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Position Paper

Online matters: Future visions of digital making and materiality in hobby crafting

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Abstract

Over the past 20 years, hobby crafting has experienced a revival of interest, as people have started to seek new ways to engage with crafts as creative leisure in an increasingly digital world. Along the way, emerging, digital technologies have provided new tools and ways to engage in hobby crafting. Indeed, today's hobby crafts are frequently concerned with material mediated via the internet and accomplished with the aid of software, which also affects our understanding of maker identities in online communities. This paper argues that digitalization has not only revolutionized hobbyist craft making with new tools and technologies, but has also paved new ways for practicing creative skills, which has had a significant impact on makers' engagements with craft materials, objects, and communities of practices. This is demonstrated through netnographic explorations on Facebook's leisure craft community where digital material practices are increasingly prevalent in hobbyists' everyday life. As a conclusion, the paper speculates on visions of the future of hobby crafts and its relevance as a leisure pursuit.

Keywords: crafts, hobby crafting, social media, digitalization, technology, materiality, leisure, speculative futures

Introduction: Hobby crafts across the internet

Modern hobbyism includes an idea of a freely-chosen activity that provides the means to experience pleasure and satisfaction. However, activities that nurture a sense of enjoyment are always contingent upon place, time, and economic and social powers that adapt individual views and qualifications set on leisure pursuits (Rojek 1995; Stebbins 2005). This makes for a complex backdrop against which contemporary hobby crafting can be viewed in the light of the shifts in society caused by digitalization.

Indeed, today's hobby craft culture incorporates makers' interaction with digital tools and technologies, their use of digital content for the purposes of fostering material interplay, ways of sharing resources, and the influence by others in the digital world (Gauntlett 2011; Minahan & Wolfram Cox 2007; Orton Johnson 2014). The internet, as we know it today, is full of websites, blogs and online forums sharing patterns, DIY tutorials and peer-to-peer tips for crafting. With the resources of the internet, hobbyists can access advice on a wide selection of leisure crafts, ranging from novice tips to pick up a new hobby to professional craft tutorials teaching makers to master new creative skills. This investigation of the digital life of hobby crafting seeks to enhance the understanding of the motives behind the resurgence of making. It traces the reasons why people invest time in hobbyist crafting and how digital interactions mediate and affect the materiality of hobby crafting. In conclusion, it offers a discussion of the speculative futures of hobby crafting in times of digitalization.

Using netnography as investigative method

This article is grounded on netnographic explorations (Kozinets 2010) of the current social media craft trends on the Facebook group *Handicraft Friends Tip Bank* (*Käsitöiden ystävien vinkkipankki*, in Finnish). The *Käsitöiden ystävien vinkkipankki* group was established in 2012 by an individual

craftsperson. Today, the *Käsitöiden ystävien vinkkipankki* group is one of the largest Finnish-based hobby craft groups on Facebook with its 57,000 members (16 May 2020), and more popular than e.g. the *Suuri Käsityö* group (20, 000 members, 16 May 2020) managed by Finland's most widespread craft magazine and *Novitaknits* group (44,000 members, 16 May 2020) administered by the Finnish yarn company Novita. In comparison to groups run by craft companies that focus on materials and provide tutorials accordingly, the *Käsitöiden ystävien vinkkipankki* group is established as a recreational craft group, where members can exchange peer-to-peer information and tips on crafting. Although there are some other, larger Finnish-based craft groups, the *Villasukat* group (133,000 members, 16 May 2020) is defined and delimited by the making of wooly socks and the *Askartelu- ja sisustusryhmä* group (120,000 members, 16 May 2020) focuses on interior decoration. *Käsitöiden ystävien vinkkipankki* is a key hobby craft group with a broad remit covering everything related to handicrafts. It is not defined by, or limited to, any particular craft technique or material, and it has no requests for the group members about their level of expertise. Other similar Finnish-based craft groups, which are intentionally created as general hobby craft platforms, have far fewer members: the *Kätevän emännän käsityöt ja ideapankki* group has 23,000 members (16 May 2020), the *Kädentaidot & Askatelu* group has 16,000 members (16 May 2020) and the *Ihanat käsityöt ohjeineen* group only has 5,500 members (16 May 2020).

The investigation was initiated in 2016 for the purpose of discussing future views on hobby crafting (Kouhia 2016) and has continued since through netnographic participation in the online community (Kozinets 2010; Bowler 2010). I participated in the group as a peer craft practitioner and hobbyist, using my personal Facebook account, reading posts and images on the computer screen, and sometimes liking photos uploaded on the group wall, just as any another group member would do. Beyond that, I tried to affect the flow of posts as little as possible, not breaking in with questions or comments. Thus, my netnographic observations were conducted as a silent participant,

as I have positioned myself as “a discussion partner in the general public on social media” (Kosonen, Laaksonen, Rydenfelt & Terkamo-Moisio 2018, 121-122). Because the *Käsitöiden ystävien vinkkipankki* group is a widespread closed group, where the flow of posts is ongoing, and where people follow and take part in the discussions with altering interest, gathering research permission from all group participants would be an impossible task. Therefore, each time I have used a post from the group wall to quote as a data sample to unpack general conversations, I have contacted the person who posted the content via private messages and asked their permission to use the data for scientific purposes. From the viewpoint of research ethics, the most crucial thing has been to ensure anonymity and privacy of the people involved, and to “minimize potential harm caused by the research” that is especially emphasized in research considering vulnerable groups of people, sensitive research topics and, crucial to the very study, material collected from closed discussion groups (ibid. 119). In conducting and reporting the study, I have followed the principles of integrity, meticulousness, and accuracy, and safeguarded the anonymity of informants so that the people under investigation cannot be identified or the flow of discussions traced.

The participation provided insights into the digital nature of contemporary social life (see Bridges 2019) and on how technology is being used “to communicate, to commune, to socialise, to express, and to understand” (Kozinets 2010, p. 2) in the context of hobby crafting. The main content uploaded on the group wall consists of pictures and stories of craft projects through which hobby crafters share their experiences and seek inspiration for their own leisure crafting. I followed the posts on the group wall for a period of three months (from May 2016 to July 2016). During the investigation period, I adapted and optimized my subscription settings on the site for it to show me the most relevant discussions, including posts with the most daily likes and comments, to see how discussions within the group revolved around specific topics. To analyse the posts with regard to

future views on hobby crafting, I annotated and structured them into themes (see Kouhia, 2016), paying particular attention to the content of the top posts and the foci of the ensuing discussions.

This article is based on the analysis conducted in 2016. Since then, I have continued my research into the future of hobby crafting through participation in the group. In this article, the results of the updated analysis are presented as three speculative visions of the future of hobby crafts. The three visions are not exclusive or preferential. They contemplate the worth and value of future hobby crafting and its relevance as a leisure pursuit for makers across digital communities.

Crafting digital materiality

New materialist theorists have highlighted that materials and objects are not fixed entities, but rather exist as malleable constructions that are in a constant state of becoming (Bennett 2010; Ferreira & Scaraboto 2016; Harvey & Knox 2014; Ingold 2007). The concept of materiality is seen as crucial for understanding how particular materials (Bennett & Joyce 2013: 5) are given form and meaning within specific historical and social contexts (Ingold 2012). Such a view on materiality focuses on the process of objectification, and addresses material interaction as a form of the engagement with the materials. Crafting, in this sense, refers to the practice of making that comes into existence through the application of one's skill and material-based knowledge to the ways of creating crafts (e.g., Sennett 2008). It is highlighted that materiality exists prior to any other qualifications in crafting, since crafts come into being through the human-material interaction, and are entwined with and organized around materiality of making (see e.g., Metcalf 1997; Adamson 2007). This advances a view that crafting requires engagement with materials; they may be materials considered traditional for crafting such as clay, wood, paper, stone, birch bark, yarn, and cloth, or sometimes more unconventional or contemporary materials, like plastic, electronics, biodegradable fibers or fabrics, or more recently, pixels.

In recent years, discussions of the interactions with handcrafted materiality and the ways these materialities are being created, displayed, shared, and collectively extended online have become more frequent (e.g., Kouhia 2015; Gauntlett 2011; Golsteijn, Hoven, Frohlich & Sellen 2014; Minahan & Wolfram Cox 2007; Myzelev 2015; Orton Johnson 2014; Searle & Kafai 2015; Torres, 2019). Crafting has gained a status as a multifaceted and interdisciplinary practice capable of tapping diverse material resources and hybridizing making with the inclusion of digital technology, such as 3D production, digital fabrication, craft-enabled animation and the use of a contemporary matrix of tools, such as computer-assisted looms and digital knitting machines. These developments are pushing hobby crafting to new territories of production, reproduction and imagination, provoking makers and opens up previously rigid boundaries between public and private.

Today, digital-material interactions are not only familiar as digital versions of analogue media, such as digital recordings (photographs, books, and music), but also as new applications, platforms, and participatory social network entities centred around sharing information and user-centred content in cyberspace (see Golsteijn et al. 2014; Kendzior 2014; Mardon & Belk 2018). In recognizing the meaning of such digital content, the term *digital materiality* refers to the entanglement of the digital and the material, how the digital emerges as a part of the material world, and - crucial for the field of crafting - how material has become digital (Pink, Ardèvol & Lanzeni 2016: 3). According to Richard Kendzior (2014: 7), digital materiality encompasses "materiality present in electronic environment such as online digital worlds", and it "consists of intangible representations and simulations" of the material world mediated on the screen. Other digital practices relate to physical materiality in that they simulate habituated practices of the material world, like consumerism focusing on browsing through online retailers' websites similar to window shopping at a mall (see Denegri-Knott & Molesworth 2010). The integration of the digital and material thus offers a valuable way to investigate the state of hobby crafting in the 21st

Century. In the following, three different ways of integrating digital means with traditional craft are discussed.

The use of digital content for the purposes of enhancing material interaction

In Finland, hobby crafting has recently become prominent through a focus on woodwork, furniture making, audio-electricity, and the construction and repair of radios, cars, and musical instruments (Statistics Finland 2005). Although contemporary hobby crafting encompasses a range of different materials and methods of manufacture, digital materiality on the *Käsitöiden ystävien vinkkipankki* Facebook group focuses extensively on the presentation of textile-inspired craft projects, news links, and other textile-related materials. This includes, for example, posts on crochet pattern tutorials, knitted doll clothes, paper-mesh dipped DIY lamps, and craft projects focusing on upcycling old curtains or leather jackets into purses. Many posts in the group wall exhibit crafting based on curiosity in order to deliver something new to think about in hobby crafting. Such posts comprise of pictures and tutorials on craft techniques that were new or unforeseen for the person who posted them, or of tips for buying craft supplies that had recently appeared to the market. Indeed, perhaps the most profound interest in the *Käsitöiden ystävien vinkkipankki* Facebook group seems to be set on developing one's own knowledge of, and visions for hobby crafting in line with the discovery of embodied virtuality and digital aesthetics. For the hobbyist makers, embodied virtuality (see Weiser 1991) foregrounds moments when the boundaries between the physical and the digital world become blurred, and digital-material objects may perform and function as craft. This occurs, when new digital-material artifacts, such as photos of handcrafted objects, are posted online, and when representations of the real-world materiality are no longer distinguishable from their digital performance.

In the most straightforward terms, the *Käsitöiden ystävien vinkkipankki* Facebook group is only capable of providing makers with a set of immaterial goods within the digital space it creates.

Therefore, the primary pursuit of such digital space relies on providing means for virtual consumption, as hobbyists browse photo streams and wall posts, and affect and become affected by digital material objects created by other hobbyists. This activity is similar to what hobbyists do in real life when browsing craft magazines and visiting craft supply stores to seek inspiration. Thus, the group's digital materiality sets a transition from the material world to experiential consumption in the form of digital simulation of the traditional modes of crafting and consuming crafts. In this sense, digital materiality constructed within the *Käsitöiden ystävien vinkkipankki* Facebook group sustains the transfer of influences by providing inspiration for craft projects and information about craft materials and tools available in the market. Indeed, interactive craft knowledge transfer is what digital spaces can offer and what traditional craft knowledge sharing cannot do. This includes sharing affordable digital-material content and circulating craft knowledge and on the social media networks of like-minded craft makers familiar to each other mostly via the internet.

In the described interactions, the somewhat binary construction of digital/real seems to persist, since virtual consumption is primarily grasped as a form of material culture occurring in cyberspace. Craft makers bring the materialities of the real world into the digital space in the form of photos and posts, which are shared as representations of the real. Even though, hybridizing material practices through digital materiality transforms the culture of hobby craft making, and enhances the enactment of crafting through interactions undertaken in the digital world.

Engagement and connection in interactive digital communities

At times, the popularity of craft-related hobbies has been attributed to the growth of social media because of its endless possibilities to share in crafting virtually with other makers (Minahan & Wolfram-Cox 2007; Gauntlett 2011). Social media may be seen as one of the most important sources today, if not *the* most important source, of information for craft makers to seek new inspiration and share practices of crafting. Distribution encompasses a wide range of online

platforms such as blogs, Facebook groups, Instagram feeds, or social media sharing platforms like Etsy and Ravelry. Information is shared in forms of craft tutorials, online workshops and projects, or live video streams. Topics covered include diverse materials, techniques, and social phenomena. In addition, social media has created new ways of participating in, consuming, and producing through crafting (Orton-Johnson 2014).

In social media, as argued by Alla Myzelev (2015: 65), the interest in participation in the online communities "creates the reality that is shared by all [. . .] members of the community." In addition to sharing photos on the group wall, members of the *Käsitöiden ystävien vinkkipankki* are active in distributing know-how and craft tips, and expressing and exchanging opinions and experiences. They circulate information with links and photos on the group wall, and liking and commenting on the posts of other makers. In this way, hobbyists share their crafting processes, views and visions, aesthetic aspirations as well as their joy of crafting. This new reality not only enables makers to share fruits of their creativity with others and perhaps see crafting as a subject matter in a new light, but also contributes to the perceived sense of community through the communication and joint actions taken online. The interactive nature of digital media enables hobbyists to collaborate within their making, shifting their needle pins to modeling with the mouse and individual material interactions to collective negotiations of decisions online. The act of sharing transforms individual recreation into a means of reacting and being responsive to the world-as-we-know-it as it changes minute by minute. For example, in March 2020 makers started to upload DIY instructions for "Corona crafts", including news on the positive role of crafting in times of crisis with links to online craft events to brighten up the days of the community members quarantined by the Coronavirus, in addition to the accustomed craft photo sharing. Indeed, hobby crafting in the digital world seems to be marked on the one hand, by active and reactive participation, and on the other hand, by the desire to exchange ideas and share experiences of joy and enjoyment of crafting with other makers.

Employing digital tools and technologies to enhance craft

The use of digital tools and technologies has resulted in the emergence of new methods and techniques to create compositions from hybrid physical and digital materials. Simultaneously, crafting has gained a role as a practice that focuses not only on the object-oriented workmanship of the hand but also on matters of embracing such new materials, tools, and technologies (see Frayling 2011; Peach 2013; Golsteijn et al 2014). As the interest in the use of new digital solutions has risen and the cost of the technology has dropped, these advanced resources have also become more accessible in form of emergent makerspaces. Due to these creative labs, technologies such as 3D printing, laser cutting, machine embroidery and computer aided design are available for today's hobbyists to embrace digital forms of designing and fabrication. It has been suggested that these digital innovations are democratizing crafting by providing broader access to a variety of novel materials, processes and techniques. This empowers a broader range of makers to "manipulate the medium to their advantage" (Blikstein 2013: 2; also Torres 2019), thus expanding and emancipating hobby crafting beyond traditional vies of hobby crafting as women's labour in household (Haraway, 1991).

In the *Käsitöiden ystävien vinkkipankki* Facebook group, while projects focusing on digital fabrication remain few, where it appears, digitalization of the culture of making appears to be driven by customising and shaping one's own living world in an ecological ethos. In many posts, attention is paid to promoting eco-friendly crafting through the upcycling and reuse of materials, open-access craft collaboration and the free use of online guidelines. Such posts tend to promote the sharing and exchange of hacking-inspired crafting and technologies (Davies 2017); for instance, a post presenting a lamp, which used an old basket as a shade and hitched on cable parts removed from a broken IKEA floor lamp to new plugs from a DIY hardware store.

A few uploads focus on the technology, featuring 3D pens, laser cutting, methods of carving logos on plywood and leather, and techniques of printing photos on shrink plastic. In these posts, digital technologies have been utilized as methods for enhancing traditional craft making and bringing new twists to hobby crafting to improve the functionality and expressiveness. This can be seen in posts exhibiting laser carving on old glasses found from the cupboard stash.

Innovative digital-material solutions continue to bubble up, but they have not yet broken into the mainstream. Rather, traditional forms of home-based hobby crafting dominate discussions on the group wall and, occasionally, digital technologies were even commented on in a disparaging way. For example, in comment chains on buying sewing machines, some craftspeople valued old analogue sewing machines more than new digital ones, and claimed that digital technology would make sewing machines erratic and easy to break. Such examples not only suggest that many hobbyists prefer conventional forms of craft making, but also indicate that hobby crafting seems to largely persist as a culture sustained by traditions.

Visions of the future of hobby crafting: From declining skill to digital mastery?

Based on the netnographic explorations on the *Käsitöiden ystävien vinkkipankki* Facebook group, three different visions of the future of hobby crafting may be envisioned as presented in the following.

The vision of a declining skills culture puts forward an image of hobby crafting as a form of digital material consumption that, due to its increasing accessibility and the large amount of digital content created around crafting, attracts more and more enthusiasts and gets more and more widely recognized and practiced, but in turn may lead to a decline in skills and quality due to the egalitarian way and nature of advice and examples shared. For example, watching skilled craftsmanship through online videos adds visibility and value to crafting in general, but this does

not guarantee that the audience is able to follow the advice and thus may foster unsafe or unskilled practices. This might lead hobby crafting into the direction of consumerism, where easy step-by step craft tutorials use ‘merchandised’ tools and materials with little individual input promoting a conventional type of hobby crafting, that is increasingly validated by “likes” and the number of online-followers than by the quality of its design and craftsmanship. This vision builds a view of hobby crafting as an attractive mainstream leisure activity where the number of craft enthusiasts grows, and a wide variety of ideas and phenomena are found online to nurture a consumption-driven logic of material experimentation around hobby crafting.

The second *vision of crafting as a form of specialization* is based on indications that different forms of hobby crafting may establish specialised communities of serious hobbyists. Through the acts of sharing within these groups, dedicated hobbyists develop high-level skills and practices, and increasingly distinguish themselves as subcultures of their own, at the exclusion of those not recognized by their group. This includes hobby crafters introducing new ways of enmeshing machines and organisms in cyberspace with the appropriation of digital materiality as a resource for crafting. In addition, the materiality of hobby crafting might develop in a direction where distinctive forms of making are translated into digital media by the hobbyist communities through the identification, articulation, and sharing of their specialized skills and knowledge. Above all, this vision of the future of hobby crafting labels crafting as a post-gender community lived through diverse social, bodily, and machining realities. This partly draws on Haraway’s ideas of the cybernetic posthuman being (1991) in which she criticizes the logic of domination in the social categories of gender, race, sex and class with the entanglement of imagination, material reality and machinery in favour of creating coalitions based on "affinity" instead of identity. A post-human vision of hobby craft, embracing humane values, becomes a way to influence, share, participate, and become involved beyond artificial social boundaries. It is, therefore, well possible that hobby crafting might develop as an avenue to search deeper meaningfulness in life for the people

dedicated to the practising of skills. This may entail a possible rejection of the constructions of woman-as-not-male and hobbyism-as-not-professionalism, but make room for new constructions through the adaptation of new technological skills and acquisition and development of new concepts and identities.

Finally, *the vision of crafting as sustainable discursive practice* puts forward a view where digitalization transforms makers' perception of creativity and agency through reflection on the use of digital materials and skills in everyday life. According to this vision, future craft hobbyists living in a post-industrial society, where interdisciplinary perspectives on the life cycles of materials promote change towards alternative modes of consumption and sources of human well-being, will undertake crafting to better society. Thus, crafting could be seen as an essential skill to combat environmental challenges through the promotion of systems aimed at the ecological use of material resources in preservation and advance of circular economies. Amid the digital, visual and social media world, crafting might be constructed as a tool to understand the embodiment of experiences generated by material experimentation and an attempt to pursue sustainability. According to this vision, makers might witness multiple and overlapping forms of hobby crafting offering a fruitful ground for interdisciplinary learning to promote agency, artisanship and professionalism, basing their participation in digital communities and acknowledging crafting as a way to transform resources and promoting an individual's well-being through the act of making.

These three visions may be three among many other options to embrace crafting in the future, and it is likely that these ideas will be interwoven and overlap, merge and emerge over time. While only time can show how hobby crafting will develop, it is likely that crafting will continue to be understood as a resource to act, re-act, share and participate, and as a resource for interweaving the "traditional" and the "new", blurring the boundaries between making and machines.

Conclusion

Based on the netnographic explorations, the article updates visions of the future of hobby crafting, and proposes that digitally mediated interactions may lead a hobbyist's craft making to different directions. At its worst, it may lead to the depreciation of hobbyist making, and at its best to the appreciation and the re-development of hobby crafting as a way to enhance equality and promote an ecological way of life through the emergence of new maker cultures. Thus, the article concludes that there is a conceptual paradox in digital hobby crafting: While digitalization facilitates a focus on the creation of the 'new' within the hobby crafts, the aims of maintaining the 'traditional' material context of crafting still remain.

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