everything and everybody as material:
beyond fashion design methods

Borås, Sweden June 7-9, 2017

Conference Proceedings

everything and everybody as material:
conference proceedings 2017

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beyond fashion design methods

THE SWEDISH SCHOOL
OF TEXTILES
UNIVERSITY OF BORÅS

RMIT
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Contents

Cover image: Clemens Thornquist and Ricarda Bigolin, studio investigations, Borås, Sweden, 2015.

These proceedings collate the materials submitted and presented as part of this conference co-hosted by the School of Fashion and Textiles, RMIT University and The Swedish School of Textiles, University of Borås, June 7 – 9 2017. The expanding agency and role of materials, and indeed what they can be classified as and what they do in fashion design practice methods was the central question behind the conference. Along with including the information related to conference call out, submissions and papers these proceedings also intend to overview the background of the conference and also highlight different formats of creative practice research the conference intended to engage with. In addition, the intention was to also consider the relative formats for presenting such research, and in borrowing intention from the conference title that indeed 'everything' could be a format for consideration.

Overall the impetus for the conference derived from ongoing research between the Swedish School and Textiles, RMIT University and The Swedish School of Textiles, University of Borås and as part of their research program Body, Dress, Space. The program challenges understanding of fashion and dress through basic art and design research. Experiments and explorations focus on new expressions and functions in clothing and fashion through approaching dress in its broadest sense as an intermediary between body and space. Directly we have been conducting workshops and studio investigations over the last three years that test these principles firstly as methods in the learning and teaching environments of fashion design. As researchers and educators, a primary question arose from taking such broad and expanded positions on fashion design around understanding the pertinent measures of how designers, artists and researchers were experiencing design methods and pedagogies and how they developed from them.

Embodied and Material
Key methods we explored, and enacted the studio space to be an active and embodied place where students 'played' key roles as performers as well as their own embodied experience of acting or being enacted within the space. The first workshops instructed students to wear particular types of clothing genres, colours and combinations in specific types of spaces. In addition, there were a series of instructions for how the students arranged themselves in the space and what they did. This proposed a method where the understanding of body, dress and space is understood and experienced through either an embodied experience of wearing, doing and being in these scenarios or instructing and arranging others.

Material Images
Along with the above premise, there was a strong belief the methods of design in fashion were not addressing or acknowledging the role of the image or photographic documentation beyond a record. The workshops acutely responded to the diaristic and ubiquitous conditions of digital photography in the contemporary context, where image is easily recorded and consumed. From both our perspectives, the role of digital image making in fashion design methods became quite an ambivalent phenomenon and not understood beyond neutrality. It became evident that students appeared to perform, act, engage and design for the image and these became more than just a documentation of activities but an intermediary form of drawing, prototype and composition. The frame, crop and perspective of the image taken sets up designed relationships between the bodies, dress and materials in space and these in turn are schemas for potential designs.

In our response to these findings we conducted studio investigations specifically around a type of prototyping with materials around rectangular composition like photographic images. These proposed to be body related scale collages of materials, arranged in relation to a rectangular image frame. As a prototyping method and device these suggest the agency of materials in contemporary fashion design practice, as a material led process where the function, end use and purpose of

these materials are considered to be enhanced or designed further in these arrangements. In addition this responds to the notion that in many ways materials are products or 'ready-mades', not inert or neutral things waiting for a design to enact them into products. From a socially engaged perspective of responsibility we wanted an awareness of this, contemporary materials or fabrics used in fashion design are themselves products requiring careful consideration of intended function and end use before they 'designed'. Our investigations relied on found and discarded materials from Borås and Melbourne detritus from fashion schools. In questioning these materials, associations of appropriate construction, forms and silhouettes for how they should be configured surfaces were anecdotes for consideration. Should the designer lead the material or is it the other way around?

Clemens Thornquist and Ricarda Bigolin 'Everyday performances' workshop, Borås, Sweden, 2013.

Research in fashion design, experimental or theoretical, is no longer concerned with finite categories of design; meaning what is designed and how it is designed are radically expanded. As the territories between fashion and fashion research practice slide and loosen to encounter each other, other fields, disciplines and terrains; we are challenged to reconcile the way we attribute the basis of knowledge in fashion design. As a consequence questions about materials in fashion design are equally expanding. In other words, what are the materials used in fashion design and what are their potential? What is a material (in fashion design) and what are the things we design? The role of things we use to design with, the shifting categories of these things that become 'material' and the body that makes or performs (fashion) is of key interest. Fashion design no longer occupies a singular category where a linear methodology is enough to account for the current conditions of practice. The conference intends to evoke discussion and speculation on how we might be able to imagine the places that fashion design (methods) might occupy in the future.

Fashion understood in the widest possible sense, is a phenomenon that is understood and described through a system based on a function of associating materials and objects with established cultural, social and commercial categories. On a linguistic level, for example, it has been shown how material as forms of non-linguistic media contribute to the constitution and substantiation of cultural capital. Similarly, but from archaeological and anthropological perspectives, materials and material objects such as for example clothing and buildings are used as the physical evidence of culture and cultural categories.

However, fashion, understood as a way of giving shape to our everyday lives does not only associate materials and objects with existing cultural categories, it perhaps more Importantly produces new cultural categories, new meanings, ways of being and propositions for ways of living. Thus, acknowledging the material's propensity between things and bodies, the aim of this conference is to experimentally explore the artistic potential in all aspects of materials that is of importance to fashion design.

Clemens Thornquist and Ricarda Bigolin 'Everyday performances' workshop, Melbourne, Australia 2014.

A selection of keynotes presentations were made to traverse the conference themes and in addition to engage in different modes of presenting creative practice research. Invited keynotes had the opportunity to either propose the format of their presentation which included installation, exhibition, interventions, performance, performative discussions and as well as traditional lecture presentations.

Helen Kirkum

After studying BA Footwear and Accessories at the University of Northampton, where Kirkum won the Inaugural, Worshipful Company of Cordwainers, Footwear Student of the Year Award, they went on to study MA in Footwear design at The Royal College of Art. There Kirkum developed their practice exploring unexpected constructions within footwear, investigating extreme constructions and textures. Their work aims to conceptualize our connections with commerce through materiality and structure. For the graduate collection they created a series of bespoke sneakers, evaluating process, ownership and obsolescence. With this collection name "our public youth" they won the ITS Vogue Talent Award, and ITS Accessories award.

Keynote lecture, 'Visions of Newness'

Kirkum's practice advocates a radical approach to up cycling and 'reuse' material method with the languages of commercial footwear products. Due to the relevance of their method to the conference Kirkum shared her process in a lecture. Through explaining their process and approach to footwear design and what can be 'materials' they discuss how materiality affects our vision of newness. This suggests looking at how we can embrace and imagine different norms for the life-cycle of sneakers, to create an infinite story of process and memories.

Helen Kirkum, *Visions of newness,* keynote lecture, 2017

Elisa Van Joolen

ELISA VAN JOOLEN (NL/IT, 1983) is a designer and researcher based in Amsterdam. Her approach to clothing design is characterised by strategies of intervention and reconfiguration. Her projects often reflect specific social contexts and emphasise collaboration and participation. They expose relational aspects of clothing and subvert processes of value production.

Elisa's work has been recognised with the Han Nefkens Award (2016), Fulbright Award (2010), and nominated for the Dutch Design Award (2013) and New Material Award (2014). She has participated in shows and exhibitions at the Stedelijk Museum Amsterdam, Museum Boijmans van Beuningen in Rotterdam, New York Fashion Week, 5th Brazilian Design Biennial in Florianopolis, Museum fur Kunst und Gewerbe in Hamburg, OCAT Art Terminal in Shenzhen and West Bund Art Center in Shanghai. Van Joolen holds a BA from the Gerrit Rietveld Academie in Amsterdam (2006) and MA from Parsons in New York City (2012). She was artist in residence at Iaspis in Stockholm (2016). Elisa van Joolen teaches at the Gerrit Rietveld Academie and is visiting lecturer at ArtEZ Institute of the Arts in Arnhem.

Keynote performance discussion and installation, 'One-to-One (Rui Mariz)'

In responding to the conference theme, Van Joolen decided to present their work in one of the workrooms in the Swedish School of Textiles. As well as installing work in this atelier, surrounded by machines and other aspects of this engine room of a fashion school, Van Joolen worked with another conference participant, Ruby Hoette in a performance/discussion, with a live feed via a Gopro which captured everything and all the materials from above.

Elisa Van Joolen*, One-to-One (Rui Mariz)* **performative discussion with Ruby Hoette and installation, 2017**

Ulrik Martin Larsen

Since receiving his MA degree in Fashion Design from the Royal Danish Academy of Fine Arts, School of Design in 2008, Ulrik Martin Larsen has worked in a number of fields connected to fashion, art and performance. Operating at the cross section where performing arts and fashion meet with an emphasis on body, movement, object and performance he has participated in several international exhibitions. In 2011 he formed the artist collective PUTPUT working with conceptual still life photography, sculpture and publishing.

Numerous collaborations with choreographer and dancer Tim Matiakis for Cross Connection Ballet Company and The Royal Danish Ballet have lead to a focus on costume design and dress as scenography for contemporary dance and modern ballet. This specialisation instigated his research at The Swedish School of Textiles, where he completed his PhD thesis Dressing Wearing in 2016.

Keynote lecture and installation 'Dressed Objects'

In responding to the conference theme, Martin Larsen gave a lecture overview around his playful approach to materials in their own practice and in their work as part of the Danish/ Swiss collective PUTPUT. In addition Ulrik presented in the exhibition space in the Textilmuseet a series of 'Dressed Objects'.

Ulrik Martin Larsen, *Dressed Objects* 2017

Annegien van Doorn

Annegien van Doorn (Vlissingen, 1982) is a visual artist
and photographer. In her work she investigates the banal,
the everyday and the obvious. She focuses on seemingly
meaningless situations. By isolating and manipulating these
situations, small events transform into the monumental and
the familiar becomes something extraordinary. She plays with
reality in order to create a new perception of the real world.

Her work has been shown among others at FOAM museum
in Amsterdam, Three Shadows Photography Arts Center
Bejing, Himalaya Museum Shanghai, MONA Detroit, Breda
Photo and the Les Recontres de la Photographie Festival in
Arles.

Keynote presentation 'Transformative vigor of domestic goods'

In responding to the conference theme, Annegien van Doorn
presented a lecture that hightlighted her suberversive use
of found and existing objects as materials. Her photographic
compositions playful imagine a new life or fantasy life of
familiar domestic objects.

Annegien van Doorn, *Dutch Tongue (2010)***, photograph as shown in her Keynote presentation 2017**

Andrey Bartenev

Performance artist, sculptor and performance artist. Born in 1965 in Norilsk, Russia, on the Taimyr Peninsula near the Arctic Ocean. Lives and works in Moscow. Holder of numerous international prizes and titles. Represented Russia at 52nd Venice Biennale in 2007 with sculpture "Connection lost. Field of lonely hearts". Member of Moscow Artist Union since 1996. Creates works in different art fields: Performance art, Art Installations, Theatre, Television. Andrey Bartenev's works were an exhibition "Treasures in The Royal Library" at the Danish Royal Library in Copenhagen which was running through 2015. Exhibition and performance Snow Queen in Royal festival hall in London in 2000 and Botanical Ballet in 1998. Theatre dance performance Three Sisters based on Anton Checkov story, Performance Bubbles of Hope from 2001 -2015 have been shown in Many places and countries. TV presenter on the 1 channel of Russian TV in the talk show as fashion judge. Creates sculpture exhibitions and costume shows. His works and projects have been presented in many festivals and art-centres all over the world: Hermitage state museum, Saint Petersburg, Russia. William de Kooning Foundation residency program 2010, NYC, USA. Pinakothek der moderne, Munchen, Germany. Moscow Museum Of Modern Art (MMOMA), Moscow, Russia. Royal academy of Arts, London, UK. Riflemaker Gallery, London, UK. The State Tretyakov Gallery, Moscow, Russia. Royal Festival Hall (SBC), London, UK. Kunsthalle, Baden-Baden, Germany. Victoria & Albert Theatre Museum, London, UK. National gallery of art (NGA), Vilnius, Lithuania. Art Basel-Miami Beach International Art Fair, Miami, USA. Arteleku Art Center, San Sebastian, Spain. Vitra Design Museum, Boisbuchet, France. Cultural Center Kampnagel, Hamburg, Germany. National Arts Club, NYC, USA. DonauFestival, Vienna, Austria.

Keynote presentation 'Performance – the art zone of higher creativity'

In responding to the conference theme, Bartenev presented key projects that resontate with the idea of the body as material and perofmrnace. Bartenev's method of presentation and persona 'performaned' the work presented emblematic of the affect of the performative body as a 'material'

Andrey Bartenev 'Performance – the art zone of higher creativity' images shown during the lecture 2017

D&K (also known as Dolci & Kabana)

D&K (also known as Dolci & Kabana) is a collaborative project between artist and lecturer Ricarda Bigolin and curator Nella Themelios. Bigolin holds a PhD in Fashion from RMIT University and is the Program Manager of the 4th Year and Masters fashion programs in the School of Fashion & Textiles, RMIT University. Themelios holds a Masters of Art (Curatorship) from the University of Melbourne and is the Creative Producer at RMIT Design Hub, RMIT University. They have been practicing under the moniker of D&K/Dolci & Kabana since 2012.

D&K is a critical fashion practice, sitting outside of the commercial context of fashion and operating primarily as practice-based research exploring key political, social and cultural concerns that affect fashion. The acronym D&K is often used interchangeably with the full practice name 'Dolci & Kabana', a play on the name of the well-known luxury brand 'Dolce & Gabbana'. The project considers all of the constituent parts of a fashion brand, focusing on unraveling the tropes, clichés and gestures that underlie these elements. Using strategies of institutional critique, D&K plays with the elusive quality of high and luxury fashion, as well as exploring the other end of this spectrum – the diffused and mass-produced product. D&K uses a range of traditional and non-traditional mediums to critically explore fashion such as garment collections, performance, writing and video.

D&K is based in Melbourne and has exhibited in Australia and internationally. In 2014 D&K was the recipient of the Han Nefkens Fashion on the Edge Award and featured in the group exhibition "The Future of Fashion is Now", curated by José Teunissen at the Museum Boijmans van Beuningen, Rotterdam. This exhibition toured to OCT Art & Design Gallery, Shenzen, China in 2016 and D&K were invited to participate in the opening program. Other recent projects include: "Fashion & Performance: Materiality, Meaning, Media" (2015)curated by Jessica Bugg and Anna-Nicole Ziesche, RMIT Design Hub; "CFS USA Tour" (2015)curated by Centre for Style, Chin's Push, Los Angeles, USA; "MCA Artbar, Twentieth Edition" (2014)curated by Chicks on Speed, Museum of Contemporary Art, Sydney;"Lifestyle Concept" (2014)curated by Daine Singer, Daine Singer Gallery, Melbourne; "effortless beauty takes a lot of effort" (2013) in "Arcades"curated by Centre for Style, Bus Projects, Melbourne.

Keynote performance interventions 'All or Nothing'

In responding to the conference theme, D&K enacted a series of interventions throughout one day of the conference. Unfolding over several hours, the performance component of 'All or Nothing' decompresses a traditional 'fashion show' usually a fleeting 15 minutes into a durational event. The performance explores the way a fashion show can interupt formal events and reveals the ubiquity of the fashion show as a socially understood and universally recognised device. It also tests the spatial setting and scenarios for presenting and viewing fashion, and turns this into an everyday experience.

D&K*, All or Nothing,* **performance intervention during Sonya Kraan's paper presentation 2017**

Susan Kozel

Can we re-enact the experiences and histories of others?
Are there ethical implications when affect becomes a design
material? Can dance improvisation refine and expand the
performative methods already used in interaction design?

These questions are starting points for this keynote emphasiz-
ing the applied qualities of performativity and phenomenol-
ogy, where 'applied' refers to the potential for practical and
material performances of bodies, memories, and data.

Susan Kozel is a Professor with the School of Arts and Cul-
ture at Malmö University exploring the convergence between
philosophy, dance and media technologies. She has an active
artistic practice and has published widely on topics from af-
fect to archiving, ubiquitous technologies to electronic music.
She teaches for the Interaction Design program and is Project
Leader of the major research project Living Archives funded
by the Swedish National Research Council. Publications
include the monograph Closer: Performance, Technologies,
Phenomenology (MIT Press 2007); and shorter articles "Pro-
cess Phenomenologies" in Performance and Phenomenology
(Routledge, 2015), "Somatic Materialism or Is it possible
to do a phenomenology of affect?" in Site Journal of Art,
Philosophy and Culture (2013), "AffeXity: Performing Affect
using Augmented Reality," in Fibreculture Journal (2012)
and "Devices of Existence: Contact Improvisation, Mobile
Performances, and Dancing through Twitter", in Improvi-
sation and Social Aesthetics, eds. (Duke University Press,
2016). Current research considers the politics, philosophies
and embodied practices of Affective Choreographies.

Keynote presentation 'When Philosophy and Performance become Design Materials'

In responding to the conference theme, Kozel presented
research around how philosphy and performance can become
design materials. During the keynote several of the strategies
around this where enacted and demonstrated in a performan-
tive lecture format that also engaged the audience.

Susan Kozel, 'When Philosophy and Performance become Design Materials' taken during her performative lecture 2017

In curating and collating the conference submissions together we allowed the contributions to determine the conference 'sub themes'. We also wanted to place equal importance on creative practice research submission to papers and treat these as equally as possible. This presented challenges related to programming but emphasised our approach. All authors were given the same time allocation; how they used this time was determined by whether the submission was a paper or creative practice and also the work itself. To support this intention we were able to use various different spaces and locations throughout the Swedish School of Textiles from traditional lecture theatres, to large expansive studio spaces, ateliers and exhibition spaces in the Textilemusset located in the same complex as the School.

In the main exhibition space of the conference at the Textilemusset, we configured a way to display creative practice submissions that responded to the space and notions in the conference. There were several submissions that included film, a popular and useful format to express creative practice research due to the potential to capture process and a way to expand or understand this. Films were all presented projected onto curtains in the museum and became somewhat more 'material' with adjoining artefacts and images from contributors. To represent the use of garments as artefacts or materials themselves the majority were presented hanging from a metal frame as simply as possible. Mannequins used were so as integral materials or objects specific installations not just as display materials. Opportunities for the exhibition display to change and evolve were also developed for contributions that used the conference as part of a documentation study, as well as interactive performances and events. Contributors during the allocated 'presentations' were given the opportunity to present their work with a floor talk, Q&A or demonstration. Some contributors used their allocated time only for performance and or with artefacts remaining in the space before and after. Various formats were explored in the paper presentations were there were immersive and interactive panel presentations and discussions that tested the divide between presenter and audience.

Overall the submissions reiterate the importance of format or mode of expression in creative practice research. The way research is presented, offers opportunities for researchers to further extend, translate and express their research through testing in different mediums. Creative practice research needs it's own qualitative methods for presentation and dissemination in order to express more acutely the essence and nature of the research.

In curating and composing the program clear themes emerged that show the variety of iterations in which materials relate to fashion and textile design and the dexterity of the term in it's role in design methods and process.

Material as:

Performance

Texts

Artefacts

Collections

Bodies

Methods

Interacitons

Processes

Form

Linnea Bågander*, INSIDE OUTSIDE,* **performance as part of conference, photography Jan Berg, 2017**

Elisa Van Joolen, *One-to-One (Rui Mariz)* **keynote installation, 2017**

Elisa Van Joolen, *One-to-One (Rui Mariz)* **performative discussion with Ruby Hoette as keynote presentation, 2017**

D&K, *All or Nothing*, performance intervention during ELisa Van Joolen's keynote presetnation 2017

D&K, *All or Nothing,* **performance intervention keynote presetnation 2017**

Ulrik Martin Larsen, *Dressed Objects* **exhibition view keynote installation 2017**

Exhibition view of creative works submissions in the Textilemusset, photography Jan Berg, 2017

Creative works submissions in the exhibition space in the Textilemusset, photography Jan Berg, 2017

Conference participants and attendees watching Linnea Bågander*, INSIDE OUTSIDE,* **performance, photography Jan Berg, 2017**

Talking through our bodies: in stillness and motion

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ABSTRACT

Talking through our bodies: in stillness and motion is a documentation film which demonstrates a collaborative, chance-based and dynamic fashion design process. Under the observation of a fashion designer and a film maker, three subjects are directed to intuitively interact with a range of materials and each other, exploring potential garment forms in a continuous flow of improvised movement, interaction and in stillness. Spontaneous behaviours between bodies and materials are revealed, demonstrating the nature of the process. The work is proposed as a design tool, framing the resulting flow of compositions as reference points with potential for further development as design outcomes.

Keywords

Fashion design, performance, chance, improvisation, movement, comfort, user-inspired, co-design

INTRODUCTION

In the film, a fashion design process and an improvised performance become simultaneous, interchangeable outcomes. The interactions unfolding between bodies and materials are proposed as potential reference points for a fashion collection. The work is a collaboration conceived by fashion designer Kasia Gorniak and film maker Alisa Javits, executed with the help of three subjects, performers of various backgrounds - Petri Lippo, Yilin Ma and Kasper Kamppuri.

Motivation to work in this way comes from a desire to discover what kind of wearable forms can be generated when the design process involves the contribution of live bodies in the ideation stage, alongside the input of the designer and the documenter. The work was carried out in a session of approximately three hours, set in a dance rehearsal studio. An initial intention was to take physical prototypes from the bodies during the process, as physical records of the generated compositions. However, as the session unfolded and upon viewing the documentation afterwards, the main focus and intention of the work shifted towards the compositions that arose mid-movement in the flow of motion. The immersive style of the documentation proved useful in allowing the designer to discover occurrences from a different perspective than the observations made in real-time, some which might have gone unnoticed otherwise.

BACKGROUND

The work was driven by an interest in using a subject's spontaneous, improvised interactions with materials as a sketching or prototyping method, keeping the body, in its dynamic state, at the centre of the process. It is proposed as an alternative to creating garments through traditional means such as 2D sketching or draping on a tailor's mannequin. The dynamic and personal relation between body and garment is brought to the forefront of the process, countering what might be lost when a garment is conceived through, for example, metric pattern cutting alone (Lindqvist, 2014).

The emphasis in the work is on the immediacy and spontaneity of the compositions, generated in the same spirit as Dada artist Hans Arp's *chance collages* (1915-1917), and aligning with the collaborative approach behind Yves Klein's *Anthropometries* paintings, created from "immediate experience" with models as "living brushes" (Goldberg, 1988).

Choreographic influences of bodies in interaction with clothing and materials as a subject are found in Joan Jonas' work *Wind* (1968) where the physical state of clothing as affected by the elements informs the narrative. Erwin Wurm's *Wrong/Right* (1996) distorts clothings' intended functionality through dynamic interaction with the body. In Gilles Jobin's dance film *Moebius Strip* (2011), dynamic moments of bodies colliding and volumes in garments shifting accordingly are captured by the camera, creases

and folds brought into focus through close-up shots. The same style of approach as these practitioners is applied in this work, but framed as a process, rather than an outcome. The final edit of resulting compositions between bodies and materials aims to demonstrate the potential of the process as a design tool.

IN STILLNESS AND MOTION

The directional concept for the work is comfort in stillness and in motion. This concept guided the selection of materials provided for the subjects in the session, as well as the kinds of directions they were given: to intuitively assemble the materials on their bodies in a way that is most comfortable for them to wear in a dynamic state. They were encouraged to forget about existing garment styles, as a way of freeing up their responses. Stylistically, the work references a dance performance rehearsal, with an informality in the overall aesthetic and an open dialogue between choreographer and performers. The subjects were encouraged to behave naturally, to take breaks as they needed, to be still or move around as and when they felt like it. Speaking was kept to a minimum during the filming, in order to focus on physical movement. For the first half of the session, the subjects were given minimal guidance from the designer, and in the second half, the designer was more present and active, giving more specific choreographic and material-related directions, depending on what occurred as the session unfolded.

Components

A visual and thematic mood for the session was defined beforehand, to more specifically guide the kinds of materials provided. These included large pieces of wool and polyester suiting remnants, cotton shirting remnants, cotton jersey, ribbing and some cardboard offcuts. The choice of the fabrics with their obvious connotations to common functional garment types was intended to juxtapose with the dynamic, unpredictable and free-flowing nature of the process. The cardboard pieces were added to allow for some harder components in the combinations. Scissors, pegs and safety pins were also provided to aid in the assembly and modification in the material.

Documentation

The aim of the documentation was to capture the feeling of the process as it unfolded, discovering and recording moments which could be referred back to as potential garment design references. Moments where interesting ideas or compositions for garment designs occurred are shown, as well as the movements or interactions leading up to them. Both active and passive cameras were used to follow the subjects, revealing gestures, wondering gazes, moments of slow, serious consideration and spontaneous playfulness. There was also a sense of effort, fatigue, moments of awareness of the camera and of forgetting about it when the subjects were deeper into the interplay of materials.

Future development

In future development of this way of working, there could be adjustments in the variables involved, or it could be carried out in a more systematic or structured way. For example, if more than one subject is involved, they could each be given the same material/s and the same direction and the differences in their interpretations could be documented and compared. If there is one subject, they could be given one material, numerous times, each time exploring a new way of wearing it. Existing garments or other objects such as furniture could be added as components in the session. A choreographer could also be involved, to steer the direction of the movements in more unexpected ways.

CONCLUSION

In executing this session, a free-flowing range of garment sketches was generated, through an improvised performance. The documentation film functions as a demonstration of the proposed process, giving an immersive glimpse into one version of how it can unfold. Where performance is quite often used to communicate fashion design outcomes, here it is proposed as a facilitator of process work. There are still many improvements or adjustments that could be made to the method to make it more efficient, but in this case the emphasis was on discovering and experimenting with what results when a fashion designer, film maker and live bodies come together, intuitively addressing design solutions for wearability and comfort in motion or in stillness.

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Kasia Gorniak *Talking through our bodies, immediate prototypes series* **exhibition view photography Jan Berg, 2017**

Creative practice submission: INSIDE/OUTSIDE

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ABSTRACT

INSIDE/OUTSIDE contain a total of 7 series of experiments. Each series explore different materiality's through an active and moving body at the center forming in-betweens as main tool for aesthetics.

In this submission, the focus is on one of the examples of these series. This because of how the example provides a suggestion on how the body/wearer can experience dress differently from the perspective of the inside as dominant to the perspective of the outside (viewer). This suggesting that dress has less to do with the representation of the self and more to do with experiencing it through wearing.

Keywords

Experience of body, aesthetics of the body, fashion, choreography, wearer/viewer.

INTRODUCTION

The work "INSIDE/OUTSIDE" is a material exploration on materials ability to be defined as building or dress depending on, if the body is placed inside or outside the material. The definitions by Locheck (2009), that architecture is something the body moves inside and dress is something the body carries with at all times, as well as that architecture and dress are different skins/frames of the body (Hundertwasser 2013, Loschek 2009, Tuan 2001, Quin 2009) stand as background for the exploration. The focus has been on dress rather than architecture or dance, this because of dresses ability to intersect dance and building. Havelock defines these as the two primary arts, dance and building. That there is one art that is the body (or bodies) as acting (expressing) and that it is one art of material acting (giving impression) to the body. These qualities are both equally important parts of dress as dress both gives impression to the body and the body expressed in the materiality.

In its full work it explores several materials arranged differently in relation to body aiming to understand the borders and intersections of these definitions. In the work the body is active and in a constant dialogue with the materiality, changing the form of the experienced body as well as the form of the material. By being active the body decides the definition of the material depending on how it relates to the body and through the different series the perspective of the wearer has been compared to the perspective of the viewer. How do they differ? What are their individual potential?

The form at focus of this submission is chosen for its possibility to communicate the inside and outside perspective as two very different perspectives and suggest new ways of dress as experience for wearer and forming of body for a viewer. By adding space and sight to the inside perspective new ways of aesthetics of the inside becomes possible. Further these example is discussing the inside and outside of ourselves, of the individual and others and the relation of individual and system (society).
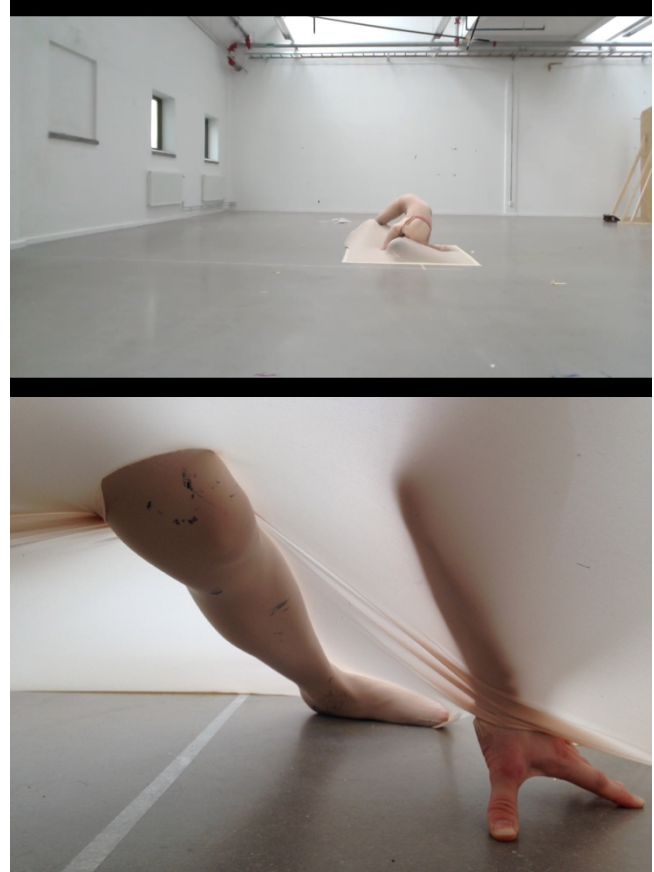
Documentation of E from the viewer and wearer perspective.

TWO FORMS

Two forms addresses the same questions articulated in different ways. They both are attached to the body by the traditional end-points (where dress usually ends). However, they are related in a opposite way to how the garment is, as it is not covering the body. From exploring both of these examples the wearer has mentioned at first feeling exposed and moving in a way aiming to cover the body. As the form in itself is not covering the body but rather separating the body from the head, hands and feet's. Later the wearer starts to focus on the experience of being inside its potential and feelings of calm and curiosity arose, also in terms of movements. Through the forms share certain similarities their outline form differs and "form a", separates the hands, feet's and head into different rooms as "form e", puts them in a common closed space.
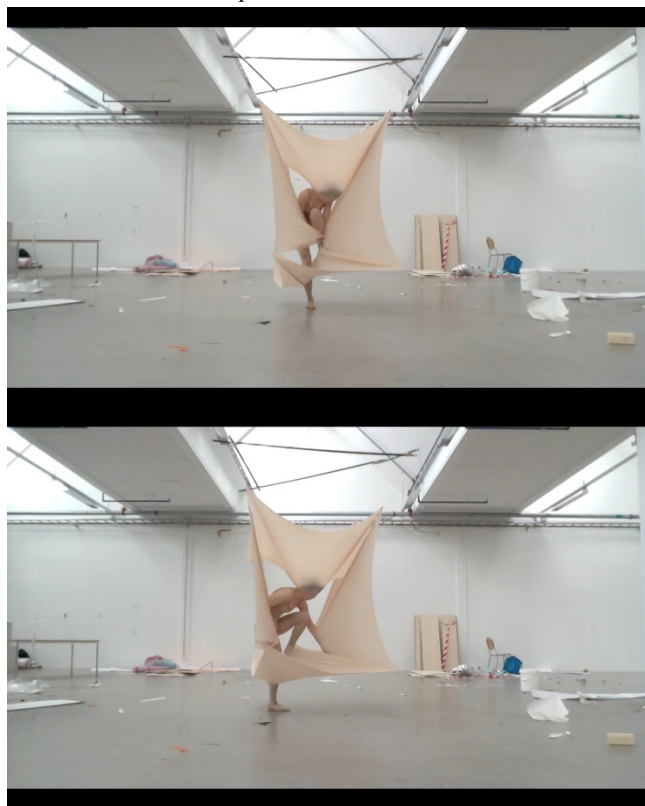
Documentation of A, articulation the aesthetics of the in-betweens.

IN BETWEEN AS AESTHETICS

The in-between as aesthetics is viewed as one of the main findings. In all the experiments within the series the in between becomes what forms the experience of the body and the experience of the material. Further it becomes the form of the aesthetics as how the change of this in-betweens is the clearest change that the body forms as the outlines of the form and the body remains almost the same.

WHAT IS THE EXPERIENCE OF THE BODY?

By separating the inside and outside perspective and also adding the visually to the inside perspective you become more aware of the inside aesthetics of the form and less aware of how an outside perspective would appear. This also effecting the relation to others. Meaning that *you* as a wearer would be more interested in the inside experience of wearing and less of how a viewer would perceive you. This may also lead to distancing dress from its role as identity communicator because, for once, it is not the focus and open up for new ways of interacting between people, exploring dress and experiencing the wearers own body. The color of the form is chosen in relation to the skin tone of the performer in order to blur the distinction between the body and the extension in materiality.

SUBMITTING – A PERFORMANCE

Through this papier we wish to submit a performance of "INSIDE/OUTSIDE" form E. The performance will work as discussion material to raise questions mentioned in the text above and hopefully many more. Through the performance we aim to make the distinctions in wearing and viewing accessible through either; making the inside perspective accessible by inviting viewers in to participate. Or; a live streamed video documenting the inside perspective, displayed simultaneously as outside perspective. This will be explored during a residency in week 18. We will preform a performance of approx. 30-60 min and after that invite people to participate and try the form through encouraging the interaction. The performance would appear 2-3 times during one day, wish ever suit the conference. The form will be approx. 5*5-8*8 depending on what the space allows. The main submission will be the form e, as it more clearly suggests the different perspectives.

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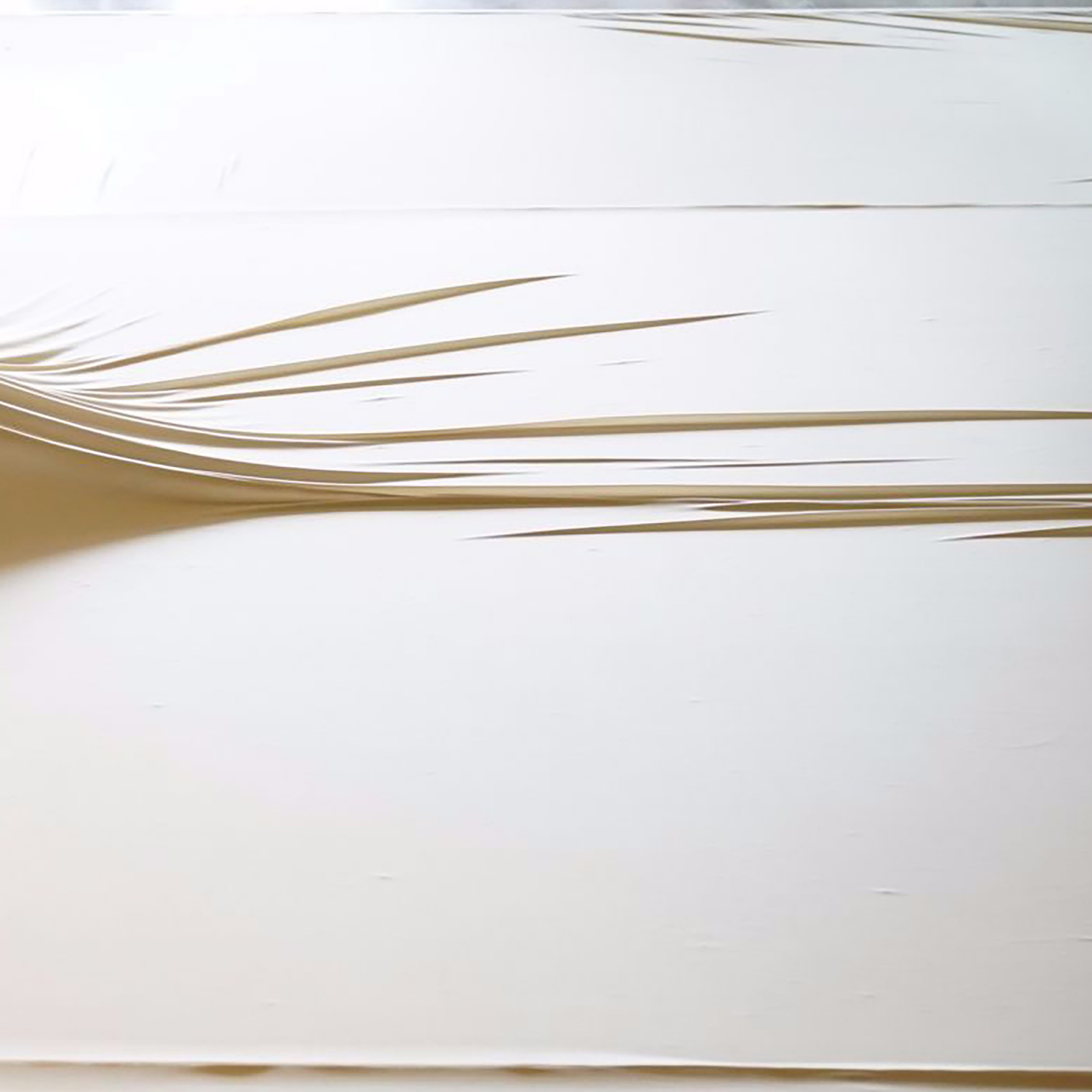
Linnea Bågander*, INSIDE OUTSIDE,* **performance as part of conference, photography Jan Berg, 2017**

The PleatFarm

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ABSTRACT

The *PleatFarm* is an artistic research of the dialogue with the material and an investigation of the nature inside the material motivated by the notion of Stern (2013: 21) that "We must forget technology and rather study the encounters it creates, the quality of our movements with them, and the techniques we rehearse in and around them. We must look and feel with the body"

When creating an object artefact The PleatFarm is a research of dialogue that occurs between the material and techniques which is researched to transform a flat material into a three-dimensional shape. It is experiments with geometry in a volumetric scale that relates to, or is lager than the human body and with folding techniques in the objects - with repetition and scale differences in the folds. It is a investigation and a search for the inner shape of the material - the artefact within the material.

The PleatFarm is also an investigation of the dialogue between the artefact and the movement of the human body. What happens when the body interacts with the artefact? What occurs when insisting on searching for qualities of movements from inside the artifact - by repeating them over and over again? Which a character occur? Which character is hidden inside the artefacts?

The PleatFarm is a video performance:
http://www.charlotteostergaardcopenhagen.dk/film/the-pleatfarm

Soundscape by Hans Sydow –
www.sydow.dk/RESONANCE.dk

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Charlotte Østergaard*, The Pleat Farm,* **exhibition view, photography Jan Berg, 2017**

Luxury as Egalitarian Material

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ABSTRACT

As the polarization of production in the fashion industry continues, with luxury conglomerates on the one hand and fast fashion on the other, this project aims to shift the embedded value found in both the authorship and ownership of luxury garments.

In this project I argue that the social meanings of dress, in the twenty-first century global luxury fashion system, can transcend a model of simple consumption and move into a more egalitarian and democratic one. Comparing ideas of taste and class, such as those found in Thorstein Veblen and Pierre Bourdieu with contemporary scholars on fashion and democracy, the work seeks to raise questions around accessibility and the possibility of democratic action through appropriation and a shift in the means of production.

The work appropriates images of designer garments from luxury conglomerates such as LVMH and Kering and, removing the image from its original context, rescales them to human proportions creating a digital "clothing" file. Once created, the file can be printed on fabric and sewn into a new "luxury" garment. This new garment, while containing an exact representation of the initial design, will eschew the original silhouette in favor of a more simplified form. See figures 1 and 3. The new garment makes clear its source (a flattened image printed onto fabric,) akin to a garment version of René Magritte's painting "The Treachery of Images (This is Not a Pipe) (La trahison des images [Ceci n'est Pas Une Pipe])" thus raising questions of authenticity and, because of its nature as a constructed garment, value and labor.

The digital files will be made publicly available as an open source document to download for free, alongside a companion instructional pamphlet that teaches users how to sew their own "luxury" garment. Both will be available on the project's website. Making the files available to the public for free achieves several aims. The contradiction inherent in our exposure to "luxury" goods found in the constant display of fashion advertising, and the impossibility of acquiring these garments for the majority of people, is rendered null once the image is made materially available to all.

A more central aim of the work, however, is achieved through the pivot in authorship. Because the files are digital they are almost infinitely customizable. The garment, once fixed in its end use, as a dress or a shirt for example, can now depart from the original design wherein there is only one way of consuming or wearing. No longer is the design an instruction handed down for you to follow, but instead is a prompt, a new beginning. Liberated from the original frame, size, pattern and color are no longer bound to the design in its intended form. Through simple digital manipulations, such as adjusting height and width, the wearer can create a form that is custom for their body. The rarity of this kind of customization in the existing marketplace of fashion makes the newly "liberated" design, paradoxically and with some amount of irony, a luxury.

Users can choose to develop garments that may, or may not subscribe to gender or beauty norms, thus transferring authorship and expression to the individual. Here, in particular, is where I locate the possibility of exploring an experiment in democratic garment design. The use of streamlined forms in the new silhouette and simple means of altering shape (such the addition of drawstrings or elastic,) allow those without extensive knowledge of garment construction to participate in a different kind of economy. This newly reimagined economy eschews the labor abuses of the fast fashion industry on the one hand, and on the other, allows access to the luxury market, wherein costs are prohibitively high for the majority.

The project addresses several linked inequalities produced in the current polarized system of production in the fashion industry. In Veblen's book, The Theory of the Leisure Class, he details the way in which emulation of the wealthy flows through all classes from the top down,

resulting in a need for constant differentiation and consequently, ever changing fashion. The inequality produced by this system, when looking specifically at the late twentieth and twenty-first centuries, is much changed since Veblen's time. The current fashion industry model has LVMH on the one hand and H&M on the other, with one creating and the other emulating at an ever increasing pace. The changes I focus on here are globalization in the fashion industry and the dramatically increased rate of production, the widening income gap produced by this system, and its effects on our social and community relations.

Taking a cue from the inherent inequality of a fashion system that prioritizes wealth distinctions, fast fashion companies use the language of "democracy" when marketing their fashion to mass populations. As many reports have shown however, this "democratic fashion" comes at a staggeringly high cost. The result is a wide range of labor abuses and environmental catastrophes.

Understood from both an environmental and social perspective, there is a moral imperative to stage an intervention within the current system. To reject the growing inequality seen both in the countries that consume these goods, and in the countries that produce them. There is an imperative to rethink language of class so frequently deployed by the marketing of luxury goods, and there is an imperative to examine the relationship we have with our clothing. Instead of moving outside of the current structure, this project embraces the language and material of fashion while aiming to shift our understanding of value and raise questions around the meaning that is embedded in our clothing. It is an experiment in democratic design.

Exhibition Description

For this creative practice submission, I am proposing an instillation of three hanging garments, each with a printed version of a dress, from the Gucci resort 2017 collection (see figure 2 for source image). As well as a printed didact which will contain information about the project including the source image for the garment, an image from a luxury fashion retailer online shop, and finally the digitally manipulated flat pattern file.

The installation will require a flat wall space measuring 3 meters wide by at least 2 meters tall. Along the wall will hang three dresses and a printed hanging wall text/didact measuring 100 x 65 cm. Hardware for the installation include three garment hooks, and four magnetic push pins (all will be brought with the garments).

The garments on display will not mimic the exact shape of the appropriated image, but will instead take a streamlined form more suited to aid in the construction of clothing for beginning sewers – an important component of this experiment in democratic dress is accessibility for potential engagement with the project through making.

While the same Gucci dress is the root image in all three garments, the file that is digitally printed on each will have undergone several digital manipulations, covering variations in size, color and print. These digital manipulations will demonstrate the way in which the flattened image of the original Gucci design can be transformed into a completely custom garment. The garments presented in the installation do not necessitate the generation of a great volume of sales, but instead reflect the possibility for highly individual expression and desire or need for utility.

The installed garments will be accompanied by the source image of the original Gucci design taken in the fitting room*, and providing a contrast from the actual to the ideal, a sales image from an online luxury retail shop of the same dress (see right side of figure 2). Viewers will be invited to reimagine their relationship with dress, expression, and to envision the possibility of a new way of understanding of value.

*A note on the fitting room source image: By being the author/creator of the photograph of the Gucci dress I am using for this proposal, I am able to stay within the bounds of American Copyright laws. This raises several additional points of interest for me in the project around ideas of accessibility, image, and class that will not fit into this abstract but that I am continuing to explore.

Fig 1: Digital rendering of a printed and sewn reproduction of a Gucci™ Resort 2017 dress.

Fig 2: Source images of the a dress from the Gucci Resort 2017 collection. On the right a shot from an online luxury retailer, and on the right a shot from the dressing room of a Gucci boutique.

Fig 3: Digitally manipulated file with custom print and color.

Fig 4: Finished digitally printed Luxury as Egalitarian Material dress.

Keywords
Democracy, Luxury, Egalitarian Design, Gender Non-Conforming Design, Political Economy, Fashion

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Abigail Glaum-Lathbury, *Luxury as Egalitarian Material* **exhibition view, photography Jan Berg, 2017**

The soirée of fashion

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ABSTRACT

The fashion boutique provides a performative testing site for dress experience. Extending this concept of the performative boutique frustrates the autonomy of static garments. This video piece addresses the theatrical and abstract nature of dressing up. The video includes 10 individuals dressed up in fanciful designer clothing, performing everyday repetitive gestures, such as laughing, hugging, running, hitting etc.

The Dadaist performance examines the absurdist nature of fashion communication/ styling and its schizophrenic relationship in imagining the body and subjectivity, confronting fashion's struggle with semiological or anthropological analysis. The work is a remake of a previous promotional video for my store opening, using the soirée's of the Cabaret Voltaire as a disruptive model to imagine the performative boutique.

Keywords

Fashion communication, designer boutique, performance

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fig. 2

fig. 3

fig. 1

fig. 4

Matthew Linde*, The soirée of fashion,* **exhibition view, photography Jan Berg, 2017**

Matthew Linde*, The soirée of fashion with* **D&K intervention exhibition view, photography Jan Berg, 2017**

Le Tapis Volant

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ABSTRACT

The Old Tokaido Road, Japan, seventeenth century. Merchants travel from Edo (Tokyo) to Kobe, stopping along the way to sell their art and crafts by the roadside. Some of the goods will make it to Nara, at the start of the Silk Road. Bursa, Turkey, 1989, at the Western end of the Silk Road. in the early hours of day light the ground of the walled caravanserai is scattered with mounds of white silk cocoons arranged carefully on small woven mats. The piles disappear as quickly as they have appeared once the sale has been made, perhaps to the bureau of Hermès discreetly located within the walls. Oaxaca, Mexico, 2016. At a textile market S!X unroll a tarpaulin, its surface printed with the interior of an eighteenth century French drawing room and place several wrapped garments on top, (Ref: supporting images) Le Tapis Volant (the Flying Carpet) proposes to use the analogy of the travelling silk traders, rug sellers and textile merchants who once moved, and still move, from city to city, occupying the galleried walls of places of exchange. S!X will unroll their flying carpet laden with textiles and objects during Material Matters, in various locations, as a way of questioning at what point the fashion and textile exhibition might intersect with commerce and other modes of exchange, and to explore the different ways in which textiles and fashion move around the globe, sometimes simply by being rolled up in a carpet bag

Keywords

S!X, Fashion Practice, Textile Craft, Contemporary Fashion Design.

Le Tapis Volant

A flying visit by S!X

The Old Tokaido Road, Japan, seventeenth century. Merchants travel from Edo (Tokyo) to Kobe, stopping along the way to sell their art and crafts by the roadside. Some of the goods will make it to Nara, at the start of the Silk Road.

Bursa, Turkey, summer 1989, at the Western end of the Silk Road. In the early hours of daylight, the ground of the walled caravanserai is scattered with mounds of white silk cocoons arranged carefully on small woven mats. The piles disappear as quickly as they have appeared once the sale has been made, perhaps to the bureau of Hermès discreetly located within the walls. Oaxaca, Mexico, fall 2016. At a textile market S!X unroll a tarpaulin, its surface printed with the interior of an eighteenth century French drawing room, one destination for the goods arriving from the East, and place several wrapped garments - perhaps of Chinese silk – on top.

Le Tapis Volant (the Flying Carpet) is a reflection upon and identification with the travelling silk traders, rug sellers, and textile merchants who once moved, and still move, from city to city, occupying the galleried walls of places of exchange. It is a reclamation by fashion of its itinerant past. For Le Tapis Volant, S!X unroll their flying carpet – and it is a carpet! – laden with textiles and objects during Material Matters as a way of questioning at what point the high-minded ideal of the fashion and textile exhibition intersects with trade, commerce, and other modes of exchange. Le Tapis Volant explores the ways in which textiles and fashion move around the globe, catching planes, following the silk thread of the jet stream, whether consigned to cargo or simply rolled up in a carpet bag. Le Tapis Volant also further extends a series of projects undertaken by Denise Sprynskyj and Peter Boyd for their practice-based PhDs.

One project examines the possibilities of the simple square of cloth, the most basic material shape that transforms from two to three dimensions when draped and pinned on the body, the moment when surface and space come together and diverge. The square of material also opens fashion to the signifying practices of other disciplines, from the wearing of the very public and highly charged symbolism of the national flag to being clothed in the intimately domestic surface of the wallpaper that graced the Oaxaca exhibition. This project is now pursued through the shift from wall to floor covering, which is an invitation to sit

down and make yourself at home, even when far from home in some distant caravanserai.

A second design and curatorial project, first unveiled at the Cabinet of Curiosities at L'Eclaireur in Paris, explores the intersection of several ideas, including the postage of work to an overseas destination for exhibition, and a critique of the still widespread assumption that an exhibition space should be pristine, in order to better display its works. Le Tapis Volant continues these investigations into the highly transportable opportunities that the materiality of the fashion object make possible, and the impure, colourful, and commercial displays in which the spectacle of fashion happens. Fashion, like the body itself and unlike architecture, is always on the move.

The concept for Le Tapis Volant is situated between two forms of fashion practice, those of the business of fashion commerce and the art of the fashion exhibition. The initial motivation behind the project stems from a memory of witnessing the selling of silk in the caravanserai at Bursa years ago. The carpets that served as the mode of transport and display for the cocoons Turkey were suddenly seen as extending recent explorations that S!X had undertaken into the square of fabric. The wallpaper collection of 2011, for example, was developed from an illustrative plate of a French 18th century drawing room and applied digitally to quadrants of silk. These quadrants were then joined and draped onto a form and fastened simply and minimally by the use of an elastic stay at the waist and shoulders. This construction technique enabled the wearer to have the dress dismantled and then reshaped into another form if required. But this exploration goes back further, and there is in the permanent collection of the Powerhouse Museum in Sydney a 2002 women's flat jacket by S!X with details taken from the male trouser.

S!X are not the first to pursue these investigations, though we also experiment with the designs of others. The Balenciaga one-seam coat of 1961 for example, was recut by S!X as a jacket without the gusset, and with the insertion of zips or fastenings along the only seam line of the jacket, enabling it to be dismantled and laid flat like a rug. The jacket can then be partially reassembled to drape over a form. Garments that transform between the two dimensional and the three dimensional have been studied by designers such as Issey Miyake, especially in his pleats collections, by Rei Kawakubo of Comme des Garçons, and by Martin Margiela.

For Le Tapis Volant, S!X have used this technique to amplify and flatten the garment surface, and then played with the transformation of the garment into a two dimensional surface and its potential relationship with space by applying a print developed from an actual grimy hotel carpet. As the garment reverts from three dimensions to two, the print moves off the body and onto the floor. The items that accompany the garment, once removed from the body of the wearer and arranged on the makeshift rug, become markers of the journey from Melbourne to Borås: the carpet dress itself, a pair of well-worn shoes, a pair of beekeeper's gloves, hosiery, hat and bag. All are memorabilia of the journey but also wares for sale in the market of fashion.

In 2011, Vivienne Westwood and Andreas Kohler shot an advertising campaign with the photographer Juergen Teller in Kenya. Westwood retells the story in *Get A Life:* "We bought so many accessories with us that Jurgen suggested that we pretend that we had a shop and were selling things like everyone else there." From the very start the fashion exhibition has been criticized as introducing commerce into the temples of art. Well, why not? Art itself is a bazaar. The flat canvas of the fabric trader's carpet at least is honest. Don't just look. Stop and buy!

Le Tapis Volant has travelled a distance of approximately 16,000 kilometres en route from Melbourne to Borås. It has transferred through three airports and travelled overland in the back of a bus. It is now unrolled and open for trading.

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S!X, *Le Tapis Volant,* **exhibition view, photography Jan Berg, 2017**

Interspecies Collaborative Design

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ABSTRACT

Human action — agriculture, and industrialization, and globalization — has significantly impacted the systems of Earth. Understanding the extent of these changes has problematized the dualism behind dominant Western worldviews and raised the importance of adopting a more integrated and contingent view of human beings in the world. Especially in light of anthropogenic climate change, the boundary between us and our seemingly static design objects is shifting and human beings are coming to be seen as a fully-integrated part of the Earth's systems as definitions of "nature" change. Researchers at the intersection of the humanities and natural sciences are re-orienting the relationship between humans and the nonhuman world of nature and are investigating the agential potential of the nonhuman. In this context, fashion designers may ask what kind of relationships fashion has with the nonhuman, and what kind of new relationships may be proposed as possible solutions to the growing need for environmental sustainability. This is an opportunity to negotiate new ways of designing *with* Earth, rather than *of* it. In other words, methods are being developed which promote nurturing and forming, rather than extracting and processing as the paradigm for fashion design. This paper asks what design methodologies might be formulated in which the agency of the nonhuman is recognized. How can designers use the morphology or behaviour of nonhumans to design materials, objects or ways of living? This paper introduces concepts which could contribute towards a method for interspecies collaborative design that is relevant to fashion design.

Keywords:

Bioart, biodesign, nonhuman agency, sustainability, design methods

1.1 INTRODUCTION

Fashion is contingent on nonhumans — both animate and inanimate. This includes the raw materials of fashion, which come from natural or chemical sources, and also its many physical manifestations. These things — bags, shoes, garments, texts, images, plants, animals, soils, dye, etc. — all express agency in the global ecology. Human action — agriculture, and industrialization, and globalization — has significantly impacted the systems of Earth, and the fashion industry has played a major role in this. During the past decade, there has been an increase in research calling for the materials and manifestations of fashion to be examined in terms of environmental impact and sustainability (Fashionrevolution, 2016; Niinimäki, 2013; Black, 2012; Fletcher, 2010). In light of these concerns, it is timely to explore new methods which reveal and invite the agency of nonhuman organisms, present during the production stages of fashion. The longstanding dualistic paradigm is being problematized and a more integrated and contingent view of human beings in the world is being promoted. In light of anthropogenic climate change, the boundary between us and our seemingly static design objects is shifting and human beings are coming to seen as a fully-integrated part of the Earth's systems as definitions of "nature" change. Researchers at the intersection of the humanities and natural sciences are re-orienting the relationship between humans and the nonhuman world of nature and are investigating the agential potential of the nonhuman. In this context, fashion designers may ask what kind of relationships fashion has with the nonhuman, and what kind of new relationships may be proposed as possible solutions to the growing need for environmental sustainability.

Dualism and the modernist desire for limitless progress have engendered a view of nature as an unlimited resource for extraction, and this view has dominated the fashion production system in the 20th century. However, researchers at the intersection of the humanities and natural sciences are re-orienting the relationship between humans and the nonhuman world of nature and are investigating the agential potential of the nonhuman in art and design practices. Feminist ecocritic Donna Haraway (2007: 15) calls these nonhuman entities "companion species," and she includes "such organic beings as rice, bees, tulips, and intestinal flora," in her definition of all the creatures who "make life for humans what it is - and vice versa ."

Similarly, environmental theorist Timothy Morton (2007: 2) identifies nonhuman agential entities as as "animals, plants, and the weather." The questions that result from the growing awareness of nonhuman agency and subjectivity in the face of environmental change offers new perspectives in artistic and design research. This research could open new pathways towards collaborative practices which call across the ancient species divide. This is an opportunity to negotiate new ways of designing *with* Earth, rather than *of* it. In other words, methods are being developed which promote nurturing and forming, rather than extracting and processing as the paradigm for fashion design.

More specifically, the questions this paper asks are: Can design methodologies be made in which the agency of the nonhuman is recognized? How can designers use the morphology or behaviour of a nonhuman entity to design objects or ways of living? These questions contribute to a fashion design practice which is more aware of its ecological contingencies.

The etymological roots of the word "ecology" are Greek: *oikos* and *logos* mean "home" and "speech" respectively. Together they make a word that can be roughly translated as "speaking about the home." Generally it refers to a field of research in the natural sciences that studies the contingent relationships between living things and their environments. Ecological philosopher Arne Næss (1979) argues that contingency in this sense is a "relational or total-field image," which takes the place of the Cartesian Enlightenment visualisation of man as a separate, disconnected entity from nature. In the 1960s, with Næss at the helm, an ecological awareness was emerging called Deep Ecology which sought to critique a science of "shallow ecology," which he later characterized as "concerned only in part with pollution and resource depletion" (1979). He argued that there are "deeper concerns which touch upon principles of diversity, complexity, autonomy, decentralization, symbiosis, egalitarianism, and classlessness" (1979: 95). While the aforementioned tenets of Deep Ecology may not be entirely suitable for the fashion industry, the postulates of Næss's theory can be used as a framework for positive action towards a sustainable and just fashion design practice which works with nature.

The idea of interspecies collaboration in creative practice will be explored in this paper in two parts. In the first part, the longstanding cultural separation between humans and nature will be explored in order to understand the lineage of the argument for the agential capacity of the nonhuman, beginning with animals. The second part will build on this argument, and existing methods of interspecies collaborative artistic practice and design will be introduced. Interspecies collaboration has been explored in artistic

research under the neologism of "Biodesign" or "Bioart" (Clotmag, 2017; Iwasaki, 2015; Myers, 2015, 2014). Bioartists and -designers make work by studying, manipulating, creating, employing, or partnering with living organisms. The theories and methods these creators use have yet to be applied widely to the material flows of fashion design.The goal of this paper is to examine such concepts and the implications they may have for the field of creative fashion and textile design. The ultimate goal of this paper is to contribute to the formation of an ecologically aware fashion design practice which invites collaboration with nonhuman partners.

2.1 HUMAN/NATURE

Each fashion item is suspended in webs of semiotic and economic entanglements, seemingly disconnected from the natural environment. Unsold fashion items are colloquially referred to as "deadstock," which means that the "life" of a garment — an item of stock — begins at sale. If a garment isn't recycled or resold, it is destroyed or disposed of. Items of stock are seen as discrete objects, disconnected from their material and social origins. In other words, nature is not always materially evident as the source of many garments in contemporary fashion design. Rather, nature is represented through expressive motifs: to express youthful exuberance as floral prints on textiles, for example; used semiotically for marketing messages; or anthropomorphized sexuality in leopard print leggings. Nature exists as a nostalgic representation of a world for which we yearn, yet cannot return to because the processes of modernity have pushed it to the fringes of our daily experience (Berger, 1984). The Western view of nature and its organisms has been philosophically and physically undergoing a process of distancing since the Enlightenment (Tsing, 2015; Morton, 2007; Ingold, 2000; Berger, 1984). The Enlightenment project gave way to modernity which continued the narrative of progress and colonization of nature, the source for commodities and resources. René Descartes' (1596-1650) canonical and reductive statement "*Cogito Ergo Sum*", or "I think, therefore I am" disallows animals the privilege of thought, and therefore, existence. Cartesian duality imagines a mechanistic nonhuman world, devoid of spirit and will, and though this separation of humans and nature was necessary at one time as it helped define us as a species, this dichotomic worldview is being challenged by the ecological inclination of contemporary scientists across many fields and specializations.

When Carl Linnaeus (1707-1778) published *Systema Naturae* in 1735, he exemplified the Enlightenment project of cataloging living things. His compartmental hierarchy of biotic life had a twofold effect: first, allowing people to see the similarity, and therefore connectivity, of plants and animals, and second, to subjugate these creatures by subsuming them into the human sciences. Following Linnaeus (1707-78) and Lamarck (1744-1829), who

classified the invertebrates in 1801, is Ernst Haeckel (1834-1919). His well-known renderings of the creatures of the sea, land and sky show them as distinct elements of a landscape, removed from their physical entanglements. Haeckel's creatures appear to languish in the frame as posed units of beauty. His drawings and the work of his predecessors lack the violence and complexity of the world they sought to understand. The work of these canonical naturalists succeeded in making human beings aware of the vast array of living things in the environment. Simultaneously, the domain of these creatures was established as the *environment* — they *surround* humans, but are not visible as part of our lives.

The environment — inhabited by all manner of nonhumans — has been made invisible by modernity and memorialized in zoos and aesthetic design tropes. At the turn of the 19th century, in the same period of time during which undomesticated animals moved away from our daily lives and experience, industrialization pushed forward with environmentally damaging processes connected to industry, especially in commercial textile and fashion design. The farther we got from nature, the more its motifs were replaced by abstract expression in painting, and began to appear in children's toys and on floral printed wallpaper and dresses (Berger, 1984). If the zoo is a monument to the invisibility of wild animals, then the shopping mall and grocery store are testament to the invisibility of wild plants and bacteria in the processes of material making which anchor us to the Earth (Pollan, 2006).

In the 1960s, architect and systems theorist Buckminster Fuller imagined the planet as Spaceship Earth — a mechanical self-healing system with human beings at the helm, steering it around the sun. Rather than a relationship in which the human is the captain of the ship on which resources abound infinitely, Lovelock (2006) diverges from Fuller by arguing that humans are only small units situated within a larger global ecology — a self-regulating, planet-sized organism called Gaia. Donna Haraway (2016) describes Gaia as such:

> In this hypothesis, Gaia is autopoietic — self-forming, boundary maintaining, contingent, dynamic, and stable under some conditions but not others. Gaia is not reducible to the sum of its parts, but achieves finite systemic coherence in the face of perturbations within parameters that are themselves responsive to dynamic systemic processes. Gaia does not and could not care about human or other biological beings' intentions or desires or needs, but Gaia puts into question our very existence, we who have provoked its brutal mutation that threatens both human and nonhuman livable presents and futures. Gaia is not about a

list of questions waiting for rational policies; Gaia is an intrusive event that undoes thinking as usual.

Following this logic of the human being embedded in a larger system of contingencies, Morton sees reality and all the things in the world as part of a "mesh" and argues against the use of the word *nature* at all, saying that it blocks people from experiencing "ecological forms of culture, philosophy, politics, and art" (Morton, 2007). If the hypotheses of the scientists referred to above are correct, then we and all things in the world are only small parts of a larger entity and are therefore linked to one another in a continuous exchange of matter — infinitely contingent in messy, tangled webs of inter-relations between human and nonhuman organisms, which affect one another in an infinite, almost imperceptible display of slowly fitting together.

Many researchers are trying to understanding the ability of human action to affect these messy webs and the nonhuman organisms tangled up in them. The level of anthropogenic change is such that some scientists are arguing that we have entered a new geological age. The "Anthropocene," as it is provisionally called, denotes a period of time in which all processes on the planet are affected by human activity (Crutzen, 2002; Crutzen and Stoermer, 2000). The knowledge that human beings have catalyzed a change in the environment — a "brutal mutation," according to Donna Haraway (2016) — coupled with numerous advances in biology and biotechnology research and, more specifically, genetic research, have opened up the possibility to redefine nature and our position within it. This is a shift away from human exceptionalism toward a more embedded view of the world. Fashion studies needs to consider the role that production and consumption of garments has played in the environmental crisis, and address the ecological by opening up to the agency of the nonhuman in the design research and practice. In scientific research, including the humanities and artistic research, a "nonhuman turn" is underway, in which researchers identify a move away from human primacy and seeing nature as mechanism, and to build an imaginary of interconnectivity and the agential potential of nonhuman entities in the world.

2.2 Animal agency

There has been a great deal of research in the 21st century attempting to repair the rift between the human and nonhuman worlds. In this section, I will show how the previously stated problem of human exceptionalism the human/nature divide has been addressed by researchers who argue for the agential and cognitive potential of animals.

Rapid industrialization in the West in the 19th century widened the human/nature rift created during the Enlightenment. John Berger, in his essay "*Why Look at Animals?,*" offers a hypothesis that the shift away from nature may have begun even as far back as prehistory, when animal husbandry and agriculture began. Berger (1984) continues by discussing what distinguishes humans from animals is our ability to have "symbolic thought," yet our first symbols were of animals, and likely painted in their blood. Ingold (2000: 61) and Lippit (2000) argue that, while Cartesian dualism was necessary at one point in history to "see" humankind as different from their own "animal" origins, it has created a barrier between humans and nature, and because of this we suffer spiritually.

Some of the earliest efforts in the sciences to repair this rift were from marine biologists such as John C. Lilly, who was (while using ethically dubious methods, such as administering LSD to his dolphin subjects) trying to teach dolphins how to speak English (Lilly, 1969). His attempts at communication using English words were unsuccessful, but they yielded results in understanding non-verbal and non-anthropomorphized communication. His work was pivotal in building the argument for the existence of kinship between human and animals that is not solely based on anthropomorphization — that we can have a relationship in which we let an animal be an animal without placing on it human expectations for behaviour or communication. In a similar vein, the work of psychologist and animal rights activist Gay A. Bradshaw, addressing elephants with PTSD, has also advanced the contemporary thinking of animals as possessing of intellect and complex psychological faculties (Bradshaw, 2010). Both Lilly and Bradshaw have explored the concept of panpsychism, the idea that all living things possess a mind, or mind-like qualities. This research shows that animals possess capacity for thought and societal arrangement far beyond the limitations of Cartesian mechanics. In addition to these foundational studies conducted in the natural sciences, there has been broad research on the consciousness and agency of animals in other fields, including, for example, visual culture (Berger, 1984), artistic research (Jevbratt, 2006), conservation studies (Kirksey, 2015), art history (Fudge, 2002), history of science (Haraway, 2002), to name only a few areas. Each of these studies addresses the agency of animals in some way and asks, with Claude Lévi-Strauss, how we can think with animals (1966) and, with Donna Haraway, how we can live with animals (2015:5).

The argument for animal consciousness and agency has taken a long time to take root in the non-indigenous, capitalist cultures of the Global North. However, considering animals and other nonhuman entities as having equal agential potential to human beings is connected to longstanding practices of animism. The ancient Japanese religion of Shintoism features numerous animistic rites that recognize the spiritual agency residing in all organic and inorganic matter. According to Senda, until Western influence in the second half of the 19th century, there were no words for "nature" or "environment" in the Japanese language (2014:1). The author argues that these two anthropocentric words would not have existed in the Japanese language before that time as they signify a separation between the human world and everything else. Because these words did not exist, the "environment" was felt as a bodily experience of connectivity — a "primitive feeling [which] opens up a window to reach out to the universe" and at the core of this form of animism is knowledge that "each of us is a part of that universe, and the landscape breathes with life" (2014:3).

Recently, the governments of Bolivia, India and New Zealand governments bestowed a provisional "humanhood" onto certain nonhuman animals and ecological regions. On Earth Day in 2010, the government of Bolivia passed a law called "Universal Declaration of the Rights of Mother Earth." This law considers everyone on the planet as part of an "indivisible, living community of interrelated and interdependent beings with a common destiny" (therightsofnature.org). Dolphins in India (Palermo, 2015), glaciers, lakes and forests in the Himalayas (The Japan Times, 2017), and a river in New Zealand (Palin, 2017) have also been granted rights as "non-human persons," "person status," and "legal persons," respectively. These decisions seem to provide evidence of institutional recognition of the agency — albeit anthropomorphized — of nonhuman members of the global ecology. Members of this global ecology are not only those beings who have slowly formed over time to fit into one another in entangled clusters, but also those creatures that have been shaped by human action — deliberate or otherwise (Kirksey, 2015). In the ruins of anthropogenic environmental change — acidification of oceans, destruction of natural habitats, irradiated landscapes — new beings, and new ways of being are emerging.

3.1 NOVEL ECOSYSTEMS / EMERGENT NATURE/ CULTURES

Artistic research and natural science have a lot in common. Both disciplines attract people who are able to turn their intuition about the state of the world into questions and action. Take Italian futurist Luigi Russolo, for instance. He was shocked by the bodily experience — the noises and smells — of the turn-of-the-century industrialized city. His reaction to the destruction of his familiar countryside this was to create an aggressive series of sound art pieces called "*Intonarumori*." He utilized crude noise-machines that make mechanical, violent sounds. These sounds were bird-like response-calls to the sounds emitted from the factories and machines of this new period; as long as industrialization has been imposing itself on the natural

environment, artists and designers have been reacting to it. The world has changed greatly since Russolo's time and will likely continue to do so, for better or worse. Designers now are looking at the changing landscape and asking how we can design new ways of living with the changes.

Despite the predisposition of journalists and academics to show our world as being in an unstoppable state of decay due to human actions, there is hope hidden in their stories. Multispecies ethnographer Eben Kirksey has devoted his attention to flourishing life in the aftermath of ecological disasters, and in the ruins of industrial wastelands. He calls what he finds in these violently changed landscapes "novel ecosystems." These young "entanglements" are masses of contingencies tangling humans together with nonhumans in such complexity that new "lifeways" emerge (2015:218). These novel "lifeways" have been explored in artistic and design propositions. Early research into animal agency, coupled with notions of emergence provide the foundational framework for making creative work *with* other entities, rather than *through* or *of* them. In the next section, examples will be introduced of art and design methods which are based on partnerships with nonhuman creatures of varying scales.

3.2 Interspecies Collaborative Art

The Merriam-Webster dictionary defines collaboration as "to work jointly with others or together especially in an intellectual endeavor" (2017). The term "interspecies collaboration" denotes that the active members of a collaboration are human and nonhuman organisms — this could include bacteria, flora, or animal partners, for example. Interspecies collaborative practices, for art or design, go beyond biomimicry to question the notion of anthropocentrism by inviting nonhuman actors into the making process. This term has been used to describe a methodology for artistic practice. At UC Santa Barbara, an elective course taught by Professor Lisa Jevbratt is offered in the Visual Art Department titled "Interspecies Collaboration," in which students are encouraged to work with nonhuman partners. In this course, animals become partners for the selection of materials for works of assemblage, and their physical movements are mimicked for dance performances, for example. In this method, the relationship is in itself a medium, and it is through this relationship of reciprocal trust, coaxing or subjugation, that artworks come into existence.

Power is a fundamental issue that arises in any collaboration and this issue is manifold when the collaborators are already mired in a historical relationship of dominance and subordination, such as that of humans and nonhumans. Artistic investigations of this nature have been criticised for not providing a clear description of hierarchy — by not doing so, they ultimately favor the

human perspective; historically the human has enjoyed privilege, and the nonhuman has been subjugated by various ideological, religious, cultural, economic, industrial or political schema. These artistic investigations have also been criticised for not clearly stating *why* such collaborations are necessary or important (Choksi, 2010). A forced collaboration in which the natural world rejects us has been explored in artist Nina Katchadourian's 1998 work *gift gift*. In this work, she fixes holes in a spider's web as a gift, but finds that the threads with which she fixed the holes are ejected from the web. Despite her intention, her gifts are tossed aside by the spider. Her work serves as a metaphor for the way that humans clumsily interact with the organisms in nature, often unaware of the implications of our actions in serving our own needs (Moody, 1999).

3.3 Interspecies Collaborative Design

In the previous section, interspecies collaboration was introduced as a method for artistic practice. Interspecies collaborative *design* projects are technologically mediated design methods enabling humans to employ and/or affect the morphology or behaviour of an organism. Can morphology — the outward appearance or structure of a living organism — be considered part of the innate creative potential of an organism, and can it be negotiated in a collaborative exchange with a designer?

If we accept the idea of Morton's "mesh" (2010), and follow Jones' definition of designing as "initiating change in man-made things" (1970), the possibilities for designing with nature in the Anthropocene are expanded beyond the standard asymmetrical practices of the past century. The term "anthropogenic" often has negative connotations as it refers to manmade toxins or pollutants, but in this case it could be used to indicate a morphogenesis that is manipulated by human technology. Materials and products made in the interspecies collaborative design process can be produced with the internal generative potential (morphology) or instinctual creative inclination (behaviour) of a living organism — like a hemp plant growing long fibres or bowerbird constructing its eclectic nest.

At Harvard University, the Wyss Institute of Biologically Inspired Engineering works in biomimetics and synthetic biology, creating engineering projects based on morphologies and processes found in nature. Researchers at the institute recently published proof of concept of a self-healing biofilm, made from a genetically engineered E. coli bacteria, which may be used for textiles, pharmaceuticals, and therapeutic treatments (Wyss Institute, 2016). Internal or instinctive generative abilities can be shaped by human activity to produce materials which benefit both human and nonhuman actors. Anthropogenic *terra preta de Índio* soils in South America, for example, also called Amazonian Dark Earths, are believed to have been produced by

agriculture and other human activities over the course of multiple generations (Glaser and Birk, 2012). These patches of soil were found in otherwise unfarmable land in the Amazonian Rainforest, and remain rich in nutrients and good for farming, as the human-introduced bacteria continue to multiply and expand the soil. How can designers use the morphology or behaviour of an organism to design objects or ways of living?

Much like Kirksey (2015) looks at post-disaster ecosystems to discover novel ways of living, designers can look at the tools and lifeforms of our changing world and propose new relationships with living organisms. The key to exploration of these worlds and experimentation in design feasibility is access to tools and information. The tools for doing basic genetic manipulation are becoming more easily available and affordable (Gaudi Labs, 2017). In addition to online databases and forums where people can exchange information and even take classes on "biohacking," physical locations around the world allow exchange and experimentation. This movement, called DIYbio, has produced many new ideas, materials, and methods; however, it is not without its dangers and ethical pitfalls. Free from oversight and a rigorous methodology, these DIYbio pioneers are in a position to negotiate the ethical codes respected by biologists working in institutional labs.

Places where young researchers can experiment are popping up around the world. In Brooklyn, New York, Genspace is a studio where biologists, engineers, artists, and designers can experiment with biohacking, which involves altering the physiological properties of living organisms. When it opened in 2009, the lab received a lot of attention and was even said to be the modern-day equivalent of the Silicon Valley garages where 1970s computing pioneers developed their systems (Kean, 2011). With the goal of creating a space for people to work on creative experiments outside of institutional labs, Genspace borrows from the FabLab co-operation and tool-sharing model pioneered by MIT. Similar labs have opened in other cities around the world where cross-pollination and interdisciplinary collaboration are the norm. In Amsterdam, The Waag Society runs an open-source Wetlab for DIYbio experiments and a biolab has recently opened in Tokyo, instigated by the MetaPhorest Bioart research group, an international group of artists, founded by Hideo Iwasaki, who manipulate living organisms (MetaPhorest, 2017). Iwasaki, a bioartist and Professor of Biology at Waseda University, has been researching the intersection between art and biology for the past decade.

Japanese artist Aki Inomata is a member of MetaPhorest and uses the internal generative potential (morphology) and instinctual creative inclination (behaviour) of living organisms in her work. In her 2014 work "I wear the dog's hair and the dog wears my hair," she collected her dog's fur to make yarn, which she wove into cloth on a handloom to make herself a cape. She then made her dog a covering out of human hair. This work magnifies the negotiations inside our bodies, in which we exchange matter with other organisms for mutual benefit. Her most well-known work spans from 2009-2016 and involved 3D-printed miniatures of famous "human structures" for hermit crabs. These crabs, oblivious to the shapes of Dutch windmills, or the Colosseums of Rome on their backs, take the forms and carry them, depositing them in their world, to be shared in an endless cycle between crabs. In her 2012 piece "Girl, Girl, Girl…," Inomata cut human dresses into scrap material from which female bagworms could make their colorful cocoons. The results of her interlocutions between humans and nonhumans show the possibilities of collaborating with other species for art and design, despite the lack of a clear boundary between the two categories (Inomata, 2014).

The work of artists and designers foraying into interspecies collaborative methods is experimental and often results in failure, as their work is dependent on non-human collaborators with whom it may be difficult or impossible to communicate. Lining Yao, PhD Candidate in the Tangible Media Lab at MIT, has recently presented the results of her research into new biotextiles (BioLogic 2016). She describes her BioLogic project is described as "growing living actuators and synthesizing responsive bio-skin in the era where bio is the new interface. We are imagining a world where actuators and sensors can be grown rather than manufactured, being derived from nature as opposed to engineered in factories" (BioLogic, 2016). She designed a dance costume on which she printed her bacterial actuators — dried cells that become rigid when sweat touches them, thereby opening small windows on the textile to allow a dancer's skin to breathe. This garment cannot be washed, and would require a lifestyle design in which a user would need an inoculation and incubation station in the home to re-apply the bacteria between uses. Though it is not ready to be taken to market, her BioLogic textile serves as an example of the potential for new applications of living organisms onto clothing for functional or aesthetic purposes.

Products for human consumption such as food and textiles are being grown from bacteria — both naturally occurring and genetically modified bacteria. In our guts are billions of partners for collaboration in permanent residency — an individual human is a vessel for a collective. Fermented foods like sauerkraut and cheese are embodiments of pet-like relationships of care for bacteria, which produce positive results in our bodies. Nata de Coco, for example, is a popular low-calorie health food made from the internal generative potential of the bacteria called *acetobacter xylinum*. This bacteria grows like sourdough or vinegar,

meaning that bacterial "mothers" can be easily separated and propagated. When fed, it produces a material of controllable thickness on the surface of the nutrient bath in which it lives. Similar to Tapa cloth, a paper-like material made from the bark of the Kozo tree that is used for body coverings in the Pacific Islands, the skin produced on the surface of the water can be dried, dyed and used as-is, for medical and decorative applications. For more than 40 years, University of Texas professor R. Malcolm Brown has been studying acetobacter xylinum and algae for their potential applications in burn therapy, bandages and even as flexible electronic screens (Czaja et al, 2006; Shaw and Brown, 2004).

This kind of "collaborative" material goes beyond the logic of growing plants for processing into textiles, and opens up the possibility of working with organisms that bestow upon a final product a unique *terroir* or identity, as in the case of cheese or wine (Erikson and Bull, 2017). It may be some time before we see garments spun from spiders, or bacteria in at-home vats, but these researchers and artists are engaging with changing notions of nature. Their work could affect how clothing is made and consumed. This approach to design needs more experimentation from fashion designers to go beyond designing clothing and materials, and to make a proposal for the world in which they can exist.

4.1 CONCLUSION

In this paper, the theory and practice of interspecies collaborative art and design were explored. This was done by first tracing the lineage of the human/nature to the argument for the agency of animals in order to present the current research on the interconnectivity of human and nonhuman organisms in the global ecology. By investigating the agency of animals, the connection can then be made for the agency of plants and bacteria in the art and design process. Then, examples of artists and designers who are pioneers in developing interspecies collaborative methods of making work were introduced under the category of bioart and biodesign.

In light of the knowledge that we may have entered Anthropocene, the definition of what can be considered "natural" is changing. The boundary between us, our static design objects, and the bigger, infinitely complex world around us is shifting and being actively problematized. What is needed is not only a look at what we can build now for future generations, but how we can reframe our existing relationships in order to renegotiate the terms of our place with Earth, in order to develop environmentally sustainable methods for fashion design.

5.1 DISCUSSION

Further research needs to be done from a semiotic and linguistic perspective in light of this nonhuman turn to explore also how the notion of nature and the environment has changed in the discourse and presentation of fashion sustainability. Interspecies collaborative design methods need to be tested through practical experimentation. These experiments require consideration of the ethical implications of producing and employing living organisms who may or may not be able to give consent. These are ethical and legal questions that could be addressed by both designers and scientists alike. For fashion and textile designers, the expansion of the productive capability of the nonhuman organisms in the world from passive participants to active players in the process of making could open up new pathways for expression and the development of new methods for production and consumption of fashion.

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but I'm at my limit, too.
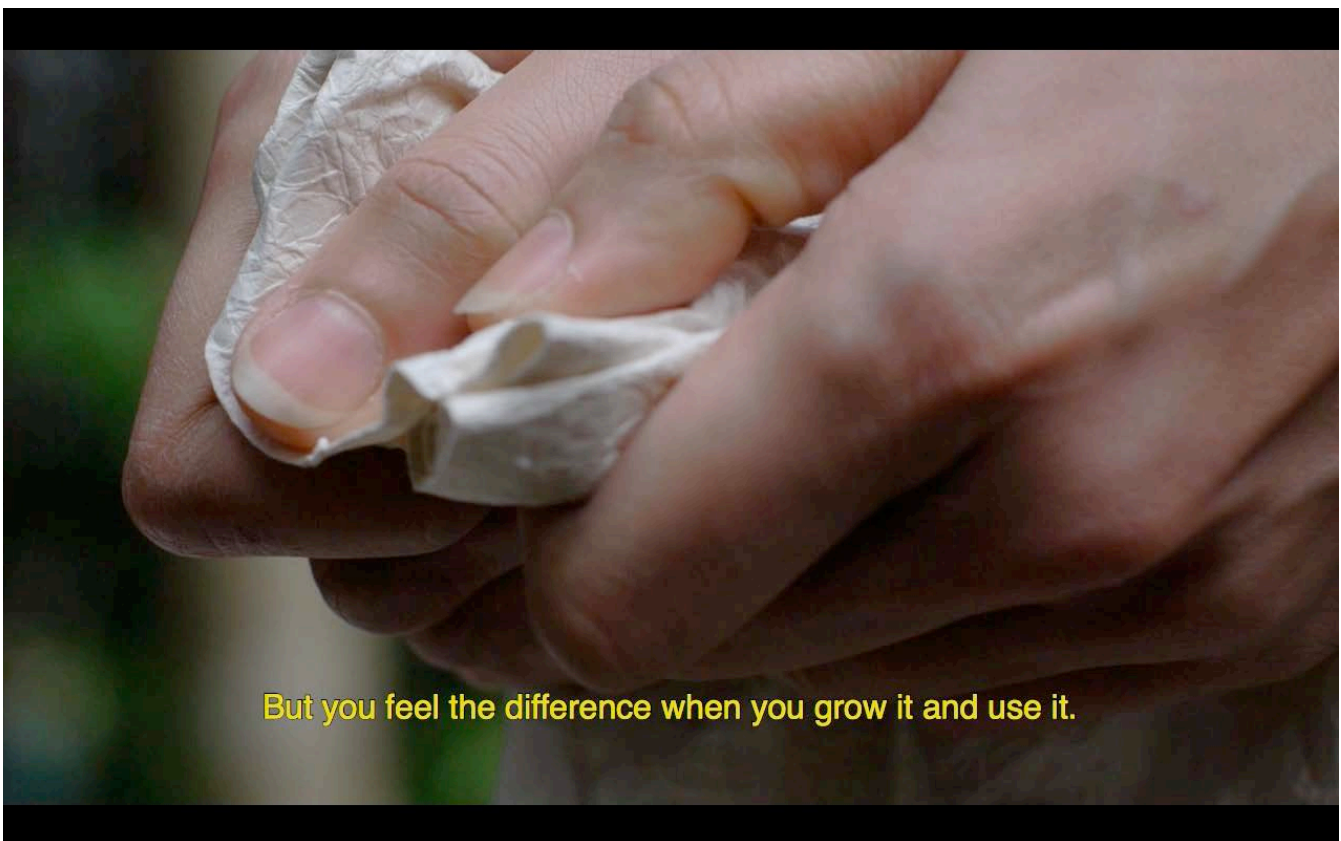
But you feel the difference when you grow it and use it.
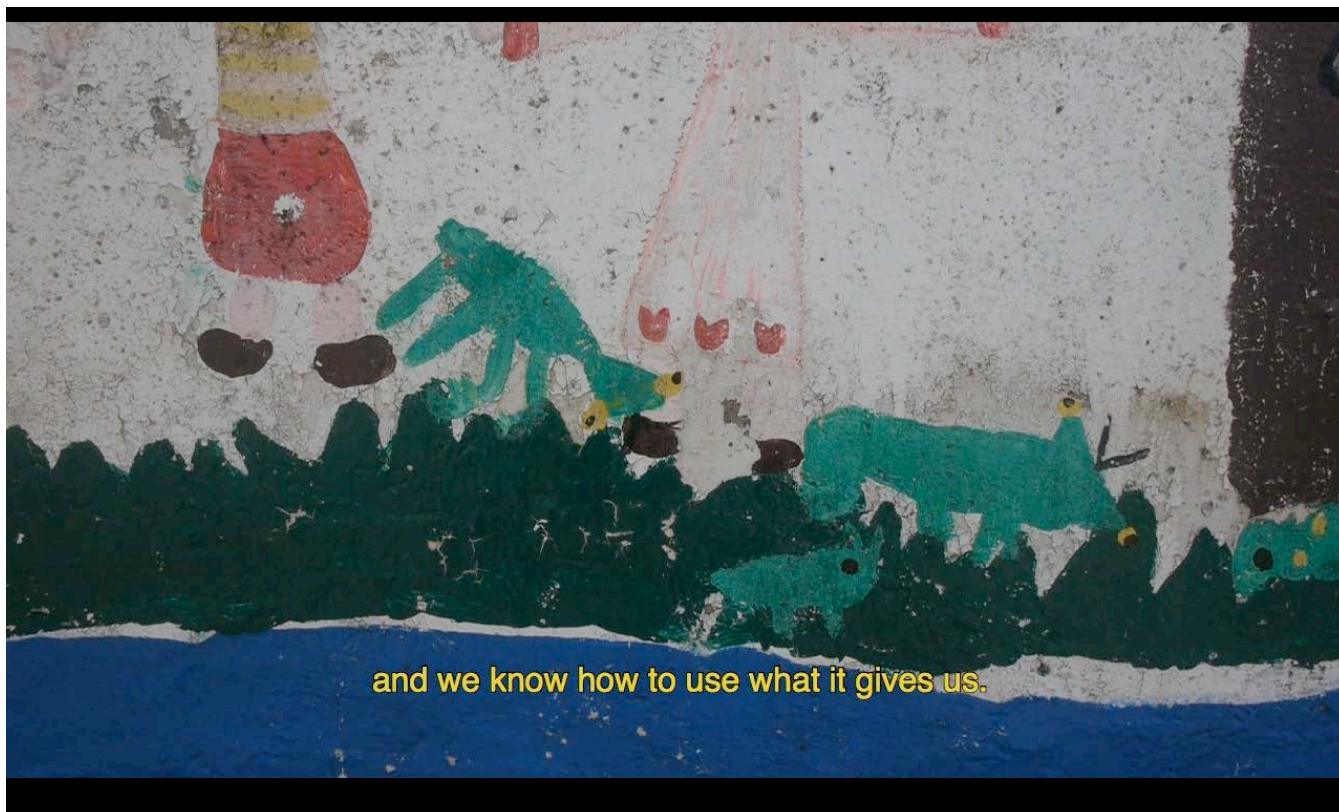
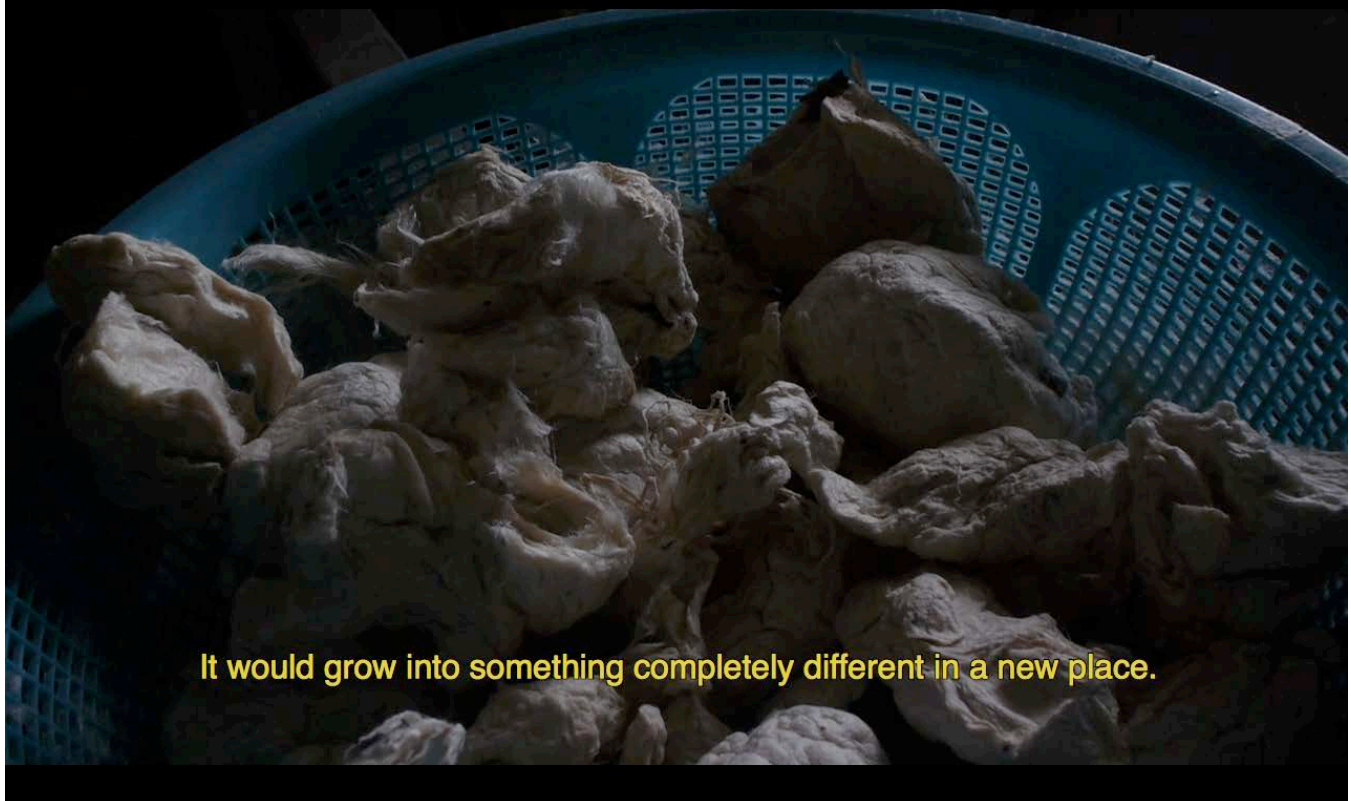and we know how to use what it gives us.

It's all about the water, isn't it?

for any kind of clothing.

It would grow into something completely different in a new place.

fig. 1-6 stills from Interspecies Collaborative Design by Daphne Mohajer va Pesaran & Cameron Allan McKean

Daphne Mohajer va Pesaran *Interspecies Collaborative Design,* **exhibition view, photography Jan Berg, 2017**

Touch of Smell

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ABSTRACT

The exploration of material is in a performance, that is investigating how human interactions develop when spaces are designed using smell as a design material. In the digital world, the touch and the sensation to the physical materials are lacking in everyday life. However, at the same time, the need to be connected to ourselves through our body is ever growing. This however is quite unlike to our affinity of moving fast in all aspects of life. As Juhani Pallasmaa (2012) points out that a haptic architecture brings about slowness and intimacy which is understood and appreciated only gradually with time. Also, written by Ezio Manzini (1989) touch being the most analytic of all the human senses, can help us explore the shapes and surfaces of a material better than the eyes.

In an attempt to re-initiate the experience through the sense of smell and touch, this paper aims to question how can smells be used as a design material in our living environments. Speculating buildings and interior spaces, using invisible immaterial, this research is focusing on ways of designing interactions with smells and how these interactions open or close architectural spaces without having physical boundaries. In this paper, the design experiments are investigating how we will respond and interact with smell in architectural spaces.

Performance done through a series of design experiments based on the improvisation and performance notes of Tufnell et al (1993). The text below is re-written as scenes of a performance keeping touch and smells in focus. These scenes are translated into real physical experiments using objects that are designed for olfactive interactions. These are presented in a form of a performance together with the audience and visitors as an interactive exhibition. The participants can select any one or all the scenes. These performances carry a sense of playfulness and that would make it engaging and interesting for the audience and participants. Along with the materials, objects and tools, a set of instructions for each scene would be provided to the audience. The examples below from fig. 1-3 are from a previous performance done in collaboration with a dancer.

Choice of Materials in each of the three performances/ installations, materials selected, are either designed with smells or includes natural materials having strong smell attributes. The smells used are pleasant and un-pleasant in each of the installations. As few examples of these smell designed objects, balloons filled with smelly air that might burst during the performance and thereby changing the movement of the body in the space. A hypothesis that through the collective movement, it may also initiate forming of spaces within a space would be investigated. Some featherweight textiles dyed with smells is another example, to create an interaction in the space with the body. Using the existing flow of air through ventilation systems, temperature and moisture, these interactions with the material can be varied. Yet another example, carrying an unpleasant smell not in hands or arms, rather dragging it behind while walking, thereby changing the scale of smells from a body scale to a spatial scale that effects both participant and the audience.

Interactions - To be able to understand how do spaces interact with us in an invisible way through smells, the focus in this research paper and in the performances, is laid on the "actions". Primarily through touch and body movement these interactions are designed to activate the smells in an architectural space. The intended interactions are designed to be intuitive and are based on the actions for example like carrying, placing, rubbing, pressing, pulling, crushing or even breaking the material. The touch to the object is not just with the hands but also with movements of the whole body. As an example, walking on an object may call for balancing with the whole body and it may involve interacting with the material by dancing, jumping and carrying an object. Through various verbs and intuitive

actions, the smells are activated in the space, these design explorations are investigating ways to design interactions within everyday routines.

The examples below in Fig 4-5 are the static installations with smell designed textiles which are experienced through haptic interactions with the materials.

Scenes

#1 Scale and quality of material in relation to the body

The same thing at two different scales
Smells at different scales in a space in relation to the body

A scale that is near to the body
is reachable with hands and feet
allows interaction
by holding in a hand
by teasing with feet
by rubbing your back

A scale that is far from the body
envelops the body
in its dynamism
in its stillness

In this scene, the same smell would be presented in different scales in relation to the body. With a scale near to body the object is presented independent in a space and can be moved and carried in a hand or other parts of the body. Whereas the smell material presented for a scale far from the body is fixed in a space. The movements of the participants activate the smells in the space. This scene could be repeated with a pleasant smell in both scales and later with an unpleasant smell in both scales. This proposal is investigating the formation of spaces within a space when interacting spatially. At a scale near to the body, this investigates the engagement of a participant with the objects.

#2 Let objects change you, how you move

Let smells change you, how you move
Let smells transform the interactions of you within a space
Let smells change the space

CARRY
an object

PLACE
an object

WALK ON
an object

ACTIVATE
an object

In this scene, the actions of carrying, placing, walking on and activating the smells is happening simultaneously. These actions can be interpreted in multiple ways, for example carrying an object is not just with one or two hands, it could be carried on head, shoulders or could even be dragged with the help of provided tools. Placing an object would vary based on different materials offered with different weight, volume and mass. Visual estimations could fail the reality and this creates interesting patterns of smell activation. This scene is investigating various intensities of smell that could be varied in space by changing the materials but repeating the actions as above.

#3 Materials and material processes

A floor covered in salt, moss, roses, feathers, rubber; a box made of plastic, of wood, or iron – materials raw or shaped-each has a quality or smells so distinct from each. Performance on material processes from day-to-day life routines are taken for activating smells. These can be used as imagination to revive the memory of these smells through past experiences or intuition.

burn wood heap feathers roll up textiles
weave bamboo filter out coffee polish shoe
squash lemon plant jasmine stack lavender
hold sneaker melt sugar tether bast rope
spread garlic wedge wood draw out milk
dissolve essential oils tangle hemp tie flowers
fold fresh laundry freeze cheese c luster eggs
bind flowers roll out grass hang leather

In scene 3, there are multiple actions and materials. These are bound to each other. The participants cannot change another action for a particular material or vice a versa. This performance happens simultaneously with all actions on the materials in a given space. Each action-material is interacted by one participant. There is a stipulated time for this scene. This scene is investigating multiplicity of smells in a particular space and thereby the scales, patterns, intensity within a particular duration of time. This scene also explores, if these smells when presented together could create invisible boundaries within a space.

The above performances bring back the attention to human instinctive senses of touch and smell through the physical materials. The expected results of these are a multi-sensorial experience and playful interaction with the objects and materials presented in each of the experiments.

Although these experiments challenge the fast and the digital way of interactions with our environment, the playful nature of the performances is expected to keep the interest of the visitors and audience to engage themselves in. The proposed performances would lead to the interactions in a spatial context that opens up this research further for investigations in the area of spatial design.

Keywords
Material, smells, space, body, touch, interaction

Jankauskienė, dancer and improvisation teacher in Lithuanian Academy of Music and Theatre.

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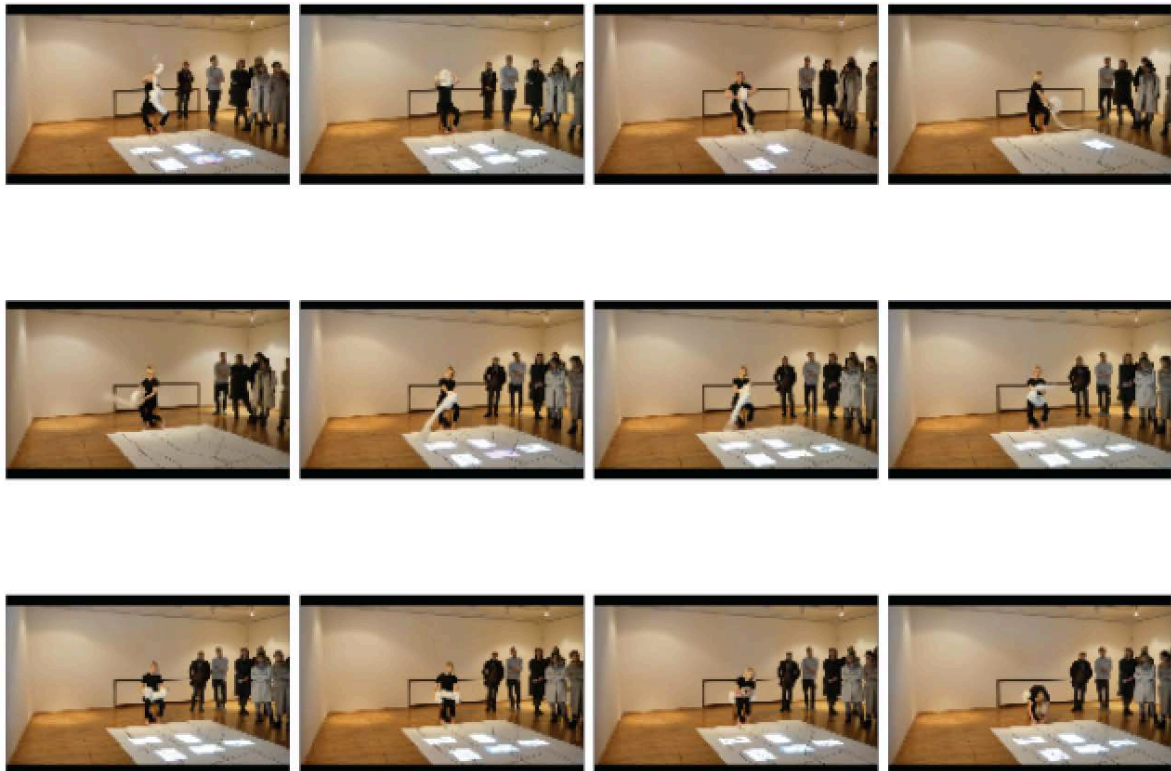
Figure 1 - Performance with smell designed textile object
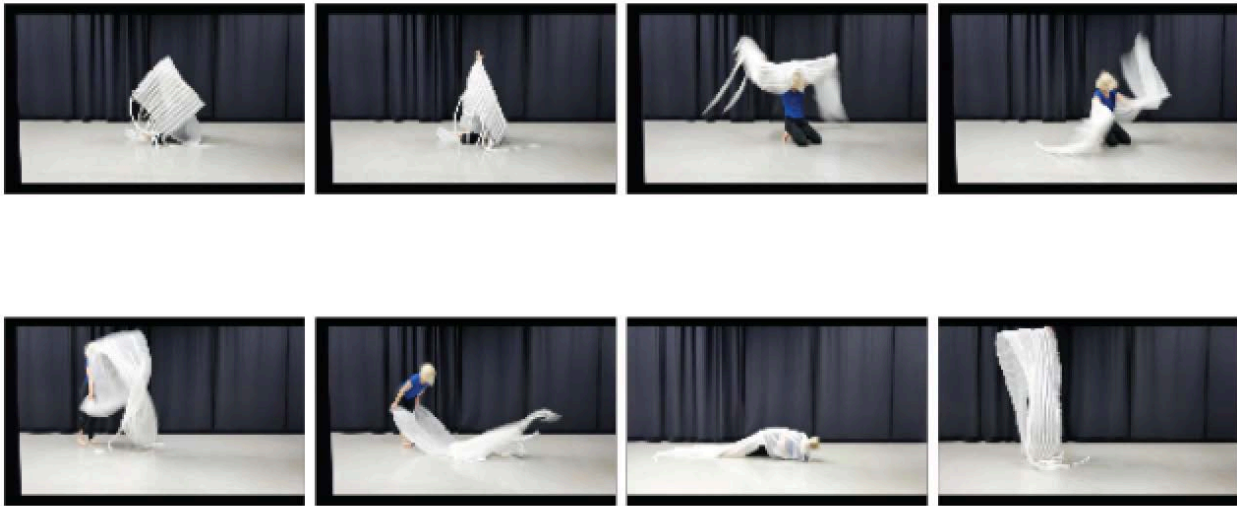
Figure 2- Performance with smell designed textile object
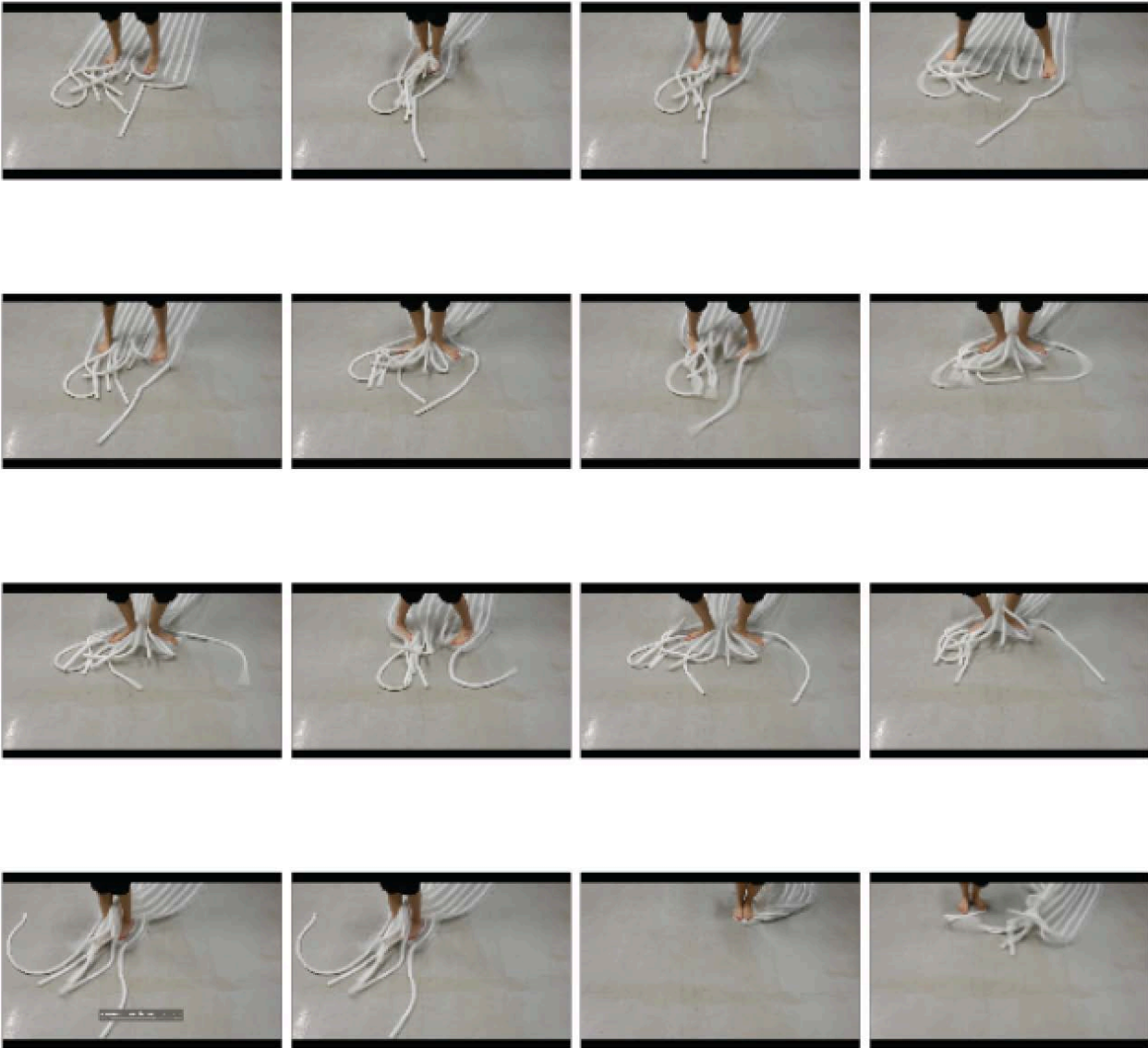
Figure 3- Performance with smell designed textile object

Figure 4 - Interaction with smells and balloons

Figure 5 - Interaction with smell coated velcro

Scene 1 - The scale and quality of material in relation to the body
a) Scale near to body
to be freely interacted by visitors

50 cm

40 -50 cm

150 cm

40 cm
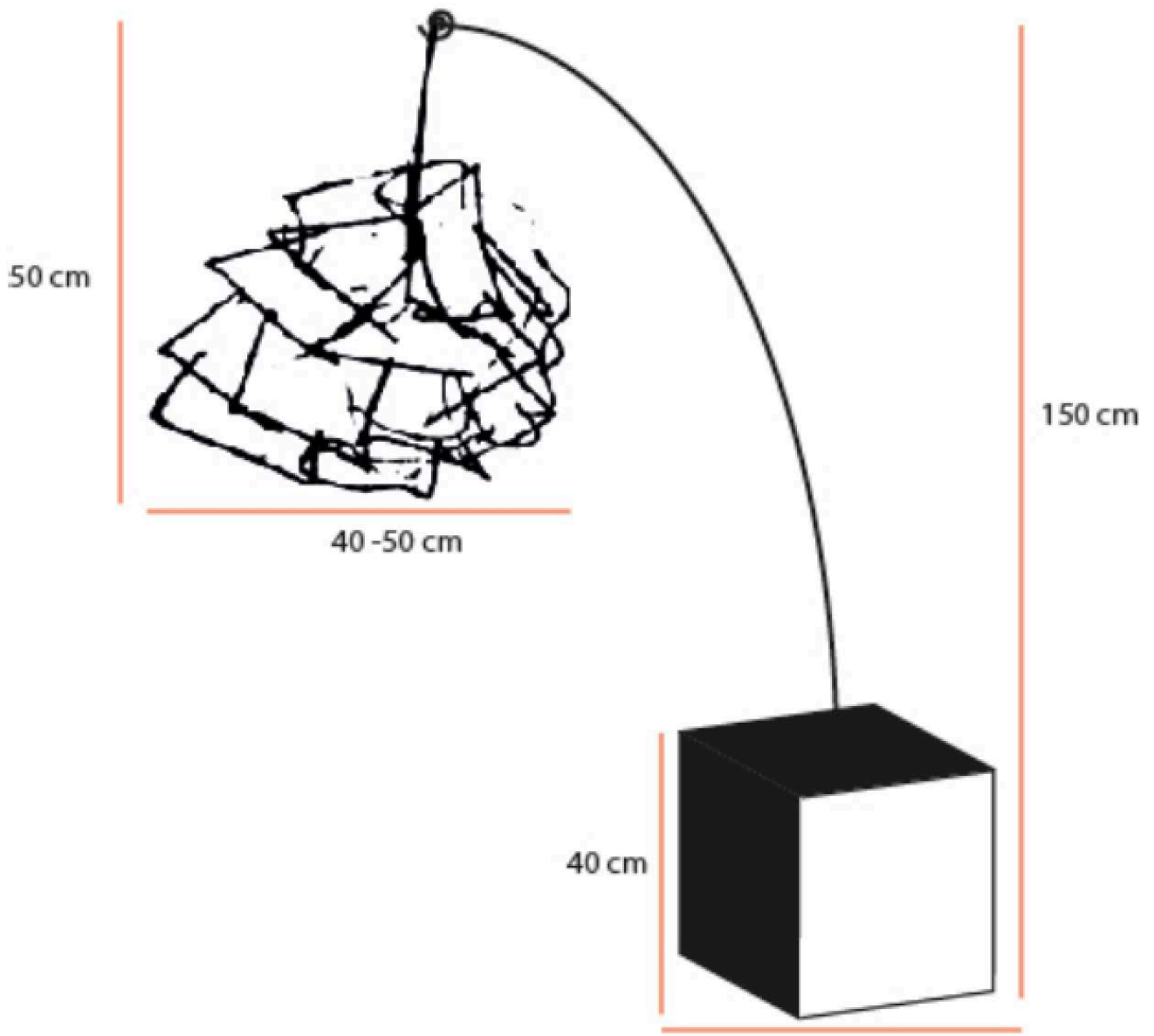
Scene 1 - The scale and quality of material in relation to the body
b) Scale far from body
the dynamisim of smell from the material interacts with visitors with the change
of airflow and movement in space

ventilator mounted on cieling

150 cm

250-300 cm (fabric length 400 cm)

about 150-200 cm

Available height from cieling- below the ventilation system
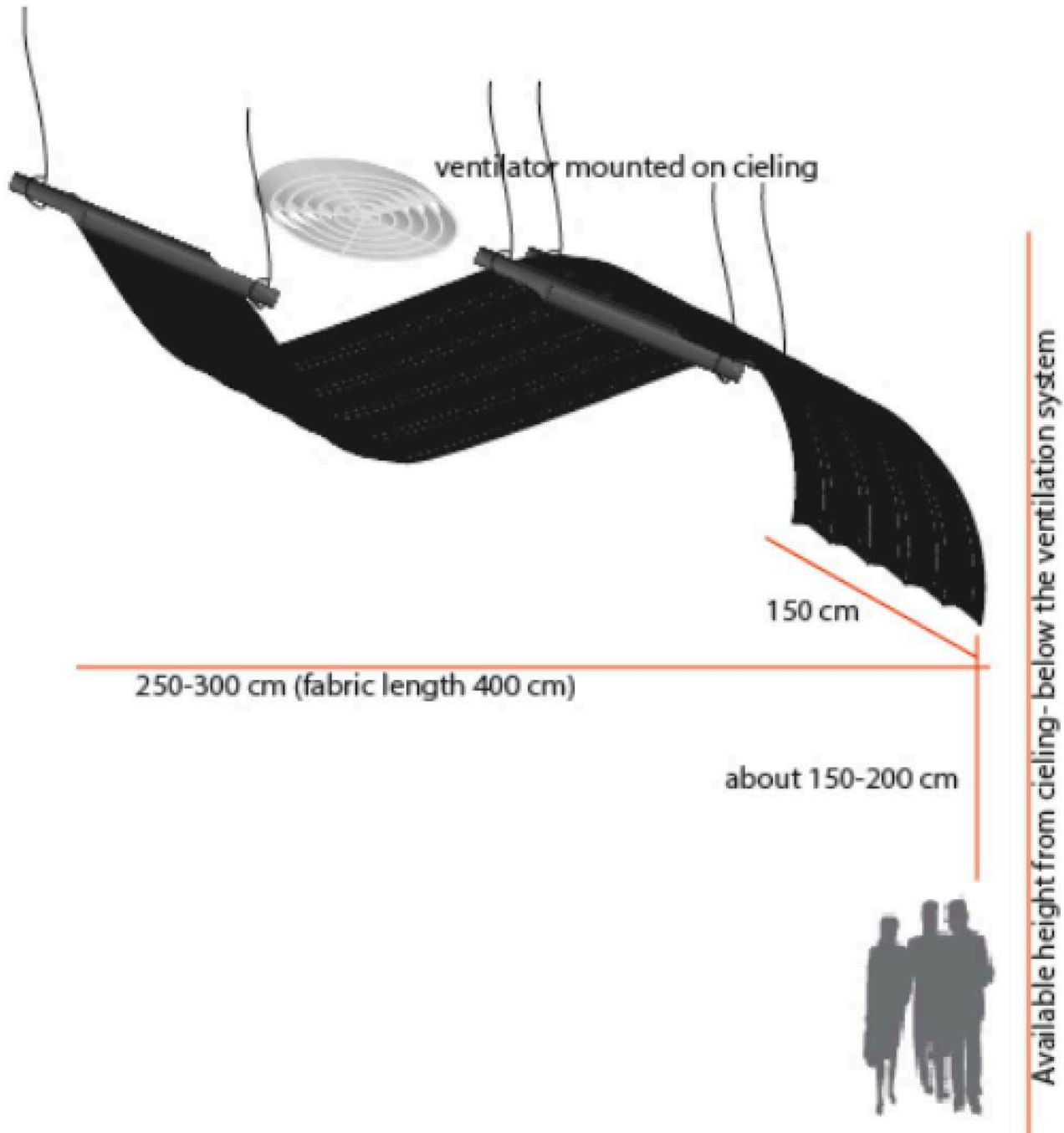
Scene 2 - Let objects change you, how you move
OBJECTS - 2 different objects- ball / glass jar filled with air and smell materials
ACTIONS -
Carry - the ball / glass jar
Place - the ball on head while walking / the jar close to your body to avoid it to fall
Walk on - the balance bench / the balance bench
Activate - ball by punching in / empty the jar in the given empty box

Table for placing objects

80 cm

ca 150 cm

Balance walking beam

5-10 cm

ca 20 cm

ca 150- 200 cm
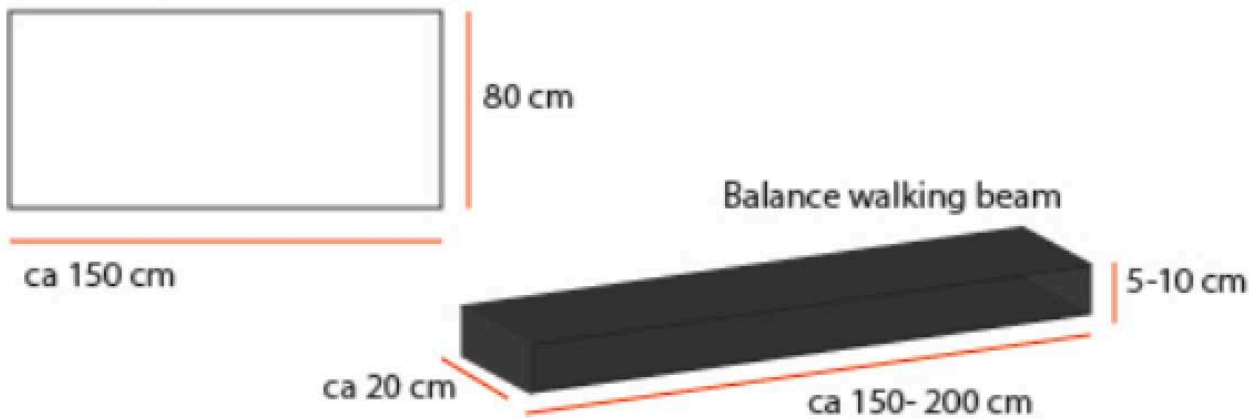
Scene 3 - Materials and material processes
Participants - 3- 5 persons
Duration of performance - 10 minutes
Frequency - 2 to 3 times in a day

4 Tables for placing objects

80 cm

ca 150 cm

ca 380 cm

ca 380 cm

85
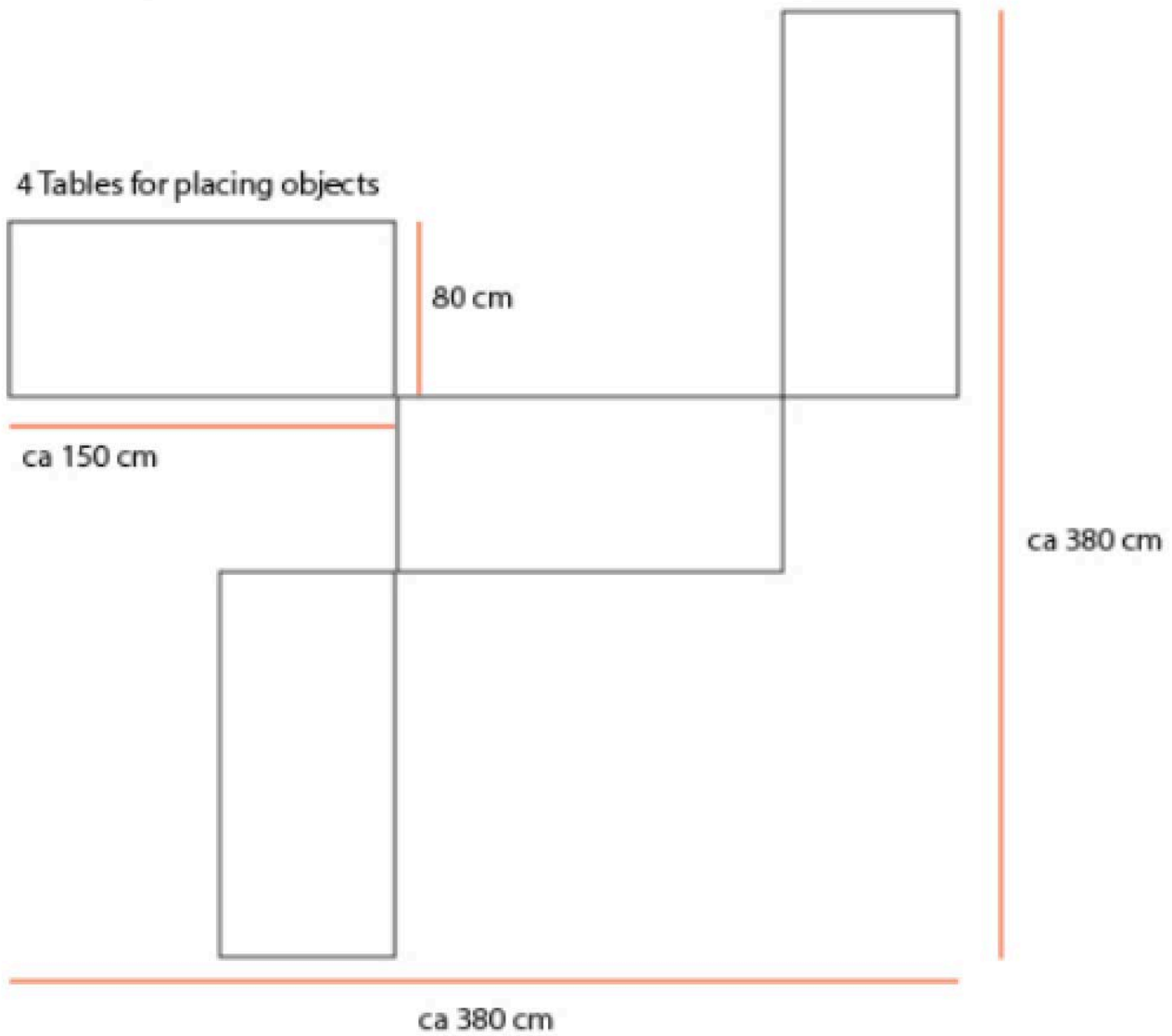
Jyoti Kapur *Touch of Smell* **performance photography Jan Berg, 2017**

Dis-Comforting, Distancing and Presenting: Mature men's experiences of fashion

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ABSTRACT

This paper accompanies the fashion installation consisting of the "Dis-Comforting", "Distancing" and "Presenting" suit jackets, and films, which stem from my doctoral project in which I investigated older men's experiences of fashion and clothing [1]. The research was conducted through my practice as a creative practitioner and the artefacts are corresponding to the subordinate set of themes which emerged in the process of phenomenological and arts-informed data analysis.

In my project I developed a novel hybrid methodology, Arts-Informed Interpretative Phenomenological Analysis. Rooted in phenomenology and arts, it put to the test the concept of '*making*' as a valid way of data analysis. The research process built on the concept of the hermeneutic circle; the subsequent activities of writing and making allowed me to constantly move between different elements of the participants' experiences of fashion as they grow older, which in turn facilitated the conditions for in-depth understanding and enhanced interpretations of those experiences.

Keywords

Arts-Informed Interpretative Phenomenological Analysis, fashion, making and writing, ageing, mature men

INTRODUCTION

The fashion artefacts discussed in this paper are the outcomes of my practice-based investigation into older men's experiences of fashion and clothing. The research methodology I developed in my study merged two approaches, namely Interpretative Phenomenological Analysis (IPA) [2], rooted in phenomenological psychology and typically used in healthcare; and, Arts-Informed Research [3], with its roots in humanities and education studies. This hybrid methodology and its processes were flexible and accommodating, and allowed me as the fashion researcher and practitioner to respond to the selected material in a creative, yet transparent way.

The empirical data was gathered via a series of in-depth semi-structured interviews and personal inventories with a small sample (n=5) of British men who throughout their life courses have actively engaged with fashion and clothing. The process of data analysis had three interconnected stages: firstly, IPA, based on textual coding of the interview transcriptions; secondly, outfit analysis, based on textual and visual coding of the photos taken during personal inventories; these two stages resulted in a set of emergent themes describing the participants' experiences. At the final stage each of those themes was re-approached separately and re-interpreted via series of practical explorations. Below I explain those processes in regards to the installation artefacts.

PRACTICAL EXPLORATIONS

The processes of practical explorations were based on my physical engagement with various objects and materials, which stimulated and enhanced my thinking about the data and initial findings. Based on a fusion of interpretative writing and creative making, this stage of data analysis had a unique path of development for each and every of the emergent themes, which was reflected in utilising different skills, materials and techniques when producing each of the artefacts.

The "Dis-Comforting", "Distancing", and "Presenting" themes, and the corresponding artefacts, represent selected aspects of the study participants' embodied experiences of fashion and clothing as they grow older. While each of these themes is unique, they all indicate a strong connection between the participants' past and present, and the impact of their individual and generational life trajectories on how they currently negotiate their ageing masculinities, which I further explored via various making processes.

Importantly, what was common for all the developed artefacts was that I began my explorations with a second-hand men's suit jacket, approaching it as a 'canvas' for my developing interpretations. Such a common starting point was adopted because suit jackets were present in the narratives of all of the participants, and most of them referred to these jackets as either their favourite items of clothing or as an item that carried a significant meaning or memory. Furthermore, a suit, by many authors, is interpreted as a prime vehicle of masculinity [4]. For these reasons, I decided to use previously owned men's suit jackets to highlight the participants' past experiences; metaphorically, any second-hand garment is already invested with a life of its own.

Dis-Comforting theme and jacket

The "Dis-Comforting" theme points to a system of values where the participants' physical comfort was compromised for the sake of a fashionable look. Alongside its potential psychological significance, this had particular physical

effects on some of the participants, most of whom recounted memories of uneasiness or even physical pain caused by their outfits. This past willingness to sacrifice bodily comfort has had implications for their present expectations towards fashion and is reflected in their current fashion behaviours, especially the negotiation between physical and mental comfort. Therefore, the practical exploration of this theme involved de-construction of a second-hand garment, a scenario-based reflective performance, and experimentations with materials such as a metal spiral corset wire (fig. 1) being inserted within the structure of a second-hand suit jacket [5] (fig. 2).

Figure 1. Dis-Comforting sketchbook pages; a scenario-based reflective performance (Credit: Ania Sadkowska)

Figure 2. Dis-Comforting jacket (Credit: Ania Sadkowska; Photo: Fraser West)

Distancing theme and jacket

The "Distancing" theme focuses on the participants' need to declare that they were not connected with, or supportive of, certain fashion practices or behaviours. This type of critique was frequently utilised as a way to express the participants' individuality or ambitions, and is especially evident in the context of distancing from 'others' who do not display the 'right' level of involvement with contemporary fashion trends. Interestingly, what was perceived as the 'right' level varied significantly for different participants; some of the participants distanced themselves from 'others' who in their eyes engaged with fashion too much, others from those who did not engage with it enough. Consequently, in the process of interpreting it via practical experimentations, I explored the notion of creating such a physical space between different individuals, and between individuals and objects. This resulted in cutting into the jacket sleeves and inserting 'extra' sleeves (fig. 3), and inserting a 'sharp' and customized element into the collar (fig. 4).

Figure 3. Distancing sketchbook pages; inserting additional sleeves (Credit: Ania Sadkowska)

Figure 4. Distancing jacket (Credit: Ania Sadkowska; Photo: Fraser West)

Presenting theme and jacket

The "Presenting" theme relates to the participants' changing physicality and its influence on their social performance in relation to fashion. Most of the men in this study acknowledged their changing physicality and the need to adjust their fashion choices accordingly. At the same time, some of the participants frequently struggled to directly verbally articulate the connection between their fashion choices and ageing, however, this relation was often reflected in their clothing choices.

While none of the participants expressed being restricted or limited by their age when it came to fashionable clothing, they certainly did not want to be identified as wearing 'too young', nor 'too old' clothing. This was exercised through the careful avoidance of clothes that could influence the participants' social recognition in such a way; consequently, the theme was an extension of the "Distancing" one. For this reason, I felt that it was crucial to further explore the relationship between these two themes; both shared a similar background concept – the participants distanced themselves from certain stereotypes such as that mature individuals attempt to present themselves as more youthful, masking and disguising their real age. It is through this process that I developed an understanding that the "Presenting" theme could be metaphorically understood as 'a shadow projected' by the "Distancing" theme. Therefore, the making processes of the jacket involved projecting a shadow on the wall by directing a light onto the "Distancing" jacket, marking the shapes of the shadows (fig. 5), and transferring these shapes onto the jacket by hand applying a black powder dye (fig. 6).

Figure 5. Presenting sketchbook pages; practical experimentations with shadow projection and powder dye (Credit: Ania Sadkowska)

Figure 6. Presenting jacket (Credit: Ania Sadkowska; Photo: Fraser West)

CONCULSION

This work aim was to push the boundaries of fashion research and practice by developing a methodology, the implementation of which would offer new insights into older men's experiences of fashion and clothing. In this vein, the methodology equally accommodated the positions of a fashion researcher, designer and artist, and it was based on a hypothesis that interpreting through "*making*" offers alternative insights into the participants' lived experiences that can only be achieved through creative artful practices.

Brown [6] notes that *"considered as the outcome of research, artworks are represented as the product of poetic, technical, and other measures of cultural investigation"*. Similarly, my analysis of the empirical data via practical explorations, was based on a certain mode of "thinking through making", and exploring metaphorical references and connections. Moreover, these processes of developing my interpretations involved utilising my skills and sensibilities as a creative practitioner by "*employ*[ing] *experimental and hermeneutic methods that reveal*[ed] *and articulate*[d] *the tacit knowledge that is situated and embodied in specific artworks and artistic processes*" [7]. In my work, each second-hand jacket was utilised as a starting point for the development of a new artefact, which metaphorically embody my understandings of the phenomenon under study. In this sense, my making processes were indeed complex transformations from one artefact to another. In parallel to these physical transformations in the appearance of these objects, these processes were conducted to facilitate and stimulate transformations in my unfolding understanding of each

theme, which were captured via short (1-3 min) films. These films (fig. 7) are presented in the installation alongside the produced jackets.
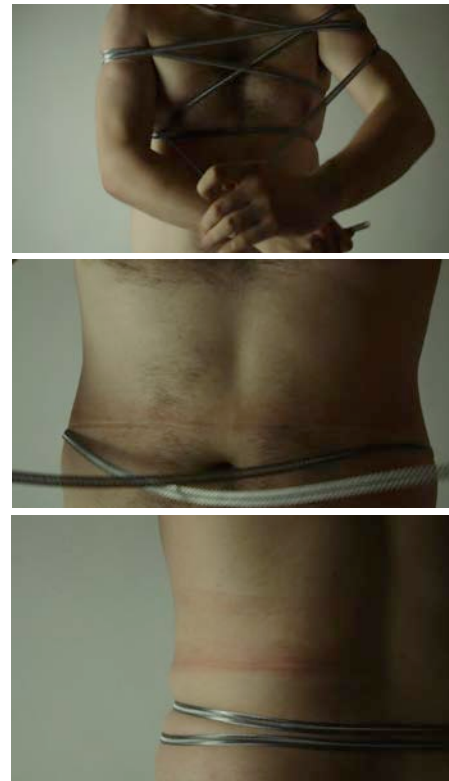
Figure 7. Dis-Comforting' film; stills. (Credit: Ania Sadkowska; Photo: Fraser West)

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Ania Sadkowska *Dis-Comforting, Distancing and Presenting* **exhibition view photography Jan Berg, 2017**

Observations from real life as ideas for a fashion collection. Proposal for *everything and everybody as material:* beyond fashion design methods

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ABSTRACT

The proposed work is an event, throughout which ideas for a fashion collection will be generated, on-site, and presented in the form of an evolving photographic installation. I propose to observe and document attendees of the conference and perhaps the wider public at the time, capturing dynamic compositions, combinations, gestures and interactions that occur between bodies, clothes, materials and the surroundings. Embracing chance and spontaneity, I will collate the observations and propose them as potential design elements, themes and concepts for a fashion collection. I am motivated to discover what kinds of ideas will result when the designer only references bodies, behaviours and surroundings they happen upon in everyday life as the source material in a design process.

Keywords

Fashion design, chance, user-inspired, time-based,

site-specific, generative

INTRODUCTION

The work will build on a process I explored in my Master thesis, *Talking Through Our Bodies*, where I conducted a series of live draping sessions with a moving subject as a fashion design process. My observations of the subject's spontaneous interactions with clothes, materials and other objects inspired and guided the design of a subsequent fashion collection (figure 2). The work was mainly carried out in a laboratory-like setting, where I defined an aesthetic and conceptual theme beforehand, provided the physical components to be interacted with and gave loose directions when needed, to instigate movement. I was interested to find out what would result from a design process which involves the physical contribution of the wearer (the moving subject) in the ideation stage, alongside the input of the designer (myself).

THE PROPOSED WORK

For the proposed work, I would like to involve the input of more external elements in the design ideation process, by documenting these kinds of interactions outside of a constructed setting. I would like to conduct observations and discover compositions from people's interactions in a real-life context. I am drawn to the subtle instances that occur between body and material when someone is, for example, waiting at a tram stop, in transit with too many things to carry, rushing somewhere, or taking off a piece of clothing. In the same way that dancers and choreographers in the 1960s came to approach 'dance as a way of life, that uses everyday activities such as walking, eating, bathing and touching…to explore unusual choreographic ideas' (Goldberg 1988), I would like to find design ideas from bodies in real-life situations, which are in some way characterised by the fleeting and serendipitous nature of the process.

Though one of the main benefits of the process, to me, is the element of discovery and surprise, at the proposed event I might look out for occurrences like the way that someone rests their bag on their lap, carries a jacket over their arm, the folds which emerge in a garment when a hand rests on it, and various other abstractions of bodies' silhouettes in combination with other bodies, furniture and the surrounding space.

Practical execution

Up to now I have only conducted these sessions with one subject at a time, so I am interested to find out how the dynamics are affected when multiple subjects are involved. All of the attendees will become participants and 'performers'; subjects for the work (as long as they are willing). Unselfconsciously they will contribute ideas for a fashion collection. I may involve a collaborator to assist with the documentation, or potentially the attendees could also be involved in the documentation, this aspect is yet to be clearly defined. The resulting documentation may be displayed in the style of Zoe Leonard's *The Fae Richards Photo Archive (1993–96)*(figure 4), an installation of irregularly-sized black and white photographs, depicting candid moments from her subject's life. The style of the actual documentation will reference Anders Edström's fashion and portrait photography (figure 3), in the sense of capturing in-between moments in a pure, unglamorous and naturalistic way.

At the end of each day the accumulated photographic documentation will be edited and displayed on a wall as an evolving installation. By the final day a concise series of moments will have been generated and framed as ideas for different aspects of a fashion collection. They may also be categorically organised, in terms of which aspect of the collection they could inform. Whether or not these ideas are then realised into a collection will remain to be seen; for the purpose of the conference, the work concludes as a set of ideas with potential for further development or translation as garment designs.

CONCLUSION

The work will demonstrate a version of conceptual source material for fashion design, found in compositions created by bodies and materials in action, everyday around us.

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Figure 1. *Matti with his t-shirt pulled up over his chin*, observation from real life, 2016
Photo by Kasia Gorniak

Figure 2. Kasia Gorniak, *Talking Through Our Bodies*
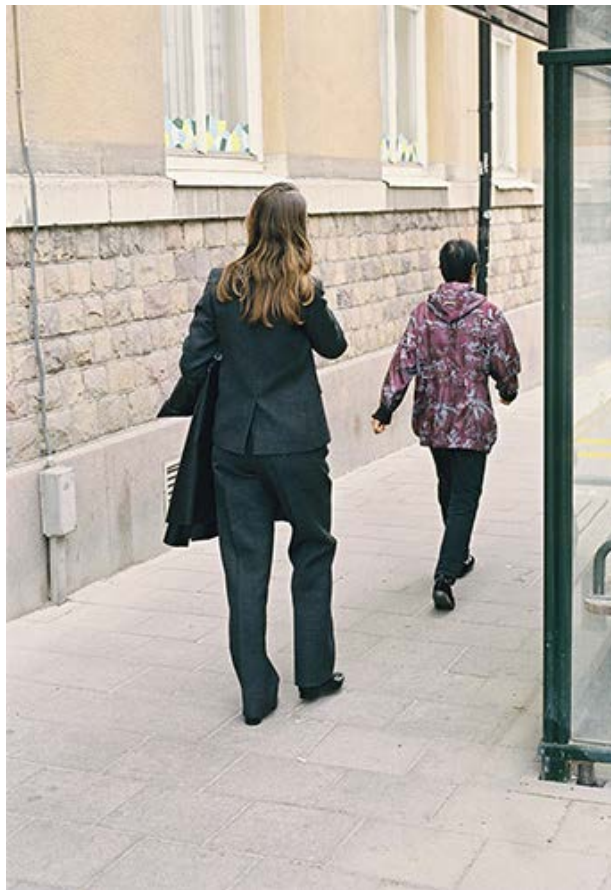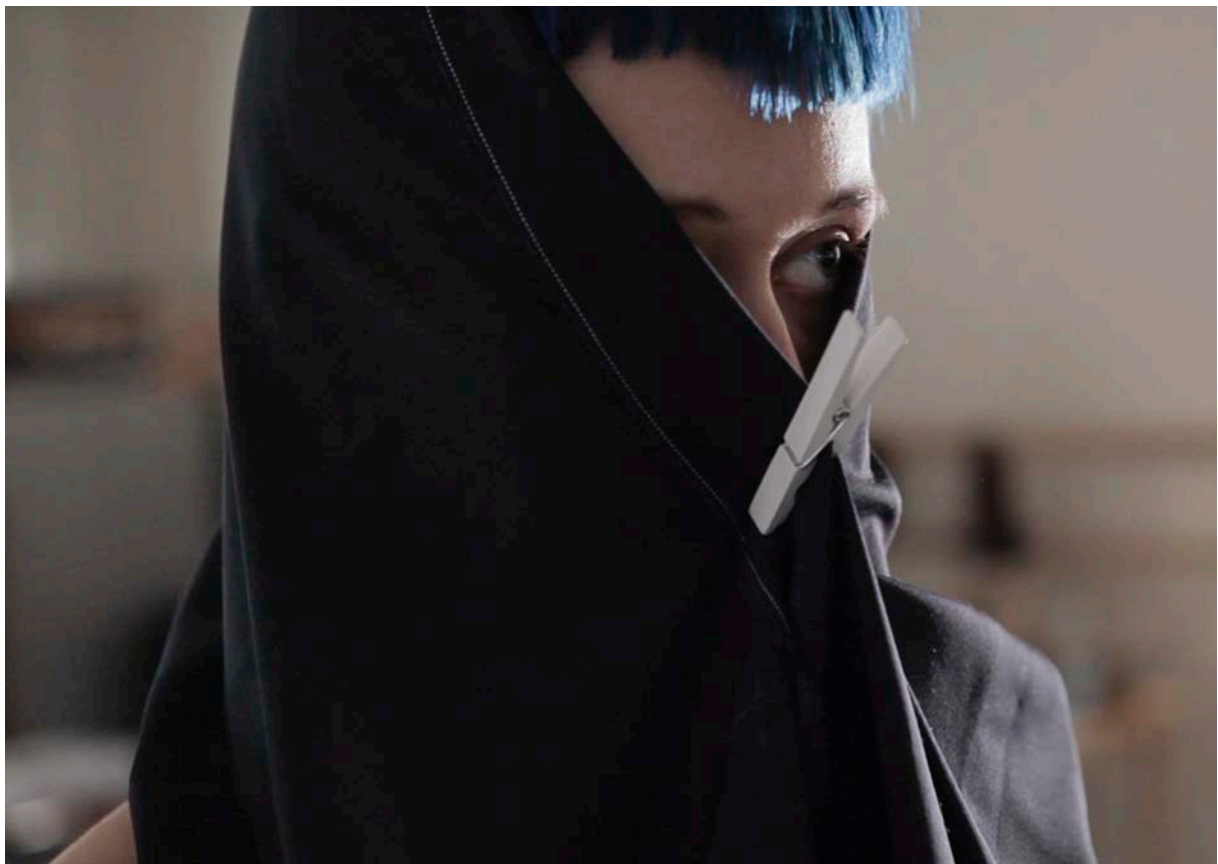Draping session with Laura, 2015
Photo by Jeanne Hendrey

Figure 3. Anders Edström, *Vanadisplan: Rodeo* (2013)

Figure 4. Zoe Leonard, *The Fae Richards Photo Archive* (1993–96), installation view
Photo by Geoffrey Clements

Kasian Gorniak _Observations from real life_ exhibition view photography Jan Berg, 2017

Kasia Gorniak, floor talk, photography Jan Berg, 2017

Sonic Somatic

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ABSTRACT

The sound installation *Sonic Somatic* is based on the exploration of the sonic identities. This art project considers the notion of *sonic object* and *sonic subject* as a binary system of interaction between human body and sounding object(s) and two stages: (1) being a sound and (2) wearing a sound. *Sonic Somatic* consists of three parts: a) low-tech sound amplifiers b) interactive sonic fashion library; c) sonic dummy.

Keywords

Sonic identity, sonic subject, sonic object, wearing sound, being sound

RELATIONSHIP BETWEEN THE (HUMAN) BODY AND OBJECT (CLOTHING)

Becoming-State

Clothing is generally considered to be soundless. They don't make sounds when they are without a body that is interacting with them (e.g., hanging garment in the closet, folding pants, etc). Clothing starts to make sounds by interacting with a human body, when we wear them, scrunch or sit on them, and etc. The interaction is based on touch and movement. This kind of state could be called as a *becoming-state*. A becoming-state of an audible object: to be determined how it becomes an object from inaudible to an object that produces sound. The haptic and kinetic interactions of human body empower the clothing to become a sonic object. The medium (air, gas, liquid or solid) allows this sonic event to happen. It is a place for an object to become audible: the place (where is a sonic object) spreads, resonates and becomes a sonorous space.

Pierre Schaeffer is the first to have conceptualized the sound object as a purely intentional object as opposed to the physical object, the emitter-object. Michael Chion defines this Schaefferian sound object as any sound phenomenon or event perceived as a whole, a coherent entity, and heard by means of a reduced listening which targets it for itself, independently of its origin meaning.

Sounds and associations

However, many items of clothing are in fact associated with characteristic (identical) sounds. For instance, the sound of a zipper is associated with the action of opening and closing a fashion item (such as a bag), the rustle of a raincoat or the opening of umbrella heralds the rush into rainy weather or the hurried escape from it, and of course the sound of a high heeled shoe is a characteristic warning of the approach of a taller-than-normal person [1].

Sonic Identity

Although sound, touch, and smell are elements of clothing, the visual culture is predominant in the fashion as a material culture and fashion is understood as a system of visuals. How do we construct our *sonic identity*? Can we recognize the identical sounds of clothing?

Concept of an Object

Art installation by Kosuth consists of wood folding chair, mounted photograph of a chair, and mounted photographic enlargement of the dictionary definition of "chair". He is showing three concepts of the same chair: language, real object, and representation. The forth form of possible concept (sound) is missing. There could be added a mode of interaction – sound of folding / sitting on the chair. That is why I started to think about sound as a construct of identity, additional concept of an object. We can apply the same concept for fashion design that is very based on visual appearance: real object (clothing) and representation (photo / video), and text, describing particular clothing. Language could be visual (written text) and sonic (spoken text). Sound of clothing (wearing, moving, touching) is a sonic identity of a garment / accessory / shoes or any object we wear.

Figure 1. J. Kosuth. One and three chairs. 1965

INSTALLATION

Content of the installation

Installation consists of three parts:

I. Low-tech sound amplifiers that visitors of the exhibition could interact and experience different listening modes (Figure 2);

II. Interactive Sonic Fashion Library (Figure 3);

III. Sonic Dummy.

Figure 2. Low-tech sound amplifiers

Figure 3. Sonic Fashion Library

Equipment for the installation

1. Shelfs for exhibiting the sound amplifiers;

2. iPAD with headphones for exhibiting the Sonic Fashion Library;

3. 8 loudspeakers, mixer, audio player for a sonic dummy. Big pillows to lie down and listen to sounds.

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Vidmina Stasiulyte, *Sonic Somatic* exhibition view, photography Jan Berg, 2017

Trying it on: searching for emotional fit

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ABSTRACT

This short film explores the area of fashion and aging through sequences that communicate the embodied knowledge and sense of agency a group of mature women (55-75) possess through engagement with the materials and processes of fashion. The film is an outcome of co-creative research into designing for the changing aesthetic and physiological needs of older female consumers. Filmed in a series of workshops, photo shoots and 'trying on' sessions, it conveys the women's experience of wearing different garments and textiles and the sense of empowerment this provides when the physical and emotional aspects come together.

Keywords:
Trying things on; fashioning; embodied knowledge; agency

INTRODUCTION

This film challenges the notion that 'fashion and age sit uncomfortably together' [1] by demonstrating the embodied knowledge and enhanced sense of agency a group of mature women (55-75) from Nottingham, UK, possess through engagement with the materials and processes of fashion and textile design. The film documents selected moments of socio-material interaction and creativity [2] whereby participants demonstrate their experiential knowledge of trying on, wearing and performing clothing in a design space, photography studio and at a fashion salon. The garment prototypes featured in the film consist of digitally printed woven, tie-dyed linen and plain jersey qualities integrated with geometric silhouettes – designed through a collaboration between four researcher/practitioners working with over 40 women from Nottingham, UK, on the Emotional Fit research project [3].

TRYING THINGS ON

The trying on of clothes is generally a private pastime, apart from in the commercial fashion industry where 'fit models' are used or in haute couture where the fitting of garments on the customer is an iterative part of the bespoke design and crafting process.

In *Trying it On*, we illustrate how the deceptively simple act of modelling toiles and garment prototypes reveal significant, but often overlooked clues for designers in the form of visual, tactile and material interactions that extend beyond the scope of trend prediction, size and fit. The film records the researchers and participants sharing the same intimate (physical and psychological) testing space, one that is usually undertaken individually in the changing room or bedroom. The auto/ethnographic approach, whereby both parties overlap in terms of selecting, manipulating and adapting clothing prototypes, challenges the existing fashion system by focusing on 'the ordinary' aspects of everyday life and how these present important continuities of practices for designers to consider [4].

TRYING ON SPACES

Set in the three contrasting environments of the fashion design workshop, the photographic studio and a public fashion salon event, a group of twenty female participants were filmed individually, in pairs and small groups trying on different garments, co-designed for the project. The footage captures some of the intuitive and practical gestures expressed physically and verbally by the women with regard to issues of comfort, fit, pattern and style that are personal, mundane and dramatic. The shift in atmosphere between the divergent spaces is palpable through the distinctive bodily actions performed, in front of a mirror, camera and audience. The captured *fashioning* actions reveal the tacit knowledge that our participants have developed over time through the ways that they explored the aesthetic and 'kinetic dimensions' [5] of the clothing. The recording of trying on things enabled us to scrutinize 'ways of doing' already in the world as starting points for potential new creations [2].

MIRROR

When viewing themselves in the mirror, certain behavior linked to trying on clothes could be pre-empted but were still interesting when viewed as an observer and then as a participant when the process became simultaneously self-conscious and revealing. General actions included checking for ease of fit across the bust, hips and shoulders (using smoothing actions) checking length, front and back view, by turning and looking over the shoulder, however most attention was concentrated on the front view. The versatility of some items (e.g. the Triangle Dress incorporating long

ties) instigated a range of spontaneous styling gestures. These included acts of customization and personalization through wrapping and tying to reveal more of the true body shape, or utilizing the form as an armature to display the full fabric volume and silhouette, while concealing underlying the contours. Other notable actions included pulling at the high, slashed neckline of this dress that was too high (particularly for younger participants) and seeking invisible or misplaced details, such as pockets that were too low or inaccessible to some. Such actions built on the women's socio-material creativity, informed by their 'biographical wardrobes' and the ongoing process of 'making (themselves in) the world', their relationship with 'material tools' and the close relationship between practices of 'continuity and renewal' [2]. The enactment of their individual fashion biographies could be traced through designerly actions to make sense of the evolving 'material artefacts' or 'dress objects' [6, 4].

PHOTO SHOOTS
In two photo shoots (November 2016 and March 2017), the process of trying on prototypes in final fabrics and being photographed in a professional studio elicited different behavior. For the researchers this was an opportunity to view the developing designs objectively from aesthetic and practical perspectives. For the participants it was a chance to try things on in a novel formal setting, compared with the spontaneity of the workshop, and to review how they appeared on screen, in a photograph, and how this made them feel. As explained to the participants, this was not a 'fashion shoot' in a conventional sense, where the model and garment were objectified, it was a research method to provide insights into the fashion process, where they should 'be themselves' and just treat it as another stage in the collaborative design development process. In the first shoot (n=6) we tried to foster a comfortable, informal atmosphere, and as a result the women were pleasantly surprised that despite being 'out of their comfort zone, felt empowered by the experience and pleased by how good they looked in the resulting images' [7].

The film includes clips from the second shoot (n=10), where more participants were able to try on a greater variety of items. Here, the atmosphere was more highly charged, with the women interacting more confidently and naturally with the pieces and each other, with the studio feeling more like a communal changing room, as they dressed and undressed quickly in order to wear an alternative outfit and be photographed again. By helping each other to try on and manipulate garments, such as assisting in tying the Triangle Dress, or reversing a garment to wear the back as the front as the print was considered more flattering, they also mirrored their own preferences and styling needs. Here the meetings between 'body and dress' went some way to transforming the material artefacts into wearable garments, but overall the exercise was still more akin to viewing 'body-sculptures' [6] than realizing

our initial research aim to develop a wearable capsule collection for older women [3].

SALON
In April 2017, the Emotional Fit: Fashion Salon, presented a further context for trying on and presenting the material outcomes of the project to date. The event comprised a film, presentation by the researchers and 'walk through' lasting over 6 minutes. The attendees consisted of industry, researchers, educators and students of fashion and textiles, thereby representing an 'audience with relevant knowledge in the field' [6] to assess the creative outcomes. None of the women had modelled in a catwalk setting before, so this was the ultimate trying on experience, as it involved presenting and performing in public.

The prospect of presenting the garments to a largely unknown audience resulted in the trying on process being thrown into sharp focus. In a final workshop and dress rehearsal, each participant became very explicit about small details that required adjustment, the kinds of accessories that they should wear, hair and make-up – which reflected their anxiety and excitement of performing in public. The footage from the salon shows the fifteen women who agreed to 'model', wearing the garments they had co-designed, tried on and finally exhibited in public What resonated strongly was how some of the women brought the garments to life and were clearly empowered by the sense of agency from being involved in every stage of the fashion design process. By showing fragments of all these stages of materialization, the film highlights the value and significance of participatory research as a co-creative intervention, involving people, materials and artefacts [6], and furthermore, it scrutinizes 'ways of doing' already present in our participants' lifeworlds as starting points for new fashion creations [2]

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Katherine Townsend, Ania Sadkowska, Jim Boxall*, Trying it on: searching for emotional fit***, photography Jan Berg, 2017**

Infinite Play

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ABSTRACT

Infinite play, a performance and video, explores the relation between a garment and its wearer through movement and film. I am interested in the idea that a garment is a friend rather than a commodity. Someone we spend time with and take care of. Someone we love rather than consume.

Notions of becoming and the exploration of a direct relationship between the maker and the matter are at the center of this work. I believe that a shift of focus away from the object and toward the performative is relevant to the context of sustainable practices in fashion.

Keywords

Fashion, movement, kinetics, performance, temporality, sustainability.

INTRODUCTION

For many years, I have been working at the crossroads of art and fashion, employing a variety of media such as photography, performance, video and sculpture. In my participatory performances, the garments I design play a central role as a mediator, blurring the boundaries between audience and performer, and producing physical, sensorial and social experiences. Recent examples are my performance *Time Out*, which was shown during the exhibition *Fashion & Performance: Materiality, Meaning,* *Media* at RMIT Design Hub in Melbourne in 2015[1] and during the performance festival *Do Disturb* at Palais de Tokyo in Paris in 2016[2]. My performance *Salon d'amour* premiered at Natlab in Eindhoven in 2016[3]. In order to get a better understanding of the role fashion plays in society I went back to study and was selected to join the masters program *Fashion Matters* (2015-2017) at the Sandberg Institute in Amsterdam.

Project description

Fashion moves and creates movement. It leads us through films, cities and time periods. Clothing is significant in the negotiation and articulation of identity. It reflects attitudes and beliefs and also creates social movements. Garments move with the body and in relation to the body, as the material folds and relaxes according to the pose and movement of the wearer.

Notions of becoming and the relation between a garment and its wearer are at the center of my most recent work. Infinite play, a performance and video, features a garment made from an unbleached type of cotton common among tailors for the purpose of making prototypes. It is a flat construction with holes that can be modelled on and around the body in many different ways, stimulating the user's imagination and spontaneity. Garment and wearer are

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1 https://vimeo.com/125549683

2 https://vimeo.com/172776454

3 https://vimeo.com/197398678
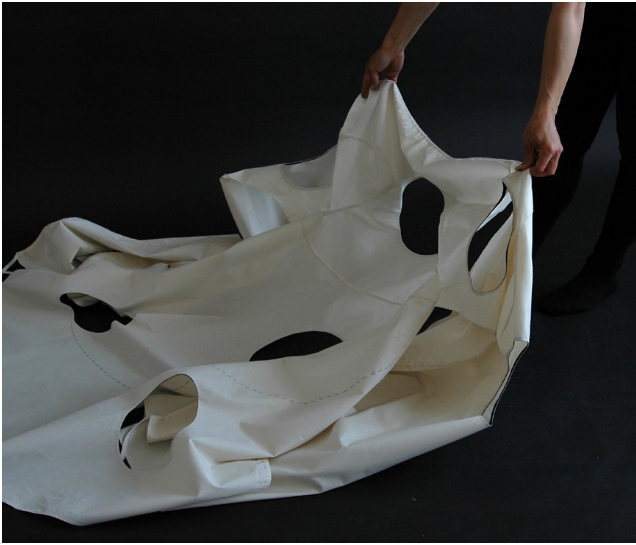
Fig.1 *Infinite Play* - flat garment construction, 2017

involved in a fluid conversation through the folding and unfolding of the garment, the exploration of space and volumes. Each movement is a proposal. There is nothing fixed, nothing right or wrong. This exploration creates a direct relationship between the maker and the matter through the intimate and at the same time social act of dressing. I am interested in process rather than form, the becoming of things rather than a designed surface or fixed

Fig.2 *Infinite Play* - proposition one, performance, 2017

form. I am interested in the movement and the changing itself that is marked neither by a beginning nor an end.

Fig.3 *Infinite Play* - proposition two, performance, 2017

I am interested in the dynamics of fashion and the capacity of a garment to create new relations the moment it is inserted into a situation, to reveal that which was invisible and unknown. For example when the garment is performed in front of a camera, the focus is on the conversation between body and garment. When the same act is inserted into a social context (such as an exhibition), spectators are invited to participate and create their own variations. This produces conversations and creates a dynamic between the audience and the performers.

Infinite Play introduces a kinetic garment that deviates from the silhouette, reveals an inside and an outside, has an unfixed appearance, and focuses on the substance of material relations rather than the aesthetics of the surface. This work considers the interrelatedness of body, garment, movement, space and time itself as material. Infinite play might invite new thoughts with regards to fashion, and proposes that the fleeting and fluid quality of fashion might contribute to speeding up a much-needed change from fast fashion to more sustainable practices.

Margret Wibmer *INFINITE PLAY* exhibition view photography Jan Berg, 2017

Dressing Affectively:
Thoughts on the wearable exhibition as a method of engaging with the spatial potential of dress.

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ABSTRACT

This presentation explores the role of the participatory, wearable exhibition as a method of engaging with the potential of dress and the wearing of garments as an embodied spatial and material practice. Founded on Benedict Spinozia's moist conception of the world in which all things that exist do so in force relations with those things around them, positions the body as a significant spatial, material component of the landscape. The exhibition then becomes a tool for opening a theoretical dialogue regarding the potential of the spatial, material body as a method of self-governed practice.

Keywords

body, landscape, situated practice, space, material, embodiment, participation, exhibition, self

INTRODUCTION

I am giving this talk from my perspective as a landscape architect, researching the material implications of dressed bodies in urban locations.

Over the past decade, I have encountered considerable research and theoretical engagement with dress as an embodied practice. Joanne Entwhistle and Elizabeth Wilson[6] delve into the relationships between dress and the body in some detail. John Flugel,[7] Harold Koda[9] and Umberto Eco[5] all investigate the social and cultural implications of everyday garment wearing in the public and private realms, and others talk of the role of dress as shelter and the list continues.

It seems, however, that there is an aspect of dress that is often overlooked - a material, spatial and voluminous aspect that, simply through 'being' profoundly alters the physical space of the garment wearer and the landscape in and of which it exists.

I posit that the material agency of the dressed body holds potential both for landscape and fashion practice and for expanding the theoretical domain of both disciplines. Today I will speak through the wearable, participatory exhibition as a method of interrogating my own position on dress, and provoking a discourse around the space and materiality of the body.

I will discuss the role of the exhibition in situating the body in and of the landscape, unpacking the reciprocal relations between the body and the environment occurring <u>through</u> dress. I will also discuss the location of the 'self' as a garment wearer and its associated implications for practice as well as the inherent inter-disciplinarity of the material space of the body.

I will draw from one such wearable exhibition I designed, *Affectual Artefacts*, as part of my PhD practice situated at the intersecting boundaries of my own field of Landscape Architecture and those disciplines more commonly associated with fashion and dress. The exhibition was staged at two conferences in place of a formal paper presentation. The first conference, titled 'Making Research, Researching Making' was located at the Aarhus School of Architecture and the second at the Symposium on New Materialism, held at the Victorian College of the Arts in Melbourne. In each case, participatory wearing of exhibited garments aimed to reveal how altering the worn garment would significantly alter the conference landscape. It was hoped that the alteration of the environment would be registered from the perspective of the wearer and those other bodies coming into contact with it. Thus provoking a discourse among the attending design academics regarding the body as a potential material for design in landscape architecture and concurrently situating dress and wearing within a spatial paradigm.

EXHIBITION OVERVIEW

The exhibited work consisted of six textile surfaces, varying in material and form. I have been calling these forms 'garments' although they have no prescribed mode of

wearing and sit somewhat loosely within the definition. Each was created of a different material – leather, silk, spandex, linen, fur or polyester - and was constructed through a generative process of making. This process created extrusions and folds, causing the surfaces to gain volume, to lift off a two-dimensional plane, and when worn, to add a considerable new mass of volume to the wearing body.

Delegates were invited to borrow and wear the affectual artifacts within the durational and geographic setting of each conference. As my contribution to the conference, the exhibition was intended to provoke the same sort of insight and debate as a paper presentation, similar to my talking now. Rather than a verbal 'telling,' the work encouraged participants to directly engage with the process of shifting space through wearing; to generate, submit to and embody the discourse that arose from such engagement, and to develop a subjective and critical position regarding the spatial, material impact of dress on the functioning of urban landscapes.

The work is founded on Benedict Spinozia's monist conception of the world; where he argues that all things that exist do so in constantly varying force-relations with those things around them.[2,4] My particular interest centers on the human body and the notion that if all things in the world exist in relation to each other then the body must also be a significant material component of the landscape, therefore having the ability to alter it and be altered by it.

If we consider the body alongside Joanne Entwhistle's position that public *"human bodies are dressed bodies"*[6] then the *dressed* body not only occupies a social, cultural position in the world *between* other bodies but dress and wearing could be considered as a material of the landscape, when we change that layering we are effectively changing the architecture of that landscape.

THE RELATIONAL SIUTATION OF DRESS

Philosophers and theorists have often considered how the garment and the body corroborate and affect one another. One such example is Umberto Eco's account of wearing jeans which, fitting snugly around the body, *"made their presence felt."*[5] In occupying the mind, the jeans succeed in locating Eco as a jeans wearer, and his account goes on to reflect on the social and moral impact of his garment choice upon his embodied actions, which cause him to *"live toward the exterior world."* What is particularly interesting is how the jeans also cause a shift of his operation within this 'exterior world' and he states: *"I discovered that my movements, my way of walking, turning, sitting, hurrying, were different. Not more difficult, or less difficult, but certainly different."*[5]

Eco's understanding of how his body and the jeans impact each other begins to spatially situate the jeans-wearing Eco in an environment dictated in part by his garments. Though in responding as he does, Eco is also altering his environment. What could have been added to Eco's account is how the jeans also caused particular *spatial* situations, as well as having an impact on the moral and social aspects already discussed. A spatial account of the choice to stand rather than sit might detail the opening of the chair space, the occupation of a vertical standing space, a shift in the level of the wearer's eye in a room and so on. And how does the spatial exterior world push back? With the chair causing him to stand, geographic placement of things causing him to hurry, etcetera.

It is the reciprocal spatial relationship between the body and the landscape that occurs through dress that the Affectual Artefacts, and now the 'Dressing Affectively' exhibition sought to bring into question.

Each garment exhibited had a very different form. Some were heavy, constructed of multiple hides, demanding their weighty presence be noticed similar to Eco's jeans. They also protruded away from the body, causing the wearer to twist and turn in order to be able to move through the crowded conference rooms. One garment constructed of silk chiffon continually caught in the wind causing the wearer to fling up their arms to keep hold of it, and provoking the bodies around to focus attention on the wearer who, for a moment, became a central focus of that landscape. There were other such accounts of wearing though what essentially emerged is the inherent relationship and feedback loop that occurs *between* the body and the environment around.

As such the exhibition located the dressed body not only as a garment wearer but as a contributor to, and as a result of the spatial, material environment.

THE IMPORTANCE OF SELF CONSCIOUSNESS

Wearing the garments and embodying the situated practice, locates the method in question as one engaged with, and stemming directly from the self. This requires, to practice, a level of self-consciousness which the extreme forms of the exhibited garments sought to reveal.

I refer to self-consciousness though Paul Crowther's interpretation. Crowther posits three main attributes for self-consciousness:

1. Attention

2. Comprehension

3. Projection[3]

To be self-conscious is thus to attend, to comprehend and to think about future occurrences. Within the exhibition, immersion and participation intends to bring about self-consciousness. As the participants change their garment layering to incorporate one of the exhibited and exaggerated affectual artefacts, they are effectively bringing *attention* to the dressed self in the landscape and a *comprehension* of the impact the dressed self has in space. While the projected aspect of self-consciousness was (and still is) indeterminable by myself as exhibitor, the idealized

projection returns to focus on the original role of garment wearer in space. In this fold of exaggerated existence, it was hoped the thought and discussion would turn back to the situation of our everyday dress, with the spatial role of *self* in the landscape, as a spatial, material body able to change and be changed by the environment and potentially used as such.

EXPANDING THE DIALOGUE

The exhibition was, at its core, a response to problems I had faced when explaining my research and proposed method of practicing in the landscape through dress to others. Conversations repeatedly ended in a cul-de-sac, debating the coextensive nature of the body and the landscape. The exhibition was developed as a way to skirt around this conversation, situating the body in the environment, and as such opening discussion around what the body can do.

While we cannot ascertain with certainty *everything* that a body can do, as pointed out by Brian Massumi[10], Giles Deleuze[4] and Melissa Gregg[8] among others, by uncovering the body and dress as situated coextensively with the landscape we push the theoretical discussion beyond its classification and situation to speculate on its potential agency, implications and opportunities.

The use of participatory engagement as a departure point for further discussion or speculation is not at all revolutionary. One practice I continually return to is that of German artist, Franz Erhard Walther whose textile sculptures act as mediums to explore the complex realities and subtle nuances of the human body in the world by playing with and altering the relationship between body and things.[12]

In the context of the Affectual Artefacts exhibition, wearing, participation and embodiment sought to situate the body in and of the landscape, facilitating a discussion beyond the dualist debate and theoretical location of the body, to interrogate how and when this body could be utilized as a material and how we might go about engaging it, expanding the disciplinary boundary within which it is situated, be that landscape architecture or fashion design.

MATERIAL PROPERTIES

As the exhibited pieces were worn, material properties of the body unexpectedly began to emerge. Not only its property as a volume and mass impacting space as we have already discussed, but the subtle properties: the form, the movement and force relations. In particular, the rapid mobility of the material body was revealed.

As the affectual arefacts disappeared, born beyond sight on a body, to reappear time and time again for all manner of durations ranging from minutes to a whole day the inherent mobility of the material body became apparent.

Participants arrived at the exhibition space faced with bare hangers because the artefacts were, at that moment, part of someone else's body and had gone elsewhere.

As a result, to Joanne Entwistle's earlier mentioned position that *'human bodies are dressed bodies'* I would also like to add that, within the context of the two conferences at least, the body is also *mobile*.

This disappearance of the body (artefact inclusive), and the complexity of tracking the whereabouts of the exhibited artefacts upon mobile bodies sparked an unintentional discussion regarding the complexities of working with and through the body.

While theoretical discussion and verbal speculation can go far in teasing out the existence of things in the world, the *doing* (in this case, the wearing) allows those unthought-of aspects to emerge, which can have profound impact on the direction of a theory as one reassesses a position in regard to new established knowledge. In this case, the self-determined mobility of the bodies in question added to the notion that the practice wearing to alter space is indeed one to be practiced through selfhood with the power residing primarily with the garment wearer.

THE INTERDISCIPLINARY BODY

Which brings me to my final point, and perhaps the most relevant to my (our) current context within a conference exploring with the edges of the theoretical domain of fashion, and that is regarding the inherent inter-disciplinarily that emerges in working through and with the dressed body as a spatial, substantial and voluminous material of practice.

In offering garments, in inviting participants to attend to the shifts of their spatial, material self and the alteration of their environment we are inherently locating this embodied practice within the overlapping space between landscape architecture, in particular its attention to experienced, phenomenological space[1,11], and those fields more commonly associated with fashion and dress. As the boundary of landscape architecture is extended to consider the body and dress as significant components within its conception of workable materials within the world, I posit that the boundary of fashion could also be stretched; pulled into the vast, reciprocal, spatial and extended realm of the urban landscape and design.

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Alice Lewis*, Dressing Affectively,* exhibition view, photography Jan Berg, 2017

Body of movement

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ABSTRACT
This work explores new ways of bodily expressions of movement as result of the body's interaction with "external" material. It questions the borders of dress and focuses on the similarities between dress as expression of the body and the change in expression that occurs when the body interacts with other objects with aesthetics intent (such as a trail bike). These objects have an aesthetic intent through a high choreographing/instructing value simultaneously as they give the body new tools for moving and therefor lets the body explore itself differently as "form". The work aims to broaden how the body expresses itself through dress and challenge common use of dress as something passive and mainly decorative.

Keywords
Body, aesthetics of movement, instrument for movement.

INTRODUCTION – danced aesthetics
There are many different types of moving, from everyday movement as body language to more controlled forms such as dance or sports. The styles of moving that are present in dance or sports are very clear examples of how the body often let another materiality or object inspire or choreograph the movements. You can have ballet as an example. In ballet, the pointe, creates though its support the possibility of tipping on your toes throughout a performance. The movement the pointe enables is a movement that the body can perform on its own but only for shorter time periods. By introducing the pointe, this kind of movement became dominant for the expression of ballet and also opened up for new movements and development of the art form.

Body of movement explores materiality's at center for both expressions of movements and body as form. It aims to explore the spatial aspects of the body´s movement as foundation for this materiality. Through this work questioning dress as a materiality; how can "dress" express movement rather than be something that is interacted with, choreographed by or simply dominating the body by visually or physically restricting or enhancing it?

It suggests that the aesthetics of the body (movement) should be based on an extended direction rather than the surface of the body pushing the physical boundary of the body. Aiming to express the relation of the different movements of the body (viewing the body as a whole. This to suggest a new aesthetic and materiality of the body, based on and as expressive as the moving body. Further this work provides new ways of moving as the new boundaries also become new place for support.

The body and its movements
As different parts of the body carry different potential for expressing movement. Different parts also provide different relations, on a body the arms have a relation to each other, just as the leg does. This because of their similar behavior and shape. At the same time, there is a relationship within the whole body, as no movement occurs in isolation (Naharin, 2016, Portanova 2013, Breath made visible 2009, Forsythe 2011) but is something continues that creates in-betweens and expresses a whole shape. The clearest way to understand the aesthetics of movement is by focusing on the aesthetics of this in-betweens. Meaning, to focus on not how the arms behave but how they meet with the legs in this "empty space".

The expression of a movement is then centered in the in-betweens as all movements expresses in their relation to each other rather than as independent limbs. Where is the point where the relation of the arms meets with the relation of the legs?
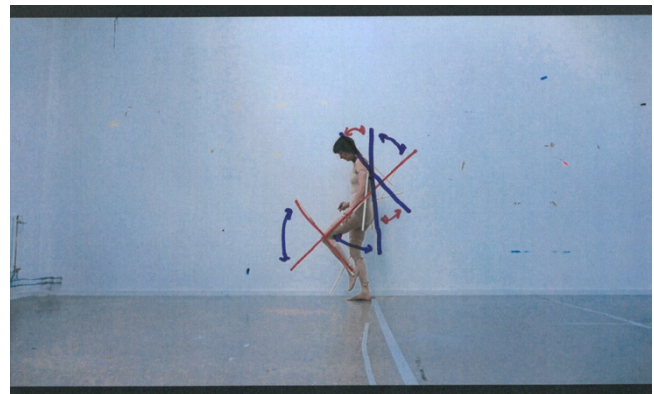
An illustration explaining the angular body.

FORMING (DANCE?) MOVEMENT...

As the body is based on an angular system for creating its movements. The key to access the body's expression seems to be this angular relationship between body and movement. The angle suggests a flexible shape in correspondence to the form of a body that provides lots of knowledge relevant for many fields. On the left you can see the first version of the system. It is based on that the same relational aesthetics that already is key for the expression for movement of the body but with extended space. Here, the "new limbs" are in extension creating a relation to the next limb. Meaning that the forearm is in relation to the upper arm and that the movement of the forearm effect the space of the upper arm. Or when moving the head this movement effects, in this case, the spine as when the head changes angle its continues movement changes angle in relation to the spine. This system creates new points of the body that can be relationally understood as levels of both the actual body and the suggestive body space as extended joint system. The system is forming the movement in relation to the body as it expresses when the body is symmetric or asymmetric as well as follows the "shape" of the body, as it expresses the body as straight and the complexity of its bentness. Compare to the tutu that at all times put the body under its symmetric expression or the body stocking that at all times leaves the body neutral this system opens up for another type of bodily expression.
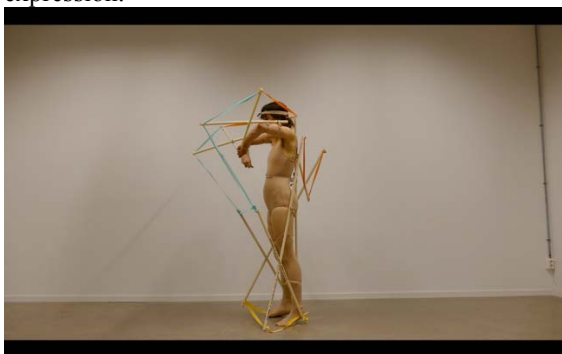
The form 20f another design of the form.

The form 20d, the angular body continued spatially and expressed as relational aesthetics of the body.

The system does not extend the traditional end points of the body (extending the arms, head, legs) in continuous direction. Nor does it divide the body into upper body and lower body by the practicality of hanging things on the shoulders and hips or explores its surface. Rather looks on the internal relationship and creates a shape that changes in shape and scale at the same time as the body. The expression is expanding it into a system of "movements" it is no longer about the arm but about what the arm does it is about what the arm does in relation to the other parts moving. When adding the elastics, the in-between and relations be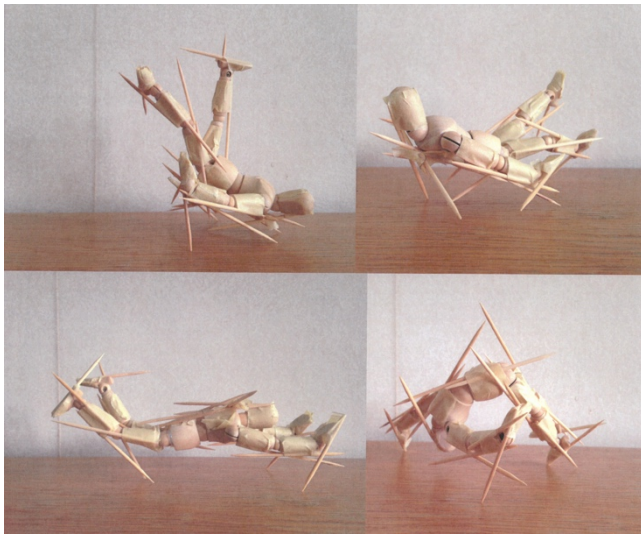tween the different parts of the (spatial) body is linked. Basically the way the elastic is arranged is providing knowledge of the relations as well as providing the expression. When changing the elastics the expression changes but the keeps its behavior

The angular body continued spatially and explored as instrument for movement.

NOT JUST A DRESS…

This angular extension does not only suggest an expression of the aesthetics of the moving body. It does also provide a new way of moving and there for makes it able for the body to express its self differently as form.

For long we have been using musical instruments to transform the sounds of our body into a more complex or only different sound. In some cases, the fingers ability to perform sound is changed by e.g. a guitars.

This design of movement could be compared to a musical instrument as it in one sense is an "instrument for movement" that is under development. This work also have relation to the instruments for sports like skates and bikes. The bike gives new possibilities of movements. The clearest example of this would then be the efficiency of moving. Another one is more consented with exploring the potential of this instrument. How is it possible to move with the bike? Just as Danny MacAskill, trials cyclist, is exploring the potential of the bike rather than the efficiency. Here the function of the bike is providing a potential of new ways of moving, e.g. jumping on rocks, balancing on one wheel backwards, biking on a hay silage. New way of moving, does then provide new aesthetic potential for the body.

This specific this "instrument for movement" is designed with focus only on the aesthetics. Fist it expresses the movement and then the body explores the new ways of moving that the form provides, allowing it to express itself differently. This new materiality of the body provides both new aesthetics, functions (new ways of moving and resting). Just as other instruments it requires both effort and skill to use.

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Conversation Pieces

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ABSTRACT

Conversation Pieces is a series of objects/garments/accessories/texts that investigate the potential of the fashion article as a discursive object, dress practices as dialogues and language as material. It explores how 'conversations' take place on a range of different levels from symbolic (within the design process or in the use or application of an object/garment) to physical (between multiple wearers, viewers or makers) to verbal exchanges. The exhibition of Conversation Pieces for the EEM conference will consist of 4-6 garments/objects arranged in such a way that they can be interacted with/touched/worn etc. – using the platform to engage the conference attendees in some of these conversations or exchanges.

The project asserts the idea that fashion is inherently a collective or collaborative practice. It addresses the reality of clothing production, during which any garment passes through multiple hands and so is the product of a form of collaborative design whether or not all collaborators are willing or visible (Latour, 2008). It challenges the still pervasive role of the designer as the sole creator of the fashion object (Kawamura, 2004). It proposes the fashion object as both the product of and the instigator of conversations. The project thus aims to begin to reveal the "craft of collaboration" and the acknowledgment that working together or collectively requires skills that need to practiced and cultivated (Sennett, 2012).

In this work tools and techniques are employed and subverted that are both related to text and textile. Text related methods include the act of 'highlighting' specific important lines of text when reading in order to make them stand out as well as the formatting of the dictionary definition in relation to experiential connotations of words. Methods related to materiality include the act of unpicking along original seamlines to 'open up' the garment as well as the tacit skills of 'wearing' and 'dressing' or appropriating garments for other uses/ways of wearing than those for which they were 'designed'.

Visual Example: Conversation Piece # 1 documents a conversation between the sleeve and the scarf using their definitions, functions and everyday adaptations as a tool for 'translation' – or the generation of a kind of 'design dialect' (see attached images). The remaining Conversation Pieces are in development stages.

Keywords

Fashion, conversation, text(ile), dress practice

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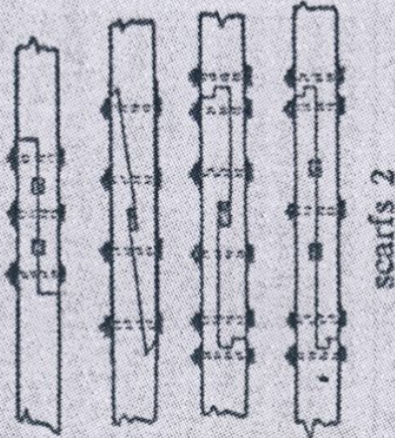
conversation
/kɒnvəˈseɪʃ(ə)n/

noun
noun: **conversation**; plural noun: **conversations**

a talk, especially an informal one, between two or more people, in which news and ideas are exchanged.
"she picked up the phone and held a conversation in French"

synonyms: discussion, talk, chat, gossip, tête-à-tête, heart-to-heart, exchange, dialogue, parley, consultation, conference

Origin

LATIN → LATIN → OLD FRENCH → ENGLISH → conversation
conversari → conversatio → converse

Middle English (in the sense 'living among, familiarity, intimacy'):

Ruby Hoette*, Conversation Pieces* **evolving documentation at conference and floor talk, photography Jan Berg, 2017**

Formless

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ABSTRACT

The showcase presents pieces from my on-going research on form in fashion design. Operating in-between the scale of the body and the scale of the interior, the work revolves around two questions: 1) the nature of the human form, and 2) the function of clothing to communicate this nature, which will lead us to the 3) factor, the illusion caused by the dressed body.

Dressing is revealing by concealing, suggesting by plotting - dress turns fiction to reality through it's structure as re-conforming, defining, the plain body. The derivation for the sculptures comes from the images of the body dressed in abstract form. Points and lines where the body meets the fabric create the form. If these points and lines are mapped into a sculptures, leaving the rest out, these sculptures would only work as an expression of the body when dressed. The abstract form would work to define the sculpture as a body. Through the form operation ”Distortion”, dress here turns fiction to reality through its structure as re-conforming, re-defining the plain body. The body turned-dressed sculpture in the exhibition manifests itself as an abstraction, disfigured and dismantled, still, reincarnated as a body – a dressed body. The limits of the body are given by the limits of the dress. The type of material suggests formal wear - archetypical fabrics that govern the definitions of dress as well as that of the body. The dress formed around the sculpture then expresses the unity of the body, but expresses more than that body - it portraits a dressed body. The limits of the body is given by the limits of the dress. The form creates what Bataille (2000) would call "Informe" or "Formless" - the operation where both form and content are displaced.

Viewing the piece from all angles, the three-dimensionality of the pieces opens up questions of what forms are regarded as bodily – and which are not. This to achieve new visions of the body and new thoughts on the production of form within fashion design.

The exhibition is comprised by dressed sculptures positioned in a space that allows for people to pass in between them through a space. The sculptures are exhibited as a group but will manifest individual features - relations to the surrounding space, sizes and forms.
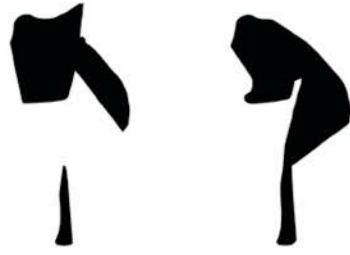
Keywords

Human form, body, interior, clothing

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fig. 1

Sara Lundberg*, Formless,* **exhibition view, photography Jan Berg, 2017**

SONIC BODY AND SONIC SPACE

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ABSTRACT

Fashion design as a field and fashion design methods are mostly based on visual values and expressions. This paper investigates alternative non-visual perspectives on fashion design aesthetics. The study on sound ontology in fashion, for example, is limited and presents a new and interesting potential territory to be explored. The main aim of this paper is therefor to explore 'sonic fashion' through speculative design research methods. *The Soundtopia* – a speculative fashion design method is presented as the introductory sonic explorations in regards to *sonic identity*. The paper introduces sonic qualities and sonic identities and suggests the new possibilities for alternative forms of design-thinking to open in research programs in non-visual aspects of person-object relationships in design.

Keywords

Non-visual aesthetics, sonic identity, sonic expression, design-thinking

Sonic Identity

The understanding of the Self comes often from binary systems constructed of personal reflection and opinion of others. Clothing as a form of visual communication is a powerful means of making statements. Everyday we make decisions about the social status and role of people we meet based on what they are wearing: we treat their clothes as 'social hieroglyphics' [1]. Clothing, as one of the most visible forms of consumption, performs a major role in the social construction of identity. Dress is an embodied practice, a situated bodily practice that is embedded within the social world and fundamental to micro social order [2].

However, although sound, touch, and smell are elements of clothing, the visual culture is predominant in the fashion as a material culture and fashion is understood as a system of visuals. If the hierarchy of senses would change? If the visual value would change to the sonic perception? If we could not see, but only percept the world and self by hearing? If our garments would become antennas? How do we construct our *sonic identity*?

Unlike the sense of self-received through ocular reflection, the *sonic self* is always already mobile, ephemeral, and spreading outward whilst incessantly referring back. It is an echoing 'image' felt throughout the body rather than one perceived externally as visual mimesis.

The investigation on the *sonic identity* as another form of Self-construct is made. The topic is explored during three speculative fashion design workshops with students and people who have different seeing abilities. The exploration is presented in this paper.

Sonic Object

The notion of sonic object was the focus of the first theoretical concerns of concrete music [3]. Pierre Schaeffer is the first to have conceptualized the sound object as a purely intentional object as opposed to the physical object, the emitter-object. Michael Chion defines this Schaefferian sound object as any sound phenomenon or event perceived as a whole, a coherent entity, and heard by means of a reduced listening which targets it for itself, independently of its origin meaning [4].

The notion of sonic object implies not only an awareness of the perceived object, but also of the perceptual process, which gives this object to perception. Schaeffer starts by remarking that the object usually appears in language, classical or colloquial, as vis-à-vis of the subject: the object of one's concerns, hatred, or studied; an object is any point in the world to which an activity of consciousness is applied. It may be an ideal object, existing in consciousness only, such as a logical proposition, an abstract category, language, or even music when considered independently of its concrete realization [5].

Fashion objects are very much based on visual expression: real object (clothing), representation (photo / video), and text that describes particular clothing. Language could be visual (written text) and sonic (spoken text). Sound of clothing (wearing, moving, touching) is a sonic identity of a garment / accessory / shoes or any object we wear. The sonic aspect is not often considered. For example the art installation by Kosuth consists of wood folding chair, mounted photograph of a chair, and photographic enlargement of the dictionary definition of "chair" [6]. He is showing three concepts of the same chair: language, real object, and representation. The forth form of possible concept (sound) is missing. There could be added a mode of interaction – sound of folding / sitting on the chair. This missing aspect inspired me to think on sonic identity of the objects and investigate the non-visual aesthetics of design objects.

Sonic Body and Sonic Space

Clothing is generally considered to be soundless. They don't make sounds when they are without a body that is interacting with them (e.g., hanging garment in the closet, folding pants, etc). Clothing starts to make sounds by interacting with a human body, when we wear them, scrunch or undress them, and etc. The interaction is based on touch and movement. This kind of state could be called as a *becoming-state*. A becoming-state of an audible object: to be determined how it becomes an object from inaudible to an object that produces sound. The haptic and kinetic interactions of human body empower the clothing to become a sonic object and create the sonic space around.

Moving clothed body becomes a sonic event. If we attach e.g. a sounding object/accessory to a moving body the sound

extends it. The attachable sounding object is amplifying and choreographing the movements differently; the bodily rhythms become an echo of a particular sound.

The artwork *Ukiyo* by artists, composers, and designers Michele Danjoux and Johannes Birringer is a great example how sounds are used in a creative way connecting body and movements [7]. This choreographic installation is fusing dance, sound, design and digital projections together (Figure 1). Attention is drawn throughout the sounding wearables that open up a new dimension of a moving clothed body – *audial space*.

Figure 1: Speaker Woman, Ukiyo by Michele Danjoux and Johannes Birringer, 2009

Somatic Costumes by artist Sally E. Dean is an interesting example of bodily extensions [8]. Her workshop *Somatic Costumes* is also as the educational tool and possible *wearable extensions* for a moving body. Sound that plastic bags make is additional invisible extension of a body that interests me (Figure 2). *Sonic Costumes* became as an inspiration for my own speculative workshops on sound that are presented in this paper as a fashion design method.

SPECULATIVE DESIGN METHOD FOR FASHION

The speculative design explores vital questions of how designers can use fiction and speculations to help us imagine sustainable futures and create new thinking by

Figure 2: Somatic Costumes by Sally E. Dean, workshop, 2014

design. When Dunne and Raby insist that design has a unique and much-needed contribution to make of enhancing our future capacities, they mean mostly product design. Speculative design method as the provocation for changes in the fashion design system and education are not often used. It should be an update to the education program of fashion design with speculative methods and studies. New topics as sonic identity should be brought to fashion education that empowers to design more sustainable futures. The speculative design workshops *Soundtopia* are based on future sonic expressions in regards to sonic identities and sonic bodies. Sound becomes a fundamental and dominant form of representing Self.

Sonic Utopias

In this paper the sound and *Soundtopia (Sonic Utopia)* is presented as a form of design-thinking. This speculative design method works very well as an introduction to a sonic discourse in fashion as it might seem challenging to shift our focus from visual to sonic perception. The method was explored during three speculative fashion design workshops based on sonic possibilities for future: (1) Exotic Matter; (2) *Soundtopia: Possibilities for Future Sonic Body and Behaviour I*; and (3) *Soundtopia: Possibilities for Future Sonic Body and Behaviour II*.
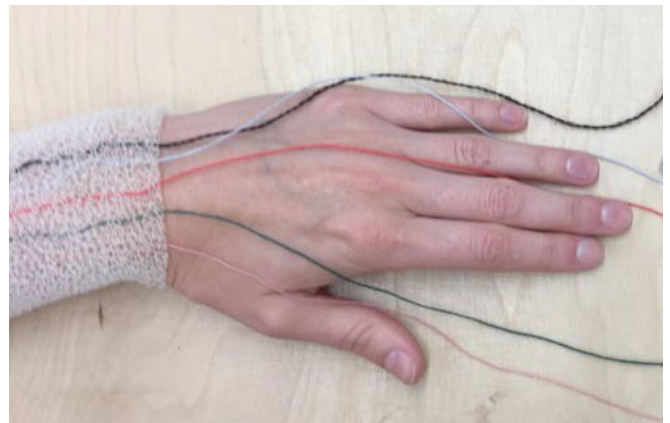
Figure 3: Making a Prototype of Ultrasonic Fabric, workshop "Exotic Matter", Design Research Lab, Berlin

Workshop 1. Exotic Matter
Participants: PhD students (including me)
Lead: Clemens Winkler and Lukas Franciszkiewicz
Place: Design Research Lab, UdK, Berlin
Date: October, 2016
Type of collected data: photos, gifs, written texts

During the workshop *Exotic Matter* at University of Arts in Berlin participants (including me) developed an unknown property for future materials. Participants created speculative gifs (graphic interchange format) about imagined property of textile that is linking with our own research projects. I created the idea of *ultrasonic property*: by wearing ultrasonic fabric blind and visually impaired people could locate themselves in the space. While interviewing people who has visual impairment a few months before the workshop, I gained useful knowledge. People who use blind sticks for finding the

obstacles, said that the most important is to get rid of the white stick and any other sounds they emit. That is why I was thinking about "silent" ("muted") expression of sound. Bats are using ultrasound for echolocation, so I combined this knowledge and used for my prototype. The ultrasonic fabric should scan the surrounding and send the feedback as tactile vibrations, which would inform about the obstacles in the surroundings. I presented this speculative idea during other workshops; it is a design-thinking example that I use for introducing the possible sonic properties for future fashion (Figure 3).

Workshop 2. Soundtopia: Possibilities for Future Sonic Body and Behaviour I

Participants: 4 participants (blind people)
Lead: Vidmina Stasiulyte
Place: Vilnius Academy of Arts, Vilnius
Date: 22nd October, 2016
Type of collected data: photos and audio recordings

Before this workshop, I collected various materials that make sounds: fabrics, accessories, fastenings, etc. The topic of the workshop was based on sonic identity, which is very important for blind people. During the workshop at Vilnius Academy of Arts we explored and created sonic possibilities for future identity and sonic communication with regards to the clothing. There were four participants who are blind and one assistant who helped me during the workshop. Participants were creating their own sonic utopias – sonic collages from various materials that I collected (Figure 4).

The importance of identical sound was highlighted. It was suggested the inspiring idea of future identity expression with sounds. The *wordless* communication is not possible for people who are blind in daily life, e.g. they wish they could feel the presence of a person in the room. They can't communicate without speech, for example, they cannot register a blink of an eye or smile. One of the sonic utopian possibilities was to wear an identical sound, that you could recognize a person not by their voice but by personal sound.

Figure 4. Making Sonic Collages, workshop "Soundtopia: Possibilities for Future Sonic Body and Behaviour I", VAA, Vilnius

During this workshop the main topics on the *hypersonic sensation* and *wordless communication* were investigated. I gained inspiration with regards to my research and the methods I am developing. The collected opinions and recorded data helped me to build the categories for my own ontology for sound in fashion design and investigate this topic further.

Workshop 3. Soundtopia: Possibilities for Future Sonic Body and Behaviour II

Participants: 9 B.A. and M.A. students
(costume/fashion design)
Lead: Ph.D. student Vidmina Stasiulyte
Place: Costume Department at UdK, Berlin
Date: 24th-25th November, 2016
Type of collected data: photos, audio and video recordings

I gave a two-days hands-on workshop for costume (4) and fashion design (5) master students from UdK and Weissensee**.** The workshop "Soundtopia: Possibilities for Future Sonic Body and Behaviour II" was focused on the non-visual value: sonic expressions. Students were using speculative design methodologies for creating future visions based on different sonic categories. During the workshop students created their own speculative scenarios and suggested different possibilities for future sonic fashion and human behaviour.

At first I gave presentation on my research, introduced to my Sonic Fashion Archive, and Sound Ontology (1 hour). Then students had the opportunity to ask questions and we had a discussion. After a break we went to the costume wardrobe (at UdK Costume department) where they chose several clothing according to sound as opposed to visual aesthetics. Later students presented what they collected and explained why. We discussed the value of sound. From this wide topic we moved to more personal ones: we talked about individual sounds that we wear in our daily life and how they form our identity. Every student brought clothing/accessories/shoes samples that they wear and explained why they liked the sound. After everybody introduced their sonic identity, we had a fruitful discussion and students started to form into two groups: those who preferred to isolate themselves from sounds and those who like to generate sounds. Students decided to work with two different categories of sound (*amplified* and *isolative*) and made two working groups: *Homo Isolator* and *Homo Amplifier*. Students from the group *Homo Isolator* were recording different silences at UdK (studios, corridors, kitchen, etc.) and experimenting with isolating properties of fabrics/clothing. I liked the concept of isolating self by wearing amplifying sound(s) (Figure 5).

The group was exploring different intensities of isolation: full isolation and semi-isolation, when using a filter or an open form. This kind of *semi-isolation* could be used when you don't want to fully isolate yourself from the surrounding. Their future scenario was based on isolation, because they thought that "the world will become more and more noisy and unhealthy, and we will need to protect ourselves by wearing isolative accessories and clothes".

Students from the other group – *Homo Amplifier* – were creating sonic sketches of future steps and behavior of moving. They did an ethnographical study on the relationship between steps and identity by recording different sonic sketches. Students analyzed how a person (the body movement) is influencing the sound of shoes.

The group was recording walking sounds from four different perspectives: a. all participants walking barefoot and socks, b. participants walking with their own shoes, c. the same person with different shoes and d. different people with the same shoes.

Their future scenario was based on future steps. They made a sonic sketch of a person moving with rollers and stated that "the speed and way of walking will change and we won't have stepping sounds at all. There will be sounds of fast moving, merging in the space".

At the end of the workshop both groups gave presentations on their topics and we had a discussion afterwards. The first group *Homo Isolators* were surprised that there is no silence and that the silence in different rooms was so different. The different intensities of isolation (full and semi) were an interesting finding for this group. The group *Homo Amplifier* developed an interesting sample of the relationships between identical walking and shoe sounds. They discovered that there are more sounds involved (e.g.: frictional sounds of wide trousers, when the person is walking).

During the presentation this group conducted a test: they asked us to guess the sounds of shoes and identical sounds. It was difficult to do this, although the participants from this group knew all the recordings, we could not guess. The speculative design method based on utopia inspired students to open up and experiment, to imagine the future with or without sounds. I was impressed by the student's ability to work so professionally in such a short amount of time: they managed to do many interesting sound recordings, high quality images, and compared and analyzed data they collected during the experiments.

Figure 5. Experiments with isolative sound category, UdK

DISCUSSIONS AND CONCLUSIONS

The sonic identity is a form of Self-construct that has a big potential for investigating fashion as sonic fashion. The sound is invisible, ephemeral, and spreads to all directions. Moving clothed body with attached sounding object becomes a sonic event and extends the body in the space. The new dimension – audial dimension – is added to the identity of moving body.

The speculative design method *Soundtopia* works very well as an introduction to the sonic perception and sonic value. Although the sonic expression is challenging to work with, especially in the field of fashion, the potential for creativity and new methods finding is there. The shift from visuals to sonic perception open-up students to improve their understanding on non-visual aspects of fashion.

By using a speculative design method participants of the workshops were inspired to experiment and speculate of future possibilities for sonic fashion. They found out interesting aspects of possible future sonic identities, such as a form of semi-isolation and merging digital sound of movements instead of sounds of steps. The non-verbal communication, which blind participants were working on, proposed the functional use of the sonic identities' concept.

Looking at the experiments and artifacts created by artists, designers and myself there is clearly a potential in the sonic identity and it is worth to investigate it further.

ABOUT THE AUTHOR
Vidmina Stasiulyte is doing a practice-based research in the field of fashion design that is based on sonic value and sonic identity. This new field of investigation in the non-visual aesthetics of fashion is unique and has a big potential for establishing a program on Sonic Fashion.

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Mind Making

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ABSTRACT

This paper explores the imagined, un-made and un-formed design ideas that 'exist' immaterialized in the cognitive space of creative practitioners. Of particular interest to this research are practitioners who are living and working with a chronic illness. These individuals face a distinctive set of challenges and methodologically must find ways to remain connected to their practice and processes. At times, often due to illness, the body calls for rest and stillness. It is proposed that this cessation of practice, or 'stillness' is not static but a site where another form of immaterial making can occur. The poet T.S Eliot in his work 'Burnt Norton' has articulated this state of 'stillness' beautifully.

"At the still point of the turning world...there the dance is, But neither arrest nor movement. And do not call it fixity, Where past and future are gathered" (1)

Keywords
Stillness, Incorporeal, Imagination

INTRODUCTION

The process of working creatively can be understood as a phenomenological experience where the body is interconnected to materials and form giving. Proprioception, kinesthesia and the senses further define this experience as one of necessary corporeal engagement. This research challenges and extends this paradigm by suggesting that making and form giving can occur without a material outcome. It is proposed that even in the absence of a tangible outcome the practice of 'mind making' can have positive implications for the creative practitioner. To situate the cognitive space as a site for making and form giving knowledge from neuroscience and creative practice will be connected to discuss opportunities and implications further. This research acknowledges the contradictory use of the language 'making' and 'form' without tangibility and proposes a further delineation will be evidenced in the research findings.

The first methodological approach of this research includes a study of the unique work methods of creative practitioners diagnosed with chronic illnesses. Through interviews, questionnaires and studio visits it was revealed that many of these practitioners, due to their compromised bodily states, undertook much of the planning and developing aspects of their creative projects during physical stillness. Some participants explained that they would lay in bed thinking about the materials in their studios and form them in their minds. They explained that this was an important exercise for them as creative practitioners and as individuals with illness. Whilst creative process incubation is not remarkably novel, the difference evidenced in this group was the therapeutic and emotional gain delivered from this 'imagined' and 'immaterial' form giving and making. The effect of these processes repositions what was intangible to something now measurable.

Secondly, a mixed-method was employed combining fashion practice based research and auto-ethnographical analysis. Form giving in the imagined and cognitive space was further explored though a series of creative projects using my own experiences of chronic illness and garment making. Findings in these projects suggested that I could remain connected to the task even in states of bodily stillness, when unable to engage in garment making due to illness.

This research builds on knowledge in the areas of materiality, phenomenology, design processes and design thinking. Also, knowledge presented here extends thinking relevant to virtual reality technology applications. Out of body making or transcending bodily limitations demonstrates ideas brought to the fore by technological singularity theorists.

CHRONIC ILLNESS AND CREATIVITY

Diseases such as Chronic migraine, Myalgic encephalomyelitis, Fibromyalgia, Major depressive disorder, General anxiety disorder, Bipolar disorder and Chronic pain conditions are of keen interest to this research. Patients with these diseases will often experience a series of debilitating and fluctuating illness symptoms that are a threat to their 'bodily integrity and functioning which interferes with interpersonal relations with the world around them' (2)

It is important to consider the 'insidious onset' of chronic illness. Non- communicable diseases do not 'break-out' they 'creep-up' (3) Therefore individuals must continuously construct new ways of being and knowing of the world. Chronic illness can be defined as: 'A disease or injury that has lasted more than 6 months and has caused an individual to significantly alter his or her day-to-day activities.' (4) The overall experience of illness can lead the way to new comorbid conditions such as situational depression and anxiety as previous capabilities degrade and future plans must re-adjust.

The relationship between illness and creativity has been widely documented, particularly cases of mental illness, brain damage and neurological disorders such as epilepsy and migraine. Existing literature has placed an emphasis on representational or 'inspired' creative practice. This focus on impairment manifestation neglects the importance of the *lived* experience of the creative practitioner in the process of making.

Recent research into schizotypal mental illness suggests that increased creative achievements are due to a reduction in latent inhibition and an inability to disregard irrelevant stimuli to prevent sensory overload. (5) The formation of associations between unrelated or irrelevant stimuli caused by cognitive dysfunction may enhance artistic behavior. (6) To simplify, artistic achievements of those with neurological disease are commonly analyzed in the context of cognitive impairment and are representational of function loss or change.

"Sometimes creativity is lost through disease and sometimes it is modified and occasionally, though more rarely, it may be enhanced or augmented." (6)

STILLNESS

This paper proposes that the 'still' body should not be thought of as inactive in the context of creative practice. Two concepts from neuroscience will be introduced to further explore this claim. Firstly, 'Mirror neurons' are a class of visuomotor neurons that 'fire' or discharge during the "Execution and observation of goal-directed motor acts." (7) To clarify, mirror neurons respond to both active participation and passive viewing of an activity. Secondly, 'Motor imagery' can be described as "A conscious simulation of one's own actions." (8) Almost like an internal cognitive rehearsal of physical actions, motor imagery has been "demonstrated to activate motor cortical areas similar to those activated in the actual execution of that movement." (9)

Mirror neurons may be a form of associative learning forged through sensorimotor experience. (10) Observed in primates, and thought to be an integral component to their social abilities. (7) In humans, their existence and hypothesis of development (10) are still highly contentious. From a creative practice perspective mirror neurons have been discussed widely also, particularly in performative disciplines such as dance. In a seminal collaborative paper (11) between neuroscientist Vittorio Gallese and art historian David Freedberg the connectivity between mirroring mechanisms and visual art have also been explored. The abstract paintings of Jackson Pollock were used as one example, explaining, "Viewers often experience a sense of bodily involvement with the movements that are implied by the physical traces." (11) It is believed that this reciprocal process is an embodied simulation and that our brains are reconstructing actions through observation.

Whilst mirror neurons rely on some form of external stimuli, Motor imagery can be enacted with the use of our own internal stimuli. The imagination is powerfully complex and a full exploration of its capabilities is beyond the scope of just this paper. What will be focused on is its ability to simulate acts and outcomes independent from actual physical or tactile environments. (8) Imagining actions that you may or may not intend to execute have been identified as a 'covert stage' that includes a "representation of the future, goal of the action, the means to reach it and the consequences on the organism and the external world." (12) The conscious simulation of actions, being 'motor imagery' is an "internal rehearsal of movements."(8) It has been postulated that these internal covert actions "are in fact actions, except for the fact that they are not executed." (12) This hypothesis aligns with the thinking proposed in this paper and suggests that idle bodies are not always 'still'. Movement may be occurring internally through the observation of actions (mirror neurons) or by imagining undertaking actions (motor imagery). Cognitive functions are dependent on the specifics of the creative acts themselves but it is believed that motor imagery in particular is more closely aligned with the central postulation of this paper.

METHODOLOGY

The experience of creative practitioners with chronic illnesses was explored by using a mixed methodology informed by social science and creative practice.

Participants sought for this study were individuals who had been diagnosed with one or more of the following chronic illnesses: *Chronic migraine, Myalgic encephalomyelitis, Fibromyalgia, Major depressive disorder, General anxiety disorder, Bipolar disorder or Chronic pain.*

Participants were recruited through online social media. An advertisement poster was shared on relevant pages and groups for 'artists with illness'. The Human Research Ethics Committee at RMIT University approved this study.

Participants were required to be between the ages of 18 and 65 and working in a creative practice to some capacity. This meant that practitioners working part time, full time or hobbyists could be recruited. Practitioners came from a variety of disciplines and identified as being: *fashion designers, musicians, textile designers, graphic designers, literary artists and visual artists.*

Firstly, an online questionnaire was sent out to those involved in the study. This had been developed and distributed though Qualtrics. Questions were formulated to understand participants experience with illness and how they undertook various tasks in their practice. For example, it was of interest how many hours a week they are able to work creatively and if they are able to work while unwell. They were also asked if they had developed any unique methods to remain productive in their creative practice along with a survey to gather details specific to their illness diagnosis. Embedded into the questionnaire was a question set from the 'Revised Illness Perception Questionnaire' to provide an assessment of the following components of illness representation: identity, consequences, timeline, control/cure and cause. (13)

To further unpack the questionnaire, a series of in depth semi-structured phone interviews were carried out. Conversations ranged from 30-45 minutes and whilst an interview schedule was formulated, it was not adhered to in any order. Themes were addressed as they arose in a conversationally manner to not overly formalize the relationship between interviewer-interviewee. The open structure of the interview allowed participants to describe their experiences of daily life and creative practice and make linkages between research themes. Generated data was transcribed in-verbatim and analyzed using "Grounded theory" (14) an iterative process where concepts become richer and are developed through methods of analysis. (15)

Secondly, a creative practice based project was carried out using my own (sick) body and experience of chronic migraine disease. The relationship between my (fashion) practice and body was reflected on during states of illness and wellness while working and while attempting to work. I used an auto ethnographic methodology within this project to capture what was happening cognitively, emotionally and physiologically. The importance of placing myself in this aspect of the research is affirmed by understanding the need for interconnectedness between research-researcher. "I cannot understand the function of the living body except by enacting it myself, and except in so far as I am a body which rises towards the world." (16)

LOOKING IN – REFLECTIVE PRACTICE

My *lived* experience of chronic migraine disease informs many aspects of my creative practice as a fashion designer. Migraines are a debilitating neurological condition further confounded when presenting as 'chronic', defined as 15 or more days affected by headache or migraine a month, 8 of which must be migraine. (17) When living with a chronic disease you are in constant negotiation with your body and may experience a daily reinterpretation of goals and abilities through an erosion of fixity. Long term illness has made me more fluid and adaptive through the development of strategies in daily life and creative practice to remain functioning despite my symptoms.

My illness journey began at the age of ten when I was diagnosed with episodic migraine disease. The illness remained manageable until I was in my 20's. As I was in the midst of launching my first collection as a fashion designer the migraines became chronic. The experience of illness was subsequently entwined in my experience of being a fashion designer. Ways of working, making and ideation fed directly off my state of being. I integrated these experiences into my work thematically and conceptually. I worked on my first collection from a hospital bed while I was connected to intravenous medications to constrict the vessels in my brain and stop the attacks. Retrospectively I believe that engaging in this act of making was not only cathartic but that it also helped me remain connected to the world and connected to my identity. My perception of illness and bodily chaos was closely linked to my ability to create and to be productive.

As I got to know my new state of being, the state of illness, I continued to work creatively and launched my first collection in 2011, 'Riding with the Storm Clouds.' The neurological underpinnings of the disease 'inspired' this collection. The process of designing and making gave an opportunity for critical reflection of my physical condition. Thematically the message of the collection aided me in accepting the importance of relinquishing control in some aspects of my health journey. Retrospectively I now understand that I was taking the first steps to learning about my body through making, materiality and reflection in the context of fashion practice. As I continued my health journey, I progressed from a classic diagnosis of chronic migraine to 'complicated' that included episodes of hemiplegia – a loss of sensation and strength to the left side of my body, that still remains. While frightening and 'stroke like' it was not fatal and I continued to learn to be in a state of connectedness with my body. Reflection played a substantial role in understanding these changes, mentally and physically.

Recognizing the interconnectedness of mental and physical states was the next stage in my recovery. During the tactile state of handling material I reconnected with the sensorial

aspect of making. As Merleau Ponty states, "The body is our general medium for having a world." (16) It was through this body that I came to understand that making was far deeper than cathartic, the *lived* experience of making let my body flow into the material and the material to flow through my body. As Shusterman confers, "As art cannot be created or appreciated without using our bodily senses, actions, and experience."(18) He further articulates that our body, "the fundamental, indispensable instrument or medium through which we perceive, act, and live this life on earth" (18) must be understood. This research proposes that bodily and worldly knowledge can be deepened though creative practice.

Worldly knowledge or 'being in the world' (19) can be understood as a form of knowledge resulting from engaging in process and handling. Martin Heidegger argues that we gain a deeper understanding of the world through the handling of materials. In this 'knowing' we are not detached beings but active participants with the practical dealings of the world. (20) This practical engagement is "at the heart of all thought and intentionality." (20)

The collection that followed: 'The Recovery' 2012 further explored the changing bodily states of my illness. This collection was an attempt to ascertain the temporality of the *dis*-ease experience. The permanence of chronic illness is very difficult to accept and stages of denial are commonplace. Maintaining a sense of self is crucial in illness perception. Unfortunately "Little is known about the strategies that individuals use to manage and sustain their sense of self in face of neurological illness." (21)

A project:

As part of the greater doctoral research being undertaken, *Dis-ease State: Illness embodiment in creative practice*, several practice-based projects were formed using my own (sick) body. I worked in my studio during states of illness and wellness and used diary methods to capture the sensorial, cognitive and emotional aspects of engaging in processes of making. It was proposed that processes of making give an opportunity for critical reflection on my internal bodily states and the relationship to my practice. This project recognizes the body as a site for active perception and subjectivity. The body is not only a tool for creation but also an expressive medium engaging in inner somatic experience. (18) This project situates myself as both practitioner and researcher by 'Reflecting in action' (22) while making in both states of illness and wellness.

The purpose of this project was to work in the studio everyday for 2 hours and record my symptom responses and internal narratives while working. The session would take place at the time of day that was both convenient and at a time I felt motivated to engage in creative practice. I would

be making fabrication samples from compositions including silk, wool, cotton and linen. The fabrics were commonly used in previous collections and I had experience with their characteristics and properties. All fabrics used were black. This was a conscious choice as to not confuse the research goals with existing color theory literature about illness and mood symbolism. This research is more interested in the sensorial experience of handling materials, the movement of the body and the cognitive and internal emotional dialogue.

The methodology of the Diaries project relied on the consistency of everyday studio practice. This did not consider the disruption of illness on plans and physical functionality. After a week of productive studio sessions, a severe migraine began and disrupted my studio sessions completely. I was unable to engage in creative practice even after the pain had left. The cessation of practice brought to attention an aspect of the illness-creative experience I had not yet considered – 'Stillness'

During the full impact of the migraine I was unable to work in the studio, but this did not stop the creative process. My mind continued to develop the creative projects underway in the studio. I had a still body but active mind. It seemed as though I was still connected to the task even though there was no tactility, movement or tangible outcome. This state of stillness was not static, "but part of a continuum which includes activity and rest."(23) During this time of incubation, insights occur and the mind rehearses the physical activity in the imagined space.

"Ok so today my migraine is so bad I had to cancel everything- no work, no meetings, just laying here with my face dropping off. But I did notice something different. As I was laying there my mind kept returning to the fabrication samples I had made and how they could be developed or applied into a garment. The garment category as usual was a jacket. It just gave my mind something to busy itself with while I laid there in pain. I was not consciously trying to think about it but my mind would go there like a magnet. Migraine is a unique pain disorder in that it affects your cognitive processing and worldly perceptions, so everything is scary – and you look for comfort." Reflective journal, 21/07/15

LOOKING OUT – PARTICIPANT INTERVIEWS

Through a series of in-depth interviews, it was found that creative practitioners experiencing chronic illnesses undertook stages of planning and making during states of physical stillness. It was explained that due to their compromised physicality that movement was sometimes just not possible. The positive gain benefited from engaging in creative practice is strongly supported by arts therapy literature. This research hypothesizes, that many interviewed participants were attempting to transcend the

limitations of their bodies by completing tasks without traditional *body-object* interaction.

A multi-disciplinary artist involved in the study who had been living with a diagnosis of Chronic Fatigue Syndrome or Myalgic Encephalomyelitis for over 10 years described the importance of this phenomenon: "I'm constantly just building my world forward." She uses the fluctuations of her illness experience to achieve different forms of making depending on her level of fatigue. For example, when working on a garment made mostly of paper, certain aspects were carried out almost in a laying position. She would twist the small strips of paper in a repetitive action for ten minutes and then allow herself to doze. The cumulative effect of the actions resulted in a highly intricate surface detailing. When those small hand actions were not possible, these worlds were still 'building forward'.

The "imaginative work" was carried out during physical stillness and specific components such as the thematic complexities and story telling were figured out. Also interestingly, considerations to the materials and form giving were contemplated in this space. "…Because my work is really complex then it's really helpful, it's better than just feeling like crap and looking at a blank wall."

In part, strategies are being formed to develop action planning during states of stillness. At the same time the mind is being occupied to avoid deep rumination about the present experience of illness. The mind's capacity to cope with the chronic nature of this disease is further exemplified by her assertion that "I would have just gone mad if I didn't have work to keep me engaged or to escape into."

A singer/songwriter with a diagnosis of chronic pain who took part in this research also spoke about the times he was unable to engage in the physicality of creative practice. "When I wake up I can hardly move on a bad day." A strategy he developed to remain connected to music in some way was simply through listening. Lying down perfectly still with earphones, that he asserts must really fit inside your ear so you aren't aware of their presence, then "the music immerses you and there is no distraction." He listens to his own music and the music of others for what was explained as being "real enjoyment." There is a certain performativity ascribed to musical creative practice and that was discussed also. Gigs involving live audiences needed to be reinterpreted, as his body would often "seize up with pain." This was negated by 'web streaming' so he was able to perform in his own home and didn't need to "haul gear all over town, or set up."

It was unclear to what level his practice developed internally but it was evident that a tension existed between the moving body and the still body. "When I look at some people who have so much energy and get so much done it makes me envious and I just wonder how they do it." There was a progressive nature to his illness and its affect on creative practice. Equally there was a progressive nature to the strategies developed to remain productive and connected to the creative practice. What is interesting to note is that these strategies are inward facing, almost taking in less of the world yet the participants do them to "remain connected."

CONCLUSION

"Movement is indeed the basis of our experience of ourselves as capable and effective agents in the world." (24) This research discusses the dimensionality of internal movement in creative practice. Motor imagery may account for the neurological underpinnings of this phenomena and opportunities exist for further interdisciplinary research to understand this. Creative practitioners with chronic illnesses may use states of stillness to further develop projects. It was found, through participant interviews and practice-based research, that this state delivered similar therapeutic gains to performing the physical act. This repositions what is traditionally understood as inactivity or even inability to a now productive space. This research holds implications for the development of new mind-based therapies and approaches to creative practice that extend the limitations of the *still* body.

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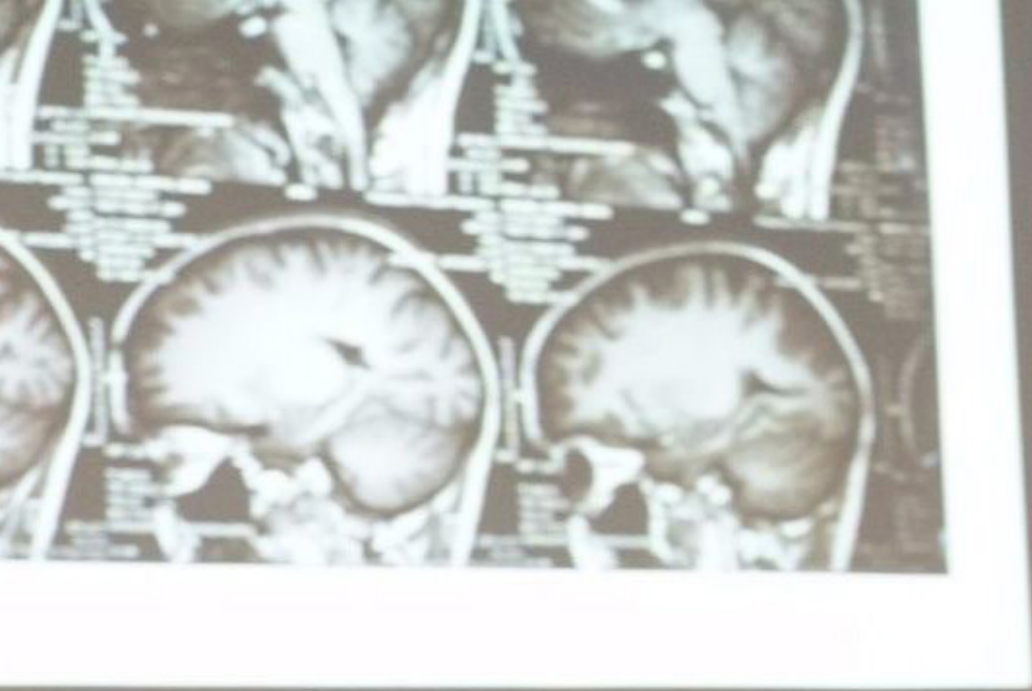
D&K Intervention during Sonya Kraans paper presentation *Mind Making,* photography Jan Berg, 2017

New Forms for Fashion:
Creation through Digital Distortion

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ABSTRACT

The technological capabilities of seamless knit have been designed to use a traditional body shape that dictates a recognized silhouette during the development of outputs. Through creative practice this paper discovers alternative design possibilities when the technology is hacked to distort this archetypal body shape; New Forms for Fashion emerge. New methodologies for fashion design approaches are also discussed through this paper when new methods of creation, which ignore the pre-programmed body form are introduced and therefore new ways of discussing design development processes are revealed. This practice–led research focuses on the investigation of non-conventional body shapes utilizing the Wholegarment® knitwear technology as a material essential to the design development process. The design methodology developed combines the machine and designer as maker throughout the practice resulting in distortion of mass manufactured silhouettes. This approach extends beyond the normal boundaries set by the digital interface generating extreme body forms.

Keywords

Digital materials; Body; Seamless; Knitwear; Technology.

INTRODUCTION

This exploration through knitwear has extended design to include the digital technology as a material that is integral to the development process and the creation of the unexpected. This practice–led research focuses on the investigation of non-conventional body shapes to utilize the Wholegarment® technology in a design approach that combines the machine and designer as maker. By merging the machine and designer into a new medium; the technology becomes a new form of material and not just a making tool [1]. Transference of the researcher's craft based knowledge into the digital environment 'creates' originality via these unexpected outputs; therefore, it is no longer merely about the use of the technology as a tool, instead the use of digital can be viewed as a means which leads to 'new discoveries'.

Through practice this project focuses on form exploring extreme silhouette developments directed by the distortion of accepted body shapes. This disruption of the digital knit environment advances the application of the technology outside the known parameters. The methodological design approach investigated alters the machine and software from the current paradigm and therefore shifts results from predetermined outputs. Through the combination of physical and digital materials new forms of seamless knitwear emerge that blur the lines between craft, art and design in a fashion context. This paper proposes the idea that new methods of working within the digital environment emerge during the design process thus alternative ways of visualizing fashion emerge through the hacking of the seamless knitwear design systems. The resulting outputs developed during the creative practice considers; the artefacts as "inputs of knowledge production and outputs of knowledge communication" [14]. This perspective helps to examine the relationship between technology, designer and output possibilities, therefore generating new discussion around the use of digital materials and materiality's.

BACKGROUND

This research has focused on the application of Shima Seiki Wholegarment® knitwear technology in particular the NESES-WG 14G machine. The development of seamless knitting machines has changed the way designers interact with knitwear design due to a general lack of technical understanding [6,17,19]. The knit process for seamless, involves all parts of the garment being knit in a circular manner on a flatbed machine. This creates a 3 dimensional garment with few finishing requirements and minimal waste [21] improving mass production outputs. However, the design system is complex requiring specialised in depth knit

experience combined with tacit knowledge to develop unique outputs. This often restricts designers unless collaborations of skillsets occur [5,17,19]. As observed by Smith (2013) "it is timely and important to be researching design possibilities and limitations using seamless knitwear technology, at a point when technology is readily available but seemingly underutilized." In an interview for *Knitting International* with Mowbray (2002) Shima discusses the advantages of whole garment over cut and sew knitwear and acknowledges that many design options have yet to be explored [13]. Since 2002 many research projects have engaged with seamless knitting all recognizing the complexities which the simplistic view of the technology masks from the outside. Critically, the knit designer engages with the design and materials throughout all stages of development; the act of knitting being unique, in its simultaneous creation of surface, structure and form. Folded into this process is technology creating a new blend of skills, as Lee (2007) states "craft is nothing without technology" [8].

The technology relies on collaboration and craftsmanship skills to develop ideas beyond the pre-set machine boundaries that produce outputs of 'workmanship of certainty' to create in the realm of 'workmanship of risk' [16]. It can be argued that the digital technology is a tool or medium to craft with during the creative practice [4,12,24]. Dormer (1997) discusses craft as being able to provide variety and unexpected outcomes whereas technology produces more predictable, uniform outputs in conjunction with this idea Dormer (1997) argues these can still be considered craft outputs;

"…craftspeople can be defined generally as people engaged in a practical activity where they are seen to be in control of their work. They are in control by virtue of possessing personal know how that allows them to be masters or mistresses of the available technology, irrespective of whether it is a mold, a hand tool, an electrically driven machine or a computer. It is not craft as a 'handcraft' that defines contemporary craftsmanship: it is craft as knowledge that empowers a maker to take charge of technology" [4].

Technology and craft can be blended during production to utilize the '*Affordances*' of a material to produce "continuous innovation and repeated uniqueness" [12] with technologies offering opportunities for mass production and new methods of experimentation to produce innovative work. McCullough (1997) observes that the '*Affordances*' of a material may not be obvious, they need to be discovered, he applies this to wood as an example but this also applies to the digital knitting technology. Technology is beginning to be seen as a material in its own right not just a tool used to create, creating art with technology is "to art out of technology." Collaboration is crucial during the seamless design process [20] however it is important to 'work with' not just hand over the work – different results occur" [1].

This research examines the craft design technology dilemma through a series of practice led experiments. The paper discusses the varying levels of technical knit knowledge required and possible outcomes in relation to design through the distortion of standardised garment shapes.

DISTORTED SHILOUETTES IN CONTEXT

In general, mass production seamless knitwear silhouettes produced by designers continue to remain within a recognized classic profile relying on structure, colour, and yarn for a point of difference but maintaining a 'safe' design aspect [21]. Outside of mass production, knitwear is currently explored by designers via combinations of hand craft and machine technology to create unique aesthetics. Notable knit garments of unusual proportion and scale are intarsia designs by knitwear designer, Hannah Taylor. These designs utilize high contrasting coloured images applied to garments of exaggerated yet wearable proportions. Another knit designer Tirzah Mastin's collection uses knit to create surface textures for asymmetrical silhouettes.

Knit designers Johan Ku, Julia Ramsey and Sandra Backlund create bulky hand knitted forms that become sculptural body art. These pieces tend to be textural oversized structures with Ku describing her pieces as "wearable sculptures" [25].

In the arena of high fashion, the recent Comme des Garcon collection, entitled "The Future of Silhouette," by Rei Kawakubo explores the distortion of body shape through a mixture of cutting edge pattern making and alternative fabrications. This fall 2017 collection, again challenges fashion's conformity to body form, using padding and materials of a woven or felted nature to create; peculiar bulbous silhouettes and armless cocoons, questioning garment shapes, similarly to designs in Kawakubo's 1997 "Bumps" collection.

In contrast to art or commercial knit products, seamless knit has been used to make social or political statements by designers such as Freddie Robins. She is known for her exploration of dark themes through knitting and embroidery usually applying a humorous or domesticity twist. One exhibition presented wholegarment knitted bodies, arranged to create various distorted body poses. This is an application of wholegarment beyond the technology pre-sets and forces the possibilities for seamless knit to be reconsidered. When discussing her most recent work in an interview with TextileArtist.org (2015) Robins describes her new design methodology to create form in her knit pieces. "The bodies and body parts are made three dimensional by filling them with expanding foam. A process that gives them form, enabling them to stand, but adds little weight. They remain visually light contrasting with the dark themes that I am exploring" [23].

In March 2017, Fashion designer JW Anderson curated the 'Disobedient Bodies' exhibition at The Hepworth

way artists depict the human form through their work [3]. The works consist of art, fashion, ceramics and design artefacts. The display included several pieces of wholegarment knit that demonstrate experimentation with technology and extreme body silhouettes. One of the knitted exhibitions encouraged visitor interaction through oversized jumpers that transformed their body shape. Fashion endeavors to continually create and question that which is new; but currently the majority of products produced using seamless knitted textile processes remain within preset body contours. This research looks to establish why that occurs and what levels of technical knowledge is needed to move beyond the natural body boundaries.

METHODOLOGY

This design practice primarily engaged a practice-led generative design process that involved designing to parameters determined by the technology not by the body shape. These digital limitations were discovered through systematic testing to record the existing boundaries for the machine available to the researchers.

Part of the research methodology applied was a systematic approach through practice, as parameters of the technology could only be explored and understood through the act of making with the process of development as important as the output generated [14]. This process follows the observation by McCullough (1997) regarding digital artefacts and building them one step at a time. "Like a traditionally made form, it represents the results of many simple repetitive actions, where one move enables the next. We build up digital artefacts one step at a time, one piece on top of another, with what is already there affecting what is to come." [12]

The artefacts developed were informed by surface structure and form structure to advance the applications of "digital craft" [12] and "digital making" [7]. Scrivener (2000) "argues that the making brings into existence the artefact that is itself a form of knowledge" [18]. Furthermore, Makela (2007) discusses the making and the artefact as an essential part of research, inclusive of the ability of the artefact to be a method of data collection and preservation of information [10]. The project follows a non-standard linear creative process or as Risatti (2009) calls this a functional form concept [16]; where abstraction of the objects form.

The project employed generative design as a method of producing new design knowledge. Loh et al. (2016) discuss the issues surrounding digital making as a form of craft practice and the autopoietic nature of making in digital craft where "it is self-referential and self-making at the same time as continuously designing [9]. Through this digital fabrication can be seen as a system that co-evolves
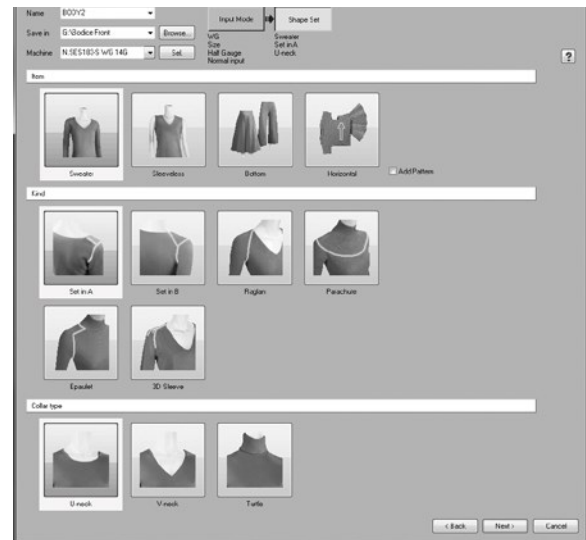
Figure 1. Pre-set options for wholegarment

technology and material systems." Experimental approaches to the practice were essential as outlined by Bergstrom et al (2010), following a practice-led approach can facilitate new design methods and create environments for unexpected results to occur [2]. The series of making experiments and the outputs became a vehicle for the emergence of artefacts and an alternative design method during maker practice within and outside the technologies pre-set boundaries.

LEVEL ONE: PRESET EXTREME PROPORTIONS

Exploration of distortion to body shape started with experimentation using the pre-set shapes that exist in the wholegarment Shima design software: KnitPaint®. These basic silhouettes are used by industry during mass production, as they require little programming ability or knit knowledge [19]. In the design system there are pre-set programs available for a range of standard sized garments; vest, dress, trouser, skirt and various sweater options, as illustrated in figure 1.

Initial testing of the sizing potential of extremely oversized garments involved inputting measurements to collate information for each style's boundaries of 'limitation', resulting in a chart of measurement limitations for our knitting machine. It is only through knowledge of the limitations that design potential of the technology can be explored. Armitage (2011) discusses how we start to understand materials by exploring, playing and sketching either through the abstract (virtual) or final material (physical). "Materials have desires, affordances and textures; they have grains. We can work with that grain, understanding what the material wishes to be, wishes to do – or we can deliberately choose to work against it. We must understand the grain and make a deliberate choice" [1].

Figure 2. 'On the Rooftop' Zahra Killeen-Chance, 2015

The next stage was to develop a collection of extreme garments applying the knowledge of limitations to distort outputs. To enhance distortion for each style one area was maintained as a control at its 'normal' size, for example the neck opening. These garments used large quantities of yarn and although interesting artefacts were not wearable due to the extreme width and length achieved.

Factoring the aspect of clothing the body into the design process the parachute sweater shape was selected to progress to a wearable extreme form. During this experimentation the computer pre-set regulating restrictions, regarding calculations of pattern shape were tested, resulting in a controlled dropping of the armhole, body width and length.

Preprogramed shapes were used to create several dance costumes for choreographer and performer Zahra Killen-Chance; the costumes requested conformed to some body measurements with others beyond the standardized norm. One such costume used in her performance 'On the Rooftop's (figure 2) prerequisite was to be extremely long to allow the dancer to stand on a tall box with a circular hoop setting in the hem distorting her body form into an extended silhouette during the enactment. A second costume required arms that were extremely thin in form. The development of the exceedingly high armhole and slim sleeve shape created a situation bordering on the limits of the machine knit capabilities due to the sharp angle of shaping required to achieve this contrast in size.

KEY FINDINGS - LEVEL ONE

The initial findings from the level one wholegarment knit experiments were that the data file size dictates the potential length of the garment or the width if using the bolero (knitted sideways). There are a few approaches to the programming that can extend this boundary by reducing the file size however this requires advanced knit programming knowledge outside the pre-set parameters. The samples tested were knitted with single bed knit if additional variables such as structure or shaping were added to the style the data file size and the knit capacity in the lengthwise direction would be reduced. In relation to the width wise direction of the machine the garment width or bolero length are dictated by the number of needles available to knit which the machine used has. The machines extreme limits were investigated in both directions of scale and proportion; minimal and maximum. It is important to note that if the output is to remain wearable it is essential not to venture too far into the area of ultra-extreme, rather to design within the constraints of the machine and the proportions of the end use. By understanding the machine these parameters allowed us to work within the machine limitations, the technology still dictates the parameters but it is used as a material during design process by the designers [4, 12].

LEVEL TWO: DISTORTED FORMS

The design of the pre-set shapes can be distorted beyond proportion through the application of new materials and stitch structures. These require more knit knowledge than level one experimentation, but are possible with limited knowledge of the complex knit design program stitch codes.

Structural Form

One method of knit manipulation is to apply stitch structures to various areas of the garment to force the knit to react in contrast to the neighbouring stitch formation. Experimentation with structure included knit and purl, ripples, and tucks in selected areas to alter the appearance, silhouette and performance of the knit.

Two of the more successful garments were simple knit and purl combinations with stitches in juxtaposing staggered squares. The knit caused the garments to move in interesting and directional variances as the stitches pushed against each other, visually presenting as twists of surface elements. Another successful sample was the use of ripples to create an effect of ridged features running randomly around the garment, adding to the illusion of distortion of shape.

However, the application of stitch to alter the appearance of the shape was limiting and generally resulted in only minor distortions.

Figure 3. Form created after application of steam

New Materials

After analysing and reflecting on the stitch structure results it was decided they remained too flat in form therefore to increase the amount of distortion new materials were investigated and introduced to the basic preprogramed shapes. The aim of the next series of samples was to produce a 3-dimensional free standing distorted seamless garment.

The fibres sourced were selected due to properties of reactivity after the knitting process. A series of samples were developed using plated pemotex to trial the thermo responsive fibres reaction via molding with steam (figure 3).

During these experiments the identical body shape was replicated several times and exposed to the stimulant steam; while using varying non body conforming molds. The forms created were viewed as responsive to Pyes (1968) workmanship of risk, where each outcome was unique in final formed silhouette, in contrast to the expectation of machine knitted outputs each being an exact repetition of each other [15]. Additionally, the heat set fibre allowed the forms to become 3-dimensional free standing artefacts, potentially moving beyond garment into an architectural realm. The forms created reacted independently of designer expectations, each artefact forming into an individually free formed design.

A second fibre explored was a cotton / metal blended yarn. When tested for qualities of distortion, this metallic yarn

worked allowing the fabric to be 'pulled' and arranged and re-arranged into a variety of shapes. This was knitted into a dance costume due to this ability to hold a form and distort the appearance of the body within. However, with body movement during performance the garment warped into an impractical wider shorter version. Measurements during prototyping were inherently inconsistent causing design and technical knit issues, as well as too many variations of flexible form to be reliable as a dance costume.

KEY FINDINGS - LEVEL TWO

Of the two techniques trialled at this technical level, stitch structures and new materials; the second resulted in the most comprehensive set of variable distortions of form whilst still using the preprogramed base bodies.

The materials used in these additional distortion of designs, are temporal and responsive, therefore requiring new methods of thinking and making for design [2]. Manzini (1989) referred to this as a "shift from working with materials that merely are to working with materials that do—in which function is the prime denominator" [11]. In order to understand a material's potential applications and performances, Manzini (1989) states; "Beyond merely existing, at hand and with properties apparent to the designer, new materials were characterised by their functionality— rather than asking 'what is it?', designers needed to begin asking 'what does it do?' [11].

A fluid relationship between tools and technology can produce a variable set of outcomes. As observed by Loh et al. (2016), tools, materials and techniques are the 3 key aspects in the making process [9] referring back to Pye's (1968) model of Workmanship [15]. As suggested by Loh et al (2016), we defined the band width of tools and techniques through the preset trials, then applied these to a specific material which resulted in broad design variations [9]. In this level of experimentation, the machine and the new materials worked together with the designer to extend creative outputs.

LEVEL THREE: OUTSIDE THE PRESET

This level of knit experiments focused on creating distorted shapes outside the confines of the automatic software. In technology knowledge is distributed between people and hardware [4] this means collaboration is required to achieve full utilization of the design potential. Dormer (1997) also discusses how this encourages new ways of doing things, and new applications for the things you do. To extend the design capabilities of the wholegarment technology advanced knit, programming knowledge must be added to the design mix. Usually this is a technician who specializes in wholegarment programming and machine operation altering the design process and increasing potential outputs

Packages are mini instructional programs that contain essential digital knit data to direct the machine movements creating desired knitting techniques outside of the preprogramed norms. In level three of this research's practice, packages were used to distort areas of the preprogramed garment in an asymmetrical manner applying flechage shaping and to add jacquard coloured patterning knit techniques to the designs. Flechage is a knitting technique that involves partial knitting in selected areas allowing other areas to be held on the needles causing stitch growth to occur unevenly in the section affected. The results varied depending on the placement of the packages that created the knitting distortions to the shape and the positioning of the jacquard design.

Packages were also trialled to test distortion of sleeves, with partial knitting techniques used to 'curl' one edge of the sleeve causing an extended undulating surface, affect when worn.

Pre-set Re-developments

Another method of shape development is a blend of preprogramed and new packages. To create a curved beanbag silhouette, a pre-set base shape was selected: The parachute tunic. This basic shape contains an umbrella like upper body form due to the designed nature of the parachute shape morphing into a two dimensional shape from the armholes to hemline. To increase the three dimensionality of the shape, as necessary for a beanbag: the curvature of the centre front, back and sides of the garment were altered. This curvilinear movement required major changes from the pre-set garment shape and had to be completed using a series of complex packages (Figure 4). Along with shape manipulation the beanbag required a closed start to the product instead of the usual open hemline. However, though the changes from the pre-set parachute shape were major the manipulation of this basic pre-set was easier than starting from scratch and building the complete form stitch by stitch.

The final beanbag extended the physicality and proportions of the end result from that of being for the body to that which would encompass the body. By extending this process one step further the shape was reworked into a garment for the body applying the larger proportions and curvilinear internal lines. In addition, structure was included to increase texture and alter the visual aesthetic: resulting in distortion and further extension of design from the natural pre-set programmed parachute body line.

Asymmetrical Shapes

Visual distortion can be exaggerated by the addition of asymmetrical form. To the human eye symmetry is perceived as perfection. To achieve asymmetrical design in wholegarment the design needs to be programmed at an

Figure 4. Beanbag development into garment form

extremely advanced level of knit knowledge with the form built by the programmer from scratch to final product, this includes developing and applying new packages.

The research investigated the concept of asymmetry through the use of intricate shaping packages positioned to reduce stitch usage through triangle wedges of non-knit areas and through the building of shape in an asymmetrical manner creating physical unbalance. However, the development of packages is a time consuming process therefore this becomes a defining factor in the lack of original development using this method in a commercial setting.

KEY FINDINGS - LEVEL THREE

The addition of packages to the design process generally requires the design team to include a technician or technical designer to construct the necessary complex knit programs. This collaboration increases the potential of design outputs [21] due to an increase of combined skills. However, it can also result in reduced design input, during form creation, with the designer one step removed from the process. In this research the technical designer created a bridge between design and technical developments reducing this issue.

The machine continues to dictate design limitations because of physical restrictions and knit stitch possibilities of movement. However, having the ability to create outside the pre-set form, although time consuming, extends design capabilities into the realm of unexpected outputs.

OVERVIEW OF RESEARCH

The final artefacts created achieved visual and physical distortion through application of a variety of knitting techniques to produce forms with altered proportions. The research contained some predetermined rules, needle selection possibilities, and machine data constraints discovered during the initial level one extreme sizing sampling. These limitations provided the parameters of the technology to be applied as a material during our creative practice in the level two and three trials. Distortion via structure, yarn properties, new materials and new technologies acted as co-agents in the emergence of undefined outcomes, adding 'risk' to the design equation. The further outside the preprogramed automatic software parameters the designs progressed the greater the need for in depth wholegarment programming knowledge until reaching the point requiring technical collaboration.

CONCLUSION

Drawing on craftsmanship during the experiments a variety of knitting techniques were applied to the wholegarment body shapes to investigate the extreme limitations and to achieve distortion of the silhouette outside of the accepted 'norm'. At each level of knit knowledge, the human body was removed from the equation becoming secondary in the design process. This allowed the designers' increased freedom, creating a design process during the practice; that was maker led, as opposed to conforming to a body conscious led method.

Technology is beginning to be seen as a material in its own right not just a tool used to create. During creative collaboration it is essential to work with the technician not just hand over the work [1] to maintain the design practice throughout the development process otherwise very different results will occur. Critically this practice shows: to extend the capabilities of the wholegarment technology beyond an accepted body silhouette or form requires extensive knowledge of the materials; the machine, yarn and knit design.

The focus on creative design and technical extremes forced an alternate design pathway to emerge that considered the wearable aspect of the garment as secondary. The design practice evolved into a new design methodology utilizing knit craftsmanship and technology as materials during the design process producing artefacts independent of body shape although pertaining to garment form. The work created during this practice led research process can be viewed as adding to the dialogue surrounding craft and digital technology. In addition, the practice yielded an alternative method of making for garments through the deliberate disregard of the body during form creation and the recognition of technology as a material intrinsic to the materiality design development of the final outputs.

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Design as intangible material

Generalizing Barthes' Système de la Mode into a methodology for design research

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ABSTRACT

This paper presents a theoretical consideration on how Roland Barthes' concept of fashion system, introduced in his Système de la Mode, a structural study on the language of fashion, can be adapted to incorporate design in addition to Barthes' structures of actual, pictured and verbalised clothing. Further, it aims to depict a way to use the signifying matrix from Système de la mode as a method for designer-researchers to conceptualise their designs as intangible ideas into systematic, comprehensive research data. As of now, the conceptualising method is a theoretical approach. It has yet to be tested in a classroom setting or in complex research settings. The approach is motivated by an interest in creating new methods in fashion design and fashion research to allow for variety of perspectives.

Keywords

Fashion research, research methods, design methods, semiotics, Barthes

INTRODUCTION

This paper approaches new methods of fashion designing as new methods of research in fashion design. There has been relatively little research done on fashion design, specifically on the design process. This is the case at least in my own country, Finland. The few doctoral theses defended in the two universities offering fashion and clothing design in Finland, the University of Lapland and Aalto University, are situated mainly around fashion history [1] or sociology [2]. Research centred on designing are rare even in Finnish master's theses, as the attention is focused often on what people are wearing and why or business instead of designing [3]. While all the other directions are worthy on their own, they do not advance the field either as profession or a field of study. Professor Clemens Thornquist of Borås has said that the fashion design research community should concentrate more on design as the driving force of research

instead of supplying results for other fields [4]. This paper hopes to add one viewpoint to the discussion.

The argumentation of my paper is based on the definition of design as intellectual work. According to Merriam-Webster Dictionary *design* as a verb can be defined as "to conceive and plan out in the mind: to have as a purpose: to devise for a specific function or end" [5] and as a noun it can have the meanings of "a particular purpose or intention held in view by an individual or group; a mental project or scheme in which means to an end are laid down; a plan or protocol for carrying out or accomplishing something" [6]. According to these definitions sketches would be visualisations of the actual design. Seeking to concentrate on the actual design as a mental scheme or a process removes the variations of presentation skills in sketches and draws the focus away from artistic choices and into design choices.

As always, reality and theory don't go hand in hand. The practical truth is that sketching is used as a tool in designing, and the design process will alter between generating ideas in mind and refining them on paper or similar methods. For theoretical clarity though it is assumed here that the design process is more straightforward and separated in different phases: that of creating the design as a mental image and only when that is finished projecting it on paper as a sketch or draped on a mannequin. It separates designing from for example making crafts, which in traditional sense is more creating by doing [7]. In attempt to clarify the quagmire of concepts, let us state that in this paper *designed clothing* and *design* refer to the mental images that are the results of a design process. Then an *actual garment* or *clothing* refer to items that are tangible, made of fabric and yarn. Reading Barthes adds *image clothing* and *written clothing*, which mean the pictures of garments and the written descriptions of garments respectively.

The problem with concentrating on design as "a mental project" is that it still needs to be projected somehow to analysable form. If sketches aren't feasible options, there needs to be another system to conceptualise designs into a format that can be used as data in research. While not necessary in a single study, it would also be beneficial if the process would systematically provide comparable results if

the process were repeated in different studies. It would make it possible to strive towards a more common ground and continuation in fashion design research in the future. In the current situation researchers have to apply data collection and research methods from different fields of study resulting in major variations that might make it difficult to compare and connect one study to another.

The starting point for this paper is theoretical consideration of Roland Barthes' concept of *written fashion* and how it could be adapted to encompass *being designed* as a state of a garment. Barthes himself didn't take designing into account in Système de la Mode, considering fabrics and seams the first state a garment has [8]. This theoretical consideration is expanded onto how clothing could be reified in its pure form as a mental project without representing it in sketches that could limit the amount of information contained in the design. Reifying the intangible design could be used as a method for transforming an idea into analysable data.

ROLAND BARTHES AND SYSTÈME DE LA MODE

In 1967 Roland Barthes published Système de la Mode, later on translated into English as the Fashion System. Système de la Mode is a structural analysis on written fashion, seeking to understand how meaning is generated in fashion. Even though the research was conducted between 1957 and 1963, the work wasn't published until four years later. By then Barthes himself considered it already dated and naïve - though enthusiastic - venture into semiology, downplaying it in the very first pages of the foreword to the book [9]. While it isn't perhaps Barthes' universally most celebrated work, it however hold its place as one of the earlier studies on fashion and a very thorough one on the subject.

The research material for Système de la Mode consists entirely of captions attached to fashion photographs, collected from several fashion magazines for one year. Barthes analyses the captions, reduces them to their barest bones and seeks to find out how meaning and fashionability is generated with those smallest units. He considered the descriptive captions to be the most concentrated form of fashion, because in the one sentence only the most meaningful points are given voice [10]. And if it those points were deemed worthy enough to be mentioned in a fashion magazine, they supposedly have to be fashionable. How and why certain pictures ended up on the pages or who wrote the captions aren't important questions in this context, as the fashion magazine represents an undeniable authority.

Barthes' Fashion System isn't widely referred to, but on occasion it is used either for its theoretical contribution or for the method Barthes utilised. For example Karen de Perthuis' published an article on street style blogs and fashion photography where she reflects on written fashion as present in blogs, drawing from the theory Barthes constructed[11]. In contrast Brian Moeran adapted Barthes' method for the structural analysis of Japanese fashion magazines and the discourse of taste [12]. More often Système de la Mode is referenced in conjunction to Barthes'

other works for example on myths and more extensively semiology, as in Manan and Smith's insightful article on t-shirt as a Barthesian myth. However to my knowledge Barthes' method of analysis or theory on written fashion hasn't been adapted into more active purpose before [13].

DESIGN AS A STRUCTURE

Barthes considers fashion garments to have three structures. The first one is the *technical structure* of actual garments. It acts as a main structure from which the other two structures can be derived, the other two being *iconic structure* for pictures and photographs and *verbal structure* for descriptions of clothing. Barthes saw cutting tables and sewing machines as the starting point in a garment's life, making the technical structure the mother language [14]. However, before fabric cutters and dressmakers can work, the designer must do their part. Every garment must naturally be designed before it can be manufactured. Therefore the main structure must be a *design structure*, translating into technical structure and forward onto iconic and verbal structures.

Coding is different in each structure, so Barthes writes that for information to flow from one structure to another there must be a *shifter* as a translator. He sees patterns as a shifter between technical and iconic structure, detailing lines and shape, and sewing instructions as a shifter between technical and verbal structures. [15] To translate the designed clothing into actual, there must then be a shifter too. Designers use sketches, fashion illustrations and technical drawings to inform the production team on what the design is, allowing them to transform those intentions into patterns and plans. Therefore illustrations and technical drawings act as shifters between design and technical structure. As they are shifters, they are not actual part of the design structure, and thus not part of the actual design. Drawing from that thought, if we are seeking to do research on design, in the purest sense the sketches and drawings shouldn't be our research data. Instead there should be some way to present the actual idea that is the design.

SIGNIFYING MATRIX

The starting point for Barthes' structural analysis were the captions of fashion photographs. Removed from the photographs the captions acted as self-standing units, as *written fashion*. In semiotic tradition these *fashion utterances* are complete signs that consist of a signifier and a signified. Signifier is how the garment in question is referred to, *a shirt with rolled sleeves*, and signified the situation given in the description, *perfect for early summer in Borås*. As mentioned before, the function of these descriptions is to point out what is fashionable. Therefore the signifier indicates in which situation the garment in question would be fashionable. This adaptation of Barthes' work

Figure 1 Signifier and signified in a fashion utterance

concentrates on the structure of the signifier, leaving the structure of the signified for future considerations.

The fashion utterances as such operate on a rhetorical level, meaning the way they are written out, but not all of the information is relevant. All excess is reduced from the utterances, until only operating units are left. The utterance is pared down to its simplest form. From that point Barthes starts to analyse the structure of the signifier. Seeking out syntagmatic and paradigmatic relations, Barthes builds a signifying matrix. [16] A syntagm is a sequence of different units that in this case makes up one utterance. In linguistics paradigms are the different options that could replace the units that make up a syntagm. Continuing with the previous example, a shirt with rolled sleeves is a syntagm, but spinning the paradigm it could as well be *a dress with rolled sleeves* or *a shirt with cropped sleeves*. The signifying matrix provides a way to lay out and understand the relations in each fashion utterance.

Reduced state

a shirt with rolled sleeves

Signifying matrix

shirt ● sleeves ● rolled
object   support   variation
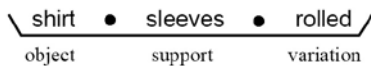
Figure 2 A fashion utterance reduced and in a signifying matrix

Each utterance has three main units: object, support and variation. *Object* is the centre of action in the utterance, and it is separated from other such objects by a variation presented in the support. A dress can be an object, different from other dresses because it has large (*a variant*) pockets (*a support*). The object and the support are interchangeable, meaning that any support could be an object in another situation and vice versa. Objects and supports always refer to material items or details such as dresses, collars or stitching. Variants however are immaterial attributes that a garment might have. They could imply a colour, location, silhouette or any such detail that might affect the material properties of a garment. [17]

Barthes continues with cataloguing the different objects and supports into a list of genera and variants into their own tables. Collecting all the possible combinations of genera and variants would, according to Barthes, create a lexicon of fashion.[18] The catalogue of genera in Système de la Mode

Genera		Variations	
shirt		long	
sleeve		flowing	
hat		on top	
button		[exists]	
hem		[exists not]	

Figure 3 Examples of genera and variations

is a charming look into fashion items of the late 50's that doesn't quite relate to current fashions. The list of variants however still hold to this day, as they are immaterial attributes that don't disappear as fashions change.

CODING IN DESIGN SYSTEM

In written fashion one utterance can consist of one or several matrices. However, that is only for a detail or two and a whole garment or a design of such has much more to it. Whereas Barthes moves from details into whole utterance, to reify design-as-an-idea the direction flows from the whole design into details. First a shirt, then sleeves and collars and body, with body divided into front and back, back divided into hem and darts and yoke, yoke into fabric and shape and stitching. The directions are numerous. The *design matrix* is an expanding system, a kind of fractal.

Sketches might not be exact representations of a design and they lack details. Then again not everything needs to be mentioned. Barthes presented a system of codes that are incorporated in the written clothing. These codes represent the different types of meaning present in the written fashion, including the rhetorical level mentioned earlier. The basest system is the *real vestimentary code*, where the written piece refers to an actual garment, then there is the *written vestimentary code*, the words referring to the garment. The *connotation of fashion* builds on that, since the whole point of Barthes' fashion utterances were to be fashionable in a fashion magazine, and finally there is the *rhetorical system*. [19]

While the systems of written clothing were correct for the context of fashion magazines, this system is too limiting for clothing design as an all-inclusive field. Encompassing garments from all walks of life from baby jumpers to school uniforms to wetsuits to religious wear, all clothing design doesn't exhaustively respond to the connotation of fashion. The codes of design structure need to be different from Barthes' codes of written fashion. Once set, they can be used to determine the suitable level of details that the design matrix needs to reach in different cases.

Reverting back to Merriam-Webster's definition of a design as "a mental project or scheme in which means to an end are laid down" [20] it is naturally necessary to have some understanding of technical solutions when designing. And even if the level of understanding differs or the need to make technical decisions, the material aspects are the same to everyone. Designed clothing has to be compiled from technical aspects like seams and buttonhole constructions that don't vary from one garment to another, only the choices out of them that designers might make. That level of understanding refers to the *technical code*.

In Barthes' systems of written clothing there is the rhetorical system, the ways things are said. While it is not entirely translatable into the systems of designed clothing, some similarities can be found. The rhetorical means aren't just words put together in mechanical fashion, the way they are combined depends on the writer's individual style of

expressing things. In a similar manner while any garment comprises of different technical aspects it is the designer's individual vision that assembles those aspects. So while a seam is a seam, it makes a difference where it is placed. Since at this level it is a matter of individual expression, it is suitable to name it the *system of expression*.

While individual intentions are major factor, we also work within a rather set context. We have a weight of fashion and clothing history that has shaped our perceptions on what can be done, what is suitable and what is what. A peter pan collar, french seam and suit jacket all bring to mind some kind of information that shape how we use those features. It is of course possible to decide to go against those conventions, but that is often a conscious decision based on the knowledge of those conventions. Then again it is just as possible to utilise the knowledge to aim for certain kind of result. Whichever way, the context we operate in remains. This code could be named as historical influence, but as it might bring to mind connotations of historical costume which is only part of the level, it might be more suitable to name it *level of convention*.

The function for the garments in Barthes' research material was ultimately to be fashionable, so in the systems of written clothing there is the level of connotation of fashion. However, as noted above, not all clothing is designed to be purely fashionable. While it is present, it is hardly the main function in many cases. A reflective vest road construction workers – and nowadays every child in Finnish kindergarten- wears is intended to be protective first and foremost. Malcolm Barnard presents eleven different functions for wearing clothing [21] and all those can be present in different designs. Being fashionable could be a combination of several of those functions. Therefore it would be more sensible to expand the connotation of fashion into the *level of function*.

While all these levels are present in all designed clothing, the weight each code holds in each case differs. In some cases, e.g. the protective vest the levels of technical code and function are in the front. In haute couture the system of expression might lead the way and school uniforms used for example in British and Japanese schools emphasise the level of convention. The hierarchy of levels determines how detailed the matrices need to be in the design matrix and which details are important to include.

DESIGN MATRIX

At this point it needs to be said that this paper presents a study that was motivated by wanting to shake the status quo of the current fashion design research, not any specific practical research setting in mind. Therefore the method stated above is a theoretical construct that is not yet tested in actual practical context. However it could be developed further and adopted as a data collection method for designer-researchers. The goal of the conceptualising method is to have a design in a systematic, analysable and comparable form. In addition this approach could be used as a tool in teaching fashion design students.

In the most straightforward way this approach would be used after the designer has finalised their design. Building the matrix would commence from that point. Starting from the main scheme into smaller and smaller details until all the important information is included into the expanding matrix. The different codes integrated in the design indicate the level of details the matrix needs to include, determined by the designer.

A single design could be used as a sole data for a research, but the systematic nature of the matrix formation makes it possible to analyse and compare different design matrices. While the data gathering approach starts with the supposition that the design is a finished piece before it is laid out into the matrix, the method could also be utilised as a tool for designing. The matrix system is very structured, and as such it might not be suitable for fast paced design work. It could, however, be used as a tool in teaching design students how different features build up and how they relate to other features. The cascading matrix structure could also help understand the complexity of necessary decisions that need to be made as a part of design work.

Barthes valiantly groups the different objects and variants into a list of genera in Système de la Mode. While indeed the list as such doesn't have much relevance in today's fashions, it can be seen as a guide on how such a task could be achieved. In a sense that can have educational purpose. More interesting however is the broader list of intangible variants. As attributes those are still relevant today and could be utilised as a certain kind of check list of different options.

One problem with this method is the amount of information that even a simple design can contain. The design matrix of a basic tank top with all the branches laid out might resemble a triangle, but anything beyond that branches out so much that two dimensions aren't enough. The solution needs to include three dimensions or multiple layers. The result could resemble a 3D-mind map where you can zoom in and out and follow different paths. Digitizing the process would bring additional practical advantages apart from being able to lay out the information. Having all the information in digital form would make it possible to use the platform to test out different options in the design and see how changing some features might affect others.

CONCLUSION

This paper sought to present how Roland Barthes' fashion system could be adapted to contribute to the current fashion design research. Main points were how to expand the fashion system, which Barthes himself considered to begin with the actual clothes, to include design as a state of existence and how concepts from the system could be adapted into an approach on data gathering.

Yet even as this approach could be used to transform design as mental scheme into data, it could easily prove to be very labour intensive and difficult to project onto paper. A solution could be to create a digital software to aid with writing out the design matrix. The possibilities in such a software could also include options for changing the design

by altering the matrices and that way testing different options.

For further results this method would need to be tested in actual setting and developed from there. In the end a method is only as useful as the research setting it is used for. This method makes it possible to continue into many different directions, including seeking out long term patterns in design features, analysing designer's conventions and how changing them would affect different aspects.

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GRACE: An Inclusive Fashion

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ABSTRACT

This paper deals with the outcomes of a cross-disciplinary research project on developing clothing for people in Wheelchairs. The initial part of the research looked into the technical aspects of cutting and designing clothing for people in wheelchairs with 3-D body-scanning as an important tool. (Rudolf, A., Cupar, A., Kozar, T., & Stjepanovic, Z, 2015). The second part was an elaborate marketing research conducted among people in wheelchairs and the third work package that will be explored in this paper was a design research part where a pilot collection GRACE was developed as part of the outcomes of the other work packages and new insights developed during this design research. The marketing research result showed that many seated people didn't want clothing to be specially cut for them. They had had enough of being 'different' and 'other' and wished to dress just like any other person would. (Vonk a.o., 2017). This led to the starting point for the design research project: Fashion doesn't need to go over to the world of seated people and 'rescue' them from bad design. Instead, it could include the specific needs of seated people in its design process. From the pilot collection, we could derive the following conclusions. The issues faced by seated people whilst buying fashionable clothing is not so extreme. In fact, many people have issues with ready-made clothing. Fashion for a long time has stuck with a certain ideal silhouette that most people don't match: too tall, too fat, short arms, hunched shoulders, etc. While the differences experienced by seated people are more pronounced, there is no reason not to include them in the modern design process. We envisage a world where a person, seated or standing, might enter a store, pick a style off the rail, and, after requesting it in their size, the assistant would size them up and get the right piece for them - one that suits their specific needs; perhaps cut slightly differently if they are in a wheelchair, but essentially the same style. There wouldn't even be a need to mention it.

Keywords

Wheelchair, inclusive design, disability, pattern cutting, design research

INTRODUCTION

The roughly 3.3 million wheelchair users in Europe (Van der Woude, de Groot, & Smith, 2006) represent an emerging market. In order to help them, designers need to engage the specific needs of these consumers in their design process. New technologies such as 3D body scanning have proved very useful in understanding the specific variations in body size and patterns. The first category of wheelchair users with high paraplegia have no ability to dress themselves, the second category cannot use their legs, but feel completely free and mobile with the wheelchair. In both categories the body dimensions can be very different. Increasingly 3D body scanning has been used to map variations in size and body dimensions of wheelchair users. (Paquet & Feathers, 2004, McCormick et al., 2007, Tweedy & Vanlandewijck, 2011) First, there are disabled people with a body shape identical to abled-bodied people. For these people, existing clothing size charts can be used – an adaption of existing pattern systems can make them suitable and comfortable for the seated person. Secondly, there are disabled wheelchair users with a body shape that has changed due to sitting and dystrophy of the legs. Most wheelchairs users fall into this category where the abdomen is often thicker and legs have become thin due to hypotrophy. The last category are disabled people with a deviating body shape, for example asymmetry. For this group, custom made patterns can be developed. Specially designed clothing for wheelchair-users can be helpful and beneficial. Wang a.o. showed that good customized clothing could reduce a toilet visit time by 46% and undressing time by 25% (Wang, Wu, Zhao and Li, 2014).

Wellbeing in clothing is not only defined by the right form and functionality of clothing. In the same way as abled people do, wheelchair users want to express themselves with nice and distinctive clothing (Lamb, 2001). However many wheelchair users have difficulties find nice and comfortable clothing (Thorén, 1996), not only due to fit and function problems, but also due to access problems, for example, finding stores that are wheel chair user friendly. To fully understand clothing behaviour and clothing desires of people in wheelchairs one needs to discern five important themes: *form and function, self-expression, social identity, self-reliance* and *symbols of victory* (Chang, Hodges, & Yurchisin, 2014). "Each disabled person must

be seen as an individual with a distinct set of physical and psychological limitations and each garment designed and produced for that individual must take all of these limitations into account" explain Renee Weiss Chase and M. Dolores Quinn in their early study on disability and design *Simplicity's design without limits. Designing and sewing for special needs* (Chase and Quinn 1990: 3). In this definition, the view of clothing for the disabled is holistic, physical, psychological and built at the individual level. They make an explicit reference to the sense of self and identity, proposing that it is based on physical, intellectual and social elements, including a strong sense of how self-perception is defined by how others see us. (Chase and Quinn 1990: 3). They go on to explore the effect that becoming disabled has on self-esteem, stating, "When a person becomes disabled, the perception of self is often confused, damaged or even lost... the person goes through grief and mourning. This process hopefully results in ... a willingness to rebuild a sense of self and self-esteem." (Chase and Quinn, 1990: 3) The inspiration of GRACE is built on this holistic concept whilst using the outcomes of the other work packages.

RESEARCH METHODOLOGY

The design research project is part of a cross-disciplinary research project where anthropometric science was involved to generate information on the specific needs and body measurements of people in wheelchairs by using 3D body scans. In the second work, package surveys and interviews were set out to gain more insight into the wishes of wheelchair-users. (Vonk a.o. 2017) For the pilot project GRACE, the results of both research outcomes were used as the start of a design research project - an iterative research project where the end product, a pilot fashion collection, is an artefact – where the thinking is *embodied in the artefact* and where the goal is not primarily communicable knowledge in the sense of verbal communication, but in visual, iconic or imagistic communication (Frayling, 1993). We will describe and explain here the iterative design process and illustrate how the outcomes of the two other work packages are naturally interwoven in the reflection of the design process.

DEVELOPING THE CONCEPT GRACE

Initial research began by searching for a new pattern cutting approach. However, we soon discovered that this was already covered by other brands such as A Body Issue, Arnhem and other earlier approaches to making clothing for disabled people that have been developed throughout history. Previous research submitted by I. Petcu (PhD, Saxion University of Applied Sciences) suggested that seated people didn't want any more highlights to their difference. The interview results and the existing theoretical literature showed that many seated people didn't want clothing to be specially cut for them. (Vonk a.o. 2017, Chase and Quinn, 1990: 3) They had had enough of being 'different' and 'other' and wished to dress just like any able bodied person. They had the same desires as someone who is standing; to look fashionable, attractive, hide flaws, keep warm, look sexy, etc. This led to the starting point for the design research part. Fashion didn't need to go over to the world of seated people and 'rescue' them from bad design. Instead, it could include the specific needs of seated people in its design process. Seated people don't need rescuing, they just need their needs and their world to be included in the broader conversation: *inclusion*. (Chase and Quinn, 1990: 3) They wanted to be able to join in with abled bodied people, to dress the same, with the same concerns; attractiveness, fashionable, sexy, comfort, glamour, luxury, etc. This result made us decide to treat the design project like any other fashion design process, but starting with *being seated* as the initial focus (rather than being disabled). So we looked at the proportion of the body in this position and the issues of comfort, but didn't dwell on them. We looked at the atmosphere of being seated: in repose, gracefulness, stillness, contemplation, peace, rest, etc. Primarily, GRACE is about an aesthetic viewpoint. It started with the simplest of actions - being seated - and developed from there as a subtle exploration of what that means and how being seated might impact the design of clothing. The title comes from my personal interest in gracefulness as a state of being, that is utterly distinct from the more often cited and fashionable term, 'Elegance'. In our current visual culture, aesthetic elegance objectifies and prepares a woman to be acceptable for the male gaze (Mulvey, 1975). Gracefulness on the other hand is something else entirely. It is a state of being, a feeling of solidity and calmness borne of a strong sense of self. Grace is founded on strength and balance. To be seated, to be in repose, is to be grounded, settled and with strong roots. So, our collection GRACE, is primarily a high end fashion collection, taking inspiration from this seated position and aiming to be comfortable, functional and making use of an imagery that …is calmer and more still than the usual energetic and objectifying position of traditional fashion collections and photoshoots.

THE ROLE OF PATTERN CUTTING

As a part of the design process we naturally applied pattern-cutting processes and fitting approaches based on research by A Body Issue, conducted with the use of 3-D body scanning and others (Rudolf, A., Cupar, A., Kozar, T., & Stjepanovic, Z, 2015).

We were aware that able-bodied people also have issues with ready to wear clothing; plus size, long arms, no waist, large feet, etc. The ready-to-wear fashion industry often avoids catering to these people and has focussed on an ideal, average figure (often focussing on young white women to the exclusion of others). This seems to be an issue of marketing - is it feasible to offer more specialised clothing to a smaller market? Options for people who don't fit standard sizes are: outsize clothing, baggy sportswear like t-shirts and tracksuit bottoms or made-to-measure clothing which is expensive.

This insight led to the decision to pull back from cutting the clothes too closely to the seated figure, to also allow standing people to wear them. There is a slight idiosyncrasy

to the clothes when worn by people standing up which has a fashionable feel; slightly ill-fitting but in a cool way. Based on this information, we altered the cut of garments to help them sit better on the body whilst seated, but also bearing in mind that people who stood could also wear them. Just as seated people wear clothing cut for those who stand, why not the reverse?

However, we didn't want to focus primarily on *pattern cutting approaches* to avoid sending the garments off on a tangent into 'weird' clothing territory. If we had focussed entirely on cutting clothing to follow the exact shape of the seated figure, then the garment shapes would have become quite extreme and far removed from what we normally recognise as contemporary clothing. To our mind it is neither necessary nor in fact desirable to go that far. Clothing cut for the standing figure is made to be wearable in different situations, for example, the ability to raise ones arm about the head is more easily achieved in certain garments such as a T-shirt, although it is not necessary to cut such movement into every garment. Likewise, clothing cut for the standing figure functions pretty well whilst a person is seated. It works because this person can stand and adjust themselves if necessary. A disabled person cannot, so their needs must be included in the garment, but not, we believe at the expense of its attractiveness. This is the whole point of designing this collection - to be both functional and attractive. Therefore, my pattern cutting approach utilised some of the techniques developed by A Body Issue, but then pulled back from them to keep the garments in the realms of standard clothing, which also allows the garments to be worn by someone who is not confined to a wheelchair.

To make a more luxurious collection, we avoided stretchy jerseys and used more traditional textiles: cotton drill, wool suiting, denim, cotton poplin, etc. When we did use jersey, it was a luxury textile from Paris without Elastane

To optimize the conformability of the collection, the following specific pattern cutting and design considerations were used:

1. Trousers and skirts cut with a long back rise (crotch) and short front rise.

2. Tops, blouses, t-shirts and jackets all cut on a seated figure with a slouch (we don't sit bolt upright): armholes moved around more to the front, back increased in length.

3. Back armhole lengthened and neck moved forward slightly.

4. Gussets added into side seams that allow front of garment to rest better on legs. Gussets can be closed for someone standing.

5. Gusset inserted in armhole of traditional blazer to allow for wheeling movement in wheelchair.

6. Knitwear developed with reinforced sections at armhole and elbow to avoid wear. (Developed by I. Petcu PhD, Saxion University of Applied Sciences)

7. Trousers and skirts are narrow to avoid fabric getting caught in wheels. No fabric bunching around waist.

8. Hems on some short pieces cut at an angle to give a more attractive look.

9. Proportions considered from seated perspective; shorted tops, and ¾ length trousers and skirts to break up body proportions.

10. Wherever possible, natural textiles were used (although some polyester was used for crease resistance).

The result is primarily a high-end fashion collection. Price could be an issue for disabled people who often don't have much disposable income, but the pilot collection was mainly designed as a proposal on how a collection designed with wheelchair users in mind could be made from a fashionable and aesthetic point of view.

BREAKING THE RULES: The development of a new fashion imagery

To further underline both the specific aesthetic quality and founding idea of GRACE we have developed a concept for a photo shoot and film loosely based on both seated and standing models wearing and swapping the clothing. We propose to make a look book and short fashion film, shot consecutively, as an exploration of how disabled people relate to clothing and fashion, their thoughts on how the fashion industry approaches selling clothing to people in general and what they would like to see change. This will take the form of a traditional three part narrative. Chapter one is a casting, chapter two a trying-on stage that explores the emotional experience of the model and chapter three will be a summary about inclusiveness and a more 'honest' approach to the issues relating to fashion and clothing faced by people seated in wheelchairs. All three chapters will be narrated by a disabled person using a voice over. We, as abled bodied people, don't know what a disabled person wants or how they feel, so we must accept our ignorance and ask them about their lives, needs, wants, hopes and desires. The narrator will be acting as a co-director, or advisor, to the director. We imagine this process and depiction to be controversial and potentially provocative. For example, the starting point for GRACE was my thoughts on the gracefulness of sitting. The narrator may well find this patronising and so would be vocal about that. The following is an excerpt from a draft screenplay for A SEATED PERSPECTIVE. The quotes are not verbatim.

'INTERVIEWER- Would you like to see more disabled people in campaigns?

LYDIA- Ooh, that's a good question. But I don't think I'd buy clothes that are specifically targeted to disabled people. That's not really sexy, is it?

INTERVIEWER- No, I suppose not. There's probably not a more flaccid word than the word 'ergonomic'.

LYDIA- Ha-ha, no. You want to sell a dream; you want to buy into that dream. You don't want to buy something you already know, something that says: hey, it sucks that you can't walk, but we've made something especially for you, so you can look good. You want to buy something that screams you're really more than the stuff you're wearing.'

The film will be fun and 'funny', light hearted and aims at a dissolving of boundaries and a way to visualise an attractive and holistic imagery, appealing to all kinds of people.

With this dissemination we try to open up the traditional boundaries of the aesthetics of current fashion collections which are still based around an imagery populated by young people who are a size zero and which excludes not only disabled people, but also older people or people who are a bigger dress size.

CONCLUSION

From the pilot collection GRACE, created as a part of this cross-disciplinary research project on people in wheelchairs, we could derive the following conclusions. People seated in wheelchairs do not want their disability to be the focus of how they dress themselves. It does not define them and they would often prefer it to be hidden, or to be of no issue. They do not want clothes that draw attention to their disabilities, or remind them or others, of being different or not 'normal'. The problems they face in dressing themselves are much the same as those experienced by other types of people - those who are very tall, large, have long arms, have a stoop or with outsized feet. Thus, the five important values that Hodges and Yurchisin discerned for people in wheelchairs - *form and function, self-expression, social identity, self-reliance* and *symbols of victory* (Chang, Hodges, & Yurchisin, 2014) – are also relevant for able-bodied people. It is clear that clothing design and the world of fashion can take steps towards producing garments, and desirable brand identities that appeal to a larger and more inclusive group of people. Furthermore, this helps us to escape conventional fashion discourse and aesthetic. Using a new and fresh starting point, the pilot GRACE helps us to define new imagery and aesthetics that escape the classical and narrow visual representations of the fashionable woman and man in general.

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If I see someone who's disabled, wearing something...

But please don't highlight it...

fig 1-4 video stills from "A seated perspective"

Simeon Morris *GRACE an inclusive fashion collection* **film viewing and floortalk photography Jan Berg, 2017**

An Aesthetic Taxonomy-of-Holes in Devoré-Lace

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ABSTARCT
The paper outlines the development of an aesthetic taxonomy-of-holes in devoré-lace [burnout-lace] through an intimate conversation between the practice of devoré-making and an appropriation of Deleuze and Guattari's ideas as articulated in 'A Thousand Plateaus'[1]. It presents a brief aesthetic history of devoré which reveals its use in haute couture being predominantly based upon devoré-velvet. The paper then presents a taxonomy-of-holes referencing holes not as absences but rather a complex haptic and optical heterogeneity in a homogeneous textile surface. This taxonomy supports a vision of a fuller potential for devoré-lace as a fashion design fabric. It argues the case for a more considered understanding of the fabric so that it may find a utility outside its visual cliché predicated upon its alluring and translucent qualities.

Keywords
Holes, lace, taxonomy, devoré, burnout, Deleuze, Guattari

INTRODUCTION
Devoré is a textile comprising multiple fibres, which are different-in-kind, selected from the universal-set: artificial (including mineral), natural-animal-protein and natural-plant-cellulose. Devoré is a fabric which results from the chemical etching of a devoré-textile by a process that involves the removal of one of its fibres without causing injury to the textile itself[2], creating a pattern of motifs. Devoré is also an expression of making that employs many processes including: photography, printing and painting. Devoré-lace is a fabric whose materiality is as important as its immateriality where holes play an integral part in its structure[3]. Without holes devoré is not lace, a fabric defined by space[4], the logic of devoré-lace is inseparable from the logic of its patterns defined by its holes. Deleuze and Guattari describe a duality between the abstract line and the motif, or more subtly when applied to devoré-lace, between the speed at which the fabric integrates and carries its holes and the slowness of the pattern of holes traversed.

It is in devoré-lace's holes that movements take place encapsulating its making and wearing. It extends beyond their content and includes the activities and labour that produce informational and cultural content containing codes and unwitting testimony embedding within; the immateriality of singing, chatting[5], labour not associated with value[6], and labour of making[7] 'warm still with the life of forgotten [wo]men who made it'[8]. This exploration of identity can be extended by looking through the devoré-lace to the embedded human-agency that one can infer it contains[9]. Gell suggests that this agency can be explored as the capacity of the object, for example, devoré-lace, to make things happen[10]. By categorising the range of cultural and material elements that figure in devoré-lace, one looks through its materiality to engage with its immateriality.

The language of devoré-lace can be expressed in two forms: nominal and self-informative[11]. Nominal is devoré-laces definition by society, curators, etc. whom create taxonomies based upon its geography, history or technique. Self-informative is devoré-lace's conceptualisation based upon its performance negotiated through the social interaction[12] of designers, makers and clientele. How they act towards, or use, devoré-lace is key to defining the taxonomic language. In fashion, the syntax and semantics of this language cannot be defined independently from devoré-lace clothes and how they transact certain aspects of being in their world[13]. It is the specific materiality of devoré-lace when used in clothing which can be used as an interpretive tool to understand how these clothes are used to mediate between the wearer and the exterior world[14]. Although devoré-lace's identity can be informed by an understanding of its cultural biography with reference to fibre and fabric[15], it is the aesthetics of the devoré-lace's use in fashion that is more important, 'cloth is the universal free element; it doesn't have to explain itself, it performs'[16]. This performance is reflected in the fluid surfaces of devoré-lace worn, the relationship between its holes and the wearers body that gives an understanding of these surfaces[17]. Finding a set of characteristics that define devoré-lace is the search for, and discovery of, differences that define its taxonomy.

Brief Aesthetic Time-Line of Devoré as a Fashion Fabric
It was in the 1880s that the first commercial synthetic fibre, artificial-silk, was produced, having a 'silk like aesthetic with superb drape and feel'[18]. This invention enabled the selective etching of textiles, a precursor to both the chemical-lace and devoré-processes that marked the

troduction to the market of 'beautiful and affordable'[19], nitation-lace[20]. These laces were made by machine nbroidery where the background silk material was ssolved leaving a network which 'appears from a short stance strikingly similar to Venetian, Irish, Honiton or russel laces'[21].

the 1900s the expressive possibilities of voided-velvet ere discovered by the Cubists, utilising the textiles visual nguage which involved 'breaking down the various planes d depiction of … dynamism translated into … designs … ith radically new patterns and motifs using the effects of ape and lighting that could be produced by uncut and t pile'[22]. The techniques of artificial-silk and voided-elvet combined to form the genesis of devoré-velvet, sually similar but with different aesthetics and identities: bided-velvet's solid-hanging and opaqueness against evoré-velvet's fluid-hanging and translucency. However, shion was slow to embrace devoré-velvet and it was not ntil the early-1920s that Mariano Fortuny, exploring its aptic properties, made 'a luxurious and desirable fashion bric'[23] into a coat for his Delphos dress with motifs spired by Cretan art[24].

ollowing this successful adoption of devoré-velvet into shion, chemical companies began experimenting with new rinting methods making it possible to obtain a wide range f decorative effects through the fine etching of the velvet le[25]. In the mid-1920s, the Art Deco movement found the elvety nature of the devoré-fabric most enticing, pporting abstract and geometrical motifs[26]. These devoré-elvet fabrics, part-transparent and part-opaque, became eal for fashions interpretation of 'the ambiguous charm of e female fatale and the uninhabited woman of the oaring Twenties'[27].

range of new devoré-fabrics became available in the late-920s with 'transparent patterning and a fluidity of drape at could be worn to enhance the female body'[28]. Lucien elong made a devoré-velvet coat 'with long and short pile a bright modernist colour scheme with swirls reminiscent f paintings by Italian futurist artists'[29], and an evening ress 'of cream devoré-velvet with a floral design'[30].

fter a sustained period of no real fashion interest in evoré, the early-1950s saw the House of Worth make a silk evoré-velvet coat with 'a devoré ground of black silk satin ve[ing] rise to luxurious velvet motifs'[31].

he market though had to wait until the late-1960s for new anges of devoré-clothing. First, British pop singer Lulu as married in a Thea Porter empire-line 'demure but rty' wedding-dress in devoré-velvet[32], then Barbara ulanicki's Biba introduced affordable devoré-dresses. The ass-production of cheap devoré-fabrics meant it had no traction to haute couture fashion designers; such was the rrency of devoré that the fine-artist Robin Giddings lopted it to produce art-wear jackets[33]. It was not until the te-1980s when John Galliano, using a combination of his wn fabric researchers and commercial printers, made gh-end fabrics to produced a devoré collection of 'special othes that one will never throw out – clothes that cry out be caressed … that evokes luxury, security and history in

a modern context'[34]. Galliano maintained his affection to devoré-velvet in following collections, saying 'devoré has history behind it, yet its so absolutely modern … it is lush without being heavy or droopy … with its hint of transparency, it is sensual without being overtly see-through. You don't look at devoré and think Twenties and Thirties'[35]. Jasper Conran followed by using devoré 'because I like it'[36]. Fashion journalist Marion Hume said, 'fifty years ago the acid bath technique led to fabulous fabric creations for the few. Now devoré will star in the high street too'[37]. Ready-to-wear fashion dresses became available using cheaper fabrics made in Asia; as Next designer Stephanie Cooper said 'devoré is going to be so important that we went as far as India for it'[38].

The early-1990s saw a second peak of use of devoré in fashion by designers like John Richmond, Krizia, Martine Sitbon, Nicole Farhi, Lucille Lewin, and Yves Saint Laurent. Simon Callow used devoré costumes in 'My Fair Lady', 'on which the pattern of sweeping ferns are burnt'[39]. Helen Storey and Georgina van Etzdorf produced devoré-velvet designs. So popular was devoré-velvet that Vogue (UK)'s Mimi Spencer declared 1993 as the 'Year of Devoré'[40].

In the mid-1990s Conran developed devoré-costumes for Sleeping Beauty, 'it's an old twenties technique called devoré, it gives a much better result than applique'[41]. Charles and Patricia Lester produced a devoré-velvet jacket, a 'sumptuous Renaissance textile'[42 43]. In the late-1990s, Voyage[44] and von Etzdorf continued this trend, with 'luxurious, deeply coloured velvet dressing gowns and a range of clothing and accessories which feature her vibrant prints and devoré-textiles'[45 46]. The desire for devoré continued with English Eccentrics Helen David's Bohemian collection with 'lively, eclectic printed textiles … the devoré-velvet features heraldic lions and unicorns'[47 48]; Christian Dior's full-length devoré-velvet dress for Nicole Kidman[49]; Krizia's 'devoré el resille'[50] wool robe; and, Rifat Özbek's devoré-velvet grunge range exclusively presented at Ebony's Fashion Fair bringing haute couture to the black middle-class[51]. This vogue for devoré-fabrics developed into a home-made industry making devoré-fabrics main-stream[52].

Fashions attraction to devoré-velvet continued in the 2000s seeing it become a commodity fashion, for example, the New Alternative country style[53] and Marks & Spencer's launch of a new collection featuring Twiggy[54], which included a 'sophisticated'[55] devoré-dress. In couture, Valentino produced his Gown and Country collection displaying devoré slashes that run down the backs of simple cocktail dresses of 'polished glamour one associates with his rich cosmopolitan clientele'[56]. Carolina Herrera produced 'black devoré skirts with a burnt-out floral pattern that made the fabric look worn off in spots, in much the same way the velvet is worn off a much-used sofa'[57]. The early-2010s saw David Koma present his devoré-velvet dresses with motifs based upon the Polynesian tattoos[58] and William Tempest (Saint Laurent) 'giant clam shell devoré-velvet dress'[59] for singer Rihanna, and his Siren's Song

collection 'inspired by the work of Pre-Raphaelite artists and features dresses made in a nude devoré-print'[60]. Tempest's collection inspired a high street launch of devoré-dresses including: Whistles 'richness, detail and sumptuous fabrics [in] this season must have - devoré'[61], Akris' collection of 'devoré cape dresses that … added sheer as an element in the mix … suggestion of space, dynamics of structure, essentially architecture'[62] and Pringle's collection with their 'signature Argyle motif played out in raised devoré-patterns'[63]. 2014/15 saw a third peek in the use of devoré-fabrics with no fewer that ten couture designers releasing devoré based designs: Miguel Alex using 'delicate fabrics made of organza and wool devoré'[64]; Umit Kutluk's 'voluptuous'[65] black devoré dresses; Nina Ricci's coats fabricated in raised devoré and appliquéd needlepoint; House of Rochas' yellow devoré dresses 'light, luminosity, pale pink, lemon, gold blush and pistachio for devoré flowers and frills, velvet and lame'[66] 'shimmer … luminosity'[67]; Michael van der Ham's dresses 'in his signature collages of devoré, silk, lace and organza … sumptuous'[68]; Donna Karan's 'very sheer'[69] devoré-dress with motifs of skyscrapers etched into the fabric positioned to protect the modesty of the wearer; Valentino's Awaking Bohemia 'devoré-velvet and tulle dress with a pattern shooting up from hem to bodice'[70]; Conran continued his commitment to the fabric in his winter devoré coats 'of richness'[71]; Versace's dresses of 'fluid hippy styles … seventies tattered hems but in hand-crafted lace and devoré-velvet'[72], and, Givenchy's ruffle devoré panel dress with its 'subtle references to grunge'[73]. 2016/17 has so far seen Erdem Moralioğlu's 'parade of faded glamour, Edwardian bias-cut velvet devoré styles'[74], the internet retailer Bombshell producing a ruffle-cuff dress in 'sumptuous devoré-velvet'[75], as well as many designers producing devoré-accessories like scarves.

DEVELOPING A TAXONOMY-OF-HOLES

Unfortunately, there exists no unified philosophy of holes that can be used in the development of a taxonomy-of-holes in devoré-lace. Ideas range from holes not existing at all[76]; holes that exist but are neither material or immaterial[77 78 79 80]; holes that exist but are immaterial[81]; and holes that exist and are material[82 83 84 85].

Devoré-lace produces a contrast between the silence of its holes and the loudness of its fibres. The holes in devoré-lace are currently perceived as an emptiness, a space between fibre, because we have learned them to be this way. In Locke's empirical theory[86], all knowledge comes through experience, suggesting one sees holes only through there existence being learned haptically; much of what we perceived as holes is learnt and not discovered. In Gestalt theory, a hole is not an actual object but the production of balance and perception forces[87]: in devoré-lace we see the fabric and not the holes[88]. Berkeley's theories[89] are an extension of Locke which suggest that extensions in two-dimensional space are learned. He challenges us to question the status quo of holes being immaterial. Deleuze and Guattari perceive holes not as negative, nor an absence but

a particle, having the characteristics of vitality, indifference, continuation, fusion, organisation and duration. For them, a hole is not binary, present ~ not-present, real ~ not-real: it is a multiplicity of combinations not just between hole and the textile but also between environment and the wearer. Holes have many 'forms that we recognise, measure, compare, and change'[90]. The holes in devoré-lace can be motifs of pure and empty form, but they can also visualise the unexpected, unwelcome, and unanticipated.

In addition, there is no straightforward connection between the various classifications of holes and devoré-lace as a complex inference process is necessary as most designers and makers have little or no knowledge of hole-theory when constructing their holed fabrics and clothes. But their hole-representations demonstrate that they share certain principals of visual organisation within specific hole-theories. For example, an analysis of holed-sculpture reveals three hole classes:

- Concavity[91 92]: White, a shallow hole rounding inwards[93], an entry[94]. A hole whose diameter is far greater than its depth. A volume created by the act of carving[95].
- Hollow[96]: Black[97], a hole whose depth is far greater than its diameter. A deep space in or within[98], created by the act of boring. Potential energy[99].
- Piercing: Holes that break-through to the other side, a liberation, an opening-through that lets in light, giving a view to the other-side[100] providing access to the spaces beyond[101]. Form and spatial depth created by taking material away[102], a manifestation of absence rather than presence[103].

However, these classifications are not suitable for a taxonomy-of-holes because, for example, when does a concavity become a hollow?

In order to define a syntax and semantics for a taxonomy-of-holes in devoré-lace throughout all its temporal periods and across all its genre, it becomes necessary to focus upon its objects of discourse: makers, designers, wearers, and consumers. However, the visual-language of holes is difficult to define in a textual-language[104] as they address orthogonal concerns. Non-oral languages lead to the construction of some syntax and sematic assumptions about visual-language. The visual-syntax covers the formal elements whose rules define its correct usage; that is to say how to use such visual concepts as composition, perspective, framing, focus, colour, form, shape, tone, space, etc. The visual-semantics, however, are more complex to define as they are not only given meaning by makers and consumers, but meaning is also dependant upon where ones' temporal viewpoint is taken in history.

A key question in the development of the taxonomy-of-holes in devoré-lace is knowing the point at which all holes become equal; the Kingdom of holes, the top level in its taxonomic hierarchy. Deleuze and Guattari suggest, when faced with such a problem, one should abstract concepts and ideas until they reach the point of the molecular, that is

- Strata: Where holes are arranged in distinct layers.
- Territory: Where holes are arranged in distinct zones or areas.

Layer 4: Hole-Genera (in- & on-, through- & of-)

Ingold's taxonomy[112] appears to operate at this layer of a taxonomy-of-holes. Ingold attempts to accommodate all lines into four genera: Threads, being a filament of some kind; Traces, being an enduring mark left by a continuous movement; Cut/Creases created not by adding or subtracting material but by ruptures in a surface; and, Ghostly that have no tangible quality. As Ingold's groupings are pragmatic, a direct transformation into hole-genera is difficult. However, the practice of devoré-making brings one to the thought that one does not look *at* devoré-lace, but looks *through* and *around* it, revealing shapes which take form: *on* traversing its pattern of holes, *in* individual holes, and gaining movement *through* the thresholds *of* its holes. This leads to a translation of Ingold's genera more suited to categorising devoré-lace's holes:

- in-Hole: An opening in a surface that requires spatial depth but does not pierce through to the other side. These holes have many forms, for example, a cut of various depths. In making devoré-lace, as layers of devoré-textile are removed new surfaces are exposed, with reference to time[113] and process[114].
- on-Hole: An opening on a surface. An area, a discontinuity in the broadest sense. For example, an irregularity in a regular pattern such as a blank in the chemical printing of devoré-textile can be perceived as a hole[115].
- through-Hole: An opening through a surface. A piercing that has opened-up, connecting one-side to the other[116]. The devoré-textile completely eaten into.
- of-Hole: A disassociation from the hole's host, for example, the devoré-shadows and the space around; the body of the wearer.

Layer 5: Hole-Species (Abstraction, Allegory, Cliché, Haptic, Idiom, Metaphor, Rhetoric, Symbol)

To release a richness of diversity of holes that can be made in devoré-lace a Species layer of taxonomy is required. There are exemplars of embracing a more subjective layer to a taxonomy. For example, in challenging Newton's objective view of the species of colour[117] as a physical problem, Goethe[118] sought to characterize how colours affect us. This affords a more useful and expressive approach to embrace an additional subjective dimension to the classification of devoré-lace's holes. The making of devoré-lace suggests eight subjective areas which respond to very different visual messages that can be used in the definition of the Species categories of the taxonomy-of-holes. However, the boundaries between them are porous and will reflect the pragmatism of message and making.

- Abstraction: A removal of unwanted detail or noise from hole-motifs so that visual meaning is not confused or diluted, relying on symbolism and key images to convey meaning[119]. For example, devoré-lace can be seen as an infinite Sea-of-Holes[120] with no start and no end.
- Allegory: A presentation of an encryption expression of difficult or uncomfortable ideas through hole-patterns that would be hard to address in an oral or textual language. For example, devoré-lace can embrace the stories that embrace the language of its making and provide a way of expressing historical context of exploitation and the identity of the unknown maker[121].
- Cliché[122]: A visual stereotyping so that the mind auto-responds to ideas that has become fixed by being widely held. For example, devoré-lace's net, its holes within holes, like the Poinçonneur des Lilas whom makes little holes within holes all day for no particular purpose[123].
- Haptic: A utilization of all senses to present sensory-images to the mind to explore the extrinsic and intrinsic properties of holes. For example, the clothes wearer presenting glimpses of their body through the devoré-lace as in the peritext of The Very Hungry Caterpillar[124].
- Idiom: Employing figurative meanings to respond to the minds deeply held beliefs. These idioms can take a set of specified or traditional accepted symbolic holed-motifs. Devoré-lace examples include: Charles and Patricia Lester's jackets using renaissance motifs and Helen David's dresses featuring heraldic lions and unicorns[125], both recalling a classic historical period.
- Metaphor: Using cross-domain projections to covey perhaps a less visually pleasing idea, to think of holes through the use of imagination. For example, the semantics of the sea has an affinity with devoré-lace: fume, waves, crests, white, the waves not solid but producing a shoreline, a threshold, folds in sea creating lace upon their surface[126].
- Rhetoric: Presenting the mind with those images that are persuasive because they respond to the minds prejudicial viewpoints. For example, the visual rhetoric of devoré-lace is in actuality that of devoré-velvet and not the richness of its other fabric forms.
- Symbol: Visual codes embedded within the hole-patterns that communicate directly with the unconscious mind which create intelligibility. For example, making Dürer like folds[127] and layers in the devoré-lace to communicate ideas from the fabric and dressmaker.

Summary

The hierarchal taxonomy-of-holes in devoré-lace is summarised in the table below.

CLASS	Point	Line	Surface	Volume
ORDER	Supple		Rigid	
FAMILY	Articulation	Segmentation	Strata	Territory
GENUS	*in*-Hole	*on*-Hole	*through*-Hole	*of*-Hole
SPECIES	Abstraction	Allegory	Cliché	Haptic
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CONCLUSIONS

The aesthetic history of devoré within the context of the fashion has shown that in actuality it was the history of devoré-velvet, ignoring the rich diversity of other devoré-textiles and devoré-processing techniques. Each incarnation of a new fashion item makes reference to a cliché of rich and luxurious clothes and textiles of the past. To put devoré-lace into the context of fashion is to make it a visual cliché and loses the laces original meaning. One sees fashions use of devoré as 'being only new grouping of clichés, new arrangement of accustomed memories … give the little shock or thrill of surprise, it does not disturb the emotional self or force one to see something new'[128].

The embracing of this taxonomy-of-holes gives new understandings of structure and identity in devoré-lace finding a utility outside its visual cliché predicated upon the alluring and translucent qualities of devoré-velvet. This taxonomy supports a vision of a fuller potential for devoré-lace as a fashion design fabric whose performance is reflected in the complexity of a multitude of devoré-textile fibres and their resultant surfaces, and how, through holes, its materiality and immateriality address each other.

This taxonomy embraces the fact that a hole is not just an absence, but rather a complex haptic and optical heterogeneity in a homogeneous textile surface. Devoré-lace need not be a binary velvet structure with either a presence or absence of a textile pile but rather a more complex haptic fabric. This understanding affords a designer's engagement with the complete process of devoré and the creation of its holes, thus enabling the making of devoré-fabric patterns whose holed-motifs encapsulate meaning and their location controlled exactly as to where they fall on the wearers body. This engagement should result in rich and expressive holed devoré-fabrics affording the making of clothes that are more thoughtful and expressive.

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Design as a socio-material practice:
reflections on the Emotional Fit collective fashion enquiry

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ABSTRACT

This paper reflects on the Emotional Fit research group's experiences of working together on an experimental, collective fashion enquiry through sharing individual and group knowledge, skills and ultimately facilitating conditions for creative socio-material encounters [1]. Underpinned by the methodological framework of participatory research, with its focus on action, reflection and collaboration, a group of fashion and textile research practitioners are undertaking a practice-led project with a local group of mature women [2]. The underlying aim of the research is to more fully understand the phenomenological experiences of older consumers by exploring new artistic possibilities [3] for them to express and realize some of their fashion needs and expectations. The paper, comprises a number of different voices of members of the collaborative team, who reflect on what happens when you put a group of older women interested in fashion together with a group of researchers in an academic creative environment.

INTRODUCTION

Creativity, assumed to be inherent within the formal design process, is a concept that is difficult to grasp, capture or explain. Tanggaard [1] frames creativity within social practices, and argues for "*a close relationship between continuity and renewal, meaning that materials, tools, things, institutions, normative practices and 'ways of doing' already in the world*" can act as starting points for fresh ideas. Following this argument, our paper reflects on a series of creative socio-material encounters during a two-year (episodic) fashion and textile design project with a group of older women (55-75). We specifically focus on how these encounters were brought about and some of the expected and surprising things that happened; what was challenging, what was valuable, and how it has changed our thinking about research and collaborative practice.

We begin by briefly outlining how the project came into being and then continue by framing it within the methodology of participatory research, and by discussing the methods that were employed. By presenting a series of individual, first person reflections from different members of the research team we focus on what emerged from a series of workshops, whereby the academic and participant researchers came together to share and exchange experiential and tacit knowledge of wearing, designing, making, photographing, filming and documenting the process of design through a series of collaborative socio-material encounters. Accounts are included from the core team, who reflect on the collaboration, from the perspectives of their different roles: Townsend, a textile and fashion designer and project manager; Sadkowska, a fashion designer and research fellow on the project; Goode, a study participant; Harrigan, a pattern cutter and maker; and, Sissons, a pattern cutter and knitwear designer. We conclude with a brief discussion on the key findings and impact of such encounters on the project, and outline potential future lines of enquiry.

RESEARCH PROCESS

The Emotional Fit project was initiated in response to a request, made to the researchers at Nottingham Trent University (NTU) in September 2012, by a group (n=45) of older women (55+) living in Nottingham, UK. The self-formed network, the majority of whom are retired, or semi-retired from professional occupations, had formed in 2012 through their shared interest in fashion. Despite seeing a great deal of publicity about fashion for the 'grey pound' they felt disappointed with what the fashion industry was offering them. Moreover, they shared an opinion that the few retailers and brands who openly target this market sector often provided generic and well-worn solutions, unsuitable for their desired sense of 'agency' and 'timeless' style [4]. Overall, the participants felt frustrated with what was in their opinion a 'limited clothing choice', in terms of 'good design, fit and aesthetics' - in line with the expectations of this demographic (ibid.).

A series of initial meetings with the women in 2013 and 2014 resulted in the formulation of a research proposal, aims and objectives as follows:

- To explore how fashion and clothing is experienced and remembered by a sample of mature British women over the age of 55;
- To understand their issues with sizing and fit;
- To discover their aesthetic design preferences;

• To co-create a series of womenswear prototypes that reflect their emotional and aesthetic design needs.

In parallel with the project's focus on action, reflection and collaboration, participatory research, was selected as the underpinning methodological framework. The exploratory nature of the investigation required flexible ways of gathering and defining what constitutes research data. Consequently, creative workshops, in-depth interviews and personal inventories were identified as the most suitable methods. To facilitate this approach, ethical approval for the research was obtained from the Ethics Committee at Nottingham Trent University in January 2015.

The first workshop was conducted in May 2015 (facilitated by Townsend, Sadkowska and Sissons), lasting three hours and was attended by 19 participants. Workshop 1 was devoted to developing a basic understanding of the participants' past and present experiences of fashion and clothing, with particular focus: sizing and fit, and design aesthetics. This involved taking measurements of the participants (fig. 1), alongside a 'show and tell' exercise of their most and least favourite garments (fig. 2), followed by a group discussion of clothing preferences using pages from various current commercial fashion and lifestyle magazines (e.g. Vogue, Elle, Marie Claire, but also Saga) as stimuli. This workshop resulted in data for a series of basic blocks to be constructed in calico based on the participants' actual measurements. During the workshop we also identified the need to conduct a series of follow-up interviews with selected participants[i] to further inform our developing understanding of their fashion needs.

Figure 1a & b. Workshop 1: Measuring the participants

Figure 2. Workshop 1: The participants discussing their garments.

A series of five in-depth, conversational interviews were conducted between June and July 2015 by Sadkowska. Each interview lasted between 80 and 120 minutes. A set of open-ended topics for discussion included: how the participants understood the concept of "fashion" and how they defined it; their past and present relationship with fashion, and how it has changed over time; their perfect fashion item; their least favourite fashion item; and, their clothing/ dressing/ wearing practices and habits. Prompts and probes were used to encourage participants to elaborate further when unexpected, but potentially interesting, areas arose and to clarify ambiguities and avoid misunderstandings. The interviews were analysed using techniques standard to Interpretative Phenomenological Analysis (IPA) [5]. The outcomes included a series of thematic entities, describing these participants' experiences of fashion. Via such in-depth phenomenological analysis of the interview material certain themes emerged as especially strong and recurrent: sense of belonging, which was based on the participants' constant negotiating between their individual preferences, styles and generational and socio-cultural affiliation(s); fashion awareness, which highlighted the importance to stay informed about changing fashion trends, yet filtering them through their individual needs and expectations; personal trajectories, i.e. the significance of the participants' individual lifecourses; and, bodily changes, a theme that focused on how the participants' changing physicality impacted upon their embodied experiences of clothing.

In response to the interview analysis and data gathered during the first workshop, Workshop 2 was conducted in September 2015 (by Townsend, Sadkowska, and Sissons). Lasting three hours and attended by 15 participants, it explored the idea of mutual knowledge exchange. The format of the workshop comprised two intertwined elements: the participants trying on the calico bodices (fig. 3), and the research team introducing the principles of geometric pattern cutting and possibilities for garment manipulation in response to the individual body form (fig. 4). This workshop resulted in ideas for the production of a series of garment toiles and complementary printed textiles.

Figure 3. Workshop 2: The participants trying on the basic blocks which were produced to their individual measurements.

Figure 4. Workshop 2: Sissons presentating on greometric pattern cutting.

Workshops 3 and 4, were conducted in May 2016, and focused on facilitating the conditions for direct co-designing exercises with the participants. Both workshops had the same structure and were run by Sadkowska and Sissons. The number of participants attending each workshop was limited to six to ensure that the participants who attended could freely try on a number of prototype woven and jersey toiles (fig. 5) and assess printed textile swatches produced by Townsend (fig. 6). The workshop enabled the researchers and participants to undertake material dialogues through experiencing and engagement with the co-desigining exercise on a one-to-one basis and in small groups. These co-creative opportunities informed prototype development in final printed and plain fabrics (fig. 7), leading to two Fittings, with Townsend, Sissons and Harrigan (fig. 9). Here, the three researchers, who are all in the research demographic, tried on garments with two of the participants in a more intimate/ private setting, similar to that of a changing room, complete with large mirror. The trying on process was filmed and photographed (using iphones) to gauge fit and aesthetics, and significantly, embodied, intuitive interactions.

Figure 5. Workshops 3 and 4: Sadkowska fitting and adapting a toile on the body to inform prototype development.

Figure 6. Workshops 3 and 4: The participants trying on and providing feedback on textiles and co-designed prototypes.

Figure 7. Harrigan adjusting patterns to develop a series of prototypes in final printed and plain fabrics.

The initial workshops, and the interviews, acted as a sharing space, laying the ground for future more hands-on encounters which were structured to respond to the accrued emotional and aesthetic information relating to how clothes feel or function in relation to body and garment shape, and their inherent tactile and visual textile qualities. The ultimate aim was to channel these findings to fabricate a series of versatile experimental pieces that would fit a range of individual personalities with individual body shapes. However, while this was achieved in part during Workshops 3 and 4, the Fittings, conducted between November 2016 – April 2017, revealed that the resulting dress objects were inseparable from the research process and embodied performed actions of the wearers, yielding various observations and outcomes – some of which we reflect on below.

REFLECTIONS
In this section we present a series of five reflective accounts from different members of the collaborative team i.e. four researcher/designers and one of the study participants, who each brought different skills and sensitivities to the project. While the core aim of the project was to facilitate collaborative and co-creative design research, each individual experienced this differently. Consequently, it is through these unique reflections that the significance of the creative socio-material encounters resonate.

Katherine Townsend: Between prints and garments

Following dissemination of the emerging outcomes from the project at the Emotional Fit: Fashion Salon in April 2017, where we showed a film, presented our rationale and the participants modelled the garment prototypes (fig. 9), it is a good time to reflect on the relationship between the people and materials involved.

My PhD, Transforming Shape [6] was focused on the integration of digital prints with geometric, draped silhouettes with the aim of contouring the body aesthetically using trompe l'oiel-style imagery. The simultaneous design method (SDM) constituted a holistic, 3D approach to body, cloth and print, synthesized using hand and digital technologies. At the time, the method was tested with my supervisory team, each using their own textiles in conjunction with circles, squares and rectangles, draped on the female mannequin [7]. In many ways, Emotional Fit revisits this concept, through collaboration with independent researchers and real women, all with their own experiential knowledge of designing and wearing fashion.

Figure 8. The Emotional Fit: Fashion Salon (2017) Nottingham, UK.

As in my PhD, I designed the prints for EF to work with the garment shapes but with greater consideration of how they would work aesthetically with the moving body form. Print imagery was based on my photos of natural forms and everyday things; plants on a windowsill, mould spores on logs, light through drapes. Using the natural forms of orchids and bark I developed images that could be repeated or engineered as camouflage; working in sympathy with the cloth, garment and body. In contrast with this approach, the effect of the sun through drapery informed more regular, stripes of varying widths and formats, which could be applied to generate dramatic optical effects depending on the way the pattern was positioned when the fabric was cut.

The final fabrics were selected by the participants from 'fabric sketches' (printed swatches) in order of preference, with hand and colourway being of prime consideration – for example the same print design was considered 'beautiful' in silk and 'unwearable' in cotton. The use of these bespoke prints, together with plain and tie-dyed organic Irish linen and jerseys sourced from ends of rolls, complemented the zero/ minimal waste cutting and sustainable aspirations

expressed by the participants and sought through the project. The designing and selecting of the textiles (and garment shapes) based on feedback was central to the evolving timeless aesthetic of non-restrictive silhouettes that facilitate 'elegance, comfort and openness' and where 'the body shapes the clothes more than the clothes shape the body' [8]. This observation reinforces findings from my earlier research into 'sculptural' shapes and the significant role that cloth plays in the iteration of the body, particularly printed textiles which can emphasize or diffuse the underlying form depending on the style, scale and placement of the imagery [9].

Another important consideration, was the way the garments were made, as discussed by Harrigan, as though simple in shape, it was crucial to merge innovative and traditional notions of materiality and making to meet our collaborators interest in 'quality, simplicity and longevity'. As Sissons notes, zero waste (and minimal waste) cutting was employed and flexible fastenings incorporated to maximize styling options and wearability. The interviews with Sadkowska revealed a strong interest in clothing that combined 'craft, artisanal and industrial' approaches, the kind of 'fashion in-between' defined by Aakko [10] but largely missing from the high street, as reiterated by Goode.

Inspired by this concept and our own research interests, many of the resulting prototypes represent a kind of 'in-between garment'. Although from the outset, we aimed to create a series of versatile garments that could be worn by a group of individuals with varying body shapes – the significance of the 'trying on' process using work-in-progess textiles and toiles proved highly influential on the developing research. While a finished garment or 'product' is generally perceived as 'social', it proved to be more social in its 'unfinished' state [11]. Testing the prototypes on and with our participants in Workshops 3 and 4 and during the Fittings revealed the richness of working with ideas that were closer to their raw state. Carried out in smaller groups of six, then two or three, (including some of the authors), the practice of trying on led to observations that were beyond the notion of 'fit modelling' and shifted the focus of the whole project. By tying, manipulating, ruching and reversing the garments in different ways in front of a mirror (fig. 8), the participants/ researchers transformed the items from clothing into 'dress objects' [12] analysed as materials for and through the body. Here, the notion of play, sensory engagement and human/ object interaction superseded prescribed ideas about what the 'final' garment might/ should look like – and instead the process of fashion and specifically the relationship between people and things became a valuable experience and output in their own right.

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As in my PhD, I designed the prints for EF to work with the garment shapes but with greater consideration of how they would work aesthetically with the moving body form. Print imagery was based on my photos of natural forms and everyday things; plants on a windowsill, mould spores on logs, light through drapes. Using the natural forms of orchids and bark I developed images that could be repeated or engineered as camouflage; working in sympathy with the cloth, garment and body. In contrast with this approach, the effect of the sun through drapery informed more regular, stripes of varying widths and formats, which could be applied to generate dramatic optical effects depending on the way the pattern was positioned when the fabric was cut.

The final fabrics were selected by the participants from 'fabric sketches' (printed swatches) in order of preference, with hand and colourway being of prime consideration – for example the same print design was considered 'beautiful' in silk and 'unwearable' in cotton. The use of these bespoke prints, together with plain and tie-dyed organic Irish linen and jerseys sourced from ends of rolls, complemented the zero/ minimal waste cutting and sustainable aspirations

expressed by the participants and sought through the project. The designing and selecting of the textiles (and garment shapes) based on feedback was central to the evolving timeless aesthetic of non-restrictive silhouettes that facilitate 'elegance, comfort and openness' and where 'the body shapes the clothes more than the clothes shape the body' [8]. This observation reinforces findings from my earlier research into 'sculptural' shapes and the significant role that cloth plays in the iteration of the body, particularly printed textiles which can emphasize or diffuse the underlying form depending on the style, scale and placement of the imagery [9].

Another important consideration, was the way the garments were made, as discussed by Harrigan, as though simple in shape, it was crucial to merge innovative and traditional notions of materiality and making to meet our collaborators interest in 'quality, simplicity and longevity'. As Sissons notes, zero waste (and minimal waste) cutting was employed and flexible fastenings incorporated to maximize styling options and wearability. The interviews with Sadkowska revealed a strong interest in clothing that combined 'craft, artisanal and industrial' approaches, the kind of 'fashion in-between' defined by Aakko [10] but largely missing from the high street, as reiterated by Goode.

Inspired by this concept and our own research interests, many of the resulting prototypes represent a kind of 'in-between garment'. Although from the outset, we aimed to create a series of versatile garments that could be worn by a group of individuals with varying body shapes – the significance of the 'trying on' process using work-in-progess textiles and toiles proved highly influential on the developing research. While a finished garment or 'product' is generally perceived as 'social', it proved to be more social in its 'unfinished' state [11]. Testing the prototypes on and with our participants in Workshops 3 and 4 and during the Fittings revealed the richness of working with ideas that were closer to their raw state. Carried out in smaller groups of six, then two or three, (including some of the authors), the practice of trying on led to observations that were beyond the notion of 'fit modelling' and shifted the focus of the whole project. By tying, manipulating, ruching and reversing the garments in different ways in front of a mirror (fig. 8), the participants/ researchers transformed the items from clothing into 'dress objects' [12] analysed as materials for and through the body. Here, the notion of play, sensory engagement and human/ object interaction superseded prescribed ideas about what the 'final' garment might/ should look like – and instead the process of fashion and specifically the relationship between people and things became a valuable experience and output in their own right.

Figure 9. Fittings: The participants trying on and providing feedback on the co-designed fashion prototypes, led by Townsend.

Ultimately, the engagement with the in-between garments was both 'academic' and 'sociable', or as one participant said of the project 'serious' and 'fun'. Actions included routine checking of the standard characteristics of garment ease, length, front and back view, quickly followed by the physical acting out of scenarios such as: the voluminous nature of Triangle 'dress' in silk, enabling it to be worn loose like a flag, wrapped tightly to the body, hitched up as a top, or worn it inside out to reveal the contrasting interior …or even upside down. The 'fashioning' possibilities explored through Emotional Fit explore the idea that in order to divert 'attention from the consumption of objects' [12] and to transform the way fashion is conceptualised, it would seem useful to engage potential wearers with its materials and processes.

Ania Sadkowska: The lived fashion experience

The very beginning of Emotional Fit coincided with me embarking on my PhD study at Nottingham Trent University, the same time when a group of older women contacted NTU (September 2012). My interest in the topic of fashion and ageing first started on the MA course at De Montfort University, Leicester, during which I explored the mature females' relationship with fashion and clothing. So being involved in the Emotional Fit project gave me a sense of dealing with something that I felt I knew something about, that was 'familiar', while adapting to a new university and PhD study. My MA project, entitled "The Dys-Appearing Body" [13], was conceptually framed in a very different way, with all of the produced pieces being inspired by images of female bones affected by postmenopausal osteoporosis, and each of the garments functioned as a material statement to provoke dialogue and discussion in order to re-address the area of social acceptance of the ageing female body. However, there were

some methodological and procedural similarities. For example, for my MA project I also conducted a series of semi-structured interviews, with mature women about their experience of fashion and ageing. Furthermore, both projects involved developing and utilising certain craft and pattern cutting skills, and simultaneously embracing the roles of fashion designer, researcher and maker, which was critical for establishing my position as a fashion practitioner and relevant to my PhD study, in which, via IPA, I investigated mature men's experiences of and relationships with fashion.

Working on Emotional Fit gave me a chance to explore the persistent and intriguing questions of the relationship between fashion, clothing and ageing, but it was not without certain tensions. My previous experience of working on a similar project (MA), and my own PhD research, allowed me to feel a certain level of confidence when designing the study and structuring the IPA interview protocol [14]. However, I could not escape the fact that, as in the case of previous projects, I was indeed the youngest member of the team, meaning that I could not directly relate to the experiences that the participants shared with me. [15] observes that during the interview the researcher gains access to a whole array of various forms of interpersonal communication, as well as a direct entry to the participant's lived world. Consequently, building a good rapport with the study participants was critical. Despite the fact that my aim as an interviewer was to create conditions for a mutual dialogue, rather than an interrogation, I cannot deny that the clear age differences had an impact on the way I formulated the questions, and also must have had an impact on the way the participants formulated their answers. To add to this, Kvale (ibid: 125) notices that during conducting an interview "[t]*he research interviewer uses* (…) *herself as a research instrument, drawing upon an implicit bodily and emotional mode of knowing that allows a privileged access to the subject's lived world*"; indeed, I observe that both myself and the interviewees enacted our age differences bodily, in a way that influenced the non-verbal interview dynamics such as the tone of voice, expressions, or gestures, which often resulted in an atmosphere of an intimate chat that the participants would perhaps have with a younger female family member, or a friend, resembling an advice session of 'how to look good, regardless of age,' sharing with me their wisdom, 'tricks' and 'methods' for looking good as you grow older, and equally, their issues and frustrations, closely tied to the content of their wardrobes [16]

Finally, and following on from the previous point, the interviews I conducted had an impact on the processes of the subsequent workshops and design decisions. Tanggaard [1] argues that both materiality and artefacts are substantial elements to creativity. Moreover, she insightfully notices that "*we need to begin to stress the situated character and the material basis of creativity as well as to tie creativity more explicitly to everyday life, not reserving it for exceptional individuals and extraordinary processes of intrapsychological thinking*." Indeed, the resulting

knowledge the participants shared with me during the interviews was reflected during Workshops 2, 3 and 4, which were designed to tap into the participants' existing relationships with, practices of, and meanings they attach to, fashion in their everyday life, supported by the use of material tools such as the overall principles of geometric pattern cutting, by utilizing all these elements as starting points for fresh idea formations. In this vein, it was via such socio-material encounters, between the participants, researchers, existent garments, textiles, toiles and prototypes, that those new creations were manifested, negotiated, materialized and finally, validated.

Jackie Goode: Finding the right fit

I was delighted to become one of the collaborators in the Emotional Fit project for a number of very good reasons. To begin with, it is addressing an important gap in academic and practice-based approaches to fashion design. It is ironic that the notion of 'user-led' design has been more fully developed in relation to organisational systems and technologies [17] as a kind of post-hoc attempt to catch up with innovation in these areas by belatedly restoring the person to the process; whereas in fashion design, which is concerned with intimate and expressive aspects of embodiment, collaborating with 'users' – in this case hitherto largely ignored older women – is still innovative. 'Participatory' or 'collaborative' action research has a longer pedigree in the social sciences where, for example, it is seen to enhance the effectiveness of efforts to bring about broad social change [18] or to improve the health and wellbeing of individuals or communities [19]. Again, a degree of irony is evident in that involvement of the wearers of the fashion industry's creations has hitherto been neglected when, at the macro level, the need for social change in methods of industrial production and the need to promote sustainability have become increasingly pressing and when, at the individual and community level, there is a growing body of evidence that dress and the way we 'fashion ourselves' can have real value in terms of enhancing health and well-being.

Secondly, I had been engaged in conducting (partly autoethnographic) research of my own on fashion and older women (and men) [4, 20] which suggests that while there may currently be a 'fashion for older women' in magazine and social media articles and on covers, the reality in relation to the actual 'offer' on the real and virtual high street hasn't caught up with the rhetoric. I shared with my interviewees an experience of what Shilling [21] refers to as a sort of 'sartorial aphasia' in which one can no longer exercise "the alchemy involved in putting together a look, juxtaposing a disparate clutch of garments to create a coherent autobiographical mini-drama". My interviewees did not, they said, wish to become invisible, while finding the right clothes for them could still 'make the spirits soar'. "Someone" said one woman plaintively, "needs to do it for us". The Emotional Fit project recognises that 'doing it for us' in fact translates not into unilaterally producing some putative 'old ladies' range but into 'doing it *with* us'.

Thirdly, in my own and my interviewees' narratives, over and above the semiotics of clothes, the elements of 'performance' (of class, gender and now age), of public display, of being noticed, it is the very materiality of clothes that comes through. What is evident is a tangible visual, tactile and aesthetic relationship with clothes. We are intimately taken up with the feel of them, the textures, the weight, the heft, how they touch our bodies, how they are constructed, the detailing, the subtle colours and shapes, the lines, the silhouette. It is this mixture of social and material practices which are co-constitutive of our 'selves'. There is a perfect 'fit' here, then, with the 'collaborative' design processes of the Emotional Fit project which, in addition to its recognition that there are indeed issues to be addressed, is validating of our 'ways of knowing', our experience, our cultural capital. It was interesting to take part in the focus group discussions, to comment together on visual representations in magazines and to share our own favourite garments; it was illuminating to participate in the 'measurement' workshops which explained, at last, why finding your size and 'trying on' can be such a trial; it was fascinating to see how a professional pattern cutter can take a much more imaginative approach to our needs; it was exciting to try on toiles and see a variety of prototype garments 'come to life'; and it was a mixture of terrifying and thrilling to take part in 'photoshoots' and the 'salon'.

Further, what I and my female interviewees have in common is that we came of age in the nineteen sixties at a time of cultural revolution, when art colleges gave rise to a fusion of art, popular music, film - and fashion. We were part of that and it was incredibly exciting. And we have retained an active engagement with fashion which, despite the occasional despondency induced by the industry's obsession with youth, its failure to recognise our changing body shapes and to take an interest in our enduring sense of style, remains positive. We love this stuff! The right 'emotional fit' can still lift our spirits. So, finally, the whole experience of collaborating in this project has been enormous fun. Fashion industry: Take note!

Juliana Sissons: Geometric pattern cutting and garment silhouette

When asking participants, what does the term 'Fashion' mean to you? The answer was overwhelmingly "Youth, constant change, driven by capitalism and not concerning them".

Introducing simplicity in design was key, with more focus on fabric quality and longevity instead of fast fashion and immediate trends. It was important for garments to be comfortable, with consideration to individual style. Garments with sleeves were a popular choice and separates and layers were also a favourite.

Introducing a geometric approach to pattern cutting, offered possibilities for minimalistic styled garments. Effortless

silhouettes with a similar aesthetic to kimono shapes could be produced. The participants had expressed a wish for versatile shapes, garments that could be dressed up or down. The geometric cutting approach also lends itself to sustainability; as most of the garments are cut with zero waste. Rectangles follow the body line and circles are good starting points for drape as they are cut with a bias grain and mould on the body easily

The participants expressed a need for the garments to be functional, in shapes that could be worn with flexibility; either worn loosely or tied and folded in a way that enhanced 'fit'. This method of design also offers the opportunity for some designs to be worn across many size ranges.

Participants had been buying clothes determined by bust measurements and then finding it difficult to fit the whole of the body shape. Fit is a constant problem for older women - a 20 year old size 12 has a different body shape to a 60 year old size 12; bust points are lower and waist shaping is in a different place. Participants found some garments to be too fitted, or fitting in the wrong places.

After comparing the measurements of participants with the British Standard size charts (with 4cm and 6cm increments between sizes) it was found that most of the women were buying garments in sizes that were two sizes too small for them. This is complicated further by the fact that some designers re-label sized garments so that the size appears smaller, in order to make the customer feel better about their size. Size and fit issues were documented in order to investigate the possibility of new size charts being developed.

Participant's measurements were initially gathered into height and width categories, these were then merged into sizes, Short S, M, L, Standard S, M, L, and Tall S, M, L. The idea of reducing these categories further into two main sizes was also considered. These categories informed the development of the sized geometric shapes, which had 10cm increments between each grade. As long as there was enough space between the body and the fabric, a number of different sized participants could fit into one sized geometric shape, as in the case of the Universal Dress (fig. 10). These sizes were edited through a process of elimination, with participants trying on different shapes to see which fitted best. We also experimented with straps and ties and methods of disrupting the flat geometric shape in order to adapt 'fit' and 'drape'. The use of these flat and gathered ties could alter the length and width of a garment and add a design feature as illustrated by the Triangle Dress (fig. 11). The garments were designed around the construction of 'fit'. However, these are not 'couture' or 'made to measure' garments, but are made with groups of body sizes in mind.

Figure 10. Universal Dress (Photos by Rebecca Lewis, 2017)

Figure 11. Trainagle Dress (Photos by Rebecca Lewis, 2017)

Karen Harrigan: Tacit making

One of the things I found interesting was how the project reconnected me with my embodied 'making' skills. As a fashion design lecturer I tend to advise students and support them with pattern cutting and manufacturing techniques. The development and construction of the garment prototypes for Emotional Fit required sewing toiles based on original patterns, fitting them on participants (and the research team as three of us are in the demographic), amending patterns to accommodate comfort and fit, making new toiles, then moving on to sewing prototypes in final fabrics. I realised there were improved ways to finish particular garment elements and apply finishing techniques using specialist machinery that I was unfamiliar in using. This led to a period of refamiliarization with skills that were once second nature to me, but that had to be practised and remembered through my hands and bodily actions.

I wanted to make the garments up to a hgh standard, in keeping with the ideas of quality and longevity expressed by the participants. Most of the garments were straightforward, but some, like the Triangle Orchid dress were cut from a number of triangular panels of silk (fig 11b & c) which needed careful handling to be manufactured to a high standard. These and other kimono-style dresses required neck bindings in self-fabrics of silk, wool and viscose, required readjustments to be made in relation to needle, stitch size and tension variation.

The Fittings with the participants were incredibly informative and introduced new considerations for altering

the garment in terms of width, length and possibilities for manipulation. Print placement also had to be considered carefully in relation to the pattern pieces, so as not to emphasise certain areas of the body, such as bust and hips, and if possible to contour or detract from classic problem areas of stomachs and bottoms, which women are often sensitive about.

The repetitive nature of the fashion sampling process, enabled me to practise my forgotten manufacturing skills, to the point where I could problem solve and construct confidently and quickly, similar to when I worked as a designer in industry. Just as the women felt validated by being listened to and designed for, so I found their appreciation of the final garments empowering, as the project had put me back in touch with my skill base as a maker.

CONCLUSION

The project described herein considers fashion design as a process and opportunity for creative socio-material encounters. Here, engagement between 'designers' and mature consumers on a live project has been utilised to inform new methods for capturing and interpreting individuals' embodied experiences of fashionable clothing, to develop an alternative, holistic fashion methodology. By opening up a dialogue with a self-formed group of Nottingham women (aged 55+), concerned about their continuing agency within contemporary fashion, the researchers have gained valuable insights into the social, cultural and material relationships, informing these individuals' perceptions of their embodied fashion selves. Through a series of show and tell discussions, in-depth interviews, personal inventories, practical and diagnostic workshops, a series of common and specialist knowledge and skills have been revealed and exchanged by the participants and researchers. These include dressmaking, altering and personalization, fashion and textile design, pattern cutting and garment construction. However, the boundary between the amateur and professional making competencies was quickly dissolved by the shared personal experiences of wearing, styling and presenting oneself through clothes.

Working with the different qualitative data, in the form of physical (measurements) aesthetic (design preferences) and psychological insights into the participants' experiential, and sensory engagement with dress objects [12] informed the development of a series co-designed garment prototypes. Based on geometric cutting and bespoke textile design to accommodate a range of contrasting body shapes and tastes, the resulting artefacts synthesisze both the past (participants' personal archives) and the future (prints and prototypes), enabling the group to visualise their current position in relation to the phenomenon of fashion and ageing. The exploratory nature of the research process challenges traditional divisions between design and research, object and subject, researchers and participants. Through the utilization of the reflection and collaboration

processes, we facilitated a space of creative possibility, with materials acting as the 'shifting ground' and where relationships and identities are negotatied remains in constant flux.

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i The interviewees were selected based on their availability and interest in being interviewed expressed during Workshop 1.

Dress Material

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ABSTRACT

This paper argues that our understanding of the aesthetics of fashion design suffers from two related problems. First, if we allow that fashion, like every creative art, is the bringing of form to matter, it is nevertheless the case that the concept of materiality as it has been understood since Aristotle has privileged the art of sculpture over that of dress. Second, if we grant that fashion, like the other arts, is currently engaged in an immanent critique of its limits, this critique of the forms of fashion (and with it that of the categorisation of its objects), is misunderstood as an application of Rosalind Krauss' concept of an expanded field. In both cases, it is the inescapable situation of the body in fashion design that renders these ideas problematic. The paper proposes that we rethink the unity of form and matter in fashion design through the singular idea of dress material. The latter denotes not a type of fabric but the thread-thin rift that separates dress (here not a means of adornment but the principle of self-presentation) and material (not any old stuff that might be put to use but the counter-principle of self-refusal). Dress material is thus an ontological investigation of the 'ambivalent' unity of display and modesty, concepts familiar from the field of fashion psychology, rethought from the perspective of Heidegger's essay on the origin of the work of art.

Keywords

Heidegger, Aristotle, Rosalind Krauss, hylomorphism, materiality, dress, stuff

Let me begin with some initial reflections on the meaning of the title 'Dress Material'. If you had not read the abstract, you might assume understandably that this paper would deal with the kinds of fabric, or perhaps of stuff in general, that might be turned to the production of a particular type of garment. If you were inclined to think more speculatively, you might then consider the first word in a verbal sense, and so wonder whether it might also deal with the arrangement of stuff, its manipulation or adornment, and so with the act of design or creation. If you were particularly analytical, you might imagine a colon placed between the two words and be reminded that dress is material in the sense that it matters to us, though why it does so remains a matter of contestation. This paper is concerned with all these possibilities.

Fashion design, like every creative art, has long been understood as a particular skill or *technē*. To be precise, it

is a specific practice that is knowledgeable in the bestowal of form upon matter. The individual work of a fashion designer – a dress, for example – is the purposive shaping of fabric to produce a particular form. The two Latin terms, *forma* and *materia*, are translations of the Greek words *morphē* and *hylē*, from which the word 'hylomorphism' derives. The latter names a theoretical framework that originates with Aristotle and has defined the conceptual field of aesthetics ever since.

However, it is necessary to pause here and to recall that these older words for matter – *materia* and *hylē* – do not refer initially to any material whatsoever. Both words initially refer specifically to wood or timber. The act of artistic design and creation is originally understood as the drawing out of a form that is inherent in natural material, while the figure of the designer or artist skilled at extracting form from matter is originally modelled on that of the sculptor.

This has two consequences for us. The first consequence concerns the artificiality of dress material. In the case of the forming of materials of nature such as wood and stone, artifice is the result of the creative act. It is not inherent in the material itself. This is not so for those arts whose materials must first be subject to skillful preparation, through the production of pigment, of metal, of leather, and certainly of fibre and fabric. The second consequence concerns the manner of dressing material. While sculpture can and does produce its forms through the arrangement and shaping of its materials, its distinctive *technē* lies in the extraction of forms latent within its masses. Dress material, however, hides its forms not in its depths but on its surface. Its materiality is to be all surface, to be a volume of vanishing thinness, while its formation shows an essential tendency but also a particular ability to display and to hide, through the presentation of a shape and the concealment of a void. Dress, unlike sculpture, is essentially hollow. Indeed dress may clothe sculpture. But also bear in mind that it is the artificial that clothes the natural.

I began by using the words 'material' and 'stuff' interchangeably, and it happens that they now have a similar semantic range. But the word 'stuff' – in German *Stoff* – originally refers not to natural matter but to the stuff of fabric and textiles. If we step back from the question of etymology to consider what the phenomenon itself might

have to offer, it might be that stuff opens up an alternative way of thinking about materiality.

Stuff clothes and protects, it but it also suffocates and exhausts. Where natural material is characterised by plenitude – by the sheer solidity of stone, for example – stuff presupposes a void, and so it is stuff, not material, that either dresses the nothing or is crumpled and crammed into its hollow. It is both a surface without depth and a surface that fills the gap between surfaces.

Lacking the tendency of natural material to the excavated presentation of inherent forms, the vocation of stuff to cover or fill a void lends it to indeterminate and unpredictable manipulations. If it is to cover the formless void, then it too must be capable of utter deformation. If it is to be stuffed inside another surface, it must be capable of secret contortion. And here we might briefly reconsider the terms of this conference, which in part seeks to examine the immanent critique of its disciplinary limits that fashion design currently seems to be undertaking. This critique, both of the form of fashion and the categorisation of its objects and practices (its intellectual 'material'), remains overshadowed by the hypothesis of trans-disciplinarity proposed in the now-classic essay "Sculpture in the Expanded Field" by the art theorist Rosalind Krauss. Where Krauss identifies that sculpture is both defined by and seeks to problematize its opposition to the disciplines of architecture and landscape art, we might speculate that fashion design is presently testing the limits of its opposition to, say, the disciplines of fine art (particularly sculpture and installation) and performance art.

How are we to understand the trans-disciplinary mode of critique? If we continue to see it as a critical examination of fashion's physical and intellectual material – of dress as a category of objects and as a disciplinary practice – then the critique may be seen as a problematizing of the traditional order of things, the expansion or confusion of disciplinary limits. Yet such a critique nevertheless recognises a natural or at least a traditional order to those disciplines, in the erstwhile separation, for example, of the objective categories and practices of fashion, sculpture, and performance. A critique rearranges. It is a conceivable mode of dress. Physical and intellectual stuff, however, is insufficiently disciplined. It is not easily to be categorised and its behaviour is unpredictable. Stuff inherently lends itself to unexpected forms of reorganisation, to chaos and jumble. If we were to understand this critique of the forms and objective categories of fashion's materials instead as a rearrangement of the stuff of fashion, then perhaps we should see fashion and its apparently adjacent disciplines not as a patchwork quilt but as a box of remnants.

I claimed earlier both that fashion design is the purposive shaping of fabric and that the tendency of stuff is both to dress and to fill a void. To have purpose has long been a criterion used to distinguish the fine and the applied arts, and this reference to a void tells us what that purpose is.

The purpose of stuff is to dress the body, which fills the void shaped by the fabric. The body, together with the sculptor's block of marble, belongs to the order of the natural, the bolt of material that would clothe the body, like a statue of Apollo carved from marble, belongs to the order of artifice, while the shaped fabric – perhaps a fig leaf – that dresses either body or statue is artifice at a still further remove from nature.

The purpose that dress serves is manifold, though in a general sense we might say that it is to be wearable, though without necessarily defining what the criteria for wearability might be. By contrast, art, unlike design, according to a persistent pre- or misconception deriving from Kant, if it is to be the object of a purely aesthetic judgement must be free of such purpose. Yet it takes little reflection to see that the creation and experience of the work of art is never without purpose, just as the work of design may always be judged disinterestedly. In the case of the creation of the work of art, the selection of material, its arrangement for the communication of the artistic intention, its release into the world, are all purposive decisions. The traditional distinction between the fine and the applied arts is itself a motivated one, designed to preserve a traditional distinction and hierarchy between disciplines.

In his essay on "The Origin of the Work of Art," Heidegger demonstrates that the theoretical framework of hylomorphism, the conceptual unity of form and matter that has long defined theories of art, is derived not from the experience of art itself but from the experience of what he calls equipmentality, the kind of purposiveness thought to be pursued not in the fine arts but instead in the design disciplines as well as in more prosaic fields of manufacture and industrial production. The concepts of form and material help us to understand neither nature nor art. Both concepts, those of matter and form, have a deeper origin, one that is revealed to us by the work of art, provided that we set aside the concepts themselves.

Note that the word that Heidegger uses, which is translated into English as 'material' and is his translation of the Greek *hylē*, is, in German, not *Material* but *Stoff*. In other words, Heidegger's critique of hylomorphism in the essay, which depends on a contrast between things of nature and things of artifice but resorts to a word for the artificial rather than the natural, is itself not immune to the kind of critique that I am attempting here.

Let us return to the phenomenon of dress material, to the chaotic or secret arrangements afforded by stuff. And let us set aside the question whether any given creation might be a work of wearable design or a self-sufficient work of art, and so discount the importance of purpose to the definition of the work of fashion design.

If we were to take precisely the same step that Heidegger now takes, we would, in attending to the surface of stuff, take note of a rent in the fabric – though it would be more truthful to say that the fabric itself is this rent. Stuff is torn

in two directions. On the one hand, its shape, its colour and patterning, its texture, its layering and combining, all disclose a particular history and tradition of dress as well as a specific world in which its wearers are identifiable as the ones who they are. Heidegger calls this the opening up of a world. On the other hand, its opacity to light, its resistance to touch, its relative impermeability to the elements, its worked presentation of the fleece of animals, the fibre of plants, and the chemistry of petroleum, place this world within the domain of nature. Heidegger calls this the coming forth of the earth. If I do not follow Heidegger along precisely this path, it is not because fabric is not rent in just this manner. Rather, it is because his characterisation of the rent, at least in this relatively early essay, too closely reproduces the questionable distinction between the thing of nature and the product of artifice or design, and with that the unquestioned assumption that materiality is originally the province of the natural.

What we do need to hold onto is the thought of the rent itself and of the counter-tendencies that draw it apart. Dress material in this sense is not a fabricated surface of vanishing thinness but the thread-thin rift separating dress as the arrangement of stuff and stuff as the derangement of dress. Dress is governed by the principle of self-presentation, stuff by the counter-principle of self-refusal. These two principles also govern the Heideggerian distinction between dress as a phenomenon of both worldly significance and earthly provenance. However, I wish to think through these principles by considering not the nature of material but the essence of stuff.

Stuff is governed by the principle of self-refusal in two ways: it is the surrender of the surface garment to disorder – to rumpling, twisting, disarrangement – and it is the concealment of a surface beneath the surface – such, for example, is the principle of the undergarment but also of the handkerchief stuffed in a pocket. But dress too is governed by the principle of self-presentation in more than one way: it is the shaping and arrangement of the surface of stuff, the creation of form, silhouette, detail, archetype. But it is also the self-presentation of the void that is clothed and shaped by stuff, the form of the obverse that presents itself through the surface. The surface presents that which lies beneath – that is the essence of the superficial.

Stuff is a matter of surface because what it forms and deforms, displays and conceals, in limited yet unpredictable ways, is the body. The body is the obverse of the surface. It is that which dwells in the intimacy of its hollow. And here it is tempting to conclude that what lies within dress material is a corporeal figure, or an Apollonian torso, something natural or at least something wrested from nature. But the body likewise is torn by this rent between self-presentation and self-refusal. It presents itself both as the surface, which draws attention away from its depths, and through the surface, which is shaped more or less to display those depths. The motivation for this presentation of

what is nevertheless concealed within dress is commonly explained in terms of Freud's theory of erotic displacement. What matters is that the erotic possibility of self-presentation is always rent by the surface; it must concede to the ever-present counter-possibility of self-refusal. Conversely, the body refuses itself not only by remaining concealed behind the surface but also by allowing the surface to conceal the form of the body through manipulation and distortion. Silhouette and detail conspire to submerge the body beneath the surface. At the same time, these surface effects point precisely to what would remain hidden, and so self-refusal must acknowledge the inevitable possibility of self-presentation.

These two bodily possibilities, for self-presentation and self-refusal, are familiar to us from the field of fashion psychology as the ambivalent unity of display and modesty. The notion of ambivalence is the psychological version of what I have called the rent, and these psychological concepts are here given what we might call an ontological interpretation.

Is this then just an alternative to and less wieldy version of a long-standing rationale for the culture of dress? Is not the psychological interpretation simpler? Yet not only aesthetics but every discipline, including psychology, is understood if not within the conceptual framework of form and matter then certainly within the derived framework of form and content. Concepts such as display and modesty comprise both the intellectual material of the discipline of psychology and the formal concepts that rationalise the material phenomena of the *psychē*. Psychic and bodily behavioural phenomena such as desire and anxiety are supposed to be natural, the interpretive responses to them that take the form of display and concealment as socially constructed.

The ontological interpretation suggests differently. The body is not a thing of nature clothed in the material of artifice but is itself a kind of stuff. Perhaps that sounds plainly wrong. Why on earth should we think of the body as just some stuff? But then, to misquote the Spinoza beloved of Deleuze, we have not yet determined what this stuff can do.

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Pain as a material for wearer-centric design

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ABSTRACT

This study aims to explore the felt and lived experience of acute and chronic pain as a catalyst for wearer-centered garment design and it's making. It examines the impact of pain in life disruption as well as two diverse stances to pain management and alleviation: product and design process. These perspectives connect the material and corporeal to develop methodologies that can further inform both product and design. This study contributes to the body of knowledge by bringing to the fore the importance of mixed methodological approaches to fashion and product research and development.

Keywords

Design methodology, Mixed methods, Pain, Design, wearer-centric

INTRODUCTION

This paper explores the felt and lived experience of pain as a catalyst for wearer-centered garment design and its making, by outlining two diversified approaches to pain alleviation and management through the garment. The immateriality of pain is explored through these approaches leading to two proposed different design approaches. For the exploration of the relationship between these multifaceted dimensions of pain and product design: in the form of a garment or a design process. A mixed methodology was used for generation of enhanced and validated data and employed the integration of varied wearer-centric source materials, as well as multi-methodological approaches to fashion and product development.

Firstly pain relief is explored through the development of a product design methodology for a maternity support garment for pregnant women experiencing acute pain.

Commonly, pain of this nature is often transient and commonly, experienced by women during late stages of pregnancy. Whilst anticipated, the corporeality of pain is something private and unique in its effects to personhood and holds the possibility of disrupting daily life. The methodology used for this purpose combined mixed underpinning knowledge gathered through surveys that explored pain manifestations in pregnant women, product features that the wearer needs and values as well as the insight provided by literature review examining the physicality of the pain during pregnancy. This approach lead to the definition of the utilitarian attributes of the garment, creating a wearer-centric, multimodal design approach to the design of pain-alleviating garment.

Secondly, the experience of chronic pain is analyzed from a design practitioner perspective, though a qualitative methodology, including participant questionnaires, interviews and auto-ethnographical analysis. The manifestation of chronic pain has been shown to be devastating in its effects to life disruption and creative individuals experiencing these conditions, often these themes are explored in practitioners work and the creative act can function as a means of making sense of individual pain experience. It is revealed that during the act of making and working with materials, some individuals appear to transcend bodily states, such as pain. The process of working creatively is a kinesthetic and sensorial experience that may be supportive of cognitive states such as mindfulness that give reprieve from pain. This study demonstrates that the significance of pain is not limited to thematic explorations but also embodied in processes of making as a pain-alleviation approach.

The objective of this paper is to propose a speculative model for design wherein pain acts as the material for both, the wearer-centered product and maker-centered process. Adopting this approach holds implications for individual's wellbeing by addressing both the physiological and psychological aspects of the pain experience. Furthermore, the proposed model exemplifies 'felt' experiences and

bodily states as resources for garment design exploration in addition to therapeutic applications.

This study contributes to the body of knowledge alternative to medical pain therapies, bringing to the fore the importance of mixed methodological approaches to fashion research and design: a mix of sources, processes and methods drawn from science and art and design research. The paper highlights opportunities for further research into unconventional garment design methodologies by interconnecting the material and corporeal as part of product and process in design.

Pain alleviation through product development
Acute pain is commonly expected and suffered by women during pregnancy. Among the most common physical discomforts reported during pregnancy are Lower Back Pain (LBP), Pelvic Girdle Pain (PGP), fatigue and general malaise, which commonly arise during the second and third trimesters of pregnancy, with the highest intensity between 20 and 36 weeks and commonly associated with changes in body shape, weight increase, hormonal changes and musculoskeletal changes [2,18,23,26,29].

Multiple studies report that approximately 50%-80% of pregnant women experience moderate to severe back pain and/or PGP during pregnancy [2, 16, 28] and 70%-80% experience fatigue and general malaise [8,18]. All symptoms vary in duration and intensity and compromise the performance of Activities of Daily Living (ADL) such as sleeping, sitting, walking up the stairs, bending and general walking [11,18,23,28], decreasing Quality of Life (QOL).

However, as the discomforts are transient and considered as expected or normal during pregnancy, most expectant women do not search for alleviation treatments from health-care professionals. For instance, only half the women with lower back or pelvic pain symptoms visit a physician, with 70% of those patients treated [21].

Health-care professionals suggest conservative, non-invasive and non-pharmacological treatments like maternity support garments to alleviate pains and discomforts. Although It has been shown that maternity support garments have been effective and efficient for alleviation of pains and discomforts during pregnancy, there is no a specific model for the development of a wear-centric maternity support garments for pain alleviation.

Pain alleviation through design process
Chronic pain conditions can be devastating and life changing events for patients and family. Individuals must re-think their self-concept and face interruptions to identity and subsequent biographical disruption [3]. Withdrawal from work and social relationships are major features of chronic pain conditions and many individuals must give up working entirely as their conditions progress [3]. Patients often seek multimodal treatment options to manage their pain including physiological, psychological,

pharmacological and lifestyle modifications [6]. The importance of mood-regulation is also emphasized as the comorbidity between chronic pain conditions and depression is common. [9, 25].

Contemporary applications of art therapies are acknowledged as beneficial practices in psychology and psychotherapy. Differing modalities of creative practice are used therapeutically to foster verbal dialogue between patients and care giver. Therapists that use art in psychotherapy believe that creative works have the ability to expand communication and offer insight into a patient's condition [15]. In addition to art facilitating communication, it can also engage "movement, vision, feeling and feedback from the externalized object." [19] The malleability and responsiveness of materials to the movements of the body are of particular interest to this research. Using the body in a creative act can be profound for patients experiencing illness and loss of bodily function. "The creation of a new body image comes from an integration of sensation from the outside to the internal world of feelings and experience." [27]. The integration of inner and outer experience gives rise to intentionality and agency often ravaged by pain and disease. "Movement is indeed the basis of our experience of ourselves as capable and effective agents in the world." [22] The perceptive and somatic body expands this experience in the act of movement and making in creative practice.

The body, movement, kinesthetic and sensorial experiences connects us to creative practice in the moment of making and handling materials. The phenomenological experience of creative *processes* may also be supportive of cognitive states such as 'mindfulness' and 'flow'. The contemporary interpretation of mindfulness is a practice of bringing awareness to the present moment in a state of non-judgment [20]. It can also be defined as an attitude that includes openness, curiosity and acceptance [24]. The practice of mindfulness has been shown to have positive affects on patients living with chronic pain conditions. [5, 12]

Flow refers to a cognitive state in which people report to become so involved in a task or activity that they lose track of time, space and bodily complaints. 'Flow' is a form of hyper attention that is elicited when a balance between "perceived challenges and perceived skills" [4] is present.

It is proposed that between these two cognitive states, mindfulness and flow that reprieve from pain may occur for some creative practitioners experiencing chronic pain conditions.

METHODOLOGY
To explore acute and chronic pain alleviation though the garment and its making a mixed methodology was developed, that explored not only the physicality of the pain, but the pain manifestations and its effects in quality of life. Acute pregnancy related pain was examined through a questionnaire with qualitative and quantitative components, while chronic pain was researched through semi-structured

interviews, questionnaire and designer auto-ethnographical analysis.

Acute pain was studied though a comprehensive literature review from July to December 2015 examining the physicality and biomechanical origins of pregnancy-related pain. After this, a questionnaire was developed to document and examine data regarding the felt experience of pain, its effects in life disruption and the wearer needs on a maternity support garment. This pilot survey was conducted through online communities themed under pregnancy and maternity. Participants were between 22 and 36 weeks pregnant, 18 to 45 years old, and had not experienced any back pain, lower back pain, pelvic pain, or hip pain before pregnancy. The final sample consisted of 55 pregnant women and the data gathered was analyzed through the Statistical package for Social Sciences (SPSS) statistics Version 23.

The questionnaire was designed, distributed and the data was collected through Qualtrics version 1016 (Qualtrics, Provo, UT, USA). The questionnaire was divided into four sections. The first section asked for demographic information of the wearer, the second section requested participants to rate the severity of pain and how it was affecting the performance of Activities of Daily Living (ADL) in a scale 0 to 10, were 0 was the lowest score and 10 the maximum score, the third section was concerned with the treatments used for pain and discomfort alleviation and the last section asked participants to rank 17 attributes for designing and developing an improved maternity support garment in order of importance from "Extremely important" to "Not important at all".

Descriptive statistics including frequencies, means and standard deviations [SD] were used to report participant demographic data, information regarding discomforts and severity of pain and experiences with maternity support garments. Open-ended questions were use to explore participant's experiences and perceptions towards maternity support garments.

Chronic pain was investigated though a series of in depth semi-structured phone interviews. Creative practitioners were of keen interest to this research. It was intended to explore the way these individuals engaged with design processes and materials. Practitioners were sought who had been diagnosed with one of the following chronic pain conditions: Chronic migraine, fibromyalgia and chronic back pain. To take part in the study participants were required to be between the ages of 18-65, diagnosed with a chronic illness. 'A disease or injury that has lasted more than 6 months and has caused an individual to significantly alter his or her day-to-day activities.' [13] For the purpose of this paper, only participants with pain related illnesses will be discussed.

An ethnographic methodology was used to enable a "thick description" [10] specific to participant's individual experience of pain and creative practices. Questions were aimed to understand participant's experience of daily life with chronic pain and specifically its affect on creative practice. Data generated from verbatim-transcribed interviews were examined through a an iterative process of "Grounded theory" [1] whereby concepts became increasingly richer through the method of analysis. [7] Prior to these interviews, participants completed an online questionnaire to foreground their illness experience. Embedded in this was a set of questions from the 'Revised Illness Perception Questionnaire' to provide an assessment of the components of representation: identity, consequences, timeline, control/cure and cause. [17]

In addition to this an auto-ethnographical analysis using the researchers own lived experience of chronic migraine and garment design practice have informed this study. This experience has been recorded through reflective writing whilst engaging in garment making processes. Pain severity was quantified and recorded before and after each studio session to measure the affect of creative practice on pain levels. A 'pain score' was recorded using a quantifiable measure (1-10) 1 indicating 'low pain' and 10 indicating 'severe pain'.

RESULTS

Acute and chronic pain were explored through product design and the process of making respectively, demonstrating two valid approaches to pain alleviation and garment design exploration.

Acute pregnancy related pain was explored in a pilot questionnaire to understand the felt experience of pain to better develop maternity support garments. The data gathered during the study revealed comparable results to the ones found during the literature review: 21.8% of women experiencing pain defined it as a highly unpleasant physical sensation that hurts the body, 20% discomfort, defined as not being in pain, but not feeling good, being uncomfortable and unease and 58.1% experiencing both pain and discomfort, with 40.2% of women not looking for any treatment for alleviation. The pains more frequently reported were Back Pain, followed by Lower Back Pain and Pelvic pain, 38.2%, 33.8% and 22% respectively.

Other pains and discomforts reported were hip pain, carpal tunnel syndrome, vaginal pain, wrist tendonitis, swollen legs, heartburn, fatigue and reflux.

The results showed that those pains and discomforts affected women in performing activities like getting up from a sitting position, staying sitting for 30 min, getting in and out of bed and getting up and down stairs, affecting quality of life.

Also, the questionnaire results showed that, on average, 40.2% of women did not look for any treatment for pain alleviation and only 25.4% of women had used maternity support garments as a treatment. Half of them reporting to have experienced with two or more types of garments.

64.2% of participants who had previous experiences with maternity support garments (n=14) found that the garment helped them to alleviate pain and discomfort by supporting the weight of the belly, by compressing the body or by correcting the body posture, while 35.7% found that the garment didn't help with pain and discomfort alleviation. Some the reasons given were: " I didn't wear it", "I'm not sure why", "It didn't offer support" and "probably it was not the right size for me".

The participants were asked to rank their experiences with using the garments in relation to garment done and doff, functional use, size availability and fabric perception. Then the questionnaire gathered information about the importance given by participants to seventeen attributes listed for designing an improved maternity support garment. Among the most important attributes in a maternity support garment were reduction of pain, baby safety, donning and doffing and breathability, while the less important attributes for participants were colour, material and appearance, making noticeable that the functional and comfort aspects of the garment were the top utilitarian attributes in a wearer-centric maternity support garment.

Chronic pain was studied in a questionnaire with creative practitioners to further understand their relationships to design processes and felt experience of pain. It was found that 88% of participants (n=8) were able to work in their creative practices even when not feeling well. Of these participants 75% were unable to work in paid employment due to their disabilities.

The semi-structured interviews revealed a richer narrative of each individual's experience. One participant, who designed intricately detailed garments, described her creative process as *"almost like a meditation."* She spoke about her 'slow' process of making and appreciation of the materials during handling. Reflecting on this she was aware that she did not have the ability to be truly 'present' before she lived with illness.

Another participant, who has been living with chronic back pain for over 10 years, described the ability to sometimes lose awareness of his bodily condition when working creatively. He described this brief reprieve from pain as *"Being in the zone."* Reliant on traditional pharmacological treatment for his severe pain the possibility of 'tapping into' this cognitive state offers further opportunities for increased wellbeing. *"If I can get in the zone I'll be so focused that I'll forget the time, I'll actually forget the pain and once I get going I'll sit up until 3am."* When asked about their individual experiences of pain and creative practice 88% participants spoke of the ability to achieve cognitive states such as 'mindfulness' and 'flow' while working.

Information gathered from an auto-ethnographical analysis revealed similar results. 14 individual practice based 'studio sessions' were analyzed and garment design processes including fabrication selection, sewing, pattern drafting, hand sewing, pressing, weaving and knitting were recorded through reflective writing. Pain severity was also recorded before and after studio sessions and in 85% of instances self reported pain was lowered after engaging in creative practice.

In addition to this, reflective writing was captured during the experience of making. It was through this additional measure that more insight was obtained into the phenomenological experience of pain and design. Analysis of the reflective writing revealed moments consistent with mindfulness.

"Sensation of sewing and seams on viscose lining feels smooth to touch; Now I'm just thinking about the materials and their texture; I feel totally in the moment and I am thinking about the fibre I am working with, its origins and imprints of life."

These notations indicate a presence in the moment and a sensorial awareness of the materials yet not of the pain.

CONCLUSION

Through the mixed methodological analysis of acute and chronic pain manifestations it was found that life disruption caused by pain was catastrophic, at the same time, these manifestations were found as valid resource for design exploration.

The role of pain in garment design and development in these instances could be described as catalectic, however pain is often thought of in the context of what it takes away; our time, comfort and relationships. This research demonstrates how pain can initiate garment making through the development of a product and a design process.

It was found that women seeking pregnancy support garments for acute pain would benefit from a methodology developed to understand their individual lived experiences of pain. It was also revealed, through the literature review that that these pains could be relieved through *wearing* the garment. Conversely, it was revealed that through the design process, creative practitioners with chronic pain conditions also had opportunity for pain relief through the *making* process.

These findings, whilst preliminary, suggest the need for further research into models combining these two stages of garment development with a focus on lived experience to better enhance wellness. The phenomenological experience of wearing and making has been the focus of literature before but this research presents an opportunity for unification with the consideration of pain as paramount.

To further speculate and to maximize the pain alleviating properties from *wearing* and *making* it should be noted that the interaction with the cloth is what unifies this. In one part it comforts us, supports us, encases us and then through form giving it provides us meditation and flow.

"We can individually desire not to suffer, but can never be immune from it. We therefore need to continually strive to increase our understanding of this fundamental aspect of our being, in order to be able to deal with suffering." [14]

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Roles of artefacts in fashion research:
Arts-Informed Interpretative Phenomenological Analysis

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ABSTRACT

Fashion is a complex of concepts which encompasses many often elusive, interconnected and overlapping meanings, thus, it is difficult to unequivocally define it. However, stemming from the typology of definitions proposed by Crane [1] based on how fashion is manifested within contemporary western culture, it can be articulated that, irrespective of the definition, clothing is a primary way of fashion's manifestation. In my practice-based doctoral investigation into older men's experiences of fashion [2], I built on this assumption, by adopting clothing as a key analytical term and conceptual lens to my creative interpretations. This, had important implications for the various roles of artefacts in this research process, including different objects belonging to the study participants (recorded and documented via methods of in-depth interviews and personal inventories), and the artefacts I produced as a creative practitioner in response to the empirical material I gathered.

In this paper, I discuss the threefold role of the artefacts in a fashion research process, in relation to the corresponding threefold role of interpretation and the hermeneutic circle model I developed for my study. I argue that, it was through my embodied interactions with various objects that were utilized as a) stimuli for conversation and dialogue; b) a 'canvas' for my practical experimentations and creative interpretations; and, c) a medium for knowledge dissemination, that I co-constructed new experiential understandings and offered fresh perspectives of the phenomenon under study.

SITUATING CURRENT PAPER

To define "fashion" is not an easy task. Indeed, the term, represents a complex and rather elusive concept of many often interconnected and overlapping meanings. This includes the lack of a clear delineation between fashion as a social process, an industrial system or a form of material product. Crane [1] implies that juxtaposing various different perspectives from several disciplines can augment our understanding of what really constitutes fashion. Likewise, Kaiser [3] asserts that studying fashion requires integrative as much as imaginative ways of thinking and Elizabeth Wilson [4] reflects:

> The attempt to view fashion through several different pairs of spectacles simultaneously – of aesthetics, of social theory, of politics – may result in an obliquity of view, or even of astigmatism or blurred view, but it seems we must attempt it.

It is within this multi-perspective approach that sociologist Diana Crane [1] argues that there are four different "types" of definitions of fashion based upon four aspects of how it is "manifested". In order to fully understand her proposed typology, we first need to appreciate the terms involved. Here, the key word is that of "manifestation", which can be understood as the practice of showing or embodying something abstract or theoretical, synonymous to "demonstration" or "exposition". Importantly to the present paper, this highlights the connection between fashion "manifestation" and "appearance", in the sense of making concepts that are hard to apprehend, like "fashion", easier to grasp through making them visible. As I argue in the following sections, clothing functions as a primary form of fashion's manifestation.

Accordingly, Crane's [1] classification lists four different types of definitions of fashion corresponding to the four different ways it becomes visible. Firstly, fashion as a part of material culture is manifested through body adornment. This, as many scholars discuss, is strongly linked to the consumption of various goods, including clothing, and the consumer culture to which we all contribute. As explained by Wilson [4] in her seminal text on fashion and modernity, "*it was easy to believe that the function of fashion stemmed from capitalism's need for perpetual expansion*". Furthermore, in this, fashion is often presented in resonance to discourses on human identity. For example, Colin Campbell [5] argues that "*there is nothing at all new about the idea that an individual's mode of consumption, and especially his manner of dress, is an indication of his social identity; for this has been there for most of human history*". However, at the same time, he notices that it is a somewhat "*suspect logic*" to claim that individuals have the possibility to influence their identities simply by changing their clothing. Rather than ascribing such "power" to fashion, he concludes that clothing, as with any other consumer goods, is just one of the forms of material culture through which its consumers can develop an understanding of what their likes and dislikes are. Such considerations are relevant to this paper because the study participants were selected precisely because of their active engagement with

fashion as manifested via the materiality of clothing. Furthermore, these participants were selected from the current ageing generation; one that created and contributed to a fashion consumer culture built on youth and sexuality, as we know it today.

Secondly, fashion can be defined within the frames of semiology. Here, as Crane [1] argues, the emphasis is on fashion being a form of a language or a code. In this vein, she identifies clothing styles as the signifiers of various meanings. Furthermore, she points out that, although usually in quite minor ways, fashion as a language has been subject to constant changes and modifications, which further influences the often-ambiguous meanings of most of its elements (i.e. different items of clothing); such semiological considerations are of course closely tied to Barthes' [7] seminal text *The Fashion System* where he argues that when we look at any piece of clothing (image of), we in fact are exposed to a complex system of signs.

Thirdly, in her classification, Crane (2012) points to fashion being a system of business organisations. In this sense, she argues, fashion can be visible through, for example, clothing's production, communication and distribution to consumers; with public and various "role models" performing a key role in its dissemination. Indirectly referring to the trickle-down theory of fashion as explained by Veblen [7], Simmel [8] or Laver [9], she recognises that this dissemination formerly happened largely on the level of non-elite members of society imitating the appearance of the elites in society. However, she also argues that nowadays such dissemination lies on the shoulders of celebrities from popular culture as well as members of minority subcultures. Once again, such forms of fashion manifestation are relevant to this paper. Somewhat inadvertently, but equally relevantly, all participants in this study were in the past members of various different subcultures and referred widely not only to being influenced by the appearance of other subculture members, as well as their music idols, but admitted to often directly "copying" their styles of clothing.

The fourth type of definitions, Crane [1] argues, is based on "*the hypothetical effects of fashion, such as the reinforcement of social differentiation, the expression of aspirations for social mobility and the resolution of anxieties regarding social identity*". For once, it could be argued that this might be the most problematic "type" of definitions due to its "hypothetical effects"; if something is "hypothetical", it can be assumed that it is yet to become visible. This could falsely suggest that this set of definitions might lack its relevant form of manifestation, which in turn could undermine its credibility. However, in the second part her description, Crane [1] explains that fashion should not be presented as a trivial nor ephemeral phenomenon, but indeed, that "fashionable clothing" carries a certain resonance as to how individuals express and shape their personal and social identities. It can be argued, therefore, that this set of definitions, to put it simply, focuses on

clothing being a meaningful medium of identity communication and mediation between individuals and society. Furthermore, it can also be argued that this type of definitions encompasses the previous three sets of definitions in one multi-dimensional definition of fashion, with clothing being the most obvious and common form of its manifestation.

Indeed, in the context my PhD project [2], from which this paper stems, fashion is captured and revealed as a complex concept that cannot be explained by a single definition, or even by one set of definitions. Instead, it is precisely through the various interconnections between different concepts and actors present (myself) and presented (my participants), that the relevant definition of fashion unfolds. In this, I must also acknowledge the interconnections between creative thoughts (designer and researcher), disseminated objects of material culture (clothing artefacts) and associated meanings (interpretations, often in relation to past experiences, behaviours and practices), as well as their potential to influence individuals on personal and collective identity levels (study participants and their experiences, as well as the audience(s) of the project's outcomes), which relates to the threefold role of the artefacts, and the threefold role of interpretation within the hermeneutic circle model I developed for my study, which I explain below.

ARTS-INFORMED INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS

The project was based on developing an in-depth understanding of a small and homogenous sample of older men's experiences of fashion, and extending interpretative research strategies through various creative and artful practices. Consequently, this project sought novel research ways of data analysis and knowledge dissemination that are alternative to those typically utilised in fashion and ageing research, via engagement with various materials, objects and techniques, and creation of fashion and clothing artefacts. For this, I took two complementary methodologies: Interpretative Phenomenological Analysis (IPA) [10], rooted in phenomenological psychology and typically used in healthcare, and Arts-Informed Research [11], with its roots in humanities and education studies, and combined them into one integrated research process. The resultant hybrid methodology, Arts-Informed Interpretative Phenomenological Analysis [2], opens up the possibility of new ways of thinking about data analysis and interpretation, as much as knowledge production and dissemination within the field of fashion studies. Arguably, by allowing the researcher to interpret through "making", as well as "writing", the developed trans-disciplinary methodology offered alternative insights into the participants' lived experiences produced through creative, embodied, emotional and intellectual engagement with the data.

Role of interpretation

Drawing from the Interpretative Phenomenological Analysis approach, the methodology utilises interpretation as a key analytical technique. In doing so, I acknowledge the threefold role of "interpretation": (a) as a single act of interpreting the older men's experiences of ageing by engaging with texts, recordings, objects and images; (b) as a process of continuous unfolding of the interpretations and re-interpretations of the data explored through writing, physical and emotional engagement with materials, objects and techniques, and captured in the form of texts, sketchbooks and short films; and (c) as a product – a series of written accounts disseminating the developed understandings of the participants' experiences alongside metaphorically corresponding fashion artefacts.

'Interpretation as a single act' relates to developing my understanding of certain aspects of how my participants experienced fashion and ageing as psychological and social processes, by engaging with texts, recordings, objects and images. Texts, in this instance, refer to participant interview transcripts. Whilst analysing these documents, I read and re-read the transcripts, marked the intuitive points of interest and coded them in an exploratory manner, including descriptive, linguistic and conceptual commentary [12], in order to produce a basic understanding of the role that fashion and clothing have played throughout the participants' lives, and their relevance to these individuals' experiences of growing old. In the same manner, I approached images collected through personal inventories, including photographs of the participants and the garments they decided to bring to their interviews. The result of this was a set of emergent themes; firstly, individual to the each of five participants of the study; and, secondly, representing the sample. These theme are: "Mirroring", "Peacocking", "Dis-Comforting", "Pioneering", "Non-Conforming", "Distancing', "Presenting", "(Un-)Fashioning", and "Re-Materialising".

'Interpretation as a process' relates to the continuum of unfolding interpretations and re-interpretations of the explored data. For this, I engaged with the activity of writing interpretative accounts and making artefacts. I experimented with the relevant fashion techniques such as stitching, embellishing and dyeing which in turn inspired and enhanced my interpretative writing. Within this process the two interpretative activities of writing about the role of fashion and clothing in participants' lives in relation to the process of growing old, and re-making second-hand men's jackets were interconnected and complementary to each other, and encouraged a more experiential, often metaphoric, understanding of the phenomenon under study.

Finally, 'interpretation as a product' relates to the set of final written interpretative accounts and objects of (re-)designed and (re-)created men's suit jackets and corresponding short films. These are the outcomes of both single acts and processes of interpretation that I engaged

with throughout the analysis process and directly represent the co-constructed meanings of the participants' lived experiences. Below I discuss the threefold role of interpretation in regards to the hermeneutic circle I developed for the study.

My hermeneutic circle

The key concept used in the methodology is the hermeneutic circle. The concept relates to the process of developing the researcher's understandings and interpretations as the constant movement between part and whole [12, 13]. In the case of my project, as in traditional IPA research, this related to the constant dynamics between different elements of the data, and can be illustrated by the example of a single interview and a set of interviews. To put it simply, I developed my understanding of each individual interview always in relation to the whole body of research material and vice versa. Similar dynamics occurred in relation to the pre-understandings of the phenomenon that I inevitably carried into the research and which became newly developed understandings in the process of analysis and interpretation.

The unique features of my hermeneutic circle (fig. 1) are the virtual "checkpoints" and constant research actions through which I developed meanings. In this manner, there are five critical checkpoints on my hermeneutic circle: firstly, Text (I), which refers to the interview transcripts; secondly, Images, meaning the photographs and sketches taken during the interviews; thirdly, Objects and Materials, consisting of the purchased second-hand men's jackets and the various materials I used for my interpretative analysis; and, fourthly, Artefacts, which refers to the re-made men's jackets. Finally, the fifth checkpoint, Text (II), encompasses the final written accounts illustrating and explaining my understanding of the participants' experiences.
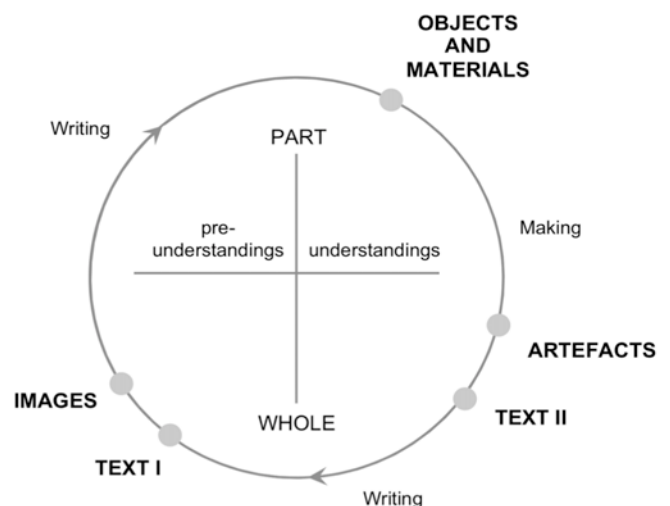
Figure 1. The hermeneutic circle developed for this study (Sadkowska, 2016)

Tami Spry [14] implies that, in accessing experiential knowledge, researchers should seek to ascertain "*enfleshed knowledge*". This not only emphasises the knowledge in the body, which is accessible through the bodily experiences, but also acknowledges the body "*as a powerful* [research] *agent*" [14]. It is precisely by interlocking the activities of writing and making as equal elements of embodied exploring, understanding and co-constructing of meanings that this methodology enters the terrain of the "*enfleshed knowledge*". Building on Merleau-Ponty's [15] theory of embodiment, within this methodology, I sought to shed light on the participants' lived experience, through my own embodied experience of interpreting it.

ROLES OF THE ARTEFACTS

In the previous section, I presented my research process in regards to the analytical practices of the novel and alternative research mechanism, based on interpretative writing and making. In this section, I focus upon reflecting on the role of the artefacts in this process, including the fashion research exhibition entitled "Fashioning Age(ing): Mature men's experiences of fashion and clothing" (2016), organised and curated by myself.

Firstly, building on the previous section, it is important to reflect on the role of the artefacts in regards to the threefold role of interpretation. These roles were: as a single act, as a process, and as a product. Artefacts were present and important for each of these aspects; however, their role and impact were significantly different for each of them. In a single act of my interpretation of the study participants' experiences, the artefacts were present in the form of the objects that these individuals brought to the interviews. These were different for each participant and included photos (fig. 2) and garments (fig. 3). These were significant because they often worked as a stimulus for the conversation, but also because I had the chance to experience them in a haptic way, that is to touch and feel the quality and texture of the fabric, see the colours, and inspect the details; such an embodied engagement was significant to me as a designer and artist. This, in turn, stimulated each of these acts of interpretation; inevitably, some elements and details of these artefacts are represented within the artefacts I produced.

Artefacts were also relevant to my interpretation as a process. For this, throughout the different stages of the constant negotiation and re-negotiation of the participants' interpretations of their experiences, I engaged with different forms of the artefacts. Firstly, all of the artefacts that the participants brought in to their interviews, including the garments they wore, were documented via photographs. Consequently, I had a chance, whenever necessary, to re-engage with these objects by visual analysis of the photographs, which informed the processes of my analysis.

Figure 2. Photos of the participants they brought in to the interview (Credit: Ania Sadkowska, 2016)

Figure 3. Participants on the day of their interview showing their 'special' fashion garments; personal inventories (Credit: Ania Sadkowska, 2016)

Secondly, during the processes of my interpretation, I engaged with various artefacts that did not belong to the participants: these were second-hand men's suit jackets (fig. 4). Just as the various elements of the experiences of the men in this study varied significantly, each of these artefacts was re-made using different techniques and materials. However, what was common for all the developed jackets was that I began my exploration with a second-hand men's suit jacket, approaching it as a "canvas" for my practical experimentations (figs. 5-8) and developing interpretations. Such a common starting point was adopted because suit jackets were present in the narratives of all of the participants, and most of them referred to these jackets as either their favourite items of clothing or as an item that carried a significant meaning or memory. Furthermore, a suit, by many authors, is interpreted as a prime vehicle of masculinity [16]. For these reasons, I decided to use previously owned men's suit jackets to highlight the participants' past experiences; metaphorically, any second-hand garment is already invested with a life of its own.

Figure 4. Second-hand men's suit jackets used for the practical explorations (Credit: Ania Sadkowska, 2016)
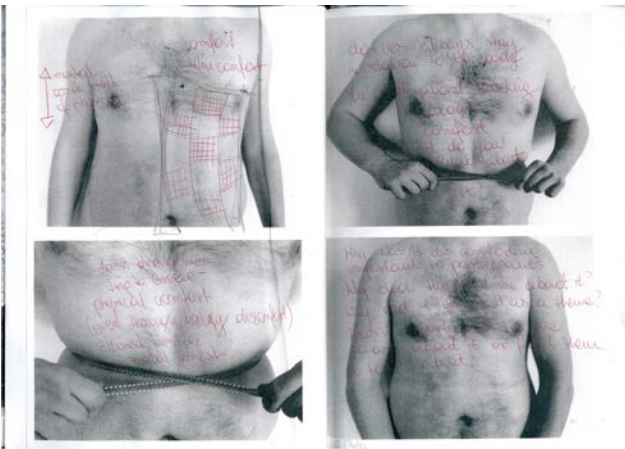
Figure 5. Practical explorations of the "Dis-Comforting" theme: author's sketchbook; a scenario-based reflective performance with a model (Credit: Ania Sadkowska, 2016)

Figure 6. Practical explorations of the "Peacocking" theme: author's sketchbook; collages and experimentations with beads (Credit: Ania Sadkowska, 2016))

Figure 7. Practical explorations of the "Pioneering" theme: author's sketchbook; de-constructing and re-constructing a second-hand jacket (Credit: Ania Sadkowska, 2016)
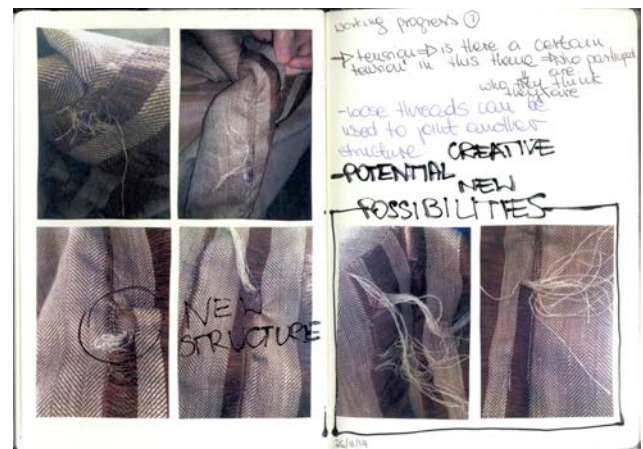
Figure 8. Practical explorations of the "(Un-)Fashioning" theme: author's sketchbook; removing threads from the outside shell of a second-hand jacket (Credit: Ania Sadkowska, 2016)

Finally, the artefacts in this research mechanism are a specific type of product of the interpretations as both acts and processes. Therefore, it is not entirely unjustifiable to argue that these artefacts (fig. 9-12) function as a peculiar form of side-product; indeed, the focus of this research was on the practices of making these artefacts, and their role in enhancing my written interpretations, rather than the artefacts themselves. However, at the same time, each of the produced artefacts, are independent aesthetic solutions; tangible and meaningful outcomes of the research process, and in many respects equal to the written interpretations. Frayling [17], described "*research for art and design*" as follows: "*where the thinking is, so to speak, embodied in the artefact, where the goal is not primarily communicable knowledge in the sense of verbal communication, but in the sense of visual or iconic or imagistic communication*". This indeed accurately describes the status of the artefacts produced in this research as embodying certain knowledge (through enabling certain understandings to be developed) and, as forms of metaphoric visual representations of this knowledge.

Figure 9. The "Dis-Comforting" jacket (Credit: Ania Sadkowska, 2016; Photo: Fraser West)

Figure 10. The "Peacocking" jacket (Credit: Ania Sadkowska, 2016; Photo: Fraser West)

Figure 11. The "Pioneering" jacket (Credit: Ania Sadkowska, 2016; Photo: Fraser West)

Figure 12. The "(Un-)Fashioning" jacket (Credit: Ania Sadkowska, 2016; Photo: Fraser West)

But, this provokes another interesting reflection as to how this *set* of visual outcomes can be described. Taking into account that these particular garments do not share any specific technique, or material, but what they share in common is the conceptual cohesion, it is not suitable to label them as a collection, a term typically used in fashion design. Instead, taking from the field of Fine Art, I consider this set of objects as *a series* of clothing artefacts. Interestingly, this mimics the character of the findings stemming from this research more generally in the sense that while the emerged thematic entities work independently, first and foremost, they create a network of mutual thematic dependencies. This is reflected not only in the case of the jackets or films, but also between the artefacts and the written texts.

My final reflection in this section touches upon the exposition of the produced artefacts: this is the fashion research exhibition that I organised and curated and which took place in December 2015 at Nottingham Trent University, UK (figs. 13-14). It is important to reflect on this particular event here, because its main elements were the produced artefacts, jackets and corresponding films, as well as key quotations from the interviews with the participants. While, from the beginning of this study, one of the objectives of this research has been to organise such a dissemination event, it is the role of this event that has changed in parallel to the development of the project. First, it is worth noting that an exhibition is a research tool commonly chosen to present the practical element of practice-based PhD research, often alongside the written thesis [18]. However, since the aim of this research has been to develop an in-depth understanding of the small sample of older men's experiences fashion, the aim of the exhibition was to present and communicate these insights, that is my metaphorical readings of the group, rather than to exhibit the artefacts per se.

Consequently, curating such a research exhibition triggered important considerations about how textual, visual and verbal presences were to be utilised and linked in order to communicate these meanings to the viewers. Conceptually, similar to Swindells and Dutton's [19] *text + work = work*

exhibition, I also strived to facilitate a space where the visual and textual forms of knowledge could be utilised seamlessly as "*mutually supportive camps*", reflecting the methodological integration of the practices of making and writing within this research process. Ultimately, each one of the jackets was annotated separately, as well as each of the superordinate groupings, and the exhibition as a whole. Furthermore, an important element of the exhibition became the plaques with the key quotations from the participants' interviews. These became significant components of the exposition and, indeed, prompted many conversations regarding the findings of my study. Many of these conversations included visitors' personal reflections and observations regarding the phenomenon under study, which, in turn, from the methodological point of view, became the final element of this research mechanism, allowing me to finalise and conclude my written interpretations. It is, therefore, important that I reflect that, the feedback I received during the exhibition, influenced the final form of and the project's findings. Furthermore, it afforded me an opportunity to validate my research and its conceptual form.

Figure 13. "Fashioning Age(ing): Mature men's experiences of fashion and clothing" exhibition, Nottingham Trent University – opening event 16th December 2015 (Credit: Ania Sadkowska, 2016)

CONCLUSION

The main aim of the practice-based PhD project described in paper was to investigate a small sample of mature men's experiences of fashion, by adopting clothing as a key analytical term and conceptual lens to my creative interpretations. In doing so, I developed and adopted a novel hybrid methodology, Arts-Informed Interpretative Phenomenological Analysis, which allowed me to utilise various *artful* practices in regards to fashion and clothing as a valid research method, enhancing findings generated through more traditional research methods, such as interviews and personal inventories. Moreover, such a research methodology allowed me to unite and synchronise my practices as a researcher, designer and artist into one sound research instrument to co-create and disseminate knowledge via engagement with various materials and objects.

In this paper, I discussed the threefold role of the artefacts in a fashion research process, in relation to the corresponding threefold role of interpretation and the hermeneutic circle model I developed for my study. These roles were: as a single act, as a process, and as a product. Artefacts were present and important for each of these aspects; however, their role and impact were significantly different for each of them. Firstly, during a series of interviews I conducted with the study participants various clothing artefacts belonging to them stimulated their reflections and openness about their experiences of fashion. Secondly, during my practical explorations, I re-made a series of second-hand men's suit jackets, which in turn stimulated my creative processes of data analysis. Finally, the series of produced artefacts act as independent visual interpretations stimulated by the participants' experiences and their interpretations of them. Consequently, the series of objects, jackets and films, offers a conceptual alternative to a standard fashion collection, where typically the focus is placed upon functionality and aesthetics, and shifts it instead towards processes of making and enabling new understandings.

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Research as Object
–
Towards a Material and Cultural Investigation

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ABSTRACT

A Measurable Factor Sets the Conditions of its Operation is an ongoing research project and series of publicly exhibited materials I originally developed through the Stanley Picker Research Fellowship at Kingston University. With the project I aimed to rethink the ways in which shoes are designed by shirking traditional approaches, instead employing a method based on the study of structural parameters – derived from anatomical and kinematic studies – required to support a high-heeled foot while in motion. The consequences of my research methodology are two-fold: By treating the 'woman in motion' as an engineering problem, I expose the high-heeled shoe as a cultural 'problem' while at the same time questioning the connotations of engineering as they seem informed by the object at hand.

Keywords
Engineering, Methodology, Identity, Shoe typologies

INTRODUCTION

Both mass-manufactured and traditionally crafted shoes can in essence be broken down into the following components: The upper, the soles (inner and outer sole) and the heel. The regimented component construction process, or the method of assembly by which shoes are made, leads to a type of design that may be referred to as 'the sum of its constituent parts'. There are exceptions to the rule, such as mono material footwear, and there are creative approaches to the traditional methods, since each component can be different/divergent in shape, material or size, as long as they can meet and be attached together. But in essence the assembly of a shoe is as follows: The outsole and heel are fixed (glued, stitched, taped, nailed, screwed, direct moulded etc.) to the upper. [3] As a result, it makes it difficult to rethink or instigate a complete overhaul of the shoe 'type', and so new shoes are rendered merely as a variation on a theme.

It doesn't seem to be in the interest of trend-led fashion to challenge shoe typologies. While much has changed in fashion since 1937, I think that Agnes Brooks Young's central argument from *Fashion has its Laws* still resonates: "We know that fashion outmodes previous styles each year, so there must be a continuous change under way. We know this continuous change must be relatively slow because only the initiated can recognise the differences from one year to the next. Finally, if fashion in dress is a slow continuous change, outmoding each year that which had general acceptance, and substituting for it something slightly different, then there must of necessity always exist a typical expression of fashion, or a typical style, on which the changes are operating." [2]

These 'hardened' fashion styles or types are constantly reinterpreted, recontextualised and re-referenced. One ubiquitous footwear type, the brogue, perfectly illustrates this contextual shift: The brogue originated around 1580 in the farmlands of Scotland and Ireland and was constructed using perforated, un-tanned leather, allowing water to drain out of the shoe when crossing wet terrain. The shoe has hardly changed in form and material since its inception, but the original function and even its cultural and physical placing (namely on men in the country) have been re-located completely. Already from the end of the 19th century the brogue was considered a formal business shoe, and from the 1920's it was acceptable wear for women. You would now be laughed at if found trudging through a wet field in a pair.

Footwear types, much like garment types, fall into an array of 'hardened' style categories that remain limiting in both form and as markers of identification. Most shoe styles could even be described as clichéd, and as a result the women that wear them can be perceived to conform to a set of restrictive roles. My main concern is with the scope of identification. While the method of consistently re-referencing and re-contextualising types has produced plenty of complexity and nuances within fashion-constructed identities, this approach is not conducive to creating new identities and codes of meaning, and thus broadening what fashion can speak of. Current avant-garde fashion designers are, according to journalist, curator and educator José Teunissen, challenging the status quo of fashion identities by redefining and expanding on the expression of the self in the field of fashion; "Instead of beautifying the body and clothing it with identity and personality, they are searching for the ominous, unsettling fantasies and meanings that the clothed human figure can also communicate." [4] These coordinates serve to help position my research topic.

DESIGN METHODOLOGY, RESEARCH AND TESTING

A Measurable Factor Sets the Conditions of its Operation is an ongoing research project and series of publicly exhibited materials I originally developed through the Stanley Picker Research Fellowship (2011-2013) at Kingston University. The initial works were presented in an exhibition at the Stanley Picker Gallery in 2013, under the same title. Displayed throughout the exhibition were artifacts from a series of structural, aesthetic and cultural experiments and outcomes, aimed both at expanding the scope of footwear typologies and the discourse related to them. In this introduction to the research, I will focus on describing three works from the show in subsequent order; the material outcomes from the development of a new footwear design methodology and two video works addressing the cultural status of footwear in cinema.

Moving away from the standard, regimented approaches and limiting parameters of the shoe industry as described above, I started from scratch to rethink the method by which shoes are designed. Employing processes drawn from an engineering approach, I set out to design a collection of footwear pieces informed by research into the structural parameters required to support a foot, in a high-heeled position, while in motion. This method purposefully shirks the existing footwear constellation of assembled parts, fashion trends and styles -that which architect and design theorist Christopher Alexander might refer to as "the chosen formal order". [1]

Based on anatomy and kinematic studies of the foot and ankle conducted with Nicola Smith Swann and James Brouner from the Sports Science Department at Kingston

University, I produced a series of 17 different hypotheses for 'new footwear constellations', or high-heeled footwear possibilities, that map out new combinations of foot and ground contact points/areas. With these 'contact points/areas' I mean the areas where the object/shoe touches the foot and the areas that touch the floor in ambulant motion or static stance. These 'contact points/areas' serve the purpose of

a) keeping the foot in place
b) keeping the foot in it's high heeled position
c) keeping the object on the foot
d) making contact with the floor

These 'constellation contact areas' were first drawn up as 3D computer models and then produced as physical pieces to be used as 'testing shoes', *White Prototypes* (2012-2013). Although the functionality of these 'shoes' were slightly compromised for the sake of aesthetics –a potential pitfall when a gallery show is a research outcome– the results from initial pressure map tests are promising in relation to the hypotheses. The ultimate purpose of this study however is not to produce 'better' shoes, but to create a collection of shoes based on these new configurations. The first footwear design stemming from this research is the *Bluepanelshoe* (2015), commissioned for the exhibition *Live on Foot* (2015) at the Design Museum London.

THE CULTURAL CONNOTATIONS OF HIGH HEELED FOOTWEAR

Having written about the 'so called' rationalised parameters from which to design the shoe, I would now like to look at engineering from another perspective and talk about the cultural connotations of engineering and technology in relation to fashion and high-heeled footwear. The stiletto heel, made possible through the use of a steel rod in the heel of the shoe (popularised by Roger Vivier in 1954), can and should be considered as a piece of engineering. [5] Yet the 'values' we traditionally associate with engineering and technology: efficiency, rationality and social progress, are not found in a variety of woman's objects, which instead promote inefficient movement and unnatural posture, and are perceived as frivolous.

In the exhibition I aimed to better understand and possibly expose how the association of high heels with frivolity and it's negative implications has historically been propagated. In collaboration with artist Noam Toran, we focused our research on the depiction of the high-heeled woman through cinematic history and produced two video investigations in response.

The first work is *Women in Various States* (2012), a taxonomy of cinematic moments where a high-heeled women's mobility has been compromised. The taxonomy reveals that a high-heeled woman, moving through a multitude of cinematic narratives, is a complex construct, but one designed for, and ultimately sanctioned to, the

man-made environment in both its literal and fantastical forms. When a high-heeled woman is placed in alternative settings – namely outside the flat and smooth surfaces of urbanity and suburbanity – or when forced to walk through unique substrates, a woman in heels loses her equilibrium (both physically and culturally) and begins to slip, trip, sink or tumble, thereby transforming her perceived identity. This observation was the catalyst for the second work; *Material Compulsion* (2013)

IN CONCLUSION

The consequences of this research methodology, developed over the course of the Stanley Picker Fellowship at Kingston University, are two-fold: By treating the 'woman in motion' as an engineering problem, I expose the high-heeled shoe as a cultural 'problem' while at the same time questioning the connotations of engineering as they seem informed by the object at hand. I think it is through these types of practice based investigations that we understand the footwear field in a broader scope so we can rethink processes, reconsider working methodologies, expand designer's roles, reinvent the aesthetics of shoes, and understand and challenge cultural connotations. Hopefully they provide other designers and myself insights that helps further the field of footwear.

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   "'Stiletto' was the term first used in 1953 for thin, high heels reinforced with steel. It was taken to creative extremes by Vivier. […] He invented the *aiguille* and the *choc* heel. The *aiguille* or needle heel became the model for the standard stiletto heel."

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Marloes ten Bhömer*, Research as Object-Towards Material and Cultural Investigation* **photography Jan Berg, 2017**

Breaking the Script - Fashion Critiques and Conversations, **photography Jan Berg, 2017**

Breaking the Script - Fashion Critiques and Conversations Thoughts in Progress

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ABSTRACT
The role of the fashion designer is broadening and shifting and in our academic, as well as our roles as creative practitioners, we feel a responsibility to develop new tools and resources for coming generations. A critical reflection on the fashion system – informed by a wide spectrum of roles and reaching from student to industry – is emerging in isolated pockets and on the fringes. We now need to nurture and connect these through the educational structures and institutions in which we work. From our conversations and critiques themes, challenges and mostly questions are emerging. We've identified that we miss fashion-owned language to describe the new paradigm as well as updates in fashion methodology. As educators we experience the disconnect between students' expectations of their education/curriculum, the fashion industry and their future roles within it and the reality of the current fashion system. We encounter fear of owning up to responsibilities within fashion in general and in particular to one's role and agency within and beyond the field and ultimately a lack of honest and potentially vulnerable critical debate. Together, we try to identify issues and opportunities of the fashion system and investigate ways to break the 'script' that we see embedded in fashion education.

Keywords
Fashion, Methodology, Education, Critique, Conversation

EDUCATION AS MATERIAL – AN OPEN DISCUSSION
At the EEM conference 2017 we want to share our 'thoughts in progress' through an evolving and participatory manifesto – not as a finished document but rather as a series of live provocations towards re-imagining the very structures and material of fashion education as we have experienced it through the institutions we have studied and worked within.

We will use the conference as a platform to pose some of the questions we have been discussing to a wider audience with the aim of creating a safe and open space to share frustrations as well as alternative strategies. We hope that by discussing the challenges we face and revealing where we feel vulnerable or lack certain knowledge due to a different educational background,opportunities will emerge for experimentation and risk taking as well as alternative assessment criteria and definitions of success. We hope this 'working manifesto' will act as a starting point and then evolve through contributions and on-going dialogues.

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MANIFESTO THROUGH QUESTIONS:

If fashion is based on re-referencing and recontextualising, is fashion able to be relevant outside of its own cultural milieu? (Marloes ten Bhomer)

What is the relevance of trench coats in the age of drone wars? (Marloes ten Bhomer)

How can everyday garments and dress practices help to re-language fashion? (Ruby Hoette) [1]

In times of globalisation and technocracy, who and how does fashion represent? (Alexa Pollmann)

Ronald Barnett argues that learning for an unknown future forms the basis of all education. He suggests, however, that newly, students' focus is towards self and identity, as part of 'a world order that is characterised by ontological dispositions', in the face of extreme chaos, complexity and fragmentation. If this is seen as problematic how and what systems in academia and industry can be interrogated for change? (Susan Postlethwaite) [2]

Why is there so much resistance from fashion educators to challenge the way fashion is taught, done and understood? (Kat Thiel)

How can we foster a meaningful exchange between educators and students, considering each group having their specific field of expertise (generational, access to technology, culture, knowledge and understanding of sub-cultures, ect.)? (Kat Thiel)

Picking up on Ingrid Loschek's consumer-influencer dichotomy: Who creates culture/fashions and how does education play a role within this? (Kat Thiel) [3]

MANIFESTO THROUGH QUOTES/CHALLENGES: [4]

Challenge #1: Fashion is a large industry under the scrutiny of many voices, but the system of fashion seems to impede on change. Can grassroots movements in fashion be encouraged and replace the status quo?
"If You're Riding a Horse and It Dies, Get Off"

Jim Grant and Char Forsten [5]

Challenge #2: Encourage fashion as a way to experiment with a collective future beyond the illusion of individual self expression:
"The trick has to be that it allows you still to feel you are an independent individual. The hyperindividualism of our age is not going to be going back into the bottle. You've got to square the circle. You've got to let people still feel they're independent individuals, yet they are giving themselves up to something that is awesome, greater, and more powerful that carries them into the future beyond their own existence. That's what people are yearning for."

Adam Curtis [6]

Challenge #3: Support and encourage students who are imagining other modes of fashion:
"Imagination alone offers me some intimation of what can be, and this is enough to re-move to some slight degree the terrible injunction; enough, too, to allow me to devote myself to it without fear of making a mistake (as though it were possible to make a bigger mistake)"

André Breton [7]

Challenge #4: Encourage expanding the field of fashion and explore unknown territories and connections:
"As a result the fashion world is still working in a 20th-century mode, celebrating the individual, elevating the it-people, developing the exception... in a society hungry for consensus and altruism. This places fashion out of society and de facto makes it old-fashioned."

Lidewij Edelkoort [8]

Challenge #5: Use fashion as a tool to educate, read and create social innovation and political voices in times of globalisation without a pure adoption and cultural appropriation of cultures uncommon to the 'French' Fashion System.
"Fashion is a collective activity and breaking the conventions is not an individual task. (…) What is most important in the French Fashion System is who has the power to decide, judge and evaluate that creativity. It is the process of legitimation that needs to be focused in understanding the success of any designer. The avant-garde Japanese designers would not have been noticed by the fashion professionals worldwide without the legitimation mechanism of the French Fashion System."

Yuniya Kawamura [9]

MANIFESTO THROUGH RELATIONSHIP: [10]

A	B
Fashion	…
Fashion objects	Body-related output (objects / behaviour) that speak of subject matters both related and unrelated to the body
…	Relevant outside the field
Design star	Inclusive communities of practice
Inspired by	Informed by / about / paying attention to
Trend led	Initiating, beyond a response to
…	…
Clothing types	New types for alternative contexts
Seasonal	Time, subject, object and location relevant
Collections	Content and context underpinned materialised output
Mood board	Illustrated contextual, formalist, aesthetic and material understanding and designer positioning
Consumer led	Society-led, situation-led, question-led opportunities and alternatives
Customer focus	Considering all players involved
Fashion audience	…
Student as client	Student participant / custodian / community of practice
Lockup in a fashion role	Ownership through expanding understanding and consequent accountability
Self-expression through fashion	…
…	…
Fashion identity	…
Locked in the system	Adapting the system
Catwalk show	Context and audience relevant dissemination of fashion
Curriculum	…
Assessment Criteria	…

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    [Accessed 29/04/2017]

A	B*
Fashion	*STUDIES OF WEAR*
n objects	Body-related output (objects subject matters both related
. . . .	Relevant outside the field
esign star	Inclusive communities of pr

pposed external ideal in favour of ac
ry alienation… it also means using th
peddedness to create an opening towa
rmen Avanessian 2017

Challenge #3:

Encourage the development of specific written and spoken language as parallel
in fashion design: Fashion Thinking.

Challenge #4:

OPEN UP THE AUDIENCE TO A LESS ELITIST AND STILL APPRECIATIVE ONE

On having successfully completed this module,
to demonstrate knowledge and understanding

- Contemporary issues ■ practice ■ theory of ▮
- ▮ to creatively integrate ▮ exploit ▮ of media, techniques, technologies ▮
- ▮ concepts, techniques, methods ▮ ▮ the digital, ▮ of your projects
- ▮ to evaluate and utilise ▮ effectively
- apply methods ■ enquiry ▮ reflection ▮, ▮ evaluate the qualities ▮

Are you...

...a supporter of traditional
fashion education?

...a promoter of disobe-
dient modes of practice?

Do we need an inbuilt institutional antagonism to stay relevant and critical?

**What modes of display and discourse
are needed to support practitioners that
are occupying new fashion territory?**

Do you see...

...non-conformist thinking
happening within fashion
institutions?

...non-conformist thinking
happening outside fashion
institutions?

**Given the fact that fashion practices are slowly expanding, what are the values,
standards and criteria education will have to address and implement?**

If fashion was politics, it would represent:

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· · · · · · · · · · **Capitalism**   · · · · · · · · · ·

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When did you observe a 'Fashion Revolution' and do you think these were reactions to political events?

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If fashion was politics, its authorities were:

JUDICATIVE (interprets law)

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Historian

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LEGISLATIVE (makes law)

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Retailer

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EXECUTIVE (enforces law)

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Consumer

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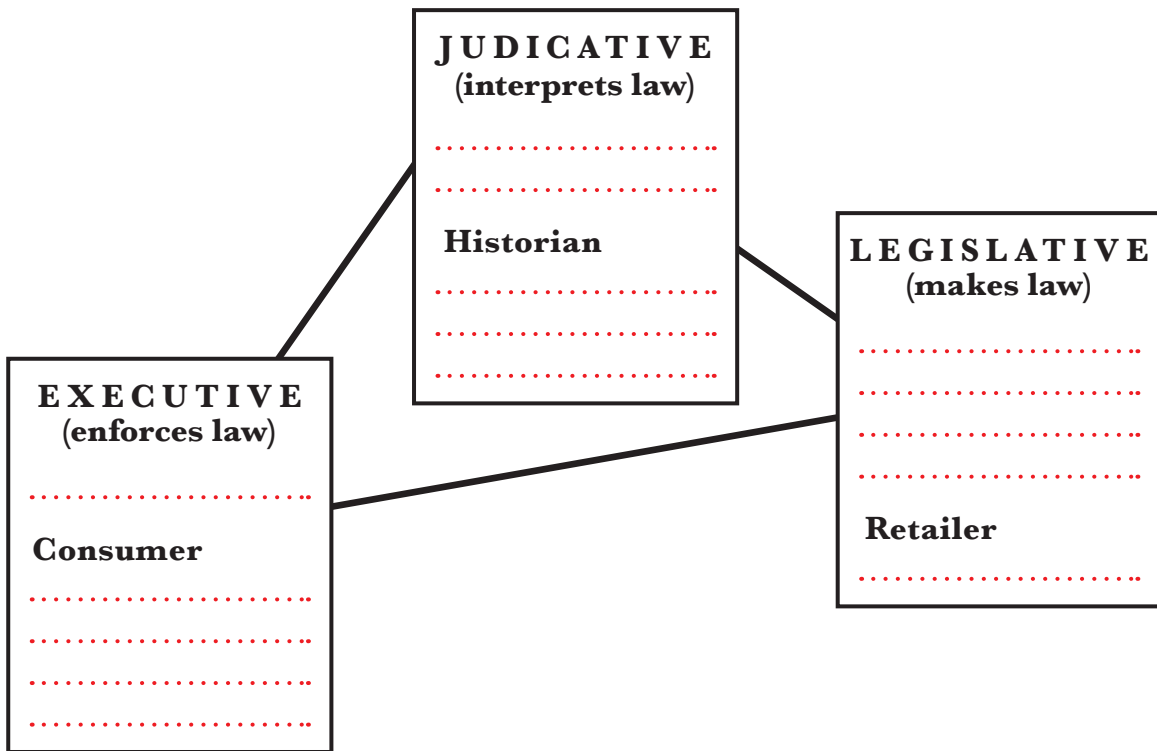
What are the unwritten 'laws' of the fashion system?

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Education as Material

08/06/17 — 2PM — **Session A**

everything and everybody as material:
conference proceedings 2017

On having successfully completed this module, you will be able to demonstrate knowledge and understanding of:

- **Contemporary issues** ▮ **practice** ▮ **theory of** ▮▮▮▮▮▮▮▮

- ▮ **to creatively integrate** ▮ **exploit** ▮▮▮▮ **of media, techniques, technologies** ▮▮▮▮▮▮▮

- ▮▮▮▮▮▮▮▮▮▮▮▮▮ **concepts, techniques, methods** ▮ **processes,** ▮▮▮▮▮ **the digital,** ▮▮▮▮▮▮▮▮ **of your projects**

- ▮▮ **to evaluate and utilise** ▮▮▮▮▮▮▮▮ **effectively**

- **apply methods** ▮ **enquiry** ▮▮ **reflection** ▮▮▮▮▮▮▮▮▮▮ **critically evaluate the qualities** ▮▮▮▮▮

- ▮▮▮ **independent critical judgements** ▮▮▮▮▮▮▮▮▮▮ **ideas, materials, techniques** ▮ **processes**

- ···

- **generate ideas** ▮▮▮▮ **enquiry,** ▮▮▮▮▮▮▮▮▮▮

- **inform** ▮▮▮▮▮▮▮▮ **analysing** ▮ **critically reflecting on contemporary issues**

- ▮▮▮▮▮▮ **selection** ▮ **appropriate** ▮▮▮▮▮▮▮

- **communicate** ▮▮▮▮▮▮▮▮▮▮▮▮ **verbal, written, technological** ▮▮ **visual formats**

- **identify,** ▮▮▮▮▮▮▮▮▮▮▮ **wide range** ▮▮▮▮▮▮▮▮ **printed** ▮▮ **electronic sources** ▮▮▮▮▮▮▮

- **reflect** ▮▮▮▮▮▮▮▮▮ **learn** ▮▮ **experience**

- ···

- ▮▮▮▮▮▮ **time** ▮▮▮▮▮▮▮ **deadlines**

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- **generate** ▮▮▮▮▮ **solve problems independently** ▮▮ **collaboratively**

- ···

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Education as Material   08/06/17 — 2PM — **Session A**

A   B*

A	B*
Fashion	. . . .
Fashion objects	Body-related output (objects / behaviour) that speak of subject matters both related and unrelated to the body
. . . .	Relevant outside the field
Design star	Inclusive communities of practice
Inspired by	Informed by / about / paying attention to
Trend led	Initiating, beyond a response to
. . . .	. . . .
Clothing types	New types for alternative contexts
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Customer focus	Considering all players involved
Fashion audience	. . . .
Student as client	Student participant / custodian / community of practice
Lockup in a fashion role	Ownership through expanding understanding and consequent accountability
Self-expression through fashion	. . . .
. . . .	. . . .
Fashion identity	. . . .
Locked in the system	Adapting the system
Catwalk show	Context and audience relevant dissemination of fashion
Curriculum	. . . .
Assessment Criteria	. . . .

* Format taken from Dunne and Raby's A/B "It's a sort of a manifesto that positions what we do in relation to how most people understand design." http://www.dunneandraby.co.uk/content/projects/476/0

Challenge #1:

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Challenge #2:

Encourage post critical fashion* practice that allows for recognition of, and experiments both within and beyond, existing systems: beyond mastery and towards visionary practice. Encouraging the exploration of the relationship of knowledge generation to risk, innovation, novelty, and propositional thinking as a post critical fashion pedagogy* and as a collaborative endevour.

*Post critical – not beyond critique but distinct from uncritical (Avanessian 2017)

Critical pedagogy – the three assumptions are 'that praxis can enable social transformations, that learning and teaching are not neutral…that society can be transformed by the engagement of those who are critically conscious. (Hickey-Moody and Page 2016)

'An acceleration of critique (Lipovetsky) means giving up a supposed external ideal in favour of accepting an originary alienation… it also means using the position of embeddedness to create an opening towards the future.' Armen Avanessian 2017

Challenge #3:

Encourage the development of specific written and spoken language as parallel practice in fashion design: Fashion Thinking.

Challenge #4:

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Challenge #5:

Fashion has been held for nearly 200 years by machines and tooling that have developed very little over 2 centuries. Fashion Thinking in fashion pedagogy needs to flexibly reevaluate the making process for new knowledge, novel systems and potentials that include reformulating, representing, moving, evaluating and managing (Dorst in Frame Innovation 2015) the production processes for sustainable, networked, scalable, future and socially responsive outputs recognizing existing infrastructures, the future of work and ecological impact. However this has to be a collaborative endeavor for which we are currently not training our students. Issues of expertise, language and communication, access to knowledge and sharing of ideas is coming slowly and demands a particular skill set from students beyond focus on the individual.

On having successfully completed this module, you will be able to demonstrate knowledge and understanding of:

- **Contemporary issues ▮ practice ▮ theory of ▮▮▮▮▮▮▮▮▮**

- **▮▮ to creatively integrate ▮▮ exploit ▮▮▮▮ of media, techniques, technologies ▮▮▮▮▮▮**

- **▮▮▮▮▮ apply ▮▮▮▮▮▮▮▮▮▮ concepts, techniques, methods ▮▮ processes, ▮▮▮▮▮ the digital, ▮▮▮▮▮▮▮▮ of your projects**

- **▮▮▮ to evaluate and utilise ▮▮▮▮▮▮▮▮▮ effectively**

- **apply methods ▮▮ enquiry ▮▮▮ reflection ▮▮▮▮▮▮▮▮▮▮▮▮ critically evaluate the qualities ▮▮▮▮▮▮**

- **▮▮▮▮ independent critical judgements ▮▮▮▮▮▮▮▮▮▮▮▮ ideas, materials, techniques ▮▮ processes**

- ⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯

- **generate ideas ▮▮▮▮▮ enquiry, ▮▮▮▮▮▮▮▮▮▮▮▮▮**

- **inform ▮▮▮ ▮▮▮▮▮▮▮ analysing ▮▮ critically reflecting on contemporary issues**

- **▮▮▮▮▮▮▮▮ selection ▮ appropriate ▮▮▮▮▮▮▮▮▮▮▮▮**

- **communicate ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ verbal, written, technological ▮▮ visual formats**

- **identify, ▮▮▮▮▮▮▮▮▮▮▮▮▮ wide range ▮▮▮▮▮▮▮▮▮, printed ▮▮ electronic sources ▮▮▮▮▮▮▮▮▮**

- **reflect ▮▮▮▮▮▮▮▮▮▮▮ learn ▮▮▮ experience**

- ⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯

- **▮▮▮▮▮▮▮ time ▮▮▮▮▮▮▮▮▮ deadlines**

- ⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯

- **generate ▮▮▮▮▮▮ solve problems independently ▮▮ collaboratively**

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Education as Material   08/06/17 — 2PM — **Session A**

Coated papers:
Exploring the conceptual potential
of printed material in fashion

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ABSTRACT

Printed matter is an essential element of fashion practice. Fashion publishers – from editors to curators, or designers creating in house publications – are fashion practitioners and therefore have the capacity to generate discourse by taking a critical perspective on fashion that does not conform to mainstream, commercial systems. In her essay 'Life Which Writes Itself: Retrospecting Art, Fashion, and Photography in Bernadette Corporation', Ilka Becker writes of the magazine project Made in USA: 'The idea was to disrupt, using techniques of montage and appropriation, the usual concept of fashion magazines: to provide a certain lifestyle in a consumable mode.' (Becker 2014, p. 80). Though referring to a project from 1999, when the publication was produced and disseminated, we could arguably look at contemporary fashion publishers and their projects similarly, as modes of critical practice. This paper examines the conceptual potential of the printed page and its material dimensions within publishing practice in fashion as a site for performativity. In considering this medium and its creative and commercial implications, I will explore this as a powerful space for fashion practitioners to articulate cultural, political and creative fashion gestures, parallel to garment-making procedure.

Keywords

Printed matter, fashion media, the fashion system, artists'

books, independent publishing, interdisciplinary practice

Introduction

By Laura Gardner

'Coated Papers' is a collective presentation between myself, Femke de Vries and Hanka van der Voet. This project is the start of a conversation and collaboration between us as well in which we explore the cultural and poetic dimensions of a fashion publication. Each of us has been doing research, or projects, that address various facets of fashion publishing, in particular, in regards to the fashion magazine.

We will each cover topics relating to fashion editorial. Then we have invited Ricarda Bigolin and Nella Themelios of D&K to contribute a reading that intervenes with our presentations and further unpack some of these ideas and paradigms that exist in fashion media. The title of this presentation, 'Coated Papers', refers to a double-meaning latent in the fashion publication: that is, the role of a fashion magazine as a material and cultural artifact, as well as a symbolic object. This is a paradigm that was proposed in 2008 by theorist Brian Moeran in relation to Pierre Bourdieu's theory of cultural production. Referring to mainstream publications like *Vogue* or *Elle*, he raises the economic paradox of the fashion magazine as being both 'a commodity and a symbolic object.'[1]

Though Moeran writes some years ago, today it remains increasingly difficult to unravel this reality given the pace and complexity of fashion media in a post-net era. Shifting technology, cultural demands and economic hierarchies of the fashion system seem to manifest, increasingly, on the pages of fashion magazines both niche and mainstream. Thus the face of commercial fashion editorial has compounded reflecting a dynamic system of visual representation, materiality, dissemination and agency. Corporate and creative collaborations across disciplines engage a reader with refined understanding of cultural references, aesthetics that often seem to veil economic duplicity; for instance, behind the page deals between stylists and brands, as well as sponsored content.

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[1] Moeran, B 2008, 'Economic and cultural production as structural paradox: the case of the international fashion publication', *International review of sociology*, vol. 18, issue 2, pp. 267-281, Routledge, London.

Despite major shifts fashion editorial has undergone in recent years, the important role of press within fashion seems unchanged. Fashion companies seem increasingly cautious of their economic precarity in a global, net era and in response, fashion publications rely very little, if at all, on sales of print editions. Instead operate as hybridised platforms that embrace digital technology and social media. These new models straddle art, music and fashion, and require a sophisticated level of engagement from their audience.

Describing the symbolic and semiotic potential of the fashion magazine, Roland Barthes proposes these as a 'machine that makes fashion'.[2] Suggesting their role as a sort of factory or laboratory through which 'fashion' emerges at the end of each season. Barthes' metaphor contains many truths that still operate today. Some of these we want to explore here, embracing the magazine as material integral in the generation of fashion. We'll address this medium by looking at some of the constituent parts of a fashion publication. In doing so, we hope to open up the possibilities of a fashion publication, as material, as metaphor, as medium, and as fashion.

On the Editor

By Hanka van der Voet

I am in the early stages of my research, I am at the point of looking at, and starting to define what we mean by terms like 'niche', 'independent' or 'alternative' fashion magazines. It's apparent that with these words there is a variety in how they might relate to a magazine project. What I will show you today are some observations I've made looking into the editorial practices of publications that seem to address these categories.

Growing up in the 1990s, I was an avid reader of what is often referred to as 'style' magazines, such as *The Face*, *i-D*, *Dutch* and *Dazed & Confused*. For me, and many others in this pre-internet era, fashion existed only as a representation through magazines. Since then much has changed in the fashion media landscape. In recent years we often hear the statement 'print is dead', while at the same time magazines - niche magazines, in particular - seem to be popping up everywhere.

But what exactly is a 'niche' or 'independent' or 'alternative' fashion magazine? In her book (developed from her 2012 PhD thesis) *Niche Fashion Magazines: Changing the Shape of Fashion*[3], Ane Lynge-Jorlén focused on the culture of production and consumption of

niche fashion magazines (through a case-study of *Dansk magazine* among other methodologies). She uses this term to refer to small-scale independent fashion magazines that merge high fashion with art and style cultures, often targeting both men and women. Existing titles she refers to include: *A magazine*, *Acne Paper*, *AnOther Magazine*, *Purple Fashion*, *Self Service*, *Love*, *S Magazine*, *10 Magazine*, *Plastique*, *POP*, *Visionaire* and *125*.

However, this definition is confusing to me, specifically the use of the word 'independent'. Independent of what exactly? Are these publications 'independent' in terms of content selection, 'independent' financially, or 'independent' in the sense that they only feature independent fashion designers? Whatever the definition may be, a niche, independent or alternative fashion magazine still has to exist in and relate to the same fashion system, deal with the same power structures as larger-scale fashion magazines, magazines such as *Vogue*, *Harper's Bazaar* and *ELLE*. This is what I'm really interested in: How can or can an independent magazine exist within this fashion system? And what would this 'independence' look like?

Browsing through a selection of these niche fashion magazines in bookstores or newsstands, it seems that these magazines are all somewhat interchangeable. They all use the same models, photographers and stylists, and report on the same trends. Apart from the genre facing a certain degree of homogeneity, this situation also raises some ethical concerns.

This situation is highlighted in the project *ReWork magazine* in which graphic designers Edwin van Gelder and Johann Tangyong dissected the pages of about seventy women's fashion magazines, organising the images of the magazines in stacks of similar poses. For their first issue, titled 'Lying', van Gelder and Tangyong focused on images where models were reclining. From over 10,000 pages of these collected magazines, the duo selected a series of images and reassembled these into a new magazine which they reproduced through a Risograph printer, commissioning fiction writer Maurits de Bruijn to add new textual content to the publication. As a result, it's really striking that as you flip through the publication you're unable to tell if you are looking at advertisements (which were included in the selection as well) or editorial, or if you're looking at an image from a mainstream or independent magazine. *ReWork | Lying* appears as a coherent new magazine, suggesting that for fashion photographers, stylists and advertisements, there is little diversity from magazine to magazine.

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[2] Barthes, R 1967, *The fashion system*, Editions du Seuil, Paris.

[3] Lynge-Jorlen, A 2017, Niche Fashion Magazines: Changing the Face of Fashion, London: I. B. Taurus

Spreads of ReWork magazine *fall winter 2016.*

One thing they observed in their research was that Harley Weir seems to be the current star of fashion photography, shooting for both mainstream and independent fashion magazines such as *Vogue US*, *POP*, *AnOther Magazine*, *The Gentlewoman*, *Purple* and *i-D*, as well as shooting campaigns for fashion brands such as Pringle of Scotland, Stella McCartney, Missoni and McQ. Placing her images randomly next to each other, it is almost impossible to separate which image was made for which magazine or fashion label. The following image is a compilation of work by Weir for several different editorial and brand shoots. When you look at them together it is as if they were all shot in the same environment, on the same day even.

Collage of Harley Weir editorial images for various magazines, 2016.

This is a significant change from the end of the 1980s and early 1990s – the period when a large number of independent fashion magazines were born[4] – when the difference in fashion imagery in mainstream and independent fashion magazines would be noticeable immediately, and there was – at least for a while – a strict division in the people working for mainstream and independent magazines.

It also exposes another problematic issue in relation to stylists and writers; the intertwining of commerce and

freedom. A lot of editors, writers and stylists are often simultaneously writing or styling for magazines and newspapers, as well as consulting for the fashion houses they write about and use clothes from to style their editorials. As Angelo Flaccavento notes in *Vestoj*: 'Prominent newspaper writing, in fact, sometimes opens the door to the odd, well-paid bit of corporate text, or perhaps a commission to write the press release of the very same show you are supposed to review, which means a treacherous blur of ethical boundaries.'[5]

Another example of this intertwining between commerce and 'freedom' can be seen in the recent issue of the magazine *Re-Edition*. *Re-Edition*'s fashion-director-at-large, Lotta Volkova, is also known for her close ties to Vetements and Balenciaga, for which she has been the in-house stylist for the last few years. Flipping through the issue *Re-Edition* issue, there is a sixteen-page story on Vetements latest fashion show, several photoshoots dedicated to the clothing of MGSM, McQ, Louis Vuitton, Balenciaga and Eckhaus Latta, and clothing of Balenciaga and/or Vetements featured in every shoot in the magazine, par one.

Series of editorial images from Re-Edition *issue #7, 2016.*

Whereas social media influencers are closely monitored by industry organisations, in Holland, for example, we have the Reclamecode Social Media (Advertisement Code Social Media), having to use hashtags such as #spon, #sp or #ad, the rules for printed magazines with regards to sponsored content are unclear and totally invisible for the consumers of fashion magazines. Shouldn't there be a similar code for printed matter? How should these so-called 'independent magazines be measured, and perhaps, monitored?

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[4] *i-D* and *The Face* were founded in 1980, *Dazed & Confused* in 1991, *Purple* in 1992, *Self Service* in 1993, *Wallpaper** in 1996.

[5] Flaccavento, A 2015, 'On Mercantile Liaisons', Paris: *Vestoj*. Available at: http://vestoj.com/on-mercantile-liaisons/.

By Femke de Vries

After writing an essay on value production in fashion through branding and exploring definitions of clothes in my project 'Dictionary Dressings', I'm now further exploring the relation between language and fashion, and how text can inject clothes with meaning and how it places clothes in a larger social, political and economic system.

I want to address how text on clothes and in magazines can create value. Firstly, I'll refer to Roland Barthes who states that together text and image (or clothes) form a kind of rebus in which clothes and text work together symbiotically, on and off the page.[6] I enjoy when unintended meaning is created, which is why, delivering this presentation, I am wearing this 'everlasting' shirt from H&M. I'm sure the irony of this garment graphic is already clear, but here the text is placed on an object from the fashion system, in particular fast fashion, that is contradictory to the text.


Femke de Vries on the relation between image and text, at 'Everything and Everybody as Material'.

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[6] Barthes, R 1977, *Image Music Text,* New York: Hill and Wang, translated by Steven Heath.

In the context of the pages of magazines text transmits information that is not necessary evident in the image**,** such as the fabric, designer and price tag. The text creates new meaning that is not embedded the image itself, or represented in the products. This highlights the essential role of text in fashion as one that transcends or transforms clothes into meaning, and thus also into fashion. Barthes writes that text can do various things in relation to the image. It can for example render the connotation of the image explicit, direct our eyes towards certain aspects that are supposedly most important, or invent a new meaning shifting from clothes to emotions.

Written Clothing and Real Clothing

The following example illustrates this rebus of image and text in fashion, and challenges their essential relationship on the pages of a fashion magazine. First of all, the placement of the text is important: the term 'hoodie' appears on the garment itself, in addition to the caption that accompanies the photo. Barthes draws apart real clothing (object), written clothing (text) and image clothing (photo). In this example the written clothing is in the *real clothing*, it's in the *image clothing* and also in the *written clothing* (as in the caption). Furthermore, the word 'hoodie' is embroidered on the garment, while in the caption is referred to and written as 'sweater'.
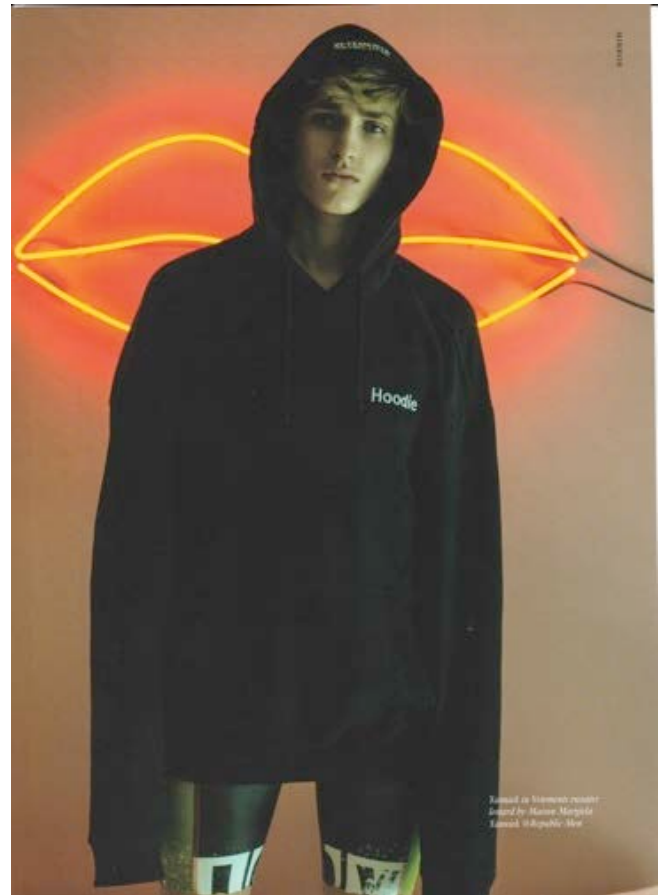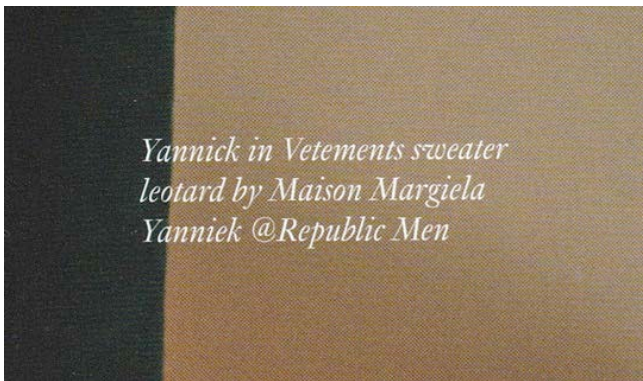
'Mirror Mirror' fall/winter 2016/2017, photography by Ferry van der Nat.

Barthes also writes that to describe clothes (with text for example) is per definition imprecise and incomplete because it is another structure than the images itself and therefore changes the meaning. In this example, the spelling out of the garment on the garment itself creates the opportunity to anticipate on this impreciseness, and to render the piece of clothing explicit. So it seems as if they have tried that but made the mistake in using the term 'sweater' instead of 'hoodie'. This slip up, therefore creates new meaning, or at least, emphasises an alternative meaning. The term 'hoodie' is a popular name for a hooded sweater. Where the name sweater has a sporty casual connotation, the name hoodie signifies more of a bad boy gangster feeling.

Anticipating on this editorial slip up: If they had used the name hoodie also in the caption it would have been explicit repetition. Undeniable there is a form of repetition already: The hoodie (which is in fact partly sweater) is described as a sweater. We can question why they would leave the hoodie part out. This wordplay could be a mistake, a playful exercise or a thoughtful decision to render the garment more accessible and sporty.

Text as Storytelling

In the following example, an editorial for *Vogue*, we see two people sitting on the ground, clearly interacting; the girl wears a short-sleeved dress with a red and white pattern and the boy wears a formal suit. Interestingly, the caption which reads: 'Bewitched, Bothered, Bewildered. Long talks, chilly sunsets (or is that a sunrise?), and an inspired meeting of the minds are all hallmarks of a memorable holiday – or an ethereal love affair.' This text is not explicitly anchoring what we see in the photo but invents a new story, a narrative with an emotional level. The clothes are promoted not by being described as what is factually there, but by writing a story to overlay the image. Using words like 'chilly sunsets', 'sunrise', 'meeting of the minds', 'hallmarks', 'memorable', 'holiday', and 'ethereal love affair' we get drawn into a feeling, a moment and an experience as we read the garments.

Editorial from Vogue, February 2017, photography by Peter Lindbergh.

For me this is a text that illustrates a long history of fashion writing in which the world of material clothes is transformed, through text, into a world of emotions, from a passage from descriptive language, to a poetic intimate conversation addressing the intellect as well as the senses. This is a history of written fashion in which Stéphane Mallarmé played an important part.[7]

In the book *Fashion and Imagination*,[8] Ulrich Lehmann refers to the rise of a new fashion vocabulary occurring around 1800, in which words like 'sheer', 'cloud', 'perfume' and 'dream' are used repeatedly in writing for fashion magazines and journals. But what's most interesting for me about this example and its use of typical fashion language, is that it fits perfectly in today's experience economy where we are at the height of relating

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[7] Furbank, P. N. and Alex Cain. *Mallarmé on Fashion*. Oxford: Berg, 2004.

[8] Lehmann, U 2009, Fashion and Imagination: About Clothes and Art, Arnhem, The Netherlands: ArtEZ Press, p. 312.

designers such as Comme des Garçons, Yohji Yamamoto, Dries Van Noten, Walter Van Beirendonck and Maison Martin Margiela, who have emerged as small-scale publishing houses producing extravagant textual and visual material. With this in mind, I want to show several instances from, more or less, contemporary designers where text is used as a critical, playful and research tool, suggesting an alternative use of this medium. The below example is a publication produced by Vienna-based _fabrics interseason, though no longer operating as a label, designers Wally Salner and Johannes Schweiger for their fall/winter 2005/06 titled 'science fiction'.[11]

Over the years of operation _fabrics interseason seasonally produce poster publications relatively consistent in the graphic form and format. These feature quasi-academic text that references quotes of critical theory and reflective writing to support and further articulate the collection. The text is experimental, but suggests their design process and garment creation is embedded in a type thinking that is critical of fashion's capitalist tendencies, and their practice more aligned with art discourse and cultural studies.

For instance, the text reads 'science fiction is no longer about the future as such, because there is no future that we can do though-experiments about. Our present becomes more and more congruent with our future.' The text is intentionally abstract, avoiding reference to the clothes, to instead function as a conceptual tool to digest the garments and the construction of their brand at large.

A second, and more playful, example by the German designer Bernhard Wilhelm. Press text here is used to tell a story around a collection, narratives that add a visual layer to the collection of garments. The press releases shown above, also in the MoMU archive, are created in the form of explanatory text to communicate the inspiration behind the collection.

One of these, titled 'LUCY, AUSTRALOPITHECUS AFARENSIS' their autumn/winter 2001/2002 collection, reads: 'Anyway, there she was, strolling through the desert, proud as a lioness and tall as a giraffe, wearing billowing dresses knotted around her delightful body, her eyes protected against the glare of the sun and from her jealous – while still horizontal – sisters, by huge scarves tied around her neck and head.' Using fictional, fantastical writing in this way suggests how text can add a performative layer to the garments of a collection. Adding to this, Atelier EB, a practice run between Glasgow and Brussels-based Lucy McKenzie and Beca Libscombe, also explores text as an exploratory tool in regards to the research and

dissemination of their collections. Instead of showing a finished, total representation of their garments, Atelier EB create their lookbooks after-the-fact and explore fictional writing, illustrations and collaged imagery within these.

The opening text of their lookbook 'Ost End Girls' outlines a murder mystery involving a group of school girls in Cairo, it reads: 'This is a short story about fashion – a set of clothes with a fabricated back story. But it's also about two people, one of whom loves the other and gets murdered. It's a crime story, so you feel at ease. It's not literature, it's advertising for clothes, with murder alongside.' Again, brand writing in this context adds texture to the garments, exploring ficto-narratives within their fashion practice.

Atelier E.B's lookbook, 2013 collection 'Ost End Girls'.

In showing these examples I want to highlight some more experimental approaches to brand language, not the conventional, highly aesthetic, clichéd descriptions that operate in many fashion magazines, but how long-form text, and more performative language, might support the dissemination of a fashion collection and practice.

Biographies

Laura Gardner is a PhD student at RMIT and my research looks at the performative and potentially critical space of publishing in fashion, for both brands as well as editorial teams. I am also a writer and editor and publisher of the publication *Mode and Mode*, a publication about fashion publishing, with designer Karina Soraya.

Femke de Vries works as an artist and researcher in fashion where she explores the interaction between clothing as (material) objects of use and fashion as a process of value production. She lectures at various art schools including ArtEZ University of the Arts in Arnhem. She just started research into on how language contributes to the cultural, political and economic construction of fashion.

Hanka van der Voet is Head of the MA Fashion Strategy, also at ArtEZ in Arnhem, and works as an independent

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[11] Access to _fabrics interseason publications courtesy of the MoMu archives in Antwerp, on a visit I made there in June, 2017.

designers such as Comme des Garçons, Yohji Yamamoto, Dries Van Noten, Walter Van Beirendonck and Maison Martin Margiela, who have emerged as small-scale publishing houses producing extravagant textual and visual material. With this in mind, I want to show several instances from, more or less, contemporary designers where text is used as a critical, playful and research tool, suggesting an alternative use of this medium. The below example is a publication produced by Vienna-based _fabrics interseason, though no longer operating as a label, designers Wally Salner and Johannes Schweiger for their fall/winter 2005/06 titled 'science fiction'.[11]

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[11] Access to _fabrics interseason publications courtesy of the MoMu archives in Antwerp, on a visit I made there in June, 2017.

researcher, writer and curator. Her current research is focused on the editorial practices of niche/independent/alternative fashion magazines.

With:

Ricarda Bigolin and Nella Themelios together form D&K. Ricarda is a designer and runs the Masters of Fashion Design program in at RMIT, and Nella is a curator and creative producer at the Design Hub in Melbourne. As D&K they explore a critical fashion practice, through their clothing collections, exhibitions, writing and performances.

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Closing conference dinner, photography Jan Berg, 2017