Capturing and Cultivating Print & Book Craft Practices in the UK

ABSTRACT
The type of intensive training previously needed for crafts in the printing trade is now redundant, but as craft practices are added biannually to Heritage Craft’s UK Red List of Endangered Crafts, there is a pressing need to preserve skills whilst also creating and developing new methodologies for practice in the UK to ensure these crafts survive as part of a thriving cultural heritage. The Dissecting Crafts project was centred around supporting book craft practitioners (typesetters and manufacturers, a letterpress printer and a book binder) to gain insight and extend their practice. Using qualitative research methods, an embodied knowledge methodology was developed as a system of self-evaluation. A freely available online tool kit was developed from project findings to enable other practitioners at all skill levels access to the programme. Sharing the research stages sensitively with case study practitioners evidenced their connectedness with their tools and with what they make, through a process of validation that was not anticipated in the project. Unintrusive methods of documenting in-progress activities, the practitioner-researchers’ recordings of the craft participants’ experiential dialogue proved valuable for them to be able to harness and transfer their knowledge. The methodology and tool kit were extended to other maker practices with feedback types ranging from practice development, reflection skills, and articulation to validation.

Keywords:
Crafts, embodied, methodology, reflection, skills.

INTRODUCTION
This paper discusses practice-led research in the Dissecting Craft Making study: a project inspired by research carried out by a UK-based charity, Heritage Crafts (HC), and a shared will to avoid more cultural loss of UK print and book craft practices and to accomplish further research in support of craft practitioners and future makers. The Red List of Endangered Crafts, first published in 2017 by HC, was
the first report of its kind to rank traditional crafts by the likelihood that they would survive to the next
generation, based on intangible cultural heritage safeguarding principles and led by the Heritage Crafts
Association (the only UK UNESCO-accredited NGO working primarily in the domain of traditional
craftsmanship). Although book binding is featured on the HC list of currently viable crafts (though a
classification of ‘currently viable’ does not mean that the craft is risk-free or without issues affecting its
future sustainability or viability), letterpress printing was added to the Endangered List in 2019, followed
by type founding and manufacture in 2021. Skills and knowledge particular to most print and book crafts
are passed on by a shrinking demographic of highly trained professionals through few traditional
apprenticeships, workshops and demonstrations across the UK. Subsequently, a need was identified to
develop a methodology that practitioners (of all levels) could apply to their own practice: to recognise
and translate their practical actions and experiences into a form that was transferable and could be
disseminated to others (i.e., a way of doing something that can be passed from one person to another)
and which would also prove to be useful for self-evaluation. This became a main aim of the project.
Research methods underpinning the resulting Capture and Cultivate Tool Kit and the wider project were
informed by recent projects such as CRAFT, Activating Pedagogy for Ceramic Education Futures (2020–
2023) and EU Craft Hub (Maker Exchange Residencies, 2021) and by research that examined methods
for recording, articulating and sharing craft knowledge (Butler, 2019; Suib et al., 2020; Westerlund
2021), that is, outcomes that evidence a shift from traditions of subject discipline delivery including
master classes and demonstrations towards new approaches, including online video workshops, live
webcam demonstrations and cross-geographical tutorials (Suib et al., 2020). Practical knowledge
requires methodologies for its externalisation; thus, the Dissecting Craft Making project focused on a
variety of book-based activities within a network of traditional craft practice in order to capture, identify
and transfer practical actions of craft knowledge through manual and digital technologies.

METHODOLOGY

Michael Polanyi believed that when we create, we use our sensory perception in order to process and
come to understand something. This participatory knowing he explained as tacit knowing. He (1967)
asserts: “I shall always speak of knowing […] to cover both practical and theoretical knowledge”. The
formulation of this practical knowing, of being human in the world, is emphasised by Glenn Adamson
(2020), who states, “Craft only exists in motion. It is a way of doing things… organised around material
experience”. In terms of evidencing this participatory understanding, craftspeople possess a great deal
of knowledge about their craft that is difficult to communicate. This has raised many issues concerning
the researchability of these applications when articulation has been difficult or not compatible with
more traditional scientific or accepted clinical methodologies (Prior, 2013).

Therefore, in paying attention to Polanyi’s tacit knowing (practical knowledge), the project
utilises particular methods (selection, capture, review, analysis) and tools (video, photography, drawing)
to evidence practice-in-action and to elicit experiential understanding from and by the practitioner, in
collaboration with the researchers. These methods are aimed at bringing about a particular focus and
attentiveness through which to understand tacit knowledge as an accumulated product of thinking and
action and also as a process during action (Toom, 2012). As Michael Jarvis (2007) states, “By connecting
the procedures of artmaking to active and reflective researching their often unacknowledged, implicit
and tacit values can be better understood”. This reflects theories that draw from and develop a
Wittgensteinian viewpoint of tacit knowledge (action-constitutive knowledge), such as that of
Johannesen (1990) or Molander (2016), who examine the logical gap between knowledge and verbal
articulation. This supports the articulation of tacit knowledge via linguistic (analogies and metaphors)
and practical examples, hence the use of video in the methodological development of the project. Video
is becoming an integral component to enable data gathering of practical actions and activities
concerning craft knowledge, particularly in the craft sciences (Almekvik et al., 2022; Groth, 2016, 2017;
van Braak et al., 2018). Through collaboration and dialogue, we can question our assumptions about
making and its value in terms of ways of knowing, attempt to exteriorise what would normally be implicit
in the making, and try to visualise and communicate how we come to know (Gray & Burnett, 2009).
Methodology: Initial development, test subjects

The Dissecting Craft Making project researchers aimed to utilise manual and digital technologies with qualitative research methods to capture sensory experiences within actions and activities that comprise specific craft practices and to test whether a methodology could be developed to evidence embodied cognition within this framework. The Capture and Cultivate process began with Angie Butler and Sofie Boons, both practitioner-researchers, acting as test subjects, studying and recording their own craft practices within their respective studio environments. It was important for the research to be carried out in a natural setting determined by the research participants (i.e., a place within the studio or workshop of the participant) rather than a re-constructed environment. This context was crucial for the research, and its familiarity would also enable the participants to feel most comfortable. Butler’s craft specialism is letterpress printing, and Boons is a jewellery designer/maker. Although Boons’s practice was outside of book crafts, it was most valuable to test and develop the potential application of the methodology in the initial research phase in order to reach beyond the scope of the case study crafts. Furthermore, metalwork techniques in jewellery-making have clear connections with other disciplines, such as type founding and manufacture.

Activities to be recorded independently were selected based on what projects the practitioner-researchers were working on, the ability to set up camera equipment in their workshop spaces and the ability to capture the activity without interrupting the practitioner’s process. (It is important to mention that, at that time, the UK was still governed by strict Covid-19 rules and university research governance guidelines, which meant that there was only limited social contact for research projects.) Before filming, detailed notes and drawings were taken of each studio set-up and camera positions. After filming, each practitioner-researcher provided a reflective oral account whilst reviewing the footage of themselves practicing their respective craft. This proved to be such an insightful exercise it was introduced into the case studies and ultimately appeared in an altered format in the final tool kit. Also, Boons’s experience of filming and practicing multiple activities, to evidence different skills levels, shaped the first stage of the tool kit (to support craft practitioners in choosing an activity to film) in order to reflect on specific issues within practice. Following the practitioner-researcher tests, all collated data was reviewed, the experience discussed and the impact of the reviewing and analysing of footage mapped (see Video 1).
VIDEO 1. Initial development of the methodology: test subjects (duration 7 min 12 s). To watch the video, click the picture

Having established the impact of their experiences (see Video 1: from 4 min 35 s to 7 min 12 s), the researchers reviewed logistics and practicalities and planned to distil their approach to test the methodology further with three case studies. Reflecting on the suitability of the camera equipment, the team identified that the quality of the footage – albeit unable to pick up fine details of surfaces (for example when filing) – was not detrimental to the overall impact for the practitioner. The action cameras were considered of sufficient quality, had ease of use and low impact in the working space and were lightweight and relatively low cost and so deemed viable for continued project research. The camera positions initially chosen for the tests were (the practitioner’s) point of view (POV), left, right, front and back (to the practitioner). Footage reviews indicated that the front and back positions were not as significant in findings than the other angles. Therefore, only the POV, left and right camera positions were to be set up for the case studies. Each angle would be filmed for ten minutes, giving each practitioner a total of thirty minutes of footage to review. Therefore, it was estimated that the whole process of filming, commentary and review in the practitioner’s workspace would take approximately one day to carry out. In initial tests, the team had also tested capturing each other’s heart rate and filming their practices over a prolonged period in their workspace during a studio session, using a security camera and a heart rate monitor. Even though both tools held some informative insights, they did not support the main project enquiry, and their introduction would only be relevant to support further research into the state of creative flow and its relation to creative practice.

Methodology: Further development, case studies
The researchers were researchers as participants in the initial methodological development stage and wanted to continue co-creating data with their case study participants. They hoped the craft practitioners would influence the conversation and feel comfortable doing so. Within this qualitative inquiry, information was driven by participants – their thoughts, feelings and experiences. The researchers’ intentions were to try to capture (and then communicate) the practitioners’ lived experiences. They were aware of their own identity (as researchers) and how this plays into the dynamic when engaging in interview conversation; but, as practitioners, they had an understanding of the perspective that participants would intend to convey to them. This addresses issues of the integration
and communication of experiential and tacit knowledge within the context of organised inquiry (Niedderer & Riley, 2010). Being mindful and attentive to understand the practitioner’s views (on that occasion, in that moment) was imperative to the study. This is something that is a practice, not a role. “Mindfulness practices could strengthen and further develop this intentional relationship between the researcher and the participant as well as enhance the openness, curiosity and awareness that guide the research process” (Lemon, 2017). Some practitioners had never seen themselves carrying out their work on film before or had commentated on their practice (other than during a demonstration) or even realised their experiential knowledge of practice could be useful to others. So, Butler accompanied them in carrying out their review, creating an attentive focus in highlighting subtle actions and in an awareness of patterns of behaviour, and asked questions in order support the process and elicit a detailed commentary on their experiences.

Case studies followed with four crafts practitioners being filmed working, conversing and contributing commentaries on their sensory experiences within practice in their professional workspaces. This provided the researchers with additional insights into the development, practicalities and impact of the methodology. The case study participants were part of Butler’s network of practice and were selected based on the following criteria: (1) the expertise of the practitioner (ranging from beginner to expert), (2) the possibility of visiting and filming the practitioner in their studio space, (3) the practitioner’s availability for the duration of the project (12 months) and (4) willingness to participate in the research project. The four practitioners selected for the three case studies were Stan Lane, owner of Gloucester Typesetting Services and expert in typesetting and manufacture, and his apprentice, Katie Beard (Stroud, Gloucestershire), Roger Grech, an independent book binder (Shipley, West Yorkshire) and Pat Randle, publisher and printer (Whittington, Gloucestershire). The practitioners were contacted by Butler and briefed on the research project prior to any involvement. The case studies were conducted by Butler and Boons over two-day workspace visits. The first day of case studies involved stage one: an introduction to the project and discussion of the activities that would be suitable and possible to be filmed. In stage two, the cameras were then set up by Butler and Boons from three angles: (practitioner’s) POV, left and right (for the practitioner). After setting up all equipment, everyone took a short break. The researchers then turned on all camera equipment and set a timer of ten minutes. The practitioner worked in their space for the duration. Overnight, the footage was loaded onto a computer. The next day was stage three: the practitioner reviewed the footage, describing their making process, whilst a camera recorded their audio and video commentary (see Video 2).
The case studies (see Video 2) provided the researchers with a programme of activities that a tool kit could perform. The desired functions were then outlined using the five Design Dimensions (Wölfl & Merritt, 2013) (Table 1).

**TABLE 1.** Desired functions of a tool kit (this developed into the Capture and Cultivate Tool Kit).

<table>
<thead>
<tr>
<th>5 Design Dimensions</th>
<th>Desired Functions of a Tool Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intended use and scope</strong></td>
<td>Methodological guide for practitioners to gain insight into practice and visualise tacit knowledge</td>
</tr>
<tr>
<td><strong>Duration and placement in creative process</strong></td>
<td>Relevant at all stages of creative practitioner career, most useful if engaged in at regular intervals in the practitioner lifetime</td>
</tr>
<tr>
<td><strong>System and methodology</strong></td>
<td>The tool kit should be flexible and enable practitioners to engage with it individually, with a colleague or with an expert practitioner</td>
</tr>
<tr>
<td><strong>Customisation of tool kit</strong></td>
<td>Customisation is optional, but the elements may be expanded and updated with new content as the tool kit receives feedback from practitioners</td>
</tr>
<tr>
<td><strong>Formal qualities</strong></td>
<td>The format of the elements of the tool kit depended on the function and its suitability to be introduced in a range of practitioner practices</td>
</tr>
</tbody>
</table>

**DISCUSSION: TOOL KIT DEVELOPMENT**
To develop and position the online Capture and Cultivate Tool Kit, functions that it could offer were analysed. To visually represent and highlight main aspects, Butler and Boons used a double diamond representation, based on a model developed at the Design Council in 2004 (and updated to Framework for Innovation in 2019) where it is used to summarise the phases of a design process: discover, define, develop and deliver. However, it is a consolidated representation applied to the wider concept of design.
thinking. Thus, for the tool kit, the double diamond model formed the basis of the four phases of the methodology: selection, capture, review and analyse (Table 2).

**TABLE 2.** The four phases of the Capture and Cultivate methodology: Selection, Capture, Review and Analyse.

<table>
<thead>
<tr>
<th>Selection</th>
<th>Capture</th>
<th>Review</th>
<th>Analyse</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consider activities in relation to flow</strong></td>
<td><strong>Film activity from 3 perspectives</strong></td>
<td><strong>reflect on practice through film review</strong></td>
<td><strong>implement into practice from review</strong></td>
</tr>
</tbody>
</table>

The first is the *selection* phase, a moment where the practitioner explores the various activities that occur in their practice. These can be extracted by focusing on technique or material practices, but they could also be considered in relation to phases in a specific project. To select an activity (stage one of the tool kit), there is a need for guidance to enable practitioners to identify the activity that will be most suitable for the insight they are aiming to gain. From the case studies, it was established that an activity where the practitioner achieves creative ‘flow’ is the most insightful and has additional beneficial impacts on self-esteem and self-confidence (Figure 1).
D: MAPPING RESULTS ON THE GRID

Choose your activity on the grid that corresponds to the coloured outcome box above.

If your activity falls outside your desired colour box, you should consider decreasing or increasing the challenge or risk of the chosen activity.

This will move the results into a different coloured box. Otherwise choose another activity.

<table>
<thead>
<tr>
<th>State of Ease</th>
<th>Encounter ranges from feeling easy and familiar, to engaging, stimulating and requiring attentiveness.</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Flow</td>
<td>Optimal encounter, ideal balance between skill and challenge, being in the zone, attention is fully absorbed.</td>
</tr>
<tr>
<td>State of Unease</td>
<td>Encounter ranges from feeling difficult and demanding, to invoking anxiety and unease.</td>
</tr>
</tbody>
</table>

FIGURE 1. Section from page 8 of the Capture & Cultivate Tool Kit. Mapping results onto the grid will confirm that the practitioner’s chosen activity is matched correctly for what they want to find out (recorded in the previous section of the tool kit; i.e., the orange area will uncover any mistakes when working, as the experience is lower and the challenge is greater).

Going into the convergent capture phase, here the practitioner works in their workspace. For stage two of the tool kit, unlike performing or demonstrating an activity to an audience, the practitioner captures (on video cameras) a moment they themselves can reflect on as a genuine practice activity and part of a holistic practice. The activity is filmed from three viewpoints to enable the practitioner to gain objective views of their activity: POV and left and right viewpoints that are other to their own view (POV). (Examples can be seen in Video 1 and Video 2).

After the capture phase, there is a need to review the video footage and respond with initial thoughts and observations of the footage: the review stage. Practitioners view prompts (these were implemented after analysing the supported case study participant reviews) alongside the footage to support their commentary.

- From the footage, what can be understood about the practice and the practitioner in the practice?
- How is the practitioner’s body performing the activity in the studio space and the context of the practice?
- How are the practitioner’s senses being used to make, check and correct whilst working?

The POV camera angle will encourage embodied empathy for the activity, and the other views will render insights into the practice through third-person perspectives. Examples can be seen in Video 1 and Video 2.

Going into stage four, the analyse phase, there is a need for the practitioner to visualise and analyse the gained insights, transforming them into usable knowledge and actions to implement in their practice moving forward. In this phase, a consideration of the language used to describe actions and key realisations are noted down and reflected on for impact. In working through the tool kit, the new model converges into a cultivated practice. Reflecting on and analysing findings can alter practitioners’ perceptions and experiences of their practices. Thus, in taking action to implement key outcomes, they
can re-engage with a deeper understanding of tacit knowing within craft practice, with the tools to share their knowledge with others.

**CONCLUSION**

This paper has discussed practice-led research from the Dissecting Craft Making study. The main project aim was to develop an innovative methodology that enables the recognition and translation of craft practitioners’ practical actions (i.e., embodied expertise) to support and extend practice and to preserve skills. The Capture & Cultivate methodology underpinning the tool kit was initially developed by practitioner-researchers, who acted as test subjects (researchers as participants). From their preliminary findings, the researchers believed they could support case study practitioners sensitively through the research process, which was aimed at eliciting a true representation of practice-in-action rather than demonstration. As project finances and time restraints were very limited, the practitioner-researchers engaged with a defined practitioner group whom they identified with, through book craft practices. The methodology was further developed through three case studies, with four craft practitioners filmed in their professional workspaces. Although the nature of qualitative research is subjective, the guided process proved useful and insightful to the individual practitioners and transferable to this range of users. Outcomes were analysed and used to create a tool kit that can be used by practitioners independently. The tool kit was tested by a selection of makers/practitioners (including a printmaker and a performance/bodywork artist) and refined prior to its publication online. As the latter test phase included practitioners from a broader creative spectrum, this indicated the tool kit’s suitability of use for a wider range of practitioners and disciplines. Through practitioner feedback, the tool kit proved to provide opportunities for the development of skills and insights in personal practice. The Capture & Cultivate Tool Kit is available to all as a free downloadable online pack.

The research process confirmed that the tool kit provides practitioners with an opportunity to extend their understanding of their personal practices. Through reflection and articulation, practitioners additionally gain validation of their own practice. This happens when they observe videos of themselves working, especially when in creative flow. The process enables practitioners to observe their movements and the rhythm of their activity, evidencing their expertise and mastery of technique and skill. Also, insights in relation to skill-sharing and an ability to communicate their activities more broadly can be recorded as benefits of the use of the tool kit (Figure 2).
Impact
How has reviewing the footage and commentary influenced your practice?

Personal impact
[practice development, skill of reflecting, validation, articulation]

- Support of left hand, and its slight movements to catch the light seem to be much more prominent than I realised
- Slight head movements to also see the light move over the piece
- Interesting how much I use the word ‘right’ it will be great to catch myself do this and try and explain what I mean by ‘right’ or ‘just right’
- This is also true for the word ‘important’, which I should immediately question with ‘why’ so I explain that better
- Clear a rhythm is established really quickly and that the pace of the movements once established remains the same
- Looking at the footage gave me the feeling I looked competent in my actions and relaxed, I also believe I reached flow quickly and this is a pleasurable state of working

Skill sharing/communicating practice
[practice insight in relation to sharing skills, ability to communicate activities within practice, reflection skill on communicating practice]

- The footage would be super useful to share with students for a range of reasons – a. students would never see me in flow when I am demonstrating and the pace of the activity seems important, b. the sound of the activity is incredibly important to direct progress – it is a check – and this would be hard to share with students without the footage c. the mistakes can easily be compared to correct filing practice and describing them without seeing them on screen would be very hard.
- Vocabulary falls short in describing the ‘right’ amount of pressure ‘right’ amount of movement – the footage supplements this shortfall
- The footage shows clearly how much time and focus goes into filing a piece with a large file – the size of the file commands more focus but enables faster progress – this would be good to share with students but also with clients

Actions
[Choose a minimum of 3 reflections from section 1 as actions you will take forward in your practice]

- When using the words ‘right’, ‘enough’ and ‘important’, I will aim to expand on what they mean – using descriptive language
- Introduce footage of activities of production (rather than demonstration) and use them as a tool to communicate the importance of sound and left-hand movements directing lights as checks
- To pay more attention to my breath pre and during work, as it would be interesting to see how my breath changes during practice

FIGURE 2, Page section from Stage 4: Analysis of the Capture & Cultivate Tool Kit, where Boons has analysed the impact on her creative practice and actions that she can take moving forward in her craft.
In addition to the benefits the tool kit provides for practitioners, the online platform and sharing practice that can be facilitated by disseminating completed tool kit activities would greatly benefit the preservation of craft skills. This could also be an empowering process for crafts practitioners, as it is enabled by their own active engagement, rather than through footage instigated by external stakeholders.

ACKNOWLEDGEMENTS
We would like to extend our heartfelt thanks to Katie Beard, Stan Lane, Roger Grech and Pat Randle for their valuable contributions to the research study.
REFERENCES


