

Bedding into bags: the life histories of materials, makers and the time of making in a case study of fabric upcycling

Clare Holdsworth

To cite this article: Clare Holdsworth (2022): Bedding into bags: the life histories of materials, makers and the time of making in a case study of fabric upcycling, *Social & Cultural Geography*, DOI: [10.1080/14649365.2022.2157042](https://doi.org/10.1080/14649365.2022.2157042)

To link to this article: <https://doi.org/10.1080/14649365.2022.2157042>



© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 21 Dec 2022.



Submit your article to this journal [↗](#)



Article views: 409



View related articles [↗](#)



View Crossmark data [↗](#)

Bedding into bags: the life histories of materials, makers and the time of making in a case study of fabric upcycling

Clare Holdsworth 

School of Geography, Geology and the Environment, Keele University, Keele, UK

ABSTRACT

Geographical scholarship on making has established the interrelations between makers, materials and space. With this paper I explore how this scholarship can be developed to incorporate time through paying close attention to the time of making. Drawing on Karen Barad's (2003) theorisation of multiple and entangled temporalities and materialities; the time of making is interpreted as a constituent of making rather than a homogenous vessel within which making occurs. Using an autoethnographic study of upcycling used domestic textiles into bags, I assemble the practices of making and distribute these into its constituent parts of heterogenous materials, tools and skills. The time of making is studied through autoethnographic reflections on the iterative interactivity between these constituent parts. My reflections on the time of making develop in two ways. First, I consider how the temporal heterogeneity of making segues the (de)stabilising skills of sewing with moments of hesitation, preparation, undoing, repetition and organisation. Second, I detail how the life histories of materials and makers are remade through making. In particular the case study of upcycling reveals how the potential of materials can be realised through re-orientating the skills and practices of makers towards (re)making the life history of materials.

De sábanas a bolsas: Las historias de vida de los materiales, los fabricantes y el tiempo de elaboración en un estudio de caso de reciclaje de telas

RESUMEN

La escolaridad geográfica sobre la fabricación ha establecido las interrelaciones entre los creadores, los materiales y el espacio. Con este artículo, exploro cómo se puede desarrollar esta erudición para incorporar el tiempo a través de prestar mucha atención al momento de hacer. Con base en la teorización de Karen Barad (2003, 2017) de temporalidades y materialidades múltiples y enredadas, el tiempo de hacer no se interpreta como un recipiente homogéneo dentro del cual ocurre el hacer, sino como un constituyente de la práctica de hacer en sí. Usando un estudio autoetnográfico de un proyecto de

ARTICLE HISTORY

Received 9 June 2021
Accepted 11 November 2022

KEYWORDS

Time; materiality; making; autoethnography; sewing; upcycling

PALABRAS CLAVE

Tiempo; materialidad; hacer; autoetnografía; costura; reutilizar

MOTS-CLEFS

Temps; matérialité; autoethnographie; couture; surcyclage

reutilizar para hacer bolsas con textiles domésticos usados, ensamble las prácticas de hacer y las distribuyo en sus partes constituyentes de materiales, herramientas y habilidades heterogéneas. El tiempo de hacer se estudia a través de reflexiones autoetnográficas sobre la interactividad iterativa entre estas partes constituyentes. Mis reflexiones sobre el tiempo de hacer se desarrollan de dos maneras. Primero, considero cómo la heterogeneidad temporal de la confección da paso a las habilidades (de)estabilizadoras de la costura con momentos de vacilación, preparación, deshacer, repetición y organización. En segundo lugar, detallo cómo las historias de vida de los materiales y los creadores se rehacen a través de la fabricación. En particular, el estudio de caso de reutilización revela cómo se puede aprovechar el potencial de los materiales mediante la reorientación de las habilidades y prácticas de los creadores hacia (re)hacer la historia de vida de los materiales.

De la literie aux cabas: les cycles de vie des textiles, de leurs créateurs et leur temps de fabrication dans une étude de cas sur le surcyclage de tissus

RÉSUMÉ

La recherche en géographie de la fabrication a établi l'interdépendance entre les fabricants, les matériaux et l'espace. Dans cet article, j'étudie par quelles méthodes on peut étendre ce domaine de recherche pour y incorporer le temps, en se concentrant sur le temps de la fabrication. En s'appuyant sur la théorie de Karen Barad (2003, 2017) de la multiplicité et de l'enchevêtrement de temporalités et de matérialités, on n'interprète pas le temps de fabrication comme un conteneur homogène au sein duquel la fabrication se produit, mais un composant de la pratique de fabrication elle-même. En me servant d'une étude autoethnographique sur un projet de surcyclage pour faire des sacs à partir de produits textiles ménagers usés, j'agence les pratiques de fabrication et les distribue dans les parties qui composent celle-ci: les compétences, les outils et les matériaux hétérogènes. J'étudie le temps de fabrication par le biais de la pensée autoethnographique sur l'interactivité itérative entre ces parties. Mes constatations concernant le temps de fabrication se déroulent de deux façons: premièrement, j'examine la manière dont l'hétérogénéité temporelle de la fabrication enchaîne les compétences (de-)stabilisatrices de couture avec des moments d'hésitation, de préparation, d'annulation, de répétition et d'organisation. Deuxièmement, je passe en revue les cycles de vies des matériaux et des fabricants pour voir comment ils sont refaçonnés au long de la fabrication. Plus particulièrement, l'étude de cas sur le surcyclage révèle à quel point le potentiel des matériaux peut être réalisé par la redirection des compétences et des pratiques des fabricants vers la (re-)création du cycle de vie des textiles

Introduction

The sewing machine stops for the third time. The digital display pointedly informs me: Machine Needs to Rest: Please Wait a Moment. I stay hunched over the machine irritated by the machine's inability to sew these final seams; ready to resume the fight with the

machine to get the fabric through. This final backpack has taken almost twice as long to make as any of the other bags. The longer I sew, the more frustrating it gets. After the machine has rested, I resume the fight. Time to re-orientate my sewing practice, sew more slowly and consistently. Finally, these last binding seams are complete. The last bag is finished. It is me, not the machine that it is a fault; it's my hurry and frustration to finish the project that slows the sewing down.

Extract from author's sewing diary November 2020

The practices of making have emerged as important fields in geographical research in recent years. This body of research has developed to examine how intersections between bodies and materials makes subjects, communities, places and knowledge (Bratich & Brush, 2011; Gauntlett, 2018; Price & Hawkins, 2018; Sennett, 2008; Smith, 2021); to avoid the cul-de-sac of fetishizing objects or practices (Jackson, 2000). What is more intangible in these studies is the practice of making itself. It is more intuitive to write about what making produces, rather than what making is. With this paper I seek to excavate the details of making as an interplay between materials, skills and tools. Drawing on Karen Barad's (2003) conceptualisation of new materialism which interprets the agency of matter as equally stabilising and destabilising, I detail how this trinity is always in the process of being made. I explore how making is not a consistent practice of skilfully using tools to work on materials, but an uneven and unfolding interactivity between these different elements. This interactivity can be revealed, I suggest, through close attention to the time of making. In the extract from my sewing diary quoted above, it is time and tempo that thread together how making is done. The language I use to capture how I sew is interspersed with temporal references: stop, rest, wait, stay, ready, final, twice as long, longer, resume, slowly, last, complete, finished, hurry and slows. Through foregrounding the temporalities of making, this paper advances scholarship on the geographies of making and balances existing accounts of making spaces within a study of making time. Paying attention to time, not as a homogenous vessel within which making occurs, but a constituent of the practice of making itself (Holmes, 2018) reveals the stabilising and destabilising dynamics of making. Detailing the temporality of making develops the sensitivity that geographers have written about in relation to the affective organisation of bodies, materials and spaces (Smith, 2021), towards the intricacies and unevenness of temporality through which these constituents become active doings (Holdsworth, 2021). The point to make here is that while making is orientated towards making *something*, it proceeds through an uneven interplay of (de)stabilising materials and bodies and accounting for this unevenness is a vital component of scholarship on making.

This paper develops scholarship on the temporalities of making in two ways. First, through considering how the temporal diversity of making weaves together skills, tools and materials in a non-linear fashion, as realised through moments of preparation, hesitation, repetition, unpicking, experimentation, organising, calculating and formulating. Second, through detailing how the life histories of materials and makers are (re)made during the practices of making. This account of the temporality and materiality of making is developed through an autoethnographic study of upcycling redundant bedding textiles into bags. The case study of upcycling foregrounds the potential of material as

doings rather than things, as the intention of this sewing practice is aligned towards bringing redundant material to new use.

The paper is developed as follows. I begin with a discussion of sewing with reference to materials, tools and skills and the theoretical underpinning of new materialism that informs this. I then briefly outline the values and practices of fabric upcycling and its relevance to an autoethnographic study of sewing. In the third part of the paper I introduce the empirical fabric upcycling project for this paper – bedding into bags – and the autoethnographic approach I have taken to study my own sewing practice. The analysis of this autoethnographic study is developed through a temporal lens to reveal the temporal practices of making and the heterogenous life histories of materials and makers.

Sewing and new materialism

Renewed interest in geographies of making starts from the simple observation of the significance of making for human life. This succinct observation has opened up the potential for diverse and vibrant scholarship and research in this field encompasses industrial, craft, collective and individual practices, and the intersections between these (see for example, Price & Hawkins, 2018). Sewing has, arguably, received less attention in studies of making compared to other crafts (Bain, 2016; Hall & Jayne, 2016). While the political and social contexts of sewing are examined in the literature (Bain, 2016; Z. Collins, 2018; Parker, 2019), studies of doing sewing are more muted. There are a number of possible reasons for this absence. First, while sewing is done by passing fabric through a machine or using a needle and thread, the intricacy of sewing involves multiple mundane ways of working with material: (un)folding, measuring, cutting, pressing, fusing, piecing, clipping, trimming and finishing. Moreover, as sewing can be undone and redone the emphasis on experimentation that is evident in other repertoires of making is more subdued (see for example, O'Connor, 2007, 2017). Second, this diversity of doing is orientated towards producing an end product and it is more intuitive to write about the outputs of sewing rather than its processes. Third, sewing is carried out in heterogenous domains, from haute couture to home sewing or domestic repair. We are, as Price et al. (2020) describe, familiar with textiles and sewing, and while sewing is not a universal skill,¹ familiarity with sewing can reduce it to something that is simply done (especially when it is done by women, see, Z. Collins, 2018) rather than a defined practice. My account of sewing seeks to optimise these qualities regarding the variability of mundane, familiar skills and intentionality to unpick the material and temporal assemblages of sewing.

In order to consider anew the mundane, familiar and predictable skills of sewing I draw upon recent conceptualisations of new materialism (Barad, 2003) to open up a temporal reading of materiality and making. The significance of the temporalities of making is taken forward in other geographical studies through addressing the historical formulation of skills (Patchett, 2016) and the interlinkages between memory, place and materials (Edensor, 2011; Paton, 2013). The contribution in this paper is towards the detail of the time of making. This time is indeterminate and not a fixed external resource within which making occurs. The questions to interrogate about the time of making relate to the diversity of how making is done rather than the singularity of how it should be done.

As Barad (2017, p. 66) writes ‘temporality is not merely multiple, but rather temporalities are specifically entangled and threaded through one another’. Multiple temporalities of making weave through the life histories of makers and materials and the potential of both is realised through making.

Foregrounding the indeterminacy of the temporality of making develops established scholarship on vitalist materialism, particularly scholarship inspired by Tim Ingold’s writings on making, living and skills (Ingold, 2000, 2007, 2013). Ingold’s assertion that makers interact with materials and that making occurs through these interactions inverts the assumption that making imposes human agency onto static material. In seeking to reassert the dominance of materials over the study of materiality, he rejects the supposition that things are animated because they are made through human agency. Instead this vitality comes about ‘because of ways in which they are caught up in these currents of the lifeworld’ (Ingold, 2007, p. 1). Thus, material properties are not fixed but instead should be more properly be interpreted as ‘processual and relational’ (Ingold, 2007, p. 14). Ingold’s influential call for a more rigorous examination of materials over materiality is not without its critics. Of particular relevance for this study is Knappett’s (2007) discussion of Ingold’s insistence that material relations should be prioritised. Knappett’s concern with this prioritisation is that it may infer that humans take a ‘back seat to the trajectory of materials’ (p. 23). He concurs with Ingold’s insistence that the properties of materials are histories rather than attributes and observes that Ingold himself does not carry this forward.

This shift towards the significance of the life histories of materials can, I suggest, be enlivened with reference to Barad’s conceptualisation of new materialism. Barad’s (2003) interpretation of matter not being a thing but a doing that equally stabilises and destabilises ‘iterative inter-activity’ (p. 822) stimulates studies of materiality to examine the capacity for matter to affect. This theorisation of new materialism involves examination of the tangled web of ongoing responsiveness between human and non-human entities that are made and remade through making (Barad, 2007). This responsiveness is not just constituted between materials and makers but also through the tools and apparatuses that work on materials that Barad contends are equally open-ended processes. Accounting for the diversity of non-human and human forms of agency unsettles the assumption that things have ‘inherently determinate boundaries’ and words ‘inherently determinate meanings’ (Barad, 2003, p. 813) and opens up the indeterminate quality of the life history of materials.

Working with fabric is germane for foregrounding how material properties are created through being (re)worked rather than given. The historical properties of fabrics can be traced back through the manufacturing processes. These are determined by the composition of yarn (distinguishing between animal origin, cellulose or synthetic), the manufacturing process of the yarn (for example, cellulose yarns can be lusted through the process of mercerisation) and how the material is constructed (whether yarn is woven or knitted to create fabric). These properties can be reworked through making; for example, interfacing or interlining is used to stabilise fabrics, or woven fabrics can be cut on the bias to increase stretch. Cutting and combining fabrics together not only generates new forms but also alters the properties of the materials being worked with. The practice of upcycling further develops the life histories of materials through experimenting with novel combinations of materials to generate new forms.

The ongoing responsiveness that is enacted through making does not just remake the life history of materials it applies equally to the life history of makers whose skills are developed, refined and redeployed through making. In existing scholarship on skills and making there is discernible emphasis on apprenticeship and becoming skilled (Atkinson, 2013; Ocejo, 2014; Paton, 2013; Patchett, 2015; Straughan, 2018). In self-examinations of learning to make, researchers challenge the expectation of a linear progression in learning and instead develop a subtle appreciation of dynamic skill-acquisition and how becoming skilled engenders a 'greater sensitivity to the potentials of materials' (R. Collins, 2018, p. 178). For example, O'Connor's (2007, 2017) pioneering examination of glass blowing describes how bodily intentionality moves the apprentice glass blower towards a feeling for body-material-tool interactions. For O'Connor the apprentice develops technique through making an 'implicit technique explicit' and then 'allowing the revised technique to again recede into unconsciousness' (O'Connor, 2007, p. 130).

What is less evident in existing scholarship is how the process of becoming skilled is not just restricted to the experiences of apprenticeship but is equally applicable over the life course of making. The question of how 'craft-skills gain temporal duration and spatial extension through differences within repetition' (Patchett, 2016 p. 406; see also, Bissell, 2013) is not just relevant to learning but how repetition of skills redefines the experiencing of making over time. A commitment to becoming rather than being skilled opens up questions about how makers' identities are reinterpreted and refreshed over the life course. Learnt skills can be repeated in different contexts and augmented with new techniques and technologies.

The temporality of repeating skill in different contexts is not just relevant for detailing makers' identities over the lifecourse, it also applies to time as a constituent of making itself. Barad provides a radical reinterpretation of time in denying that there is 'no determinate time, only a specific temporal indeterminacy' (Barad, 2017, pp. 67–68). The breadth of this reimagining of time is challenging, particularly for empirical investigations of everyday activities such as making. The aspect of her ambition that is of most interest for my purposes is developing a relational interpretation of time which is experienced through the interactivity between materials, skills and tools. One way of empirically accessing this relationality is through a sense of tempo and rhythm; that is been alert to both the coherence and inconsistency between skills, materials and tools. This is particularly pertinent for writing about sewing as it is not done by applying a single technique to a unique piece of fabric, but through a bricolage of skills and materials. These heterogenous practices necessarily require stitching together moments of doing/not-doing. Anticipation and reflection about how to work materials in response to what has been done and what needs to be done interweave stillness into the activity of sewing, thus sewing is experienced through an arrhythmic tempo. Sewing is also punctuated by unpicking; even an experienced sewer makes mistakes. These reversals of sewing through unpicking undermine the expectation that mistakes refine the linear quality of skill progression (Dreyfus, 2002). Instead the repetition of mistakes underlines their non-linear development (Bissell, 2013; Lea, 2009). These different repertoires of doing resist a singular interpretation of making and its temporalities. Indeed, one potential loss of a persistent focus on embodied practice and refinement of skill is that the interweaving of activity with stillness is muted. Paying attention to the diversity of registers of doing that stitch together productive and non-productive activities can provide a perspective on the

temporalities of making that move beyond a binary of the event versus the non-event (Baraitser, 2017).

Upcycling

Upcycling can be defined as remodelling old or redundant materials² into new forms so that the value of the new product is greater than the sum of its original components (Bridgens et al., 2018; Sung et al., 2017; Wegener, 2016). The use of clothes/textiles is particularly suitable to this practice. A number of fashion makers specialise in upcycling,³ including some fast fashion.⁴ The aesthetic of upcycling is eclectic, creating one-off bespoke pieces against the norms of mass consumption. Thus, fashion upcycling is directed towards educating consumers about the sustainability of fashion consumption rather than providing a sustainable alternative practice (e.g., the US company Reformation calculate a sustainability impact for each item of clothing).

There are two limitations to how upcycling fabric is conceptualised in professional and hobbyist sewing. First, it overlooks the different ways in which fabrics are used. While upcycling retains a commitment to the limited use of new materials (Bridgens et al., 2018), transformations necessarily require the use of some new resources. Fabric is reworked through combining with other materials (through the use of interfacings and interlinings) which are worked together with new materials (threads, notions and fastenings). Second, the human labour of remaking materials is not visible. The popular aesthetic of upcycling emphasises its potential as a quick and easy practice that can provide a ready solution to unwanted clothing.⁵

Using a case study of upcycling in this account of the temporality of making conveniently foregrounds the dynamic qualities of the life history of materials. My approach to upcycling involves reworking used fabric into new forms which implicitly emphasises the malleable qualities of the materials being used. Equally this orientation to remake material reworks my own sewing identity as I learn to work *with* found materials rather than source new materials to work on. My use of upcycling does not explicitly focus on how this practice can adopt external dispositions towards working with materials, such as slow or sustainable making (see for example, Crewe, 2013). Instead I unpick how temporal and environmental sensibilities are cultivated through upcycling. There are synergies with Straughan's (2018) study of learning taxidermy and her vital materialist conceptualisation of the capacity of both materials (in Straughan's case dead bodies, in my example redundant materials) and living bodies 'to affect the creative process' (p. 146). The approach I take to upcycling is to reimagine the possibilities of how redundant material can be reused and how this remaking can bring about reorientations to the intentionality and temporality of making.

Methodology: bedding into bags

The case study that I use to unpick the temporalities of making and materials draws upon an autoethnographic study of a fabric upcycling project: bedding into bags. Autoethnographic analysis requires an unconventional approach to writing a research paper. This study did not start with predetermined research questions and a defined methodology. Instead the opportunity to engage with geographical scholarship on the materiality and temporality of making emerged through experimenting with upcycling.

Bedding into bags was originally conceived in February 2020 as a participatory project with a community arts group to teach basic sewing techniques to be used for fabric upcycling. It became a solo project after the original project could not proceed following the introduction of covid-19 mitigation lockdowns. Thus, bedding into bags became a hobby activity that I carried out by myself at home in my sewing space in November 2020. In realigning the project, I was inspired by other researchers who have turned to consider their own hobbies and making practices (Kouhia, 2015; Mann, 2018; Paton, 2013). Doing autoethnography requires, as Ellis (1999) contends, opening oneself up to vulnerabilities and making your life open for critique, not just your work. When applied to hobbies this bifurcation between work and life is necessarily blurred. Sewing is no longer an antidote to work; it is work (Carr & Gibson, 2017). The advantages of turning the research lens onto one's own making is that it can resist the temptation to fetishize doing and instead reveal the variability and ambivalence of making (Hawkins, 2019). Shifting the emphasis from group learning to individual practice necessarily moved the focus of this study towards the detail of the assemblage of skills, tools and materials; the intricacy of how these are brought together in time; and, how the life histories of materials and maker are remade through making.

To carry out the project I selected a duvet cover that was originally my daughter's and was now no longer used. My mother gave me a second duvet cover for the linings of the bags. I choose to make these bedding textiles into bags as this was the intention of the original project. I retained the commitment to studying skill development in the context of fabric upcycling though setting parameters for the project that made it more experimental and went beyond my sewing comfort zone. My preference for dressmaking has been to purchase patterns and material specific to making a particular item. Rather than designing my own patterns, I enjoy the process of following instructions to focus on the repetition of making rather than thought of design. In this sense my normal approach to dressmaking resists (Ingold's, 2010) claim that making should be interpreted going forwards, for dressmaking I start backwards from the item that I want to make. In remaking the bedding into bags, I set myself the task of not using patterns and designing each bag myself. This is not to suggest that my patterns are original. Prior to making the bags I spent time inspecting my own bags and browsing the internet looking at bag design patterns that would suit the fabric. Hence while the designs are my own, I acknowledge the contribution of other sewers and designers.

I made seven bags in total out of the duvet covers: handbag, messenger, holdall, shopper, backpack, washbag and laptop bag (these are pictured in [Figure 1](#)). The bags vary by size, shape, handle design, closure type and pockets/compartments. I also experimented with different aesthetic elements, for example, different quilting patterns, seam piping and inserting additional fabric. I found size the most difficult feature to gauge. Size is determined at the start of making through cutting the fabric, though the achieved size of each bag is only realised at the end. I became better at anticipating a bag's final form and the last two bags that I made feel about the right size.

Other design decisions include the type of closure and the number and type of pockets, both of which change and/or enhance the functionality of the bags. These choices add to the complexity and frustration of making. Sewing zips is one of my least enjoyable sewing activities. Inserting zips is fiddly and slows down the progress of making each bag. I committed to include either a zip closure or a zipped pocket in all of the bags.



Figure 1. The bags, clockwise from far left, handbag, messenger, holdall, shopper, backpack, washbag and laptop bag.

I became more adept at sewing zipped pockets and closures during the project and inserted three zips in the final backpack. Other functional and aesthetic considerations include non-zipped pockets, piping seams, size and material of handles and the option of quilting the bag. While design details do not change the function of the bag, they do change perception of an item and I find that the finer details of design give more joy to the overall appreciation of the final bag.

I made the bags using a domestic sewing machine: a Pfaff Quilt Ambition 630. This is a computerised machine, capable of sewing more than 201 different stitches. As with other domestic machines it is possible to change the key settings: stitch type, length and width, thread tension, position of the dog feeds (which determine how the fabric is taken through the machine), sewing foot type and foot tension (the foot keeps the fabric in place). Sewing also utilises a miscellany of smaller, though equally important tools (Beaudry, 2006). Scissors, needles, pins, bobbins, fabric clips, threaders, cutters, rulers, quick-unpicks and tools for adjusting the machine as well as materials such as chalk and paper were all utilised in various ways

The methodology was more than simply to make the bags. I kept a diary to detail as much as I could, including notes about the design of each bag and the tools and materials that I used throughout the project. I also used the diary for recording my emotional responses, embracing satisfaction and frustration. I tracked the timing of making each bag using an App on my phone (toggl) for an objective record of how long it took to make each one. Finally, I took photographs and video recorded some of the sewing sessions on my phone. I concur with Straughan's (2018) observation about the frustration of filming making. The videos capture the sluggish tempo of making and the overall impression is how slowly I move through the practice of sewing. I note in my diary that I spend more time faffing rather than getting on with the task in hand. Rather than seamlessly capturing the practice of sewing, the films reinforce the temporal diversity of making to reveal how times of focussed doing are interposed with moments of not-doing and un-doing.

The bedding into bags project generated a rich bricolage of data: the finished bags and the debris of unused or discarded materials, my diary and notes, video recordings, photographs and time tracking. In the following sections I piece together these data to

interrogate the temporal diversity of sewing practice and the life histories of both materials and maker.

Analysis

Time of making

It is impossible to write about the practice of sewing without reference to time. As I detail in the extract from my diary in the introduction, the time of making is inherent to its practice, it is not simple a vessel in which making is done. The temporal qualities of making are most readily captured with reference to tempo. However, the tempo of making does not dictate the embodied and emotional qualities of sewing, instead it knits together the properties of materials and makers. Slow making can be associated with therapeutic practice (Wellesley-Smith, 2015), taking care, or completing a difficult or unfamiliar task. Completing making quickly may suggest a task is easy or the maker is very proficient and familiar with the activity. Upcycling is often promoted as a quick and easy way of reducing waste. Thus, ethical qualities of reusing materials are enhanced through its accessibility with reference to skills and time. The experimental design of bedding into bags deliberately resists this normative interpretation of the benefits of quick projects. My observations about making time relate to the calibration of tempo, working with the machine and the temporal unevenness of sewing that segues between intensive activity and inertia.

The tempo of making is continually calibrated. I wrote in my diary about the frustrations of unpicking which extended the time of practice:

Sewing the shopping bag I try to save time by not stopping to mark the sewing line for the bottom corner. I judge that I can sew a perpendicular line by eye. In rushing to finish the bag I sew this in the wrong place twice. I sit on the floor frustrated and deflated to unpick the seams. At the third attempt I take more care and mark the sewing line first.

This iteration between taking time to do things correctly and cutting corners though the application of embedded skills is ongoing. I am an experienced sewer and can complete the basics of sewing quickly; I don't always need to pin seams or mark stitching lines and I organise tasks to reduce moving between machine, ironing board and sewing table. But, as in the example above, I am sometimes over confident about my proficiency rather than taking care to do sew 'correctly'.

When things go wrong, I blame the machine. It is the machine that does not sew straight, misses seam allowances, or sews in the wrong direction. The latter is a common fault which is partly due to the design of the machine. The reverse button is located just above the sewing area and at times the force of pushing the bulky fabric through the machine pushes this button and the machine starts to sew backwards. But most of the time is because I am trying to sew too quickly. I press the button and it does not register as I do not give the machine time to process this request. To sew efficiently and neatly the machinist must be momentarily ahead of the machine, anticipating what will happen in the next moment through focussing on the material passing through the machine rather than the movement of the needle. Sewing with the machine requires maintaining this minuscule temporal difference, if

the machinist is too far ahead or gets behind the machine, the unity is broken. This fine line between competent and faulty sewing is not given, instead it is realised through been alert to the open-ended processes of equipment and materials (Barad, 2003). Sewing the bulky bags with the machine segues between unity and disunity, times of precise spatial and temporal harmony and other times of frustration and physical exertion.

The embodied practice of sewing is more than simply using a machine and/or needle and thread. Time spent sewing does not account for the majority of the time it takes to make each bag. I did not attempt to measure the time spent on the different elements of sewing as this would have turned the project into a time and motion study that prioritises linear external time rather than subjective experiences of time. However, making the bags segues a variety of tropes of doing: folding, unfolding, measuring, cutting, drawing, piecing, pinning, ironing, pressing, fusing, quilting, basting, unpicking, finishing (threads), winding (bobbins), sniping, trimming and tidying. Fusing these different doings together is neither seamless nor linear. While the overall intention is towards completion of the bags, the process of making is uneven. This unevenness is experienced through varied intensity between inertia and moments of intense doing or reversal (mistakes are unpicked and redone). My observations of how long I judge it takes to make a bag are different from the results of measuring the time spent sewing using the app on my phone. Bags that came together easily with few mistakes felt quicker to make than those with more interruptions.

As I note above, my initial reactions on viewing the first video recordings is that nothing happens. I move too slowly in patching the different methods of sewing together. The videos capture the slowness of making: repetitive folding and refolding of fabric, setting the sewing machine up and changing various settings, working out how to feed the bulky bags through the machine, undoing mistakes, double checking measurements before cutting and piecing before sewing. In working through the project, I sought to capture this temporal unevenness and noted in my diary times of reversal or stalling. My intention is not to identify how to maximise the efficiency of sewing through minimising these periods of non-linear activity, instead it is to reflect on how this flow between moments of making, pausing and undoing are essential to the completion of the bags. There are analogies to my fusing of productive/non-productive making to take care in making the bags with Baraitser's (2017) assertion of the significance of the non-event to the temporalities of care.

I identify five main ways in which making is experienced through pause or reversal:

Hesitation. These are necessary pauses for thinking through whether I was making the bags correctly. This is common at key moments such as cutting the fabric and sewing major seams. Double checking that measurements are accurate and that pieces are pinned together correctly ensures the smooth completion of the project. The videos capture these calibrations of hesitation as I stand staring at the task in hand.

Preparation: This is similar to hesitation but with more intention. This involves thinking through design and process. Some of these designs are worked out in advance in my diary, such as bag dimensions, though these are also recalibrated at each stage of cutting out. The process of making, such as the ordering of piecing fabric together or choices about finishing and pockets, are worked out in situ through doing.

Undoing: Unpicking stitching is a core component of sewing. All sewers make mistakes. In making the bags I sew zips in upside down, seams along the wrong line, twist handles, catch excess fabric in seams, miss seam allowances and insert piping incorrectly. All of these require unpicking and redoing. Making mistakes also provides a reason for stopping. Time to stop sewing, take a rest and return afresh.

Repetition. Many stages of making the bags are redone or repeated. Fusing the foam interlining to the fabric is done repeatedly if the fusing does not work first time. Piecing seams together is redone (hopefully reducing future undoing). Seams are reinforced or resewn along a straighter line. These repetitions and repeats facilitate the overall process of making and enhance the aesthetic of the finished bags.

Organisation: The varied assemblage of tools and materials requires constant organisation. Everything has a place in my sewing room, and I end each session by tidying and putting everything away. During a sewing session as more tools and materials are used, items are lost under fabric and the growing debris of rubbish comprising small offcuts from cutting out and the endless process of trimming and clipping seams. Time is spent looking for items and continually rearranging the assemblage of materials and tools.

Detailing the temporal unevenness of sewing is more than an observation of how making is done. It opens up a non-deterministic interpretation of making that gets to the essence of how it feels to make and the iterative interactions that constitutes the materiality of making (Barad, 2003).

Life histories of materials

The rationale of the bedding into bags project – to showcase how materials can be remade into new forms – foregrounds how the properties of materials are, following new materialism, active rather than passive histories. This process of reworking the properties of materials is a haptic, sensual practice and these sensibilities are not just experienced through touch they are also learnt. Fabric textures are not static or external to sewing as the feel of fabric is experienced through how it is worked, either passed through a machine or held for hand sewing (Dixon & Straughan, 2010). The woven polycotton fabric of the duvet covers is easy to sew as it has a relatively stable structure, and its qualities informed my choice of using this fabric for making bags. This feel for the suitability of different fabrics for sewing projects is an embodied skill; the touch, weight and structure of fabric are judged for its suitability for specific sewing projects. The material properties are also reworked through sewing through cutting and combining with other materials. The use of lightweight polycotton might be easy to sew but is not suitable for more structural bags and requires strengthening and stabilising with interfacing and interlining. These materials rework the properties of the original polycotton. However, once fabric is fused with interfacing into a new form this process cannot be reversed. Unlike reusing, repairing or recycling, upcycling fabric to enhance its value through remaking materials into new forms restricts potential reuse.

Fusing interfacing to the duvet fabric enhances the functionality of the bags. Changing the structure of the material also alters how the bags are sewn. When making the bags moments of repetitive sewing go smoothly, though the bulkier sewing towards the end of each bag feels more like a fight between myself, bag and machine. The physicality of this practice and holding the uncomfortable and ungainly shapes to feed the bags through

the machine contrasts with normative images of genteel and reposeful sewing (Burman, 1999). This feel for sewing is not experienced as unity with the machine; instead I experience the tension of trying to minimise the fracture between my embodied practice and the machine's mechanical workings. Material properties are actively reworked through these embodied encounters between maker and machine.

Life histories of makers

The parameters of the bedding into bags project are defined by my own past practice. My commitment to see through the process of sewing from design through to production breaks with how I have sewn in the past. The commitment to upcycling rather than purchasing fabric also re-orientates my engagement with materials and, following Barad (2003), a commitment to their indeterminate properties and capacity to affect. Upcycling engenders a forward-looking approach, starting with the potential of redundant material rather than a backwards orientation of intending to make a specific item (Ingold, 2010). Hence while the techniques of sewing are the same for upcycling, I am repeating these in a different context (Patchett, 2015). This repetition in difference facilitates my re-engagement with the materials and tools of making. Through starting with materials and considering how to change their properties I developed an appreciation of the material science of sewing. Previously interfacings and interlinings were stuff I simply used as required in a pattern, I never gave much thought to their properties and structural role in sewing. In making the bags the properties of all the materials used is not accidental, it defines both process and product. Thus, this re-orientation engenders a new ethical disposition to pay attention to material properties and how these can be reworked.

Likewise, I did not set out to apply the ethos of 'slow' making to the project and was frustrated by the slowness of making captured in the videos. Paying close attention to the arrhythmia of making, rather than ascribing to a particular temporality, also facilitated a renewed understanding of the embodied practices of making. While others have written about the frustrations of making (Hawkins, 2019; Price & Hawkins, 2018), my reflections on the temporal diversity of sewing moves on from a binary between the frustrations of lacking skill and the fulfilment of accomplishment. Hesitating, redoing and undoing can undermine the capacity of being skilled but are equally necessary to its accomplishment. Sewing is not simply done; it is thoughtful, and these mental calibrations are more than distractions.

There is an important pedagogic value in identifying the complexity and variability of making. My filming of sewing looks nothing like the carefully edited videos on sewing techniques available on YouTube. These learning tools edit out the messiness of doing to isolate a specific skill. However, editing out the lived experiences of how making progresses can undermine learners' experiences. Learning to make it is not only about acquiring skills but accommodating the subtle practices of calibration and moving through the unevenness of doing (Lorimer & Lund, 2003). As Lea observes, these attunements apply an ethics of practice that 'consists of monitoring, sensing, negotiating and intervening in the kinds of leaky bodily affective and biological flows' (Lea, 2009, p. 471). This monitoring is spatial – reorganising the workshop, shifting bodily position at the machine – and temporal – working out what has to be done next, being alert to the

temporal dissonance between machinist and machine and acceding to the varying tempo of the processes of making.

A final observation on maker's life histories is that these are not independent of social identities. The agency I write about in this autoethnographic account is possible through my privilege as a hobbyist sewer in the Global North. As an experienced sewer I have also acquired my own tools and space to sew. Upcycling can become affirmative and engender a shift in ethical practice because of who and where it is carried out. Equally the politics of sewing are redefined in more advanced economies through intersections between gender, class and lifecourse and the economic policies of austerity (Hall & Jayne, 2016). Having to sew rather than choosing to sew, as well as the detail of the times and spaces within which it is carried out cannot be separated from its embodied experience and makers' openness to the vulnerability of self-inspection.

Conclusion

My reflections on the bedding into bags project did not just focus on the detail and/or ethics of upcycling. The findings that resonate most with my sewing practice are what I learnt about the subjective and heterogeneous experiences of the time of sewing. Studying the detail of making through an intensive autoethnographic lens reveals how making proceeds through the iterative processes of remaking materials and skills. Some of these iterative processes are more transparent: fusing lightweight fabric to a bulky material requires greater physical dexterity and more pressure to work the fabric through the machine. Other iterations are subtler, such as repetitive recalibrations and double checks that the fabric and machine are aligned and maintaining the temporal alignment between maker and machine.

Detailing the precision of how making is done and paying equal attention to inactivity alongside more active elements of sewing, does, I suggest, align towards Barad's writing on new materialism. The additionality of interpreting making through this approach opens up the indeterminate quality of their life histories and the capacity of materials to affect without assuming the direction of this agency. The bags that are made are not given by the inherent properties of the fabric used. Thus, the forwards approach to making that Ingold inspires requires a more indirect approach to work through the potential of what fabric can be used for and remaking the life histories of materials. Arguable sewing is more suited to exploring the ambiguity of materials as what is made is not determined by the properties of the fabric itself but how it is cut, fused and sewn, that is by the interactions between materials, skills and tools. Equally my own sewing life history is remade, as the project re-orientates my sewing practice to an ethic of starting with the potential of materials that I have to hand. After completing the bags, I am excited by the potential to upcycle other items of clothing and domestic textiles.

Time is not a vessel in which making unfolds, but as Barad (2003) contends, matter performatively materialises time as well as space. Analogous to how geographers have engaged with the spaces of making as not simply locations where making happens (Smith, 2021); the time of making refers to time as a constituent of making itself. The diverse tempo of making permeates the subjective experiences and evaluations of how making proceeds (such as if making goes well or is a frustrating experience). Indeed, the time of making can be demarcated by progress (or sometimes lack of progress); making

may stop when particular stage of the transformation is completed, rather than the external calibration of linear time. Being alert to the time of making is more than a self-indulgent study. In particular learners may struggle to accede to the arhythmical flow of making and accept when making does not proceed to plan or to time. Thus, the significance of the time of making can be relevant for teaching these skills to new audiences.

Capturing how making is done, through the intersection of the life histories of makers and materials, is deceptively difficult. While geographical scholarship has engaged with the principles of new materialism to resist the thingness of materials and promote interpretations of the iterative inter-activity between human and non-human entities (see for example, Edensor, 2013; Tolia-Kelly, 2012); detailing the vitalist conceptualisation in the practice of making is more elusive. This paper therefore also makes an important methodological contribution to scholarship of making through detailing how the intricacies of making can be made visible through an immersive autoethnographic study, rather than a study of how makers' competencies and identities are realised through practice (such as learning a new skill). The bricolage of data collected in the study, incorporating materials, subjective observations and more objective visualisations, can be brought together to detail how making *is* in time and space.

New beginnings

The life histories of the fabric and the bags do not end when making is complete. A year after their completion, once covid-19 lockdowns were relaxed, the bags were featured in an exhibition *Threading Time: Sewing the Temporal Rhythms of Creativity*. The exhibition was held in a café on Keele University campus. The intention of threading time was to invite visitors to reflect on the opportunities and challenges of time and creativity. The bags provided a striking visual engagement that encouraged visitors to the café to stop and look. The exhibition also provided a conduit for the next phase in the life history of the bedding material. Visitors were invited to take part in an online survey to record their thoughts about the exhibition and enter a prize draw to win one of the bags. Exhibiting and giving the bags away took me back to the original participatory intention of bedding into bags. Winners were delighted to hear that they had won a bag and the momentary connection with others in delivering the bags to their new homes ended my involvement with this project. Giving the bags away also retains a commitment to sustainability *in* the method. Making functional items for other people means that I am not simply adding to the redundant outputs of participatory arts projects. Upcycling is not just the subject of my autoethnographic method it has also framed the ethics of how this project has been realised.

Notes

1. Research carried out by the British Heart Foundation in 2017 with approximately 2,000 people in the UK found that 59% of respondents were unable to sew at all or confidently: <https://www.bhf.org.uk/what-we-do/news-from-the-bhf/news-archive/2017/june/bhf-exposes-uk-sewing-skills-shortage-to-launch-the-big-stitch-camapaign>.
2. Commercial fabric upcycling can involve reworking used clothing into new items or making use of deadstock (discontinued) material.

3. There are a number of small design houses that use upcycling techniques, such as Reformation (based in Los Angeles, USA) and Antiform (based in Bristol, UK).
4. For example, ASOS Reclaimed Vintage and Urban Renewal (a subsidiary of Urban Outfitters).
5. Online resources for fabric upcycling often promote quick and easy projects for DIY upcycling. See for example, Lang, H. (2020) Upcycling Clothes: 7 Creative Ways to Repurpose Your Old Clothes'. <https://goodonyou.eco/7-creative-ways-to-upcycle-your-old-clothes/>. Vanderzel, G. (2019) Eight Simple Ideas For Reworking Your Closet. <https://collectivegen.com/2019/09/eight-simple-ideas-for-reworking-your-closet/>

Acknowledgments

This research is funded by a Leverhulme Trust Major Research Fellowship, MRF-2017-044, whose support is gratefully acknowledged. I wish to thank the editor and three anonymous reviewers for their insightful and encouraging comments on the original manuscript.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the The Leverhulme Trust [MRF-2017-044].

ORCID

Clare Holdsworth  <http://orcid.org/0000-0002-9064-3493>

References

- Atkinson, P. (2013). Blowing hot: The ethnography of craft and the craft of ethnography. *Qualitative Inquiry*, 19(5), 397–404. <https://doi.org/10.1177/2F1077800413479567>
- Bain, J. (2016). “Darn right I’m a feminist ... Sew what?” the politics of contemporary home dressmaking: Sewing, slow fashion and feminism. *Women’s Studies International Forum*, 54, 57–66. <https://doi.org/10.1016/j.wsif.2015.11.001>
- Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs*, 28(3), 801–831. <https://doi.org/10.1086/345321>
- Barad, K. (2007). *Meeting the universe halfway. Physics and the entanglement of matter and meaning*. Duke University Press.
- Barad, K. (2017). Troubling time/s and ecologies of nothingness: Re-turning, re-membling and facing the incalculable. *New Formations*, 92(92), 56–86. <https://doi.org/10.3898/NEWF:92.05.2017>
- Baraitser, L. (2017). *Enduring time*. Bloomsbury.
- Beaudry, Mary C. 2006 *Findings: The material culture of needlework and sewing*. New Haven: Yale University Press.
- Bissell, D. (2013). Habit displaced: The disruption of skilful performance. *Geographical Research*, 51(2), 120–129. <https://doi.org/10.1111/j.1745-5871.2012.00765.x>
- Bratich, J. Z., & Brush, H. M. (2011). Fabricating activism: Craft-work, popular culture, gender. *Utopian Studies*, 22(2), 233–260. <https://doi.org/10.5325/utopianstudies.22.2.0233>
- Bridgens, B., Powell, M., Farmer, G., Walsh, C., Reed, E., Royapoor, M., Gosling, P., Hall, J., & Heidrich, O. (2018). Creative upcycling: Reconnecting people, materials and place through making. *Journal of Cleaner Production*, 189, 145–154. <https://doi.org/10.1016/j.jclepro.2018.03.317>

- Burman, B. (Ed). (1999). *The culture of sewing gender, consumption and home dressmaking*. Bloomsbury.
- Carr, C., & Gibson, C. (2017). 'Animating geographies of making: Embodied slow scholarship for participant-researchers of maker cultures and material work. *Geography Compass*, 11(6), e12317. <https://doi.org/10.1111/gec3.12317>
- Collins, R. (2018). A sustainable future in the making? The maker movement, the maker-habitus and sustainability. In L. Price & H. Hawkins (Eds.), *Geographies of making, craft and creativity* (pp. 174–194). Routledge.
- Collins, Z. (2018). Unpicking the material politics of sewing for development: Sex, religion and women's rights. In L. Price & H. Hawkins (Eds.), *Geographies of making, craft and creativity* (pp. 78–93). Routledge.
- Crewe, L. (2013). Tailoring and tweed: Mapping the spaces of slow fashion. In S. Bruzzi & P. Church-Gibson (Eds.), *Fashion cultures: Theories, explorations, analyses* (pp. 200–214). Routledge.
- Dixon, D. P., & Straughan, E. R. (2010). Geographies of Touch/Touched by Geography. *Geography Compass*, 4(5), 449–459. <https://doi.org/10.1111/j.1749-8198.2009.00299.x>
- Dreyfus, H. (2002). Intelligence without representation – Merleau-Ponty's critique of mental representation. The relevance of phenomenology to scientific explanation. *Phenomenology and the Cognitive Sciences*, 1(4), 367–383. <https://doi.org/10.1023/A:1021351606209>
- Edensor, T. (2011). Entangled agencies, material networks and repair in a building assemblage: The mutable stone of St Ann's Church, Manchester. *Transactions of the Institute of British Geographers*, 36(2), 238–252. <https://doi.org/10.1111/j.1475-5661.2010.00421.x>
- Edensor, T. (2013). Vital urban materiality and its multiple absences: The building stone of central Manchester. *Cultural Geographies*, 20(4), 447–465. <https://doi.org/10.1177/2F1474474012438823>
- Ellis, C. (1999). Heartful Autoethnography. *Qualitative Health Research*, 9(5), 669–683. <https://doi.org/10.1177/2F104973299129122153>
- Gauntlett, D. (2018). *Making is connecting: The social power of creativity, from craft and knitting to digital everything* (2nd ed.). Policy Press.
- Hall, S. M., & Jayne, M. (2016). Make, mend and befriend: Geographies of austerity, crafting and friendship in contemporary cultures of dressmaking in the UK. *Gender, Place and Culture*, 23(2), 216–234. <https://doi.org/10.1080/0966369X.2015.1013452>
- Hawkins, H. (2019). Geography's creative (re)turn: Toward a critical framework. *Progress in Human Geography*, 43(6), 963–984. <https://doi.org/10.1177/2F0309132518804341>
- Holdsworth, C. (2021). *The social life of busyness*. Emerald.
- Holmes, H. (2018). Self-time: The importance of temporal experience within practice. *Time & Society*, 27(2), 176–194. <https://doi.org/10.1177/2F0961463X15596461>
- Ingold, T. (2000). *The perception of the environment: Essays on livelihood, dwelling and skill*. Routledge.
- Ingold, T. (2007). Materials against materiality. *Archaeological Dialogues*, 14(1), 1–16. <https://doi.org/10.1017/S1380203807002127>
- Ingold T. (2010). The textility of making. *Cambridge Journal of Economics*, 34(1), 91–102. <https://doi.org/10.1093/cje/bep042>
- Ingold, T. (2013). *Making: Anthropology, archaeology, art and architecture*. Routledge.
- Jackson, P. (2000). Rematerializing social and cultural geography. *Social and Cultural Geography*, 1(1), 9–14. <https://doi.org/10.1080/14649369950133449>
- Knappett, C. (2007). Materials with materiality. *Archaeological Dialogues*, 14(1), 20–23. <https://doi.org/10.1017/S1380203807002140>
- Kouhia, A. (2015). The making-of: An autoethnographic cinema on the meanings of contemporary craft practicing for a young hobbyist. *Textile*, 13(3), 266–283. <https://doi.org/10.1080/14759756.2015.1084788>
- Lea, J. (2009). Becoming skilled: The cultural and corporeal geographies of teaching and learning Thai Yoga massage. *Geoforum*, 40(3), 465–474. <https://doi.org/10.1016/j.geoforum.2009.03.005>
- Lorimer, H., & Lund, K. (2003). Performing facts: Finding a way over Scotland's mountains. *The Sociological Review*, 51(2_suppl), 130–144. <https://doi.org/10.1111/j.1467-954X.2004.00455.x>

- Mann, J. (2018). Knitting the archive: Shetland lace and ecologies of skilled practice. *Cultural Geographies*, 25(1), 91–106. <https://doi.org/10.1177/2F1474474016688911>
- Ocejo, R. E. (2014). Show the animal: Constructing and communicating new elite food tastes at upscale butcher shops. *Poetics*, 47, 106–121. <https://doi.org/10.1016/j.poetic.2014.10.006>
- O'Connor, E. (2007). Embodied knowledge in glassblowing: The experience of meaning and the struggle towards proficiency. *Sociological Review*, 55(SUPPL. 1), 126–141. <https://doi.org/10.1177/2F1466138105057551>
- O'Connor, E. (2017). Touching tacit knowledge: Handwork as ethnographic method in a glassblowing studio. *Qualitative Research*, 17(2), 217–230. <https://doi.org/10.1177/2F1468794116686651>
- Parker, R. (2019). *The subversive stitch: Embroidery and the making of the feminine*. Original work published 1984. Bloomsbury.
- Patchett, M. (2016). The taxidermist's apprentice: Stitching together the past and present of a craft practice. *Cultural Geographies*, 23(3), 401–419. <https://doi.org/10.1177/2F1474474015612730>
- Paton, D. A. (2013). The quarry as sculpture: The place of making. *Environment and Planning A: Economy and Space*, 45(5), 1070–1086. <https://doi.org/10.1068/2Fa45568>
- Price, L., & Hawkins, H. (2018). Towards the geographies of making: An introduction. In L. Price & H. Hawkins (Eds.), *Geographies of making, craft and creativity* (pp. 1–30). Routledge.
- Price, L., McNally, D., & Crang, P. (2020). Towards geographies of comfort. In D. McNally, L. Price, & P. Crang (Eds.), *Geographies of comfort* (pp. 1–22). Routledge.
- Sennett, R. (2008). *The craftsman*. Penguin.
- Smith, T. S. J. (2021). Therapeutic taskscapes and craft geography: Cultivating well-being and atmospheres of recovery in the workshop. *Social and Cultural Geography*, 22(2), 151–169. <https://doi.org/10.1080/14649365.2018.1562088>
- Straughan, E. (2018). Entangled corporeality in the making of taxidermy. In L. Price & H. Hawkins (Eds.), *Geographies of making, craft and creativity* (pp. 144–157). Routledge.
- Sung, K., Cooper, T., & Kettley, S. (2017). Individual upcycling in the UK: Insights for scaling up towards sustainable development. In W. L. Filho (Ed.), *Sustainable development research at Universities in the United Kingdom* (pp. 193–227). Springer.
- Tolia-Kelly, D. P. (2012). The geographies of cultural geography III: Material geographies, vibrant matters and risking surface geographies. *Progress in Human Geography*, 37(1), 153–160. <https://doi.org/10.1177/0309132512439154>
- Wegener, C. (2016). Upcycling. In V. D. Glăveanu, L. Tanggaard, & C. Wegener (Eds.), *Creativity: A new vocabulary* (pp. 181–188). Palgrave Macmillan.
- Wellesley-Smith, C. (2015). *Slow stitch: Mindful and contemplative textile art*. Batsford.