Critical fitting: pedagogy for confronting colonial dynamics in fashion

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Abstract

Critical Fitting is a new method devised to decolonise design teaching in fashion schools. With participants at London College of Fashion we workshopped a core concept in clothing design: fit. The standardisation and simplification of fit is critical to fashion's ability to sell, ship and scale products globally - facilitated in part by vocational teaching which ties fit to practices and dynamics of colonial modernity. Our workshops locate an opportunity for advancing critical pedagogy in conjunction with STS pedagogy in order to empower LCF's globally-diverse students to bring to classrooms their own situated, sensory embodied and tacit knowledge of fit whilst simultaneously exonerating them from obligations to do so.

This article shows how workshops use playful but conceptually powerful strategies to remember and imagine alternative material-practices and ways of knowing – from those predetermined in industrially-produced garments to those enacted by participant's grandmothers' hands. We contribute a novel compositional methodology, Critical Fitting, that opens up new possibilities for decolonial pedagogy and can be adapted for new practices of STS teaching.

Keywords

colonial modernity, critical pedagogy, design, sensory embodied methods, fashion

Introduction

"I think it's a two-way thing... I have experienced both sides of the pond… I find in London we tend to think of ourselves as the authority on everything. And that privilege is part of the colonial history and how we have been conditioned to think. But even in other so-called 'third world' countries, they think of London as being the authority and sometimes ignore the talents and the creativity that they have. I know from working and teaching in Barbados for example, even at 16, at higher national diploma level, if you do a course in fashion technology you're expected to have such a high level of skill and knowledge in pattern construction. It's essential for them because that's where they get their livelihood. You have to leave there knowing how to design a garment and how to make something fit. But it's not so important in London because we outsource these processes, so [in Barbados] they tend to think of [London] as a place to be.

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"It's about London recognising the responsibility they have now… it's not just about being inclusive of people around you, but it's about the countries that they have taken from …. How do you give back to them, how do you bring them in, and make their opinions and their skills, and their knowledge part of this whole fashion world?"

- Participant 10 at the FBYKI Workshop Series, London College of Fashion, 2024.

What skills, knowledges and values from what worlds fit into the fashion classroom? Fashion practice is a critical yet understudied site of knowledge production and pedagogy. Fashion plays a constitutive role within modernity, through processes of knowledge and resource extraction and exclusion (Bartlett 2019b). But fashion has also an emancipatory role in societies, facilitating new subjectivities, posing challenges to authorities and enabling cultural re-articulation of new and old ways of knowing and being together. Within this milieu, the education of fashion designers is an important site of knowledge production, pedagogy and we argue, enduring colonial dynamics. In this situation, conversations such as the one reported above reveal a bind. On the one hand students and teachers tell us they value fashion school's reputation for unruliness and transgression. Yet, a commitment to vocational training means that for many students the purpose of fashion education is to ensure they can, after graduation, fit into industry.

We use the idea of *fit* to contrast how design education at London College of Fashion (LCF) has come to make things fit by presenting insights from a series of workshops using a novel *Critical Fitting* activity designed to reveal in the classroom knowledge that is normally left out. We also use the idea of fit to challenge what gets put into fashion education, and what is excluded. We introduce our *Critical Fitting* workshop in the first section where we connect their development to already existing critical pedagogy at LCF, a teaching-intensive school within the University of the Arts, London. We show that critical pedagogy in the Freiren sense (2017) is not sufficient. Our *Critical Fitting* incorporates a more explicitly STS pedagogy in order to explore and explain how modernity and colonialism are bound together in fashion education and how space might be opened up for other ways of knowing.

We make two contributions to emerging scholarship on STS pedagogy. First, the value of open-ended processes - a familiarity and comfort with uncertainty helps us do decolonial work through creating new epistemic infrastructures. The second contribution is our embodied sensory methods which we propose can be used in wider STS teaching activities to bring less formally academic knowledge into the classroom.

The sensory embodied methods of Critical Fitting workshops

Critical Fitting is a novel method iteratively devised through grounded research and reflexive practice-based teaching at London College of Fashion where groups of students use movement and their everyday sensory processes to generate critical discussion about *fit* in design. Many pre-industrial garment archetypes, and especially those from non-Western places, such as wrapper dresses and saris do not exemplify fit on the body as contemporary global fashion curricula intend the concept to be learned. Unlike, for instance, the European men's shirt, in which shape and fit is 'built-in' to the garment through standardised industrial processes. Because standard features such as sewn darts, shaping in seams, and complex industrially-produced garment construction details do not feature, the sari and wrapper are usually excluded from technical training in patterncutting. Along with these non-modern garments, also excluded from the classroom are the hands of the wearer in tying, folding and knotting fabrics into place on the body along with tacit knowledge such as bodily techniques

or sensory responses learned over generations. We argue for a place for this knowledge in fashion education. Sensory embodied methods help access this kind of knowledge that is not usually explicitly discussed or even thought about but instead is just done (Chong Kwan 2019).

In the fitting, each group is given a garment, specially designed to be open-to-interpretation (see Figure 1). It is not obvious how the item should be worn, however there are recognisable details in the finishing of edges or application of a fastening that hint towards western garment archetypes. As groups work together to figure out the intervention they would make with this 'abstract' artefact, participants question their assumptions around dressing and design. Tacit knowledge is up for discussion and concerns that might influence the design of a garment are centred around the wearer's needs or desires rather than the design's intention. Each group also has a separate set of prompt cards related to one of the following lenses through which they chose to experience the fitting activity: *Colonialism*, *Knowledge*, *Senses* and *Relations*. Groups are given a pouch with a set of drawing and fitting tools (markers, tailor's chalk, snips, safety pins, bulldog clips). The set of prompt cards directs groups to conduct actions in wearing the garment, e.g. "Secure the garment close to the body. Take a walk." Each action is followed-up by a discussion prompt, for instance "where did you learn this technique" or "does wearing the garment in this way bring up any memories? Tell us a story". Notes and comments from the discussion are written directly onto the garments as they are worn on the body.

Critical Fitting differs in several significant ways from the standard industry fitting scenario usually replicated in class. Normally a fit model (chosen because their waist, hips and chest measurements match standardised mannequins) tries on prototypes to allow designer and team to make stylistic and technical decisions, detached from the experience of wearing the garment. The fit model remains passive within this exchange and their sensory experience of wearing the garment is usually ignored - the focus is on how the garment 'looks' on someone else. The industrial design process aims toward a fixed understanding fit - a garment that either fits or does not. Enacted in this way, the design process ensures there is little agency for the wearer.

The objective of the *Critical Fitting* is to explore what new understandings of fashion emerge when we carry out fitting as a fluid and open-ended process. When we contravene the industry and educational norms described above – a teleological process intended to achieve a 'well-fitting' garment – we set up an interrogative enquiry with an open-ended objective. Previous workshops have raised discussion among students on the use of "industry-standard" (as worded on LCF design briefs) as a level of professionalism to aspire to in assignment outcomes. At a session involving design educators, embodied methods in the *Critical Fitting* instigated a constructive dialogue on the place of technical training in a decolonised curricula. At another workshop with non-design academics at a 4S conference, conversations about the knowledge of grandmothers emerged. One participant with Mexican indigenous heritage spoke of their grandmother's dressing practices teaching us about garment archetypes from that place. One participant told a story from Peru of dressmaking methods that used bodily actions in place of measuring tapes. Another participant told us about their Caribbean grandmother who, after emigrating to London, commissioned tailored clothing and enjoyed wearing a well-fitting suit. For her this was an important signifier that she 'fit in' to British society. In this moment at the conference workshop, these stories took their place as academic contributions in a context where these knowledges are normally marginalised or devalued.

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Figure 1. Abstract garments hanging and ready for use in a Critical Fitting workshop. The garment patterns were created by participants at preceding workshops and then fabricated as toiles by workshop organisers. Image courtesy of the authors.

In the fitting workshops, we prompted participants to share stories of any memories that the act of dressing and moving in the clothing evoked, placing importance on situated knowledges (Haraway 1988). We encouraged participants to share insights on a topic from a point of deep knowledge of being-in-a-body.

Sensory embodied methods in this specific fashion education situation model critical pedagogy by bringing the lived experience of students into the academic setting. Sensory embodied methods are combined with discursive methods in the *Critical Fitting* enabling a process of action and reflection. The aim is to get closer to the 'lived, corporeal experience of being clothed in the social world —how the body feels when dressed, but also how it moves in space—and the implications that this has for the construction and negotiation of people's identity and positioning within the social world' (Chong Kwan 2019). One of the ways that decolonial pedagogy and critical pedagogy are aligned in our work is in how we meet students in their own worlds of reference rather than situate them in a fixed universal canon. Critical pedagogy, as emancipatory, transformative and inclusive (Nouri and Sajjadi 2014) sees educators engaging in inclusive discussions in the classroom by engaging in the specific ontological, epistemic and axiological perspectives of a student's design research process. To set the conditions for a liberatory learning journey, tutors also have room to unlearn (Freire 2005) - and in doing so, we learn about a student's rationale, their values, how their design methods are influenced by their positionality and what fits inside and outside their world.

Critical pedagogy, often augmented by concepts from cultural studies, has long been taken up by art school educators to foster critical engagement with harmful norms and practices (D. Atkinson 2018; Stevenson 2022; Centre for Sustainable Fashion 2021). For instance, at London College of Fashion, we ask our students to create a 'values diamond' (Clark 2012; Stephens and Staddon 2019).[ii] This exercise is designed to help students develop reflexive capabilities to know themselves and the relations within the worlds they operate, reminding them that "we design our world, while our world acts back on us and designs us" (Willis 2006: 70). Pedagogically, this contributes to students' 'becoming' as they transition into new ethical territories, rather than encouraging the acquisition of information that comes with universalist assumptions. In line with critical pedagogy, this approach helps identify values, politics, sites and practices of reification and oppression. For instance, in recent years activist educators and students have successfully diversified who gets to be represented in different fits (Barry and Christel 2023). Despite this critical work however, critiquing reification of western fit as a core curriculum objective remains neglected.

Critical Fitting was iteratively developed via a series of hands-on, discursive workshops, using an overarching compositional methodology (Lury 2021) and documented using audio and videography. The workshop was first prototyped away from fashion educators, with STS scholars at the Making and Doing track of 4S Cholula in December 2022. Encouraged by enthusiastic peer feedback, including a conference award, we iterated the workshop design for fashion educators, running variants online and in the real world throughout 2023. A final workshop in June 2024 brought together educators and for the only time current and former students. Throughout this time institutional ethics clearance was sought and gained via research and teaching offices in LCF/UAL and research with students was reviewed as part of a "UAL Teaching and Learning Fund" application and grant-awarding process.

Locating dynamics of colonial modernity in the workshop

The aims of educators in London College of Fashion today adhere closely to training students to fit an industrial model of mass production which separated the designers of clothes - predecessors of today's LCF students - from both the manufacturers and wearers. (Godley 1997, 4).[iii] In this model, tools and processes emphasise two features which allow distributed design, production and marketing: standardisation and simplification.

Standards codify, embody and prescribe ethics and values, often with great consequences. One way that procedural practices such as design are standardised across time, space, industry and education sector, is by limiting their knowledge inputs to make them as straightforward as possible (Timmermans and Epstein 2010), translating the messy lives and attributes of clothes wearers into numbers. The importance of this move is not only the quantification of processes, but also their simplification. A goal of our workshops was to open up the usually unsaid rules and processes that simplify and standardise *fit* to critical interrogation and ultimately intervention by students - to allow students confront the ways in which vocational training and industry practices co-produce one-another. This challenge in turn contributes to a broader project of decolonial critique of the tools of the fashion industry (Ahmed 2022).

In pursuit of this goal we draw on Science and Technology Studies scholarship to help us answer the following question: how do we and our students locate and confront constituting patterns of (colonial) socio-material relations in modern fashion education that are historically deep, geographically pervasive and can be intractable to change?

We start with processes of standardisation, perhaps the constitutive process of modernity (Jasanoff 2007; Scott 1998). These processes are of a kind with John Law's perspective on a One World World (2015) where Law argues that hegemonic Western or global-North ways-of-knowing assume a singular and universal understanding of the world - what he calls *mononaturalism*. The kind of diverse understandings of cultures, people and their beliefs that our sensory embodied workshops recovered - *multiculturalism* - are permitted, but ultimately are all rooted in a single ontology, modernity. The status of difference in this one-world world is not merely of understanding (epistemological), but of actively constructing the world (ontological). At stake then is not simply that certain knowledges are epistemically categorised in design education on one side of nature vs culture, modern vs ethnic, sensory vs scientific, but that these categories are hierarchically ordered: a one world world assimilates all other worlds - sometimes violently.

Two points follow. First, the violence of the one world world is not a metaphor. Freire's philosophies have encouraged educators to invoke "colonisation" as a metaphor for oppression (Tuck and Yang 2012). Critical pedagogy often presents liberation as redemption for both oppressors and oppressed and in such a paradigm '"internal colonisation" reduces to "mental colonization", logically leading to the solution of decolonizing one's mind and the rest will follow' (Tuck and Yang 2012, 20). Second, in order to allow our methods confront these practices of categorisation and ordering, we turn ways of identifying processes that commit violence on worlds other than the one world world (Cadena and Blaser 2018; Escobar 2011; Lugones 2007)*.* The world that makes and is made by these global and historically situated processes we call colonial modernity (Arora and Stirling 2023; Quijano 2007; 2011). In work that seeks to account for how colonially accumulated power and privilege is reproduced in contemporary processes of knowledge production, Arora and Stirling (2023) set out six dynamics. These are: assumptions of comprehensive superiority; assertions of military supremacy; enforcement of gendered domination; extension of controlling imaginations; expansion of toxic extraction and appropriation of cultural privileges.

These dynamics are enduring practices that reproduce intersectional stratification and violence directed against other worlds – practices that have been central to the making of modern societies and their constituting economies, institutions and knowledge systems worldwide. Fashion is no exception, it is a crucial element of modernity tied up with

economic and cultural extraction and subjugation of people, regions and resources (Bartlett 2019a). Today these dynamics can be found in fashion's global supply chains. Forest land previously managed by indigenous communities continues to be bulldozed for industrial cotton agriculture (Earthsight 2024), garment workers in the global south are underpaid (Clean Clothes Campaign 2023) and the clothing waste produced by global north consumers is dumped on former colonies (Liboiron 2021). As reported by the workshop participant we quote at length at the beginning of this article, teaching activities at LCF are themselves situated within a global network of material and human flows that continuously circulate between sites of education and industry as we now discuss.
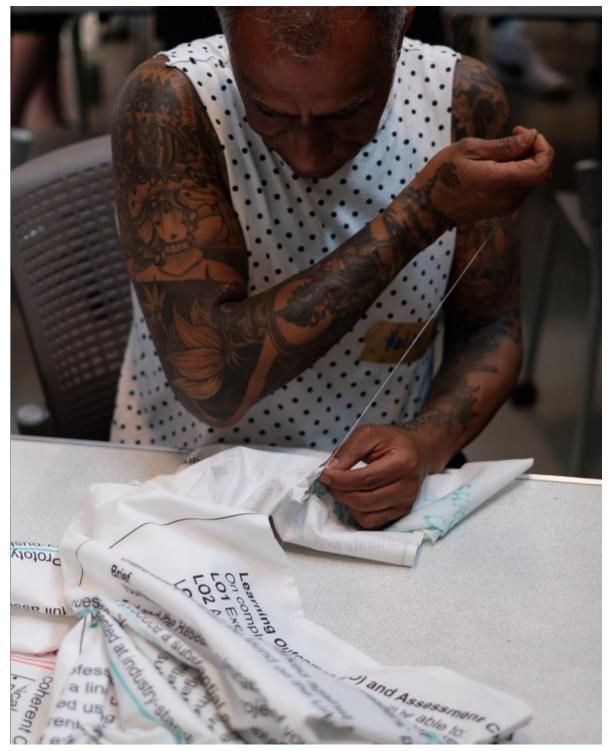
What Critical Fitting can contribute to STS pedagogy

Fashion teaching proves such a useful site of study for decoloniality because it illustrates where STS pedagogy and critical pedagogy constructively overlap. This is urgent work according to fashion scholar Caroline Stevenson (2022, 466):

"Fashion education is in crisis, caught between the competing demands of a reckless and powerful industry and a new generation of students with progressive ideas and activist mind-sets, determined to tackle its damaging political, social and environmental effects."

Our study confirmed that London College of Fashion students share this urgency. One workshop group problematised the wording on their programme brief: "Garments… presented at industry-standard" (UAL Assessment Brief: Master's Project, MA Fashion Design Technology Womenswear, see Figure 2). This intervention led to a critical discussion of the role of industry in setting guidelines for best practice in their work, given what they know about the social and environmental harms caused by fashion production. STS pedagogy, in its influence on how we composed the *Critical Fitting*, facilitated students to deconstruct assumptions on fashion technology. There is a compositional methodology (Lury 2021) behind the *Critical Fitting* where STS formed one side of a three-part composition. Despite the value of honing students' skills for critical analysis, when directed at the industry students aspire to work in as graduates, a tension arose. Critical pedagogy formed the second side of the methodology by addressing this tension. Students proposed to replace the phrase "industry-standards" with a phrase acknowledging that students' own values may set higher standards for their outcomes than settling for industry norms. In centering their own individual and collective empowerment, as critical pedagogy encourages, students suggested the creation of a reflective tool-set - their own guiding path through the uncertainty that criticality had unearthed.

The third side of the compositional methodology is art and design practices. The specific capacities of these practices to confront unjust and colonial dynamics as well build new paths forward can be of interest for STS scholars in the context of this special issue. Creative tools both cut and make. Art and design practices prime students for liberatory and decolonial work in their embrace of transgression, rule-breaking, 'epistemic disobedience' (Mignolo 2009) but also world-building. Design educators encourage students to disrupt norms in their processes and outcomes. It is important to consider whether rule-breaking is attainable for all, given that the stakes of transgression are higher for some students (Orr and Shreeve 2017). But deployed as emancipatory tools, students' fluency in disruptive practices may be valuable in navigating the tensions around how to build a better future within fashion, how to build agency in *redefining* fashion as they grow and learn.

Figure 2. A workshop participant and member of teaching staff cuts and stitches a learning outcome. In this instance of the Critical Fitting in a workshop on "Decolonising the Curriculum" organisers printed wording from the assignment briefs from an LCF MA Womenswear design degree course onto the abstract garments used in the fitting. Students literally cut into the printed fabric as it appeared on the body, to create emphasis or make additions to aspects of the written curriculum. Image courtesy of the authors, with permission of subject.

A particular characteristic of creative art and design practices relevant to the *Critical Fitting* is their *open-endedness* - where outcomes are not predetermined in advance of making. One

participant told us "I don't have an expectation of where it will lead to. You just have to go with what comes up" (Participant 2 at the FBYKI Workshop Series at London College of Fashion, 2024). Creative fashion practice uses experimental processes of physical toiling or 'sampling' - reflective, responsive efforts of trial-and-error. This is a phenomenological dialogue between senses and material (Ingold 2013) where "imaginative leaps are made into what we don't know as this can lead to critical insights that can change what we do know" (Sullivan 1989, 48). This lends art and design students a familiarity with uncertainty in knowledge-building. For many, these open-ended processes are at odds with the contemporary science, technology and mathematics approaches they may have learned in school that build knowledge in order to close down uncertainty (Stirling 2008). Creative acts on the other hand require students to step into the unknown.

In practice-based arts disciplines, students' familiarity with conditions of uncertainty (and open-ended processes useful for navigating those conditions) allows them to step out of existing paradigms. In this way, designers are used to world-building - a creative innovation won't fit into existing norms and its new world requires a new ethics (D. Atkinson 2018). Our *Critical Fittings* facilitated the creation of a new epistemic infrastructure where participants could define its relations. By opening up the fitting as a creative rather than technical exercise, the fitting outcome was not limited by pre-existing criteria of judgement - instead the terms of reference were set in and by the creative activity. For instance, fit was redefined itself as a process, rather than a fixed thing. This world-building process of enquiry is a useful tool here because colonial practices and the epistemic infrastructure they sit within are co-constructed or compulsively composed (Lury 2021).

The kind of world-building that the *Critical Fitting* requires students to do is dependent on both STS pedagogy, as set out in the previous section, and critical pedagogy. STS pedagogy through aligning colonialism and modernity affords an understanding of a world of many worlds (Cadena and Blaser 2018), and in that pluriversal approach we can understand students' own diverging and converging ontologies. Critical pedagogy (in its interest in students' growing ontologies) supports an understanding of self that is relational to others and to other worlds. 'Life practices, habits of being' are connected with professional identities (hooks 1994). Encouraging students to create their own value-set does not, of course, guarantee that graduates will always make design decisions in line with decolonial agenda. Indeed liberated practices may equip graduates with the means of self-justification in design of weapons or engagement in exploitative supply chains (as argued above with reference to Tuck and Yang's critique of Friere). Equally, the world-building capacities that fashion students practise don't guarantee better worlds - the damage done by fashion as mentioned above demonstrates otherwise. If we are to follow the practices of critical pedagogy, we cannot force students to become radical practitioners in their careers, but through a *combination* of critical pedagogy and STS criticality we can create the conditions for reflexivity that open up transformative paths.

A second contribution made by this article to STS scholarship is efforts to advance sensory embodied methods. We show how such embodied methods have potential for use in decolonial work outside the *Critical Fitting*. They can be used in STS teaching activities to give credence in academic settings to bodily ways of knowing and challenge epistemological dominance in classrooms that delegitimises non-modern ways of knowing and marginalises or silences students who value them (Cech et al. 2017). When used in classrooms with an international cohort, it made space for a diversity of bodily knowledges that were physically present in that room. In this way shifted what Mignolo calls "the geography of reason"

(Mignolo 2009, 172). Sites of accepted knowledge-production for educational settings here move away from text-books, journal articles, fashion history and industrial processes to the lived experience and personal histories of the learners in the room. This situated knowledge, an onto-epistemic knowing through being (Verran 2014) allows for the possibility of many worlds to enter the classroom and prevent the exclusions enacted by a one-world world. In our work, sensory experiences and memories of senses were crucial to this shift in reason.

Worlds that undergo colonial and post-colonial transformations experience the loss of senses and importantly the loss of memory of the senses (Seremetakis 1996, 8). The domination of global-north garment archetypes show us one way that haptic senses and their embedded sense-making may be lost through the dynamics of colonial modernity. This loss of sensory knowledge and estrangement from memories plays out in conventional fashion education, for instance, the European men's shirt that performs the canonical role of introducing students to standard fit. As such, the knowledge, skill or sense of how to pleat a turban or a longhi or tie a sari or a wrapper-dress may be lost. Sensory capacities work in the negotiated spaces between the boundaries of the inner and outer body, the self and the external physical, social and cultural world. Here the two meanings of 'sense' come to the fore. One being a specific 'sensation or feeling' and the other, the action of 'making sense' where 'The sense(s) is (are) both a reaching out to the world as a source of information and an understanding of the world so gathered' (Vannini, Waskul and Gottschalk 2014:123).

Conclusion

Sensory embodied methods have been used by us to bring everyday life experiences into the classroom because they are inclusive, because they go beyond merely describing and explaining sociomaterial phenomena (Roth, McGinn, and Bowen 1996), and most importantly because the methods themselves make sense of decoloniality through situated knowing. *Critical Fitting* thus works at multiple levels. Using practices long established in LCF, and other fashion schools, it is fitting through ripping, tearing, wrapping and feeling. In using hands as tools to think, the method compositionally fits together a productive exchange between the making practices of creative fashion, the critical work of STS pedagogy and the emancipatory objectives of critical pedagogy. This is exemplified above where students critiqued their assignments' wording by physically cutting into the garment to remove the text "industry standards". The activity led directly to one tutor rewriting their real-world assessment requirements, allowing students set their own terms for *standards-in-make*. This shows the potential to disrupt existing industry-vocational standard-flows. But also to use *Critical Fitting* to produce standards from within, and for students to act collectively as standards-makers, not merely standards-takers.

STS research and pedagogy is often concerned with the question of 'how to know'. But pedagogy in the fashion school, explicitly engaged in practice, demands we help our students answer another question: 'what to do'. *Critical Fitting* is one approach using sensory embodied methods that can open a radically creative door to how we produce STS knowledge, posing again questions that structure the field, about what knowing is, how we come to know, what we might come to know, and how we might put that knowledge to use in the classroom.

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Ethical approval and informed consent statements

The data and research reported here was gathered and conducted in line with University of the Arts London Code of Practice on Educational and Research Ethics. All study participants physically signed informed consent statements and these statements have been retained.

Data availability statement

Ahead of publication, a repository of anonymised photographs of garments, sensory embodied practices and workshop tools will be made available at an appropriate online repository. Other data collected includes workshop photographs of participants, audio recordings, annotated garments and personal notes, along with audio transcripts and analytic notes. These data are not appropriate to make available due to the nature of the ethical consent agreed with participants.

Endnotes

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[ii] The use of the values diamond as a classroom activity with undergraduates at LCF and University of the Arts London (UAL) predates the research work of this paper.

[iii] The origins of ready-made fit in the garment industry lie in the development of standard sizing for military uniforms at the end of the 17th century - an innovation that predates the mechanisation of sewing by 150 years - and notwithstanding the influence of countless contingencies, path dependence effects, and complex sociomaterial dynamics along the way (Godley 1997).