Original Article

Journal of
MATERIAL
CULTURE

Journal of Material Culture
2024, Vol. 29(1) 26–41

DOI: 10.1177/13591835231212283
journals.sagepub.com/home/mcu


COVID, clay, and the digital: The role of digital media in pottery skill development during the COVID-19 pandemic in Britain

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Abstract

The COVID-19 lockdowns in Britain during 2020 and 2021 deprived people of access to studios and workshops in which we typically understand the learning and practising of skilled crafts to occur through working amongst others with materials. Recent literature on skill and craft has argued that it develops through social, participatory, and embodied processes in shared situated contexts. I argue that attention to the role of digital media within these ecologies is key to understanding how people continued to learn new craft skills during the pandemic. Drawing on Material Engagement Theory and the concept of digital materiality from digital sensory anthropology, I develop a case study around people practising pottery in Britain during the pandemic. I demonstrate how engagements with digital media are central to skill development, highlighting how the 'digital' and 'terrestrial' cannot be disentangled, and thus emphasising the importance of attending to the total hybrid learning ecology.

Keywords

Pottery, skill development, COVID-19, digital media, hybrid learning ecologies

Introduction

March 2020 marked the onset of prolonged periods of social distancing and lockdowns across Britain due to the COVID-19 pandemic. People found themselves increasingly confined to their homes and were unable to enter physical spaces such as studios or workshops where previously the learning of craft skills most occurred. Thus, people wishing to

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learn new skills, or continue to develop existing ones, were faced with the task of learning at home. This article investigates the role of digital and social media in the development of pottery skills during this period. Drawing on Material Engagement Theory (MET) and the concept of digital materiality, I adopt a material and ecological approach to the development of skill. I explore how it emerges through interactions with persons and things across terrestrial and digital spaces that cannot be discretely disentangled, in what I refer to as hybrid learning ecologies. I draw on Bluteau's (2019) designation of 'digital' and 'terrestrial' to discuss online and offline engagements to reflect the blended nature of the postdigital world and explore the intersections between enmeshed online and offline spaces. In comparison to 'offline' and 'online', or 'real' and 'digital', these terms emphasise the reality of our engagements in our interactions in the world and are particularly useful for my discussion that concerns graspable physical materials, such as clay or tablet screens, and non-physical or digital materials, such as websites, social media, or algorithms and code. Interactions with such materials are not distinct, for example, when opening an app on your smartphone you are interacting with both 'terrestrial' and 'digital' materials simultaneously, and it is such blended interactions, which are encapsulated by the concept of 'digital materiality' (Pink, 2017; Pink et al., 2016a, 2016b).

Hybrid working and learning, which has been subject to increasing debate surrounding its functioning and design (see, Raes et al., 2020) and has been exacerbated by the pandemic (Gnaur et al., 2020) offers a germane context for exploring such blended interactions. Taking the example of pottery, which is typically associated with traditional and non-digital learning practices, this article aims to address the importance of understanding the role of digital media in hybrid learning ecologies as they become increasingly part of our learning experiences. Many of my participants were learning from within their own homes during lockdown, outside of the traditional spaces and social structures typically associated with the learning of craft skills. Whilst some participants had fully functioning home studios, others worked within their homes; on kitchen counters, living room floors, and in their gardens. Some common problems participants faced with learning from home concerned lacking a master–novice relationship, a lack of feedback, and not working amongst peers. In this context where access to social and educational structures was restricted by the closing of physical spaces, social learning interactions were re-configured using digital media. I argue that in order to explore how people continued to learn in this context, we must understand how these interactions with and through such media took place within wider hybrid ecologies, made up of engagements with both digital and terrestrial materials.

Methodology

The central research question explored in this article concerns how my participants were able to learn pottery skills in the absence of in-person teaching. Moreover, I question whether the existing theoretical approaches we have to understand skill development are able to adequately capture the experiences of my participants, or whether a new approach is required. To explore this, I conducted digital ethnographic fieldwork

undertaken primarily on Instagram between March and July 2021 using my account @anthro_pottery. The account name, inspired by Bluteau's (2019) @anthrodandy, aimed to reflect my dual position as researcher and potter. During this period, I interacted with the site daily and conducted 25 semi-structured interviews using Microsoft Teams, each one lasting around 1 hour, with participants ranging from novices to professional potters. The interviews undertaken aimed to explore how participants were practically learning and developing their pottery skills during the pandemic, particularly attending to how they used specific sites and media, as well as their affective experiences of potting during this period. Rather than asking a series of preformulated questions, I began each interview by asking the participant to tell me about their journey into pottery, whether this was during or prior to the pandemic. From here, I allowed the discussion to unfold in line with what was of interest to both me and the participant. Moreover, drawing on the well-established practice of combining participant observation with learning the same skill as the participants we work with (see e.g., Bluteau, 2019; Downey, 2011; Luvass, 2016; Marchand, 2010; O'Connor, 2007), I used my experience as a beginner potter since the first British lockdown, to elucidate, and better comprehend the experiences of my participants, as well as researching pottery communities on sites such as Instagram and Facebook.

As I conducted interviews with participants using Teams who had predominantly been recruited through Instagram, and additionally made use of sites such as Facebook and YouTube in their learning, this complicates the location of my research but equally, I argue, more closely parallels the experience of my participants. Moving across sites was not out of the ordinary for my participants as they considered the potential uses of these sites for different things. For example, a participant might watch how-to tutorials on YouTube, but they seek advice in pottery groups on Facebook. Movement across platforms is discussed by Madianou and Miller (2012) in their discussion of 'polymedia' and the social and emotional consequences of interacting through specific sites. However, this article, is less concerned with attending to the media content specifically, and more interested in how different sites were used as part of this wider ecology. From the perspective of my research, it would not make sense to confine my research to one site as my participants did not confine their own interactions to one site but engaged with multiple platforms in their learning. Therefore, the methodological approach taken also reflects the theoretical approach developed in this work, which argues that my participants' learning occurred in hybrid ecologies made up of interactions with different digital and terrestrial media and materials that cannot be discretely disentangled, as I discuss below.

Hybrid digital-terrestrial learning ecologies and digital materiality

Approaches to craft and skill learning can broadly be understood as situated approaches (e.g., Lave and Wenger, 1991), perceptual transformation approaches (e.g., Goodwin, 1994; Grasseni, 2009), embodied approaches (e.g., Downey, 2011; Marchand, 2010; O'Connor, 2007), and ecological or material approaches (e.g., Ingold, 2000; Koukouti and Malafouris, 2021; Malafouris, 2013, 2019). While the literature tends to either

emphasise learning as situated activity systems or understanding the embodied experience of learning and the development of relationships with tools and materials, varying in their emphasis on the community or individual, there is common stress on the situated, contextual, and emplaced nature of learning.

In this article, I take a material and ecological approach to skill, in which I draw upon Malafouris' MET perspective, which itself draws heavily on Ingold's (2000) ecological approach to skill development. In doing so, I emphasise the centrality of engagements and explorations with materials in learning, and I argue for the need to extend such considerations to those digital materials with which my participants interacted. MET takes the cognitive system as embodied, mediated, distributed, and extended, with the human capacities to enact agency, memory, and imagination being distributed material processes, extending beyond the individual (Malafouris, 2019: 13). These are capacities that inform skill as a form of knowledge that cannot be seen to exist only in the interiority of the human brain but are emergent properties within a wider system of interaction. Thus, we must recognise the action potential of engagements with materials in the 'shaping of our minds and brains' (Malafouris, 2013: 7). From a situated cognition perspective (Bateson, 1973; Gibson, 1979; Merleau-Ponty and Smith, 2002), we can consider perception and action as distributed and ecological, where knowledge and self-awareness in learning are 'constructed through movement and an interdependence of the body, social relations, material engagement, and the environment' (Walls and Malafouris, 2016: 626). The learning of a skill, while it may follow rules of correct practice within a 'community of practice' (Lave and Wenger, 1991), involves 'improvisation and conflation of perception and action in relation to an unfolding flow of activity at hand' (Walls and Malafouris, 2016: 629). Taking the example of the potter at the wheel, we can explore how when throwing, bodily actions are inseparable from the enaction and re-enaction of skill, as bodily memories that emerge through engagements of body and brain with the wider material ecology of action (Malafouris and Koukouti, 2018: 171–173). Without this material ecology, there are no engagements, and without this, there is very little that the body can remember about actual making processes. It is in the process of throwing, through engaging with the clay and tools, that these skills emerge as a kind of remembrance. Through repeated engagements, a feeling *of* and *for* clay arises (Malafouris, 2014: 149) as potters discover the relevant affordances, and develop an atunement to the materials and skills engaged in the emergence of a form (see also Ingold's (2000) notion of guided rediscovery). Thus, in skill development, the persons, materials, and tools with which the potter engage, and their perceptual experience of them, are central to their constitution. In this article, I seek to extend this to include the role of digital media in my participants' experience of learning.

Despite some notable contributions (see e.g., Barker and Jewitt, 2022; Grasseni and Gieser, 2019; Pink et al., 2016b; Poulsgaard and Malafouris, 2020), there is a paucity of theoretical discussion on the role of digital materials in the context of skill development. How we experience our environment is increasingly digitally mediated (Jewitt and Mackley, 2019; McQuire et al., 2009; Pink, 2017; Pink and Leder Mackley, 2013). And, from a postphenomenological perspective, it is impossible to argue the digital is outside of reality; rather it is integrated into our sensory landscape, as something with its own materiality that is experienced and perceived (see Ihde and

Malafouris, 2019; Poulsgaard and Malafouris 2020). For many people, the digital's ubiquity is felt daily across all aspects of our lives, as not distinct from our reality but part of it and blended with our terrestrial engagements. Moreover, the contemporary literature that addresses craft, particularly from the sociology of crafts and occupational therapy, elaborates on how digital and social media have been used in learning (e.g., Torrey et al., 2007; Wood, Rust and Horne, 2009), in establishing communities among craft practitioners (e.g., Kuznetsov and Paulos, 2010; Orton-Johnson, 2014; Pöllänen and Weissmann-Hanski, 2020), and the overall connection between the resurgence of craft interest and the information age (e.g., Gauntlett, 2011; Luckman, 2013; Minahan and Wolfram Cox, 2007). However, this latter research remains relatively under-theorised by comparison. I argue there is a need to join this literature and develop a theoretical perspective that allows us to consider how engagements with such digital technologies in our wider material ecologies are implicated in the development of craft skills. This might be done through combining such material and ecological approaches with the concept of 'digital materiality'.

The concept of 'digital materiality', has been variously defined across different disciplines such as architecture, design, media studies, and the social sciences (Pink et al., 2016a: 7). For example, in anthropology, where much of the attention shifted from binaries of 'offline' and 'online' to considering their interrelation (see e.g., Beaulieu, 2010; Bluteau, 2019; Boellstorff, 2016; Horst and Miller, 2012; Miller et al., 2016; Miller and Slater, 2000), there is also a focus on the relationship between the 'digital' and 'material'. Horst and Miller (2012: 25) attend to three types of materiality in digital anthropology. First, the materiality of digital infrastructure and technology. Second, the materiality of digital content. And third, the materiality of digital contexts. Thus, they argue, 'the digital, as all material culture, is more than a substrate; it is becoming a constitutive part of what makes us human' (2012: 4).

The co-constitution of digital media and persons is made further explicit in Poulsgaard and Malafouris' (2020) understanding of digital materiality. Taking a non-representationalist and relational approach, they construct another definition of digital materiality, joining work from postphenomenology, MET, architecture, and design. They attend to how technologies, digital and physical, mediate the perception and co-constitution of beings and world, with human–technology engagements being fundamental to being-in-the-world, knowledge, creativity, and agency. Their use of 'digital materiality' refers to how just as physical materials resist and transform action upon material objects, so too digital materiality, of software and layers of code, transform creative practices upon computers (2020: 3). They argue that 'creative agency arises as an emergent property dependent on the dynamic couplings between architects, software, their configuration and underlying digital materiality, studio organisation, project-specific collaborative relationships and so on' (2020: 6). In their relational view, these specific technological relationships are part of total digital design ecologies from which architects' agency and imagination emerge and fundamentally shape the mind and digital design. Paralleling Malafouris' example of the potter's situated exploration of the clay, the digitally engaged architect 'finds form through skilled engagement with the digital modelling environment across its inter-faces, software, and their underlying mathematics' (Poulsgaard and Malafouris, 2020: 9).

From the perspective of digital sensory ethnography Pink et al. (2016a: 11) argue that 'the digital, the material and design are not specific and separate things, but are rather more porous elements of processes of research, design and intervention'. Adopting a processual approach, largely drawing on Ingold's attention to things, rather than objects, they argue that materiality is a process, a flow, and connections. Thus, digital materiality occurs through continuous and open processes that cannot be delimited into discrete units with physical properties in opposition to attributes such as being virtual, binary, or digital, challenging the assumed boundaries of what is digital and what is not (2016a: 10). Taking such an approach, goes beyond the content of media (Pink and Leder Mackley, 2013) and allows for explorations of how digital technologies and media form part of our sensory embodied engagements with the world in which their qualities, affordances, and potentialities are always present (Pink, 2017: 2). This concept is employed by Pink et al. (2016b) to explore how digital video has been used to stimulate new ways of learning and knowing about safety in the construction industry. Through attending to the concept of digital materiality in discussing learning environments, which include digital technologies, they emphasise the relationality of things, and the emergent nature of this process (2016b: 5).

These different conceptions of digital materiality are joined in their attention to the flows and flux of things that shape our perception and experience of the world that we inhabit, with persons and world being co-constituted through these engagements. Pink's conception of digital materiality directly draws on Ingold's ecological approach, which lends it to integration to MET, which similarly draws on Ingold's work but more assertively argues for the agency of materials in the development and constitution of skill. As we move beyond distinctions between 'real' and 'virtual', or 'offline' and 'online', we may no longer view the 'digital' and 'terrestrial' as separate spheres but, in adopting an MET approach, we can consider the larger blended and hybrid ecologies of distributed agency, composed of the material that we can grasp as well as that which we cannot, with which we multi-sensuously interact when we access digital content. Following MET, I argue skill development occurs in and through these engagements, which constitute such ecologies, made up of interactions with both terrestrial and digital resources, unbounded by the physical space of the studio alone. I argue that when access to social and educational structures was restricted by the closing of physical learning spaces, digital media was used to re-configure social learning interactions encouraging participants in their experimentation with clay.

YouTube tutorials as a learning resource

Nearly all my participants, whether they were absolute beginners or continuing to develop their skills, cited using video resources to learn. YouTube as a learning resource has been discussed extensively (see e.g., Maziriri et al., 2020) and has particular relevance in the pandemic when many people have turned to learning online. Within YouTube, there is a clear genre of tutorial content which is created for a specific teaching purpose, which many participants used to seek answers to questions or learn techniques, which they would observe and then mimic.

> I think if I get stuck, I'll be like 'oooh how do you do this bit' and then look up a YouTube video on my phone and just try and see what they're doing and then try to copy that. Sometimes I play the video while I'm trying to do it and like copy that. (Maisie*[1])

When Maisie was confronted with a challenge, she looked to YouTube for tutorials that she could watch and mimic in real-time. Relying on the video's instruction, which is most often visual and verbal, she physically re-enacted what she was witnessing through engaging with the tools and materials in her own situated environment. Moreover, this relies on blended and multisensuous engagements with both terrestrial and digital materials. She grasps the smartphone, tactilely engaging the screen as she opens the app, types her query, and plays the video, she watches the screen, and hears the audio through the speakers. The pervasiveness of our sensory engagements with screens, cameras, and other digital technologies have been variously discussed in digital anthropology (see e.g., Miller, 2005; Miller et al., 2016), as well as in the context of education research, such as by Ellis and Goodyear (2016: 158–159) who point to the many ways education is 'hybrid', blending digital and physical interactions, for example, in how 'touch screens (re)introduce a tangible quality to interaction with digital information'. But beyond the physical devices she is engaging with, she is engaging with digital content which may have been created on devices anywhere in the world, uploaded to the Internet, onto servers located in yet other locations, to be accessed via the YouTube website or application, which is itself built up of layers of software and code. These engagements cannot be disentangled from one another – she simultaneously interacts with the digital and terrestrial through these interactions. Here we see the parallel utility of a MET approach, as rather than looking at specific objects, tools, and external representations, MET explores the wider material assemblages and ecologies (Malafouris, 2018: 764–765), and can consider how such engagements are implicated in the development of skill.

It is possible to argue tutorial videos function as a means of communicating information in a way like that a teacher might instruct a novice through observation and imitation and guided rediscovery, as if they were co-located in a studio. However, while video tutorials offer specific information and pedagogically instructed teaching, there were certain elements of the master-novice relationship that were evaded by video. For example, Marchand (2010) has discussed an experience probably familiar to the reader; of having one's positions, postures, and movements physically manipulated by a tutor. This works as a non-verbal means of instruction, with Marchand arguing that tactile guidance makes direct links to motor cognition allowing the motor-based interpretations of the receiver to apprehend the total dimensions of bodily arrangement as well as the time-ordered aspects of the activity (2010: S112). Given that most of my participants were working in isolation at home, this form of teaching was unavailable to them.

A concern with a lack of real-time feedback was voiced by Amber*, who had learnt wheel throwing during the pandemic, and relied predominantly on YouTube tutorials. Amber discussed with me her experience of learning to centre clay on the wheel when she first started learning, and the complexity of learning a skill which cannot be easily verbally or visually instructed:

> I found it is quite hard to learn something which is a feeling activity. So, it's like someone is telling me what you need to do. But really what you need is somebody hands-on, to kind of…you know, be like in Ghost where you put your hands on and go 'right now pull it up now' {LAUGHTER}. And so, it did take me a while to get centring. (Amber)

This references the infamous scene in the film *Ghost* (Zucker, 1990) where a deceased husband in the form of a ghost aids his wife in forming a vessel on the wheel by placing his hands over hers. While humorous, this quote reflects a key difference between learning in-person and through digital resources, the lack of the physical presence of a tutor. Although the video can offer verbal instruction, she is unable to access real-time feedback through non-verbal means of instruction.

Feedback can be broadly understood as the exchange of information about an action, process, or event, between collaborators in an action, that in turn shapes the actions undertaken. It is offered in interactions with materials, as the body of the practitioner physically changes in accordance with developing skills, such as through developing callouses (Sennett, 2009:153; Ingold, 2013:117), through physiological, neurological, and psychological changes (Downey, 2011; Koukouti and Malafouris, 2021; Sennett, 2009), perceptual changes in relation to atunements to different materials or sensations in their practice (Goodwin, 1994; Grasseni, 2009; Grasseni and Gieser, 2019; Maslen, 2015; Rice, 2010; Walls and Malafouris, 2016), as well as the materials themselves undergoing changes through such reciprocal interactions. It is also offered through social interactions, within communities of practice by tutors, peers, or others within this community (e.g., Goodwin, 1994; Grasseni, 2009; Lave and Wenger, 1991) whether verbally offering feedback relating to specific ways of doing things, through offering encouraging or discouraging expressions, tactile guidance, or straightforward encouragement (Downey, 2011; Gieser, 2008; Marchand, 2010), as well as in the process of guided rediscovery (Ingold, 2000).

Amber felt that this latter type of feedback, through social interactions in the form of tactile guidance from a tutor, was missing from her use of video resources. In this example, we see the limits of the communicative capacities of video in reference to it being a visual and auditory medium rather than a tactile one. While the embodied use of the camera has been discussed at great length in visual anthropology (see e.g., Banks and Zeitlyn, 2015; MacDougall, 2006), as a teaching tool Amber found it insufficient in communicating the tactile knowledge, sensory timings, and feedback required to correctly execute an action she was attempting to mimic. However, she was still able to receive feedback from the clay itself as she developed a feeling *of* and *for* the clay (Malafouris, 2014) through practice.

> You know, when you first centre it, and you get it done once and you go 'I've got it. I'm just gonna leave it now.' Yeah, thinking that's good, but then realising as you go along that you need to get all the air bubbles out and all the rest of it. So, yeah, so I always do it three times now…I would say the hardest thing was the learning how to centre without hands on experience. (Amber)

It is widely accepted amongst wheel-throwing potters that centring is a difficult skill to develop when starting out. Often to a novice, the clay will appear to be centred but then as you begin to manipulate the clay into a form it will quickly become distorted if it is not properly centred. It is something one must learn the feel of. As this discussion illustrates, through repeated practise of centring, Amber realised what she had initially thought to be sufficient was in fact inadequate to centre the clay. In this way, we see the centrality of engaging in exploration and experimentation with clay for oneself, something that is regarded as central in the existing literature on skill development. Thus, what I seek to highlight is that while feedback from other practitioners or a master is not facilitated through the use of video tutorials, feedback from engaging with the tools and materials themselves was still accessible in learning independently and remained integral to skill development. Moreover, this highlights the impossibility of confining our explorations of learning to solely exploring the utility of tutorial videos, or to her experimentation on the wheel. It is through engagements with both digital and terrestrial materials in this total hybrid ecology that her ability to centre developed. Furthermore, novices did not rely on tutorials alone, and many of my participants, including Amber, combined tutorial learning with participation in online communities of potters on Facebook and Instagram, within their hybrid learning ecologies. Although this is an alternative form of social feedback, which does not emerge in real-time, through participating in these spaces, novices were able to receive feedback and support facilitated by the communicative affordances for these sites from a huge number of peers at a variety of different skill levels, which aided in their learning.

Feedback and community through social media

It is possible to reflect on the multiple forms of digital interactions afforded by these sites, and how this allows for variability in communication modes, and thus offers different applications for the user. While physically most of these sites are engaged by participants through a mobile phone and may be accessed and swapped between in just a few taps of the thumb on the screen, the digital materiality of how these sites have been designed, the successive layers of software and code, change how they are engaged by users. These aspects of the digital media that go unseen/un-sensed to the vast majority of users have a critical role in shaping the total ecology of human and non-human engagements that make up their use, and thus their role in skill development. While participants such as Amber lacked direct feedback when learning using tutorial videos, they were able to generate other forms of feedback from both masters and peers using social media sites such as Facebook and Instagram. I argue that participation on these sites bore resemblance to that of in-person communities of practice discussed in the literature on skill development (e.g., Lave and Wenger, 1991), and emerged in respect to the affordances of the digital materiality engaged in the use of such platforms. Through participating in these spaces, novices were able to receive feedback and encouragement, that helped spur them on in their learning.

While many of the groups on Facebook were for a worldwide community of potters, others often specified the geographical location in which they lived, such as ‘Britain’ or more specific localities such as ‘Oxfordshire’. This site, due to its group function, afforded the creation of more organised communities with delineated boundaries

through 'membership'. This consisted of being part of specified 'groups' that were tailored to different clientele with interests ranging from beginners tips, dedicated to specific techniques such as throwing or hand building, groups functioning as marketplaces, or even devoted to pottery depicting lewd images or expletives. Once a member of a Facebook group, individuals are permitted to post, following the internal guidelines stipulated by the group administrators, for example, no selling on pottery appreciation groups. These posts can be visual, textual, or a combination, as well as being links to other sites or frequently to YouTube videos, and other members can like and comment below it. One Facebook group discussed by Amber was dedicated to *The Great Pottery Throw Down* – a British television series that follows the popular *The Great British Bake Off* formula. Following each week's episode, the 'Admin' of the group would upload a tutorial video instructing the members in how to create the piece that the contestants on television had been competing to make. Then the members would create their pieces at home, following these instructions if they chose, posting photographs or videos their pieces with a short description of either the work or their experience of making it. The other members of the group would offer feedback and encouragement in the form of liking and commenting on these posts, creating a sense of shared community and support in the group. Amber compared this directly to her partner's experience of the model train community online, which he had found to be much less supportive:

> My boyfriend, Clive*, he does trains, you know, model trains. Each to their own. But, he says when people put layouts and stuff on [Facebook] everybody is really critical and go 'well, that's out of perspective' and 'that's not right is it?' Whereas I find the pottery people all are like 'oh well done that's brilliant' and 'that's amazing.' Yeah, you know, there's not any, like, trolls on there or anything, and everybody's really supportive. (Amber)

While I cannot comment on the atmosphere of other hobbyist groups on Facebook beyond Clive's experience, Amber's experience of the pottery group speaks to the community of support that she felt was specific to potters, a common theme throughout my interviews – both in terms of social media and in general discussions of potters as a wider group.

This idea of community was similarly voiced by Leah, who began learning from home in the first lockdown and said she found a 'little community' there:

> It's very, like, supportive… recently, one of the posts I've done, and it was like, it showed like, a bit of failure. I was like 'oh, you know, it didn't go great, but I'm still trying' and then everyone is like you know 'go on you can do it' kind of thing. And then the next post when I had a few successes, they're like 'nice one'. And I'm like 'ah thank you.'…It makes me happy [doing pottery] as well as having the Instagram page and communicating with other similar people is really nice… I think everyone is really supportive in that sense and helpful when I asked for advice … It's really nice because Instagram is always talked about in such a negative sense… somewhere that makes people feel bad. But when you construct who you follow, and the things you like, I think it can become that space where it's positive and encouraging. (Leah)

Leah felt she was encouraged in her learning in part due to the encouragement she received from others in this space. While she had posted work that she described as 'failures', others were quick to spur her on to continue trying, and when she had made work she was happier with others celebrated this with her. She points to the positive experience she has of Instagram in the community that she has found in it, which was afforded due to the fact she was able to construct her own community. The communities people found on Instagram were not bounded or entered through membership to a specific group. Rather, the community came to reveal itself through interaction and participation with others on the site, building up incrementally through interactions, and a range of smaller and larger communities within this, through using the different communicative modes that the digital materiality of the site affords. Moreover, while Leah discusses her own role in developing this community, Instagram algorithms also play a role in this, promoting certain posts and accounts based on your interactions. This comment also indicates the well-documented rhetoric surrounding Instagram having negative impacts for mental health (see e.g., Mackson et al., 2019), which were certainly experienced by some of my other participants, particularly those operating small businesses. A key research question explored in this research is the affective dimensions of engaging in learning pottery skills in this way. Just as our engagements with materials are always affective (Koukouti and Malafouris, 2021) so too are our engagements with such digital media, composed of their digital and terrestrial materiality. While I have previously discussed the relationship between social media, pottery, and eudemonic wellbeing (O'Brien, 2023), it bears highlighting here how my participants experienced both positive and negative emotions in relation to their participation in such online communities.

This contrasted Emily's experience who, as a professional potter, relied on Instagram to promote her work in order to make an income, and whose experience highlights the precarity of digital labour in such spaces and the demands of the site to consistently post to attract followers and thus buyers:

> I don't particularly like it [Instagram]…And then today, I woke up and I'm like 'it is a post day, what am I going to post and what am I going to write?'…It's been it's been a massive learning curve. And my partner is always like 'just stop worrying just carry on, like, just keep going, like stop overthinking everything'…like literally my time now is my income. And that's it like, not like I've got a part-time job or anything like that. It's literally what I make is what I need to sell. (Emily)

Emily's stress surrounding Instagram and selling her work was palpable at many times during the interview. Of note is the presence this technology holds in her life even when she is not directly using it. Waking up and worrying about what she would share online was part of her experience as a potter and reflects Pink's (2017: 3) discussion of the 'being there' of digital materiality, in that the binaries of on/off no longer apply as it always has the 'potential, possibility, or expectation of becoming active or apparent'. This potentiality, as part of Emily's wider ecology, had adverse implications for her wellbeing as it brought about stress. Thus, while I argue that sites such as Instagram and Facebook can be useful in developing skills, this is an affective process and it is important to acknowledge there may also be adverse impacts generated through its inclusion

in the wider ecology of practice, and how this might change in respect to whether engagements in such spaces are associated with leisure or labour. Moreover, it is important to acknowledge Emily's point that her engagement with this site has itself been a 'learning curve', and the importance of developing a feel of and for such media through experimenting and exploring possible engagements with it, discovering from themselves how they can best be utilised to support ones' participation in learning and practising pottery.

For example, Charlotte*, who had been working independently in her studio prior to the pandemic and was substantially more experienced than many of the other potters I spoke with, had found Instagram to be a useful means of crowd-sourcing advice for highly technical issues. She recounted a time she was making ceramic flatfish and kept finding cracks forming after firing. She posted an image on her Instagram and asked, 'does anyone know why this is happening?', and received responses from many other potters, including one from another potter who could understand that the problem was the angle at which she cut the clay through looking at the image of the piece. This example can be related to the notion of 'skilled vision' (Grasseni, 2009; Grasseni and Gieser, 2019) or 'professional vision' (Goodwin, 1994), and the idea of perceptual transformation shared amongst practitioners in a community of practice. Thus, the community of practice extends into the digital, and while these potters are not co-located in a studio setting, they share perceptual and technical understandings of the materials and tools with which they work. These visual media, which afford different communicative capacities, for example, close-up photography compared to the aural capacity of video, allowed those within this community of practice to offer advice based on their shared multisensory knowledge. Thus, we see the active role these media, and their specific digital materiality, play in this wider learning ecology, and the utility of these resources for practitioners with different levels of pottery experience, as participation in this craft necessitates an ongoing openness to learning and adapting.

Conclusion

When we take an ecological or material approach to skill, that focuses on the engagements between persons and things in a shared environment, the learning ecology extends out to and encompasses the digital. Whether we engage the digital on the level of its terrestrial materiality in the form of phones, cameras, and screens, or attend to the digital materiality of algorithms and code, their materiality pervades our everyday interactions in the world. When we consider each participants' learning, often doing so at home and alone, they do not do so in a vacuum. My participants were learning across terrestrial and digital spaces within their homes but also in digital spheres, creating a blended and hybrid learning environment and relating to contemporary digital ethnographic research, we see this problematises the dichotomy of 'online' and 'offline' realms. Moreover, we must explore how participants engage with different digital and social media, as people move across sites within this wider ecology to fulfil different needs based on what the various platforms afford in terms of their 'digital materiality' (Poulsgaard and Malafouris, 2020) at the level of how the software itself is designed. I have sought to emphasise how while tutorial videos on YouTube cannot replicate the

tactile and real-time feedback offered by in-person learning, what remains present is receiving feedback from the materials and tool themselves as one develops a feel of and for them. I have also highlighted how participants were able to generate, albeit different, feedback from peers and experts through participation in online communities of practice on social media sites such as Facebook and Instagram with respect to the communication they afforded. In this way, arguably my participants developed a feeling of and for different media in line with their learning needs, which was itself an affective process, with such practices bringing up positive and negative emotions for different participants. These points served to illustrate that the analysis of these interactions should not be confined to participants' use of single sites, but rather should be explored as parts of their hybrid learning ecologies.

In taking the example of pottery, a craft skill so tied to notions of 'tradition', I have shown how it can be learnt through engagements with digital media. This article aims to emphasise the need for this literature to embrace the relevance of these technologies, and their increasing centrality in craft and skill learning today, both inside and outside of the pandemic context. Whether practitioners, social scientists, software engineers, designers, office workers, or educators, we are increasingly confronted by the requirement to engage in hybrid learning and training. But more importantly, a whole spectrum of disciplinary perspectives is required to contribute to these discussions if we are to better understand how these spaces operate and to develop new tools. Fundamentally, interdisciplinary collaboration is required: (a) to understand the functioning of such hybrid ecologies, (b) to understand the role of digital media within them and how they are multisensuously engaged, and (c) to understand their impact on learning.

Declaration of conflicting interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Clarendon Fund.

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Note

1. Participants who chose to have their names pseudonymised are indicated by an asterisk (*) when first introduced in the text.

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