2021). Both studies investigated the phenomenon of sewing face masks during the COVID-19 pandemic by groups of home sewers, including older adults and what led people to make and donate the masks. They explain that craft can act as a catalyst for both creative and social agency as well as relational interactions. The ability to act and do something in the face of the overwhelming feeling of helplessness, especially at the beginning of the pandemic, promoted creative and social agency. Interestingly, for these two studies that due to the requirement of self-isolation at the time, direct co-creation was not possible. Rather, people made masks at home, on their own, as a means of maintaining their emotional wellbeing through feeling (more) in control and empowered in the given situation, and of further gaining a sense of social agency through making something beneficial to the community and helping others. The relational aspect was enacted through interactions of sharing knowledge and experiences of the best materials and ways to make the masks online, and through the gratitude of the community experienced by the makers, as expressed, for example, through "thank you" cards. Satisfaction felt at receiving such acknowledgements added further to the makers wellbeing, or sometimes to the lack thereof if these were not present.

Conclusion: crafting wellbeing through immersion and co-creation

Our examples of craft-making related to metalwork and textiles reveal how craft practice allows makers to develop deep material and experiential knowledge and expertise, and how this may further lead to creativity, personal agency, emotional satisfaction, and social connectedness, thus promoting wellbeing. The examples further demonstrate that mindfulness plays a significant role in relation to the concept of flow, which has been shown to be intrinsically linked to emotional satisfaction. The discussion has highlighted five key points:

- The understanding of how craft practitioners rely on embodied knowledge as the basis for making creative leaps.
- Embodied knowledge and craft expertise, such as sensory evaluations of material properties in the making process, are built over time through practice, repetition, and immersion.
- Immersion, fostered by repetitive action and balance between skill and challenge, allows for the emergence of the flow state that is, in turn, associated with mindfulness and emotional wellbeing.
- Craft and design practices can foster wellbeing by instilling a sense of personal agency and emotional satisfaction through the ownership and self-realization immanent in the process of material engagement.
- Co-creation builds on the wellbeing benefits of making, engendering social engagement and connectedness through sharing not only craft knowledge in the process of making but also the delight and appreciation of the outcomes of craft practice.

We live in an increasingly virtual world where digital technologies become more and more pervasive, on the one hand facilitating creativity, while on the other being recognized for creating stress (Ilstedt Hjelm, 2003). In such a world, it is important to have a counterbalance: craft offers such a compensation and can become a means for promoting wellbeing, through (a) the grounding effects and benefits of immersion through making, (b) the sense of agency that the making process can foster, and (c) the social connectedness that the sharing of craft knowledge and appreciation of the products that craft making can provide.

Reference list

- Adams-Price, C. E., & Morse, L. W. (2018). Crafts as serious hobbies: Impacts and benefits in later life. *Craft Research*, 9(1), 93–102. https://doi.org/10.1386/crre.9.1.93_1.
- Aldrich, W. (1996). *Fabric, form and flat pattern cutting*. John Wiley & Sons.
- Bunn, S. (2020). Basket-work, well-being and recovery: The story from Scotland. *Craft Research*, 11(1), 39–56. https://doi.org/10.1386/crre_00014_1.
- Burt, E. L., & Atkinson, J. (2012). The relationship between quilting and wellbeing. *Journal of Public Health*, 34(1), 54–59. <https://doi.org/10.1093/pubmed/fdr041>.
- Canetti, E. (1960). *Masse und Macht* [Crowds and power]. Classen Verlag.
- Coxon, A., Fer, B., & Muller-Schareck, M. (2018). *Anni Albers*. Tate Publishing.
- Csikszentmihalyi, M., Abuhamdeh, S., & Nakamura, J. (2014). Flow. In M. Csikszentmihalyi (Ed.), *Flow and the foundations of positive psychology: The collected works of Mihaly Csikszentmihalyi* (pp. 237–238). Springer. https://doi.org/10.1007/978-94-017-9088-8_15.
- Eatough, V., & Smith, J. A. (2017). Interpretative phenomenological analysis. In C. Willig, & W. Stainton-Rogers (Eds.), *Handbook of qualitative psychology* (2nd ed.) (pp. 193–211). Sage.
- Groth, C. (2017). *Making sense through hands: Design and craft practice analysed as embodied cognition*. Aalto ARTS Books. <http://urn.fi/URN:ISBN:978-952-60-7130-5>.

- Hanssen, H., & von Busch, O. (2023). Socially valid tools: Sloydtrukk and co-crafting togetherness. *Craft Research*, 14(1), 59–79. https://doi.org/10.1386/crre_00094_1.
- Huotilainen, M., Rankanen, M., Groth, C., Seitamaa-Hakkarainen, P., & Mäkelä, M. (2018). Why our brains love arts and crafts: Implications of creative practices on psychophysical well-being. *Formakademisk*, 11(2). <https://doi.org/10.7577/formakademisk.1908>.
- Ilstedt Hjelm, S. (2003). Research + design: The making of brainball, *Interactions*, 10(1), 26–34. <https://doi.org/10.1145/604575.604576>.
- Ingold, T. (2013). *Making: Anthropology, archaeology, art and architecture*. Routledge.
- Johansson, R., & Flanagan, J. (2009). Coding and use of tactile signals from the fingertips in object manipulation tasks. *Nature Reviews Neuroscience*, 10, 345–359. <https://doi.org/10.1038/nrn2621>.
- Johnson, M. (2015). Embodied understanding. *Frontiers in Psychology*, 6. <https://doi.org/10.3389/fpsyg.2015.00875>.
- Kabat-Zinn, J. (2003a). Mindfulness-based stress reduction (MBSR). *Constructivism in the Human Sciences*, 8(2), 73–83.
- Kabat-Zinn, J. (2003b). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144–156. <https://doi.org/10.1093/clipsy.bpg016>.
- Kaufmann, E. G., & Engel, S. A. (2016). Dementia and well-being: A conceptual framework based on Tom Kitwood’s model of needs. *Dementia*, 15(4), 774–788. <https://doi.org/10.1177/1471301214539690>.
- Kitwood, T., & Bredin, K. (1992). Towards a theory of dementia care: Personhood and well-being. *Ageing & Society*, 12(3), 269–287. <https://doi.org/10.1017/s0144686x0000502x>.
- Langer, E. J. (1990). *Mindfulness*. Da Capo Books.
- Langer, E. J. (2010). *Counterclockwise: A proven way to think yourself younger and healthier*. Hodder & Stoughton.
- Malafouris, L. (2013). *How things shape the mind: A theory of material engagement*. The MIT Press.
- Manzini, E. (2015). *Design, when everybody designs: An introduction to design for social innovation*. MIT Press.
- Martindale, A. K., Armstead, C., & McKinney, E. (2021). “I’m not a doctor, but I can sew a mask”: The face mask home sewing movement as a means of control during the COVID-19 pandemic of 2020. *Craft Research*, 12(2), 205–222. https://doi.org/10.1386/crre_00050_1.
- McCullough, M. (1998). *Abstracting craft: The practised digital hand*. The MIT Press.
- Molander, B. (2022). Ways we are connected to the world: Craft and/or science? *Craft Research*, 13(2), 222–236. https://doi.org/10.1386/crre_00077_1.
- Merleau-Ponty, M. (1962). *Phenomenology of perception* (C. Smith, Trans.). Routledge and Kegan Paul.
- Merleau-Ponty, M. (1963). *The structure of behavior* (A. Fisher, Trans.). Beacon Press.
- Niedderer, K., & Townsend, K. (2014). Designing craft research: Joining emotion and knowledge. *The Design Journal*, 17(4), 624–647. <https://doi.org/10.2752/175630614X14056185480221>.
- Niedderer, K., Holthoff-Detto, V., van Rompay, T. J. L., Karahanoğlu, A., Ludden, G. D. S., Almeida, R., Losada Durán, R., Bueno Aguado, Y., Lim, J. N. W., Smith, T., Harrison, D., Craven, M. P., Gosling, J., Orton, L., & Tournier, I. (2022). This is me: Evaluation of a board game to promote social engagement, wellbeing and agency in people with dementia through mindful life-storytelling. *Journal of Aging Studies*, 60, <https://doi.org/10.1016/j.jaging.2021.100995>.
- Philips, P., & Bunce, G. (1993). *Repeat patterns: A manual for designers, artists and architects*. Thames & Hudson.
- Piper, A., & Townsend, K. (2015). Crafting the composite garment: The role of hand weaving in digital creation. *Journal of Textile Design and Research Practice*, 3(1–2), 3–26.
- Power, G. A. (2016). *Dementia beyond disease: Enhancing well-being* (revised ed.). Health Professions Press.

- Rodgers, P. A. (2018). Co-designing with people living with dementia. *CoDesign*, 14(3), 188–202. <https://doi.org/10.1080/15710882.2017.1282527>.
- Schlosser, M. (2015, August 10). Agency. *The Stanford encyclopedia of philosophy*. <https://plato.stanford.edu/archives/win2019/entries/agency/>.
- Schnittka, C. G. (2021). Older adults' philanthropic crafting of face masks during COVID-19. *Craft Research*, 12(2), 223–245. https://doi.org/10.1386/crre_00051_1.
- Schroder, T. (2010). *Hiroshi Suzuki*. Scala Publishers.
- Sennett, R. (2013). *Together: The rituals, pleasures and politics of cooperation*, Penguin.
- Singh, N. (2018). *Does colouring promote mindfulness and enhance wellbeing? A randomised controlled trial* [Doctoral dissertation, University of Surrey]. University of Surrey's Open Research. <https://doi.org/10.15126/thesis.00849293>.
- Shercliffe, E., & Twigger Holroyd, A. (2020). Stitching together: Ethical dimensions and innovative approaches to participatory textile making. *Journal of Arts & Communities*, 10, 3–11. https://doi.org/10.1386/jaac_00011_1.
- Strohmaier, S., & Camic, P. (2017, November 24). *Conceptualising what we mean by 'wellbeing' in the dementias* [Paper presentation]. Royal Society for Public Health conference 'Powerful Partners: Advancing Dementia Care through the Arts & Sciences', London, UK. <https://repository.canterbury.ac.uk/item/88v33/conceptualising-what-we-mean-by-wellbeing-in-the-dementias>.
- Townsend, K. (2003). *Transforming shape: A simultaneous approach to the body, cloth and print for textile and garment design (combining CAD with manual methods)* [Doctoral dissertation, Nottingham Trent University]. Nottingham Trent University's Institutional Repository. <https://irep.ntu.ac.uk/id/eprint/7552>.
- Townsend, K., & Niedderer, K. (2020). Crafting health, well-being and happiness. *Craft Research*, 12(1), 3–8. https://doi.org/10.1386/crre_00012_2.
- Townsend, K., & Sadkowska, A. (2018). Textiles as material gestalt: Cloth as a catalyst in the co-designing process. *Journal of Textile Design Research and Practice*, 5(2), 208–231. <https://doi.org/10.1080/20511787.2018.1449077>.
- Townsend, K., & Sadkowska, A. (2020). Re-making fashion experience: A model for 'participatory research through clothing design'. *Journal of Arts and Communities*, 11, 13–33. https://doi.org/10.1386/jaac_00012_1.
- Townsend, K., Sadkowska, A. & Boxall, J. (2017a). *Emotional fit* [Video]. Vimeo. <https://vimeo.com/214462308>.
- Townsend, K., Sadkowska, A., & Sissons, J. (2017b). Emotional fit: Developing a new fashion methodology with older women. *Clothing Cultures*, 4(3), 235–251. https://doi.org/10.1386/cc.4.3.235_1.
- Varela, F. J., Thompson, E., & Rosch, E. (1991). *The embodied mind: Cognitive science and human experience*. The MIT Press.
- Wells, K. (2000). *Fabric dyeing and printing*. Conran Octopus.
- Woolley, M., & Huddleston, R. (2016). Maintaining the human touch – Exploring “crafted control” within an advanced textile production interface. In N. Nimkulrat, F. Kane, & K. Walton (Eds.), *Crafting textiles in the digital age* (pp. 91–102). Bloomsbury.
- Zeilig, H., Tischler, V., van der Byl Williams, M., West, J., & Strohmaier, S. (2019). Co-creativity, well-being and agency: A case study analysis of a co-creative arts group for people with dementia. *Journal of Aging Studies*, 49, 16–24. <https://doi.org/10.1016/j.jaging.2019.03.002>.



Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>