ACTS OF SEEING

SEEING AS A METHODOLOGICAL TOOL IN FASHION DESIGN

STEFANIE MALMGREN DE OLIVEIRA
FLOWER PIECE
FOURTEEN TYPES

COMPOSE

A BOUQUET
COMPOSING
AT FIRST
A LITTLE LIGHT
FROM
ABOVE
ILLUMINATING
THEN ITEMISED
GYPSOPHELIAN SHIVERING
AND
MIRROR VASE GEOMETRY
COMBINING
CRAVING FOR COLOUR
GYPSOPHELIA’S CROWN IN
BLUE SHADE REFRESHED
DUPLICATING
A ROSE
AND
A RED
CARNATION
ILEX
NOW ENTWINE
INTERTWINING
Fashion design can be described as perpetually having to produce new suggestions of dress. The foundational tool for realising such propositions in a precise and focused way is the act of seeing. Rather than referring to the sense of sight or visual perception, the act of seeing builds on the concept of the ‘inner eye’ in the sense of imagination, discovery, and the direction of design ideas.

Seeing as a foundational act in the creative process is not a novel concept; on the contrary, it is usually an intuitive act that any designer performs when directing design ideas towards aesthetic goals. However, systematisation and an awareness of seeing in design processes, as methods of developing ways of working in the field of fashion design, are still open for further research. Therefore, the research presented in this thesis is aimed to systematically explore the act of seeing as a methodological tool in fashion design processes.

The experiments described in this thesis were used to explore the act of seeing in relation to concepts such as ideation, decision-making, direction, and reflection. The acts of seeing were documented iteratively in photographic sequences, and were important materials for documentation and reflection. The interaction between seeing and doing was recorded using action/reaction chains, and analysed through two modes of seeing: forming and materialising.

The most important contributions of this research are: 1) The hypothesis that the act of seeing is a methodological tool that is fundamental to creative processes. 2) A framework of ideas that builds on the interplay between the act of seeing and consequential act of doing, which was the basis for experiments that shifted between the two modes forming and materialising. 3) A mapping of different kinds of seeing.

This raises awareness of design sensibilities, and could lead to more conscious and focused ways of working in which the act of seeing is a foundation for ways of designing that are both methodological and systematic.

Keywords: Seeing, fashion design process, methods, ideation, aesthetic goal.
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BY

JAN BERG

(EXCEPT THE EXPLORATIONS ON TAILOR’S MANNEQUINS)
EARLY REFLECTIONS
A smell of fleur d’oranger paired with ginger flows through the atrium of the Ecole des Beaux-arts in Saint-Germain-des-Prés, Paris, on a late afternoon in March 2006. Tea is served in traditional Moroccan teacups together with delicate chocolate pastries, both treats imbued with traces of fragile gold leaves. The guests are seated, clinging to their seats, waiting for the spectacle to begin. The heavy brown curtain provides neither a hint nor presentiment of the scene that is to unfold shortly. The gigantic space is consumed by darkness, when suddenly the curtains are parted and a blinding, bright surface appears from nowhere. Nothing seems to exist but this, an expanse of small gold-leaf squares laid out side by side, forming a surface that stretches along the atrium’s length. The show begins. Models walk, one after another, along the precious catwalk, their feet disappearing in a golden fog of particles set in motion from the fragile ground. The colour palette is stunning. All imaginable shades of brown, ochre, cream, deep emerald green, and cherry red are present, embellished with gold-toned bullion embroidery and frequently interrupted with black garments, half disappearing in the darkness of the surrounding space, half illuminated by the sparkling ground. The garments themselves combine eastern influences and sombre, tailored elements. The small, fitted jackets tucked into high-waisted trousers, voluminous coats closed with ribbons above the chest, and silk dresses – which catch the movement of air and are styled with different belts and cummerbund variations – contribute to the general picture. Effortless, loosely draped pieces, styled with richly ornamented ones, combined to create an impression of precious solemnity but, at the same time, a casual tone.

Dries Van Noten’s Fall 2006 ready-to-wear show is one example of an aesthetic goal that was achieved within a body of work, i.e. a ready-to-wear collection and its presentation. Communicated in this creative work is the designer’s vision; a representation of embodied ideas. The idea of ‘colouring’ – with gold as the guiding principle of the collection, indicated by the treats offered to the spectators before the show and becoming increasingly clear with the revealing of the catwalk – might be significant here. It found its completion in the complex, sophisticated embroidery presented in the collection, where the Moroccan theme of the teacups was also resumed.
How does this work, arising from Van Noten’s creative mind and consisting of a system of complex relationships between form and material, come about? How are these creative works developed from their initial ideation, through a process of discovery and evolution, to a final proposition? The most striking, diversely composed worlds can be found in the field of art and design. These are visualisations of creative impulses that have been given form in certain ways, based on what the artist or designer sees and how they choose to elaborate upon what has been seen.

In the example of Van Noten’s Fall 2006 ready-to-wear collection, one can only speculate as to the complex notions relating to material and form that contributed to the aesthetic goal. One of these could be described as ‘colouring’, as exemplified by the gold theme. But which gold theme? The gold displayed in the jacquard weaves of some jackets, which could constitute the concepts of ‘colouring’ through ‘weaving’? Or the golden embroideries – ‘colouring’ through ‘embroidering’? The golden catwalk, where gold leaves were laid out – ‘colouring’ through ‘surfacing’ – or the moving image of the catwalk when the gold particles were set in motion – ‘colouring’ through ‘detaching’ or ‘raising (gold)dust’? The golden colouring could further be related to the brown and beige silks represented in the collection; ‘colouring’ through ‘tinting’. Naturally, the notion of ‘colouring’ could also depart from the concept of ‘gilding’ and refer to a general colour selection in the collection, or to colour contrasts that were created by some pieces and/or silhouettes. A great complexity of notions is thus apparent.

In a creative process, the act of seeing is a fundamental tool for catalysing and developing ideas, as well as advancing and implementing methods. The act of seeing is usually a highly intuitive act that an artist/designer explicates throughout the process of shaping their vision. An artist/designer’s way of seeing is fundamental to their work as it constitutes a recognisable signature within their body of work.

This ‘seeing’ does not relate to perception, nor description of what is in front of the artist/designer’s eyes. Rather, it relates to the act of imagination; to what arises before one’s inner eye. Seeing in this context relates to discovering and searching for ideas, and delves into their development with regard to form and material expression.
The processes by which many artistic, design, and fashion works were created could be considered to constitute practical examples of ways of seeing. While in some works seeing is explicitly reflected in the final result, this is not always the case. In his exhibition Inspirations (Les Arts Décoratifs, 2014; MOMU, 2015) and book of the same name (Golbin & Debo, 2014), Van Noten opposes two phases in a design process – the point of departure and the final outcome – and consequently shows two different kinds of seeing. Here, a reference material, represented by e.g. an image or object, and a final result, i.e. a finished garment or silhouette, are presented in juxtaposition. The reference material serves as a foundation or catalyst for seeing something, while the final result reflects what has been seen. However, what has been seen between these two phases – the experiments that led to the development of this final outcome – remains unknown. One can but guess at how the visual impulses of the reference material became those of the resulting work. These intermediate steps are performed in any creative process when one attempts to define a final outcome. But while these steps, in the form of samples, prototypes, and experiments, may be stored in the archive of a fashion house, they are rarely shown or communicated to outside audiences. However, one example of three-dimensional sketches being demonstrated is Miuccia Prada’s book Prada, which contains images of three-dimensional sketching/fittings (2010). Here, material scraps and paper prints are roughly related to a body in order to test form and material expressions, and so the photographs illustrate how Prada’s Spring 2009 collection came about (Vogue, 2008).

Another process of seeing is visible in Anne Demeulemeester’s sketches, drawn during her fashion design studies in Antwerp. The drawings and illustrations, based on a period costume, demonstrate the vastly differing focuses of her artistic vision: at times it is the silhouette of the piece that is in focus, at others various details seem to intrigue her and become highlighted. Expressed in this approach is the directing of focus to selected ideas contained within the concept of the period costume (Debo & Menkes, 2013).

In Martin Margiela’s first lookbook series 3-9 (n.d.), a thorough exploration of expressions is visualised through a relatively casual, fitting-like context. Photographed silhouettes and garments are combined with text, drawings, and gestures that suggest, add to, and even alter the proposed design. The text, added with a black highlighter pen, emphasises design elements, comments upon them, and gives instructions for wearing. At times, a reference that the design is
based on is indicated. Line drawings are sometimes drawn over the photographs, emphasising, accentuating, and even slightly altering the lines of the displayed garments. Fitting situations are hinted at when gestures, i.e. hands, appear in the pictures, placing, adjusting, or adding elements to the design examples. These, although staged as lookbook suggestions, give an insight into the development and direction of design ideas through experimentation.

In this thesis, seeing is explored and discussed from the perspective of fashion design practice. While the notion of seeing in artistic analysis focuses on descriptive aspects with regard to the dissection (analysis) of an artwork, seeing in the context of fashion design practice relates to the act of seeing that is performed throughout the design process, and which strives towards the development of aesthetic goals or a vision. The development of a vision is accomplished gradually and non-linearly through design experiments (explorations), which in the research work described in this thesis were used to initiate and test ideas with regard to their potential. The explorations served as a foundation for acts of seeing in relation to the triggering and development of ideas, rather than as a basis for description or analysis. The act of seeing during a fashion design process is a natural and unconscious one that designers carry out when creating, and this is perhaps why it has not yet been systematically explored within a research context. This thesis predominantly builds on the work of artists and designers, including their writings on art and design practice, as well as their reflections in relation to vision and seeing. From a research perspective, there is a gap in regard to methods and the systematisation of seeing in the design process.

This research aims to introduce and explore the act of seeing in creative processes as a fundamental methodological tool for iteratively defining aesthetic goals within artistic practice. It is the act of seeing that directs the act of doing in the process, drives decisions and evaluations, and stipulates a specific form and expression for design examples. The act of seeing is explored in a three-dimensional sketching phase, and delves into 1) the catalysation of ideas; 2) their development through the testing of how forms and expressions can be arranged, transformed, manipulated, and used in order to map a specific set of relationships; and 3) a decision-making process in which several ideas were selected for exploration, while others were bracketed. The act of seeing is here central to defining purposeful relationships between form and material.
RELATED WORK

Seeing, the visual sense, forms of visualisation, and visual analysis have all been widely discussed from various perspectives and within diverse fields, often in relation to art and design.

Merleau-Ponty has explored perception in several of his works, including *Phenomenology of Perception* (2002) and the essay ‘Eye and Mind’ (1964). Here, the perceiving of the world is connected to bodily experience, and an intertwining of vision and movement in artistic practice is described (1964, p. 2). This concept can be reflected upon in relation to the interaction between seeing and doing that takes place in a creative process. Merleau-Ponty acknowledges that there is another seeing, an “inner gaze” or “third eye which sees the paintings and mental images” (1964, p. 4).

Perception in relation to thinking is discussed and reflected on at length in the work of Rudolf Arnheim, who acknowledges artistic expression as a form of logical thinking (1969) and discusses art and perception based on certain parameters (1974). Images of thought and shapes as concepts are discussed when he explores thinking in relation to images and reflects on the abstract character of these, as well as the difficulty of obtaining them. Arnheim further describes the relationship between imagery and unconsciousness, and argues that drawing is an important tool for realisation and depiction. Drawings, he writes, “cannot be faithful replicas of mental images but are likely to share some of their properties” (1969, p. 116).

George Stiny delves deeply into seeing in relation to shape – and the interaction between seeing and doing – in *Shape: Talking about Seeing and Doing* (2006). Shapes are concepts (“plans”), and are explored in detail in relation to their construction and composition, as well as from various perspectives. Designing – a “calculating with shapes and rules” (2006, p. 354) – needs words to draw connections, he argues. Stiny expands on the concept of seeing shapes as idea generation through calculation, which he considers to be a creative process. His work can be considered to be a profound investigation of ‘forming’ in relation to the interaction between seeing and doing.
In Philosophical Investigations, Ludwig Wittgenstein discusses seeing from the perspective of philosophy and perception, approaching seeing as “interpreting”, “thinking”, and “a state” (2009). He differentiates between two definitions of the phrase ‘to see’: one based on what is given, and one that involves noticing an aspect that someone else has not seen. He further delves into seeing as interpretation based on the image of a simple line drawing of a box. When paired with text, this illustration gains information in relation to the material (e.g. glass) or construction (e.g. upturned and open), for example. The interpretative qualities of text when paired with imagery (such as an illustration) are discussed: “So we interpret it, and see it as we interpret it” (2009, p. 203). Wittgenstein reflects on the abstract qualities of mental images in relation to the colour purple, questioning how one could, based on a mental construct, know what a colour really looks like. Through an act of doing, concepts are concretised in divergence or inconsistency from the mental image. A picture is an intrinsic feature of a mental image (2009, p. 126).

In ‘Kinds of seeing and their functions in designing’, Donald Schön and Glenn Wiggins describe the process of designing as being “crucially dependent on seeing” and an “interaction of making and seeing, doing and discovering” (1992, p. 135). The article builds on practical examples produced by first-year architecture students, and so seeing is discussed based on the students’ design processes. Designing, which is described as a conversation with materials, interacts with discovering based on seeing and moving (1992, p. 154). Different kinds of seeing in relation to reasoning and learning – “visual apprehension” and “literal seeing” – are presented, and designing as a seeing of things in new ways is highlighted.

Seeing as analysis is elaborated on in various fields, including photography (Barthes, 1981; Sontag, 1977), art (Berger, 1972), and fashion (Hollander, 1993). In relation to text and context, images are in these works reflected on in the form of photographs, art-history objects, and clothes. The forming and materialising aspects of forms of art are analysed, as are possible layers of meaning, and this seeing relates to an analytical kind of searching in order to explain visual structures and elements, for example, while aspects of ‘doing’ are neglected.
Visual thinking has been approached in relation to forms of data visualisation, wherein seeing is dealt with as a means of obtaining evidence and considered to be an analytical tool for the construction of charts, diagrams, and models (Tufte, 1997). The image as evidence and explanation is presented and reflected upon in Tufte’s work. Based on a wide variety of examples, information – displayed in image material – is analysed and communicated. The information contained, such as calculations, perspectives, dimensions, techniques, and methods, is used as a foundation for description and reflection. The main aim of this type of image material is to communicate a certain knowledge, as with e.g. a road map, wherein information relating to location is at the core. Alternatively, the aim is to explore or obtain certain knowledge, as in Otto Lilienthal’s investigation of bird anatomy and flight; here, the intention was to derive the basic principles of aeronautical engineering by studying birds (1997, p. 35). Tufte describes Lilienthal’s visual analysis as more informative (“richer”) than “the single-flatland cross-section of introductory flying manuals” (1997, p. 35), and so the visual material can be seen to be of crucial importance here. In relation to analytical design, seeing can be described as a tool that is used for the derivation and communication of knowledge, as well as for understanding and research purposes.

Several artists have reflected on seeing in relation to, or through, their artistic practice. In many of Josef Albers’ works, for example, vision and/or seeing are strongly focused and reflected upon (1977; 2006; 2010). In Interaction of Color, for example, seeing is discussed in relation to colour explorations: “What counts here – first and last – is not so-called knowledge of so-called facts, but vision – seeing. Seeing here implies Schauen (as in Weltanschauung) and is coupled with fantasy, with imagination” (2010, p. 2). Albers describes seeing in relation to fantasy and imagination, and so a differentiation with regard to other kinds of seeing becomes apparent.

The notion of seeing has been explored by many artists in varied ways, be it through reflection on concepts related to vision, seeing, or associated terms, in their practices as well as in their writings.

László Moholy-Nagy’s The New Vision and Abstract of an Artist and Vision in Motion discuss educational principles and methods in relation to the notions of ‘material’, ‘volume’, and ‘space’. These works were developed during his time at the Bauhaus and IIT Institute of Design in Chicago (1947). As the titles suggest,
vision is central to these exploratory works, wherein practice is used for reflection.

David Hockney’s That’s the Way I See It offers a different way of seeing, an act that breaks with tradition and convention. As the title suggests, seeing – as a highly individual approach – is emphasised. His profound explorations of form and media have resulted in personal visions of the world as, to Hockney, ‘seeing’ can be described in relation to ‘feeling’: “In art, new ways of seeing mean new ways of feeling; you can’t divorce the two, as, we are now aware, you cannot have time without space and space without time” (1993, p. 165).

In Laurence Weschler’s biography of Robert Irwin, Seeing Is Forgetting the Name of the Thing One Sees, a series of conversations between an artist and a critic describes Irwin’s process of artistic creation through his observations, thoughts, and decisions, and so reflect on the practice of an artist in relation to seeing (2008). The work’s title suggests that the act of seeing is a perpetual act of redefinition that strives to question established seeing patterns, and creates new relations and connections based on qualities that have been seen. In other words, a strive towards the new may well be the suggestion here, and is certainly reflected in Irwin’s artistic body of work.

Another relevant work is the first volume of Paul Klee’s notebooks, The Thinking Eye. Here, a significant piece of artistic visual thinking is presented in the form of detailed sketching material, which is paired with text. The methodological explorations delve into the underlying principles of Klee’s work, dealing with a wide array of aspects, from form to composition and colour (1961). At the heart of this investigation is a highly analytical and imaginative discussion of the elementary principles of artistic creation, performed by a ‘thinking eye’.
EARLIER WORK

This section of the thesis reflects on the development of and elaborations on this research work in relation to previously conducted research regarding seeing in fashion design processes (Malmgren de Oliveira, 2016). The notion of seeing was investigated and reflected on in equal measure within a practical and theoretical framework. Four experiments were used to systematically explore the act of seeing in different phases of a design process: the derivation of ideas in ‘Before seeing’; the possibilities regarding what can be seen in a sketch in ‘Seeing exploration 1’; the deepening (refining) of ideas in ‘Deepening of seeing exploration 1’; and the assessment of ideas with regard to value and possibilities in ‘The discarded series’. The experiments particularly highlighted the point of departure and two-dimensional sketching phases of design processes, and resulted in a methodology of seeing. Concepts such as ‘the mind’s miscellany’, ‘the point of departure’, ‘ideas’, and ‘relationships’ were reflected on in this context. The most important contributions of this research are the notion of seeing as a methodological tool and framework, and concepts to support reflection on the act of seeing throughout the design process.

This thesis elaborates on several key points and concepts that were introduced in the author’s previous research. The structure deviates from that of the preceding work by departing from the idea of clearly separating the phases of a design process, such as the point of departure, two-dimensional sketching, and discarding. Instead, one three-dimensional exploration phase was used to reflect on acts of seeing in artistic practice.

The approach used was non-linear, in that the act of seeing was explored in a three-dimensional context. The idea of a design process consisting of various distinct phases was thus abandoned in favour of key concepts or layers of seeing that interweave.

The point of departure has been described as the moment at which a train of thought is set in motion – where the mapping of ideas begins. A process begins somewhere, then turning points occur throughout the process that may become new starting points, which in turn form new tracks for the development of the idea(s). Thus, there is often not a single point of departure, but many. One or several starting points may develop in parallel, and while some are pursued, others
are abandoned. The point of departure relates to the idea catalyst or activator, which – naturally – can initiate ideas at the outset of a process but may do so at any other point.

‘The discarded series’ dealt with the evaluation and assessment of ideas. This thesis focuses on the act of seeing from the point of view of discovery, imagination, and the development of ideas. In this regard decision making is central, and the discarding of ideas or sketches relates to the designer’s choice, what they decide to see, and which paths they choose to follow. The discarding of ideas is expressed here as ‘decision making’ and the ‘bracketing of ideas’, exemplified by the text (verbs) and action/reaction chains in explorations such as the ‘Flower piece’ (the latter of which are discussed in more detail in the ‘Reflections on explorations’ section).

The concept of expressing design ideas as verbs (present participles) – ‘lining’, ‘positioning’, ‘layering’, ‘scaling’, etc. – was introduced in the author’s previous work, and highlights the active character of seeing. The action/reaction chains propose a clear distinction between the act of seeing and consequential act of doing, which was blurred in the preceding research. The refinement of ideas and deepening of concepts through principal and accessory acts of seeing are further developed and reflected on in this thesis.
As is discussed above, the act of seeing relates to the catalysation and development of ideas. In fashion design processes ideas must deal with questions of form and material, and so can be said to build on two elementary concepts: forming and materialising. The former defines all acts related to the creation of form, while the latter refers to acts in relation to thinking about materials. The elaboration of ideas is intended to define interesting relationships between form and material in order to achieve a certain expression. When relationships are constructed between body and material, the act of seeing necessarily deals with both modes: Form cannot be composed without answering questions of materialising, and material cannot be used for creation without due consideration being given to forming. The focus can, of course, shift between these two modes of seeing, and either a form or a material can be prioritised in order to explore and define visual potentials. Depending on the chosen mode, an idea might be developed with a focus on either form or material. However, even if one mode is prioritised and the other addressed more implicitly, both are equally essential. A certain expressiveness on the part of a design is the result of a successful interaction between both modes. The mode of forming supports the mode of materialising and vice versa; when the creation of shape is dependent on the material choice, the material properties unfold their expressive potential through form. The act of seeing directs the two modes and influences the interaction by focusing on one or shifting between the two. What follows are three mode possibilities:

1. Act of seeing in the mode: forming

   Directing mode: forming

   Supporting mode: materialising
2. Act of seeing in the mode: materialising

Directing mode: materialising

Supporting mode: forming

3. Acts of seeing in the mode: forming and materialising

Directing mode: forming

Directing mode: materialising

Depending on the chosen mode(s), the exploration of an idea could induce particular actions and reactions.

Consider, for example, the following acts:

1. *Lining* through *shaping*

2. *Lining* through *curving*

3. *Lining* through *positioning*

4. *Lining* through *layering*

5. *Lining* through *scaling*

If the selected modes are:

Act of seeing in the mode: forming
Directing mode: forming

Supporting mode: materialising

The exploration could unfold as follows:

1. Lining is used to create interesting shapes on a body, using material to support the intended shape.

2. Lining triggers the exploration of different curving lines in relation to the body. These could be constructed in proximity to or at intervals of distance from (waving) the body. The material supports the character of the lines.

3. Positioning is chosen in order to explore the importance of the location of lines/sets of lines in relation to the body. Various shapes are generated depending on where the lines are placed, and the material supports a specific shape.

4. Lining is used to explore layering on the body. Line structures are used in relation to the body and the material supports the layering expression, but focus is placed on the lines and shapes generated by the layering.

5. Lining is explored through scaling. Line systems change in relation to the body when the scale is changed, and the material supports the expression of the lines created.

The consequent action/reaction chains would likely be similar to the following:

1. Action 1; Act of seeing: lining

   Action 2; Act of seeing: shaping (seeing the possibility to explore various shapes)
Reaction; Act of doing: *shaping* (creating various line systems/shapes on the body)

2. Action 1; Act of seeing: *lining*

   Action 2; Act of seeing: *curving* (seeing the potential of exploring curved lines on the body)

   Reaction; Act of doing: *curving* (creating curved lines in relation to the body)

3. Action 1; Act of seeing: *lining*

   Action 2; Act of seeing: *positioning* (seeing different line positions on the body)

   Reaction; Act of doing: *positioning* (testing different line positions on a body)

4. Action 1; Act of seeing: *lining*

   Action 2; Act of seeing: *layering* (seeing the potential of exploring layer composition on the body)

   Reaction; Act of doing: *layering* (layering material on a body in different ways)

5. Action 1; Act of seeing: *lining*

   Action 2; Act of seeing: *scaling* (seeing the possibility of trying
different line system scales in relation to the body)

Reaction; Act of doing: scaling (scaling line systems up and down and relating them to a body)

Consider the five examples in the materialising mode:

Act of seeing in the mode: Materialising

Directing mode: Materialising

Sporting mode: Forming

The exploration could unfold as follows:

1. Lining is used to create interesting shapes with a focus on material, possibly in a printing or texturing context. Forming supports the character of e.g. a print.

2. Lining triggers the exploration of curving lines in the material, which are produced using e.g. a material technique, part of the material, or an element of its print. The form supports the character of the line(s).

3. Positioning is chosen in order to explore the lines in relation to the material. The positioning of sets of lines could, for example, be explored in a graphical context (i.e. patterns), or in a structural pattern wherein lines or line expressions are explored in various positions. The form supports a specific expression of line(s) in the material.

4. Lining is used to explore the possibilities of layering materials and creating line structures in relation to the material. The form supports the layering expression (if e.g. different surface shapes are layered), but the focus is on the material expression that is generated by the layering.
5. Lining is explored through scaling. The relationships between line systems change in relation to the material surface (e.g. a surface pattern) as well as the material properties when the scale is changed (a scaled-up material may result in a collapsed-shape expression, for example). The form supports the expression of the lines created by the scaling.

The two modes depend on each other. The act of seeing determines whether one or more ideas are explored with one mode particularly in mind or the two being considered equally. This can be of significant importance in the development of examples towards an aesthetic goal.
THE ACT OF SEEING AND DOING IN INTERACTION

The act of seeing is central to the generation of ideas, discovery, imagination, and decision making. Seeing activates ideation, directs the development of ideas, and evaluates suggestion materials such as design examples. There is, however, no suggestion or change to a suggestion material without an act of doing. In order to create and further develop designs, both acts need to interact with each other: Based on what has been seen, the doing ‘acts’ accordingly. Thus, a new suggestion is shaped based on the act of seeing and through the act of doing. However, it is the act of seeing that directs any act of doing, and consequently influences the design’s development; which ideas are pursued and which ignored, which expressions are created and which are not, and for what purpose. Stiny elaborates on the concept of ‘seeing’ and ‘doing’ in relation to shape, describing the interaction between the two acts as an inexhaustible source of creative ideas (2006, p. 2). Ideas are catalysed when a designer sees something that sparks their imagination or interest in discovery. When ideas are explored, the two acts of seeing and doing are in constant interaction. In this regard, the act of seeing can be thought of as the directing act, and the act of doing as the consequential act.

Another consideration in this context is the interaction between seeing and doing as a back-and-forth dynamic between an action and a reaction: Something is seen (Action 1) that causes a specific response (Reaction 1), which triggers a new act of seeing (Action 2) that in turn causes another response (Reaction 2), and so on.

Richard Serra’s famous Verb List – “a series of actions to relate to oneself, material, place, and process” (Friedman, 2011) contains 84 infinitives of verbs (‘to roll’, ‘to crease’, ‘to fold’, etc.) and 24 contexts (‘gravity’, ‘entropy’, ‘nature’, etc.). It has been described as the conceptual blueprint of Serra’s entire artistic output (Vervoordt, 2013) and is, according to the artist himself, related to the nature of the design process. Serra does not specify what the actions relate to, but they have the potential to give direction to acts in a design process, and in that way become instructions for acts of doing applied to a material. In this sense, they could be said to parallel acts of seeing.
RELATIONSHIPS

The act of seeing in fashion design can be described as an elementary act for the defining of relationships between form and material. John Cage states that “[w]hen you look, your mind goes into a state of finding relationships” (Cage, 1996; cited in Basualdo, Battle, & Tomkins, 2012, p. 233), and describes the connection between the visual act and the discovering of relationships.

The development and elaboration of ideas is closely intertwined with the forming of relationships. Any idea could be described as a fluctuating, variable set of relationships in the designer’s vision. These need to be formulated in experiments, evaluated according to their value and strength of expression, and further explored with regard to their design possibilities. The experiments become suggestions that illustrate and show the direction of, for example, a programme or method (Hallnäs & Redström, 2006; Redström, 2017; Hallnäs, 2017), but also represent snippets of a larger vision that the designer strives towards. Defined relationships, as exemplified in this thesis by the design explorations, are initially composed because the designer sees a direction that they consider to be worthy of further exploration. Explored relationships could thus be described as the results of acts of seeing. When relationships are formulated, the designer analyses these and can decide to pursue another possibility that diverts this set of relationships. This may be due to the designer having evaluated the example and decided that an alteration is preferable, or could relate to their desire to produce a larger quantity of suggestions from which to choose. A suggestion that proposes a set of relationships then forms a basis for new acts of seeing. Within the structure of arranging and rearranging relationships based on what has been seen, seeing is related to defining, evaluating, and directing design ideas towards an aesthetic goal.

The exploration series presented in this thesis evinces slight changes or shifts in the sets of relationships, each of which produces a new design suggestion. Relationships were constructed so as to create a particular structure and series of interrelationships, in order to achieve a certain expression.

Experiments are a general way to explore relationships due to their form and material expression. Relationships are plastic; they can be changed, transformed, broken, etc. But how do we decide what we will continue to work on? What to
change, or elaborate? What to break and redefine? What is considered to be
worthy of further exploration? These considerations and decisions relate to
specific contexts and purposes, including basic and individual judgements such
as ‘I consider this to be beautiful! Therefore, I will position the draping in precisely
that way on the body.’ Alternatively, consider the following hypothesis: ‘In the
context of our next ‘Fall ready-to-wear collection’, I want to have three different
scales (‘scaling’) of jackets to be able to layer them (‘layering’) one on top of the
other. This jacket thus needs to be scaled up by at least 10%.’ Decisions that alter
sets of relationships can also be constructed according to a certain purpose: “I
became annoyed by the fact that the jeans were so uncomfortable to sit in, so I
started deconstructing my own jeans to make them fit and follow the body in a
seated position” (Linderoth, 2017). Relationships can consequently be shaped in
relation to a specific aim based on factors such as context, purpose, guidelines,
audience, and taste. When working in the context of artistic exploration, as in
the work described in this thesis, the act of seeing can focus primarily on the
expressional values that the set of relationships defines. These can take the form
of ‘this line is beautiful, interesting, strange, unappealing intriguing, etc.’, and
can influence assessments relating to the alteration of expressions in design
examples or even lead to their being put aside.

One concept can produce a large quantity of possible relationships. When we
explore the idea of ‘lining’ (as in the explorations ‘Seeing lines’ and ‘Line piece’),
for example, we are confronted with a multiplicity of suggestions for possible
visualisations of the concept. A ‘seeing block’ that embodies the idea of ‘lining’
forms a specific set of relationships when placed on the body in a specific way.
If the designer considers the ‘positioning’ of the piece to be an interesting idea
in further re-defining the set of relationships, the act of doing repositions the
piece and consequently changes the given set of relationships. A new suggestion
is constructed.

A set of relationships forms a specific expression/set of expressions. Experiments
or design examples are foundations or catalysts for ideas, functioning as
suggestions of a specific set of relationships. These must be explored in order
to find the expressiveness sought. At times, designers do not know what exactly
they are looking for, and so the testing of possibilities regarding how an idea can
be realised is essential.
In discussing the relationship between research results and searching, Hallnäs suggests that, during a search process, one often finds what one is looking for along the way, and emphasizes the coincidental character of some findings (2017, p. 5).

Further reflection on the formation of relationships suggests that each discipline could be described as having the potential to establish specific sets of relationships and develop certain fashions within these. Sets of relationships describe expressions that relate to, for example, particular traditions, as well as time. Every designer, fashion house, and brand has consequently established particular sets of relationships, which can also be considered to be signatures or codes (Blanks, 2013; Loschek, 2009). These are often recognisable elements of their respective designs and principal patterns that are explored, developed, manipulated, and changed in order to achieve diverse expressions while continuing to refer to an underlying, recognisable set of relationships. This occurs with new appointments of artistic directors to established fashion houses, for example, or when new collections are developed based on archival references.

The ability to recognise and analyse the structures and organisations of relationships is very valuable tool for designing. The recognition of structures that refer to specific times, for example, or organisations that relate to a particular archetypal work, signature piece, or method, plays an important role in the further development of these relationships. Recognising and acknowledging the other perspectives and possibilities of a set of relationships may direct the exploration of design examples. This could be expressed in the maintaining of established structures (relationships), or in the induction of change. A maximum change leads to a breaking of these structures/relationships as part of a strive towards new definitions. One example is Comme des Garçons’ Fall 2012 ready-to-wear collection, when the general trend of embracing three-dimensionality was abandoned in favour of two dimensions, leading to new approaches to construction (Blanks, 2012). Similarly, Nicolas Ghesquiere broke with the traditional double-face idea, transforming the material into a lightweight technical silk by applying foam. In so doing, wholly new construction possibilities were created for significant Balenciaga shapes (De Looz, 2013).
The building of relationships, moreover, is related to an artist's training and the discipline in which they are active, and both of these aspects can consciously or unconsciously influence a design process (Meyer, 1967). When a designer explores the various possibilities for composing a set of relationships in order to achieve a desired expression by, for example, scaling up and down, repositioning, adding, or reducing elements, this may be undertaken in relation to working with and seeing pre-existing patterns. Sets of relationships, as exemplified by the design suggestions, are therefore constructed, pursued, changed, or broken in this regard.
EXPLORATIONS
FOUNDATIONAL PIECES
SEEING LINES
LET’S START BY SEEING LINES
CURVING
TRANSPARENTISING
CREASING
SEEING POSITIONS
AND

BY SEEING POSITIONS
SLICING
PADDING
CREASING
CURVING
CURVING
NEVERENDING DRESS
EXPLORE
SEEING
AND
DOING
IN
INTERACTION
SEEING BLOCK

PIECES
SEEING
BLOCKS
AS
BUILDING
BLOCKS
TO
TEST
RELATIONS
DIVING INTO MATERIALISING:
ONE SET OF LINES EXPLORED THROUGH THREE MATERIALS
AND

INTO

FORMING:

SEEING

DIFFERENT

IDEAS

FOR BUILDING

VOLUME
LOOKING CLOSE TO SEE BETWEEN THE LAYERS
EXPLORING THE POTENTIAL OF A TUBE
MONOCHROMATIC PIECE
ONE COLOUR EXPLORED TROUGH DIFFERENT CONCEPTS
A
CHANGE
OF
PERSPECTIVE
REARRANGEMENT PIECE
THROUGH
REARRANGING
THROUGH ANGLING
COMPOSITION
PIECES
COMPOSITIONS BUILT ON DIFFERENT IDEAS
TENSION PIECE
TESTING THE POTENTIAL OF BUILDING RELATIONS USING TENSIONS
CONTRAST PIECE
COMPOSING WITH A FOCUS ON CONTRAST
MISCELLENEOUS PIECE
COMPOSING
WITH
MISCELLANEOUS
MATERIALS
AND
IDEAS
REFLECTIONS ON EXPLORATIONS
REFLECTIONS: FLOWER PIECE I & II
‘FLOWER PIECE I and II’ consist of ten photographs of flower arrangements. While ‘FLOWER PIECE I’ (six photographs) is a visual introduction to the thesis, ‘FLOWER PIECE II’ (four photographs) works as its visual conclusion. Fourteen different types of flower and several selected items, such as a table, vases, and garments, were used along with lighting set-ups to form arrangements. Each photograph is the result of one or more acts of seeing that were performed to achieve an aesthetic goal. Paired with text, the photographs communicate the principal idea that has been seen in each arrangement. Two different types of text were used: A descriptive text at the left side of each image and a present-participle form verb at the bottom right of each spread (except for Figs. A8 and A10, where the order is inverted due to graphical issues).

Principal ideas such as ‘composing’, ‘illuminating’, ‘combining’, ‘colouring’, ‘duplicating’, ‘intertwining’, ‘piling’, ‘wrapping’ and ‘vanishing’ represent the acts of seeing that were performed in the creation of these examples. The exploration digressed from a fashion context: flowers, rather than a human body, took centre stage in the artistic experimentation with regard to the investigation of their aesthetic potential, and were a trigger material for ideas that can be seen. Fourteen types of flower were chosen from a large selection and arranged and photographed. The arrangement shown in Fig. A1, for example, was directed by the act of seeing ‘composing’. A detailed description might suggest that the act of seeing ‘composing’ relates to the act of selecting flowers in a flower shop, which could be further narrowed down by choosing some in order to compose a bouquet. Therefore, choices and possibilities had to be tested. Questions such as ‘how should we compose, and with what?’, needed to be answered. Should one or several flowers take centre stage in the composition, or should all be of equal value? How should questions of shape or the characteristics that compositions could take (round, squared, elongated, concentrated, airy, etc.) in terms of colour combinations, flower selection, quantities, or stem heights be addressed? The principal act of seeing ‘composing’ could consequently be performed by several accessory acts of seeing, such as ‘shaping’, ‘colouring’, ‘highlighting’, ‘cutting’, ‘adding’, and ‘reducing’. One or more acts of seeing are performed by one or more acts of doing. The two acts can be considered to interact, and are conducted in order to achieve an aesthetic goal. Through the act of seeing, an idea is seen, and the act of doing is directed in order to realise it. Directed by the act of seeing and realised by the act of doing, arrangements are created and/or changed. This interaction between the act of seeing and the act of doing can be
described through the concept of action/reaction chains.

In Fig. A1, the flower arrangement is paired with the act of seeing ‘composing’, which has thus been seen and induced a reaction, i.e. the act of doing ‘composing’. This act of doing visualised the act of seeing, which in turn directed the doing. The direction of the act of seeing follows certain criteria or judgements, which the act of doing performs accordingly. As is discussed above, the act of seeing ‘composing’ can be further differentiated through accessory acts of seeing, and this differentiation equally applies to the act of doing. The act of seeing can be equal to the act of doing or can differ, as in Fig. A6; here, the act of seeing ‘duplicating’ was performed by the act of doing ‘mirroring’. Similarly, in Fig. A11 the act of seeing ‘vanishing’ was achieved through a change in the lighting setup by the act of doing ‘obscuring’. In Figs. A8 and A10 the principal act of seeing is the same (‘wrapping’), but due to further accessory acts of seeing relating to forming and materialising, the expressional values of the result changed. These accessory acts relate to another material selection as well as a different way of performing the act of seeing ‘wrapping’. The act of seeing relating to materialising could be defined as ‘shining’ or ‘glittering’, directing the process towards a sequinned fabric; the act of seeing relating to forming could be described as ‘tightening’ or ‘fitting’ as it led to a tightened wrapping that created a different shape in the bouquet.

The photographs of ‘FLOWER PIECE I and II’ were paired with ideas that have been seen throughout the experimentation, resulting in the aesthetic goals that are represented in the images. Consequently, they crystallise guiding concepts that were essential to the creative process. However, this does not exclude the possibility that each photograph could catalyse a wider selection of ideas when viewed as graphical material, for example. There is certainly a distinction to be made between the seeing that happens in a design process (sketching, draping, prototyping, etc.), for example, and the seeing that takes place when reviewing graphical material (reference material). While the seeing that occurs during a design process is in constant interaction with an act of doing that alters the arrangement, the seeing of reference material is more of an analytical nature; searching for interesting values or guiding principles/ideas that then, in a subsequent stage, may induce a design process based on the idea that has been seen.
Action/reaction chains:

Fig. A1:   Action; act of seeing: composing
          Reaction; act of doing: composing

Fig. A2:   Action; act of seeing: illuminating
          Reaction; act of doing: illuminating

Fig. A3:   Action; act of seeing: combining
          Reaction; act of doing: combining

Fig. A4:   Action; act of seeing: colouring
          Reaction; act of doing: colouring

Fig. A5:   Action; act of seeing: duplicating
          Reaction; act of doing: mirroring

Fig. A6:   Action; act of seeing: intertwining
          Reaction; act of doing: intertwining

Fig. A7:   Action; act of seeing: piling
          Reaction; act of doing: piling

Fig. A8:   Action; act of seeing: wrapping
          Reaction; act of doing: wrapping

Fig. A10:  Action; act of seeing: wrapping
          Reaction; act of doing: wrapping
Fig. A11:  
Action; act of seeing: *vanishing*  

Reaction; act of doing: *vanishing*
REFLECTIONS ON FOUNDATIONAL PIECES
The ‘FOUNDATIONAL PIECES’ delved into elementary concepts of acts of seeing, as well as the interaction between seeing and doing. Questions such as ‘what is ‘lining’ or ‘positioning’?’ were dealt with in the explorations ‘SEEING LINES’ and ‘SEEING POSITIONS’ through accessory acts of seeing. ‘NEVERENDING DRESS’ explored an interaction between an act of seeing and an act of doing through a systematic investigation of expressional form and material values.
REFLECTIONS: SEEING LINES

Fig. B1

Fig. B2

Fig. B3

Fig. B4

Fig. B5

Fig. B6

Fig. B7

Fig. B8

Fig. B9
‘SEEING LINES’ explored the act of seeing ‘lining’ as a principal idea. The question ‘what is lining?’, i.e. which lines can be seen and how, was further specified through accessory acts of seeing such as ‘looping’, ‘padding’, ‘transparentising’, ‘slicing’, ‘creasing’, ‘pleating’, and ‘curving’. In Fig. B1, a first act of seeing (e.g. ‘lining’) gains direction through a second act of seeing (e.g. ‘looping’), and so the concept is consequently further refined through the description of the specific movement that the line forms. In the photographs of the silhouette suggestions, various lines could be focus points for acts of seeing; the outlines of a silhouette, the lines of a drape, a movement that is described, or a line created by a change in material. The accessory idea specifies the act of seeing ‘lining’, and clarifies the exploration. If we consider Fig. B4 (‘lining’ through ‘transparentising’), ‘transparentising’ points to the line that separates the opaque and transparent material. If the accessory act of seeing were to be replaced by ‘edging’, the focus may be directed towards the outlines of the shape, while ‘lining’ through ‘plunging’ might refer to a specific character of line. In Figs. B3 and B9, ‘curving’ is the accessory act of seeing. The two examples demonstrate very different approaches to exploring ‘lining’ through ‘curving’, and resulted in entirely different expressions. Further accessory ideas could be used to fine-tune the experiments. While Fig. B3 could be described as ‘lining’ through ‘curving’ through ‘transparentising’, Fig. B9 would be more aptly delineated as ‘lining’ through ‘curving’ through ‘layering’. However, in a design process the seeing aids in the selection of ideas according to certain criteria of judgement, such as aspects that might be considered to be interesting for further exploration. In Fig. B3, the acts of seeing could focus on ‘lining’ through ‘transparentising’, and the idea of ‘curving’ could be bracketed. These decisions are crucial to further developments and refinements of design examples due to the fact that they direct actions towards specific aesthetic goals, in relation to which ideas are considered and sometimes disregarded.

Action chains of the principal and accessory act(s) of seeing:

Fig. B1:  
Action; act of seeing 1: lining

Action; act of seeing 2: looping

(Lining through looping)
REFLECTIONS: SEEING LINES

Fig. B2: 
Action; act of seeing 1: lining
Action; act of seeing 2: padding
(Lining through padding)

Fig. B3: 
Action; act of seeing 1: lining
Action; act of seeing 2: curving
Action; act of seeing 3: transparentising
(Lining through curving through transparentising)

Fig. B4: 
Action; act of seeing 1: lining
Action; act of seeing 2: transparentising
(Lining through transparentising)

Fig. B6: 
Action; act of seeing 1: lining
Action; act of seeing 2: slicing
(Lining through slicing)
Fig. B7: Action; act of seeing 1: *lining*  
Action; act of seeing 2: *creasing*  
(Lining through creasing)

Fig. B8: Action; act of seeing 1: *lining*  
Action; act of seeing 2: *pleating*  
(Lining through pleating)

Fig. B9: Action; act of seeing 1: *lining*  
Action; act of seeing 2: *curving*  
Action; act of seeing 3: *layering*  
(Lining through curving through layering)
REFLECTIONS: SEEING POSITIONS

Fig. C1

Fig. C2

Fig. C3

Fig. C4

Fig. C5

Fig. C6

Fig. C7

Fig. C8

Fig. C9
‘SEEING POSITIONS’ explored the act of seeing ‘positioning’ as a principal idea through accessory acts of seeing such as ‘slicing’, ‘padding’, ‘pleating’, ‘creasing’, ‘curving’, and ‘cleaving’. The principal act of seeing ‘positioning’ directed the testing of material placements on a body (mannequin) with regard to their expressive value and in relation to forming and materialising. The accessory act of seeing triggered ideas for ‘positioning’, with each position initiating an assessment of the form and/or material expressions that were created in conjunction with the mannequin. These assessments were similar to the following: ‘This ‘slicing’ position creates a nice shape. That position creates just the right tension in the material. The draping is exciting in this position. This position should be changed through ‘rotating’ or ‘dropping’ to achieve...’. Each example or sequence of examples became a foundation for seeing. Approximations of aesthetic goals are discovered and defined through these kinds of ‘seeing explorations’, which are foundational for both decision making and the selection of focus points during a design process.

The act of seeing ‘positioning’ was explored in Figs. C1-C4 through the accessory act of seeing ‘slicing’. ‘Slicing’ directed a specific material manipulation; one slice was applied to a piece of rubberised cotton, which was first placed over the shoulders, with the slicing following the centre front line (Fig. C1). ‘Positioning’ was then performed through accessory acts of seeing, such as ‘rotating’, ‘dropping’, and ‘lifting’, to test and direct the design potential of the experiments.

In Figs. C26-C35 the act of seeing ‘positioning’ was applied not only to the material but to the mannequin, which was placed on the ground. The spatial extension offered new possibilities for the building of relationships between form and material.

Figs. C26-C29 explored ‘positioning’ through ‘curving’. The testing of ‘positioning’ was consequently directed towards the concept of ‘curving’ in relation to the body. Were the accessory act of seeing to have instead been defined as ‘transparentising’ or ‘contrasting’, the ‘positioning’ may have focused on expressional values dealing with the contrast between the transparent and opaque qualities of the material in relation to the mannequin.
The guiding acts of seeing in ‘SEEING POSITIONS’ were:

Fig. C1-C4: ‘positioning’ through ‘slicing’

Fig. C6-C13: ‘positioning’ through ‘padding’

Fig. C14-C17: ‘positioning’ through ‘pleating’

Fig: C18-C25: ‘positioning’ through ‘creasing’

Fig: C26-C29: ‘positioning’ through ‘curving’

Fig: C30-C35: ‘positioning’ through ‘cleaving’

For Figs. C1-C4 - 'positioning' through 'slicing' - an example action/reaction chain sequence would be as follows:

Action; act of seeing 1: \textit{positioning}

Action; act of seeing 2: \textit{slicing}

Reaction; act of doing 1: \textit{slicing}

Reaction; act of doing 2: \textit{positioning}
The following lines (relating to Figs. C1-C4) demonstrate how (i.e. an accessory act of seeing) ‘positioning’ was performed.

**Fig. C1:**

Action; act of seeing 1: *positioning*

Action; act of seeing 2: *rotating*

Reaction; act of doing: *rotating*

**Fig. C2:**

Action; act of seeing 1: *positioning*

Action; act of seeing 2: *rotating*

Reaction; act of doing: *rotating*

**Fig. C3:**

Action; act of seeing 1: *positioning*

Action; act of seeing 2: *dropping*

Reaction; act of doing: *dropping*

**Fig. C4:**

Action; act of seeing 1: *positioning*

Action; act of seeing 2: *lifting*

Reaction; act of doing: *lifting*
REFLECTIONS: NEVERENDING DRESS

Fig. D1

Fig. D2

Fig. D3

Fig. D4

Fig. D5

Fig. D6

Fig. D7

Fig. D8

Fig. D9
REFLECTIONS: NEVERENDING DRESS
REFLECTIONS: NEVERENDING DRESS

Fig. D58  Fig. D59  Fig. D60  Fig. D61

Fig. D62  Fig. D63  Fig. D64  Fig. D65

Fig. D66  Fig. D67  Fig. D68  Fig. D69

Fig. D70  Fig. D71  Fig. D72  Fig. D73
‘NEVERENDING DRESS’ is a design example that explores the interaction between acts of seeing and doing. Five T-shirt-shaped layers of different scales, colours, and materials were explored on a body in relation to their expressional potential within forming and materialising. ‘NEVERENDING DRESS’ began by gradually building up layers, i.e. T-shirt patterns that were not sewn together but left open at the edges, on a body one after another (Figs. D1-D6). The layers were then arranged in diverse ways in order to investigate their expressional value through the building of relationships between form and material. Thus: An idea was seen, an act of seeing directed an act of doing, which changed the arrangement; the new arrangement triggered a new act of seeing, which in turn directed an act of doing. In this way the ‘NEVERENDING DRESS’ was a rich source of design possibilities, wherein through a change of setting, new acts of seeing were perpetually evoked. Various acts of seeing and doing – ‘layering’, ‘turning’, ‘twisting’, ‘voluming’, ‘twisting’, ‘knotting’, ‘crossing’, etc. – could be said to be in interaction here. In Figs. D10-D17, the act of doing was performed by the model through ‘moving’, and so the act of seeing ‘moving’ was an instruction for the model’s act of doing. In Figs. D43-D50, the act of seeing was directed towards a dramaturgical line to emphasise the perpetual character of the exploration, displaying an apparent ending to the sequence before continuing with a backdrop of a different colour (Figs. D51-D66). The acts of seeing that effected the apparent ending (Figs. D43-D50) could be described as ‘dropping’, ‘removing’, or ‘leaving’.
REFLECTIONS ON SEEING BLOCK PIECES
For the ‘SEEING BLOCK PIECES’, one or several manipulated materials were used as building (seeing) blocks to form relationships between form and material. Different acts of seeing were triggered and pursued in search of expressional values. The fabric panels or ‘seeing blocks’ were ‘prepared’ materials (i.e. they had been manipulated in some way). As any manipulation is based on acts of seeing (i.e. the designer must have seen something in order to direct the manipulation), the ‘seeing blocks’ were the results of action/reaction chains. They were used as materials that, when related to the body, initiated further acts of seeing. Design potentials and expressional values were tested in relation to two modes of seeing – ‘forming’ and ‘materialising’ – with shifting focus points.
LINE PIECE
In the ‘LINE PIECE’, the act of seeing ‘lining’ was explored in three different materials – black and white cotton (Figs. E1-E15), denim (Figs. E16-E27), and velvet (Figs. E28-E31). A set of lines was incorporated into each material using different techniques. The black and white cotton was joined with plain seams, the denim pieces were combined with flat-felled seams, and the velvet structure contained no seams and was instead stitched and padded. Each material had different properties; while the cotton was thin and flexible, the denim was relatively rigid and heavy, and the velvet was soft and thick. The material panels were mirrored and then related to the mannequin, triggering various accessory acts of seeing. As ‘lining’ was the principal act of seeing that was explored in relation to different material properties in this exploration, it can be regarded as an example of materialising. Although relevant aspects of forming could be said to have been present in the experimentation, the differences between the materials in terms of their qualities were the primary focus here and effected particular expressions of form. A certain ‘draping’, for example, worked well with the cotton but not the denim, which in turn offered possibilities for creating forms that were more expressive than in the other materials. Some actions were facilitated better by the padded velvet than the other materials, and sometimes resulted in different expressions in the cotton and denim. Different expressions were thus generated through both differing and similar acts of seeing, with each material having specific properties that influenced this process.
Figs. E32-E43 show a simplified selection process: Eleven of the twelve design examples shown are marked with ‘NO’, while one is marked ‘OK’. Here, a visual form of decision making is presented, wherein the seeing resulted in an evaluation of expressional values and the properties of ideas, and consequently in the selection of the material that was most suited or promising in relation to the aim of the experiment.
REFLECTIONS: VOLUME PIECE

Fig. F1  Fig. F2  Fig. F3  Fig. F4

Fig. F5

Fig. F6  Fig. F7  Fig. F8  Fig. F9
In the ‘VOLUME PIECE’, the principal act of seeing ‘voluming’ was explored through different accessory concepts. The materials – one puffer vest and four quilted pieces – were used to create volume on the body in various ways. Central to this example was the creation of voluminous shape expressions, and so the main focus for the acts of seeing was forming. As explicated in the ‘LINE PIECE’, in which materialising was the focus, the design matters and qualities of the other mode (materialising) are always present regardless of the experiment being
conducted. In the ‘VOLUME PIECE’, the act of seeing ‘quilting’ was applied to the material due to its great potential for voluminous forming/form building. The acts of seeing within the scope of materialising could be said to support matters of forming. The accessory acts of seeing in this exploration were concerned with ‘positioning’, ‘adding’, ‘crossing’, ‘layering’, ‘dropping’, ‘merging’, ‘stacking’, ‘wrapping’, ‘intertwining’, and ‘twisting’, for example. Fig. F19 is the result of the complex action/reaction chains shown in Figs. F1-F18.

Example of action/reaction chains:

**Fig. F1**

Action; act of seeing 1: *voluming*

Action; act of seeing 2: *positioning*

Reaction; act of doing: *positioning*

**Fig. F2**

Action; act of seeing 1: *voluming*

Action; act of seeing 2: *adding*

Reaction; act of doing: *adding*

**Fig. F3**

Action; act of seeing 1: *voluming*

Action; act of seeing 2: *repositioning*

Reaction; act of doing: *repositioning*
Fig. F4  Action; act of seeing 1: *voluming*

Action; act of seeing 2: *adding*

Reaction; act of doing: *adding*

Fig. F5  Action; act of seeing 1: *voluming*

Action; act of seeing 2: *dragging*

Reaction; act of doing: *dragging*

Fig. F6  Action; act of seeing 1: *voluming*

Action; act of seeing 2: *increasing) dragging*

Reaction; act of doing: *dragging*

Fig. F7  Action; act of seeing 1: *voluming*

Action; act of seeing 2: *adding*

Reaction; act of doing: *adding*

Etc.
When we consider the action/reaction chains, two aspects become apparent.

Firstly: Each example (figure) could be further refined by digging deeper into the action/reaction chain through accessory acts of seeing.

Example:

Fig. F4  Action; act of seeing 1: voluming

Action; act of seeing 2: adding

Action; act of seeing 3: interweaving

Action; act of seeing 4: contrasting

Reaction; act of doing : interweaving

In Fig. F4 the act of ‘voluming’ was further explored by adding a third material to the arrangement. The third act of seeing specifies how the ‘adding’ was performed, while the fourth act of seeing selected the material to be added. As the fourth act of seeing was ‘contrasting’, a colour contrast (blue) was added to the arrangement.

Secondly:

The exploration highlighted a diversified character of ‘seeing’ and emphasised the idea of different kinds of seeing (see also the ‘Kinds of seeing’ section). In a process in which seeing and doing are in close interaction, the act of seeing is almost always equal to the act of doing. This is logical, on the basis that the doing receives its direction from the seeing. However, when the examples are viewed separately – leaving aside the processes of doing – the images may trigger
entirely different acts of seeing such as ‘balancing’, ‘proportioning’, ‘surfacing’, or ‘angling’, or even obscure acts such as ‘framing’, ‘hugging’, or ‘vanishing’. The act of seeing ‘vanishing’ can be seen in Fig. F11, where the rose material blends with the background. Similarly, in Fig. F19, the material wrap/swirl is dropped to the ground and the relationships between form and material are built without the involvement of a human body (as if the body has ‘vanished’).
REFLECTIONS: LAYER PIECE - CLOSE-UP

Fig. G1

Fig. G2

Fig. G3

Fig. G4

Fig. G5

Fig. G6

Fig. G7

Fig. G8

Fig. G9
The principal act of seeing in the ‘LAYER PIECE’ was ‘layering’. The seeing blocks in this example were five rectangular pieces, each with a rectangular cut-out at its centre, and one piece of an ordinary shirt. The material used was a stripe-patterned cotton fabric in different colours and scales that is typical of classical shirts in menswear. ‘Layering’ was explored through accessory acts of seeing such as ‘adding’, ‘turning’, ‘crossing’, ‘pulling’, ‘twisting’, ‘knotting’, and ‘puffing’, but this time from a close-up perspective. The editing (the close-up perspective)
REFLECTIONS: LAYER PIECE - ZOOM OUT
may not have had an impact on the seeing that took place in the exploration process, wherein seeing and doing were in interaction. However, if we examine the photographs, an analytical kind of seeing may be achieved as a result of the editing. The close-up photographs direct the seeing towards certain details, and so point to specific focus areas. This is emphasised when the close-up sequence (Figs. G1-G20) is compared to a zoomed-out sequence (Figs. G21-38). This comparison raises the question of whether the close-up sequence is likely to be related to materialising and the zoomed-out sequence to forming.
REFLECTIONS: TUBULAR PIECE

FIG. H1

FIG. H2

FIG. H3

FIG. H4

FIG. H5

FIG. H6

FIG. H7

FIG. H8

FIG. H9
A piece of tubular knit was used to create the ‘TUBULAR PIECE’. The seeing block was a tube that was manipulated using identically sized cut-outs and the act of seeing ‘slicing’. The elasticity of the material as well as the manipulation (act of seeing: ‘cutting’) offered a rich foundation for the triggering of ideas. Figs. H1-H37 show the act of seeing ‘interweaving’. Cotton and jersey strips were inter-woven in various ways through accessory acts of seeing such as ‘pulling’, ‘tensi- ning’, ‘releasing’, ‘twisting’, and ‘crossing’. 
In Figs. H42-H45 and H49-H52, another accessory act of seeing – ‘knotting’ – was combined with ‘interweaving’. Figs. H38-H41 and H46-H48 explore the act of seeing ‘stretching’ instead of ‘interweaving’, while in Figs. H19, H20, and H26-H33 ‘stretching’ and several other accessory acts of seeing were tested in addition to ‘interweaving’. Forming and materialising were tested equally.

The primary action/reaction chains of the ‘TUBULAR PIECE’ were:

**Figs. H1-H37:**

Action; act of seeing 1: *cutting*

Action; act of seeing 2: *interweaving*

Reaction; act of doing: *interweaving*

**Figs. H42-H45; H49-H52:**

Action; act of seeing 1: *cutting*

Action; act of seeing 2: *interweaving*

Action; act of seeing 3: *knotting*

Reaction; act of doing 1: *interweaving*

Reaction; act of doing 2: *knotting*

**Figs. H38-H41; H46-H48:**

Action; act of seeing 1: *cutting*

Action; act of seeing 2: *stretching*

Reaction; act of doing: *stretching*
Figs. H19; H20;  
Action; act of seeing 1: cutting

H26-H33:  
Action; act of seeing 2: interweaving

Reaction; act of doing 1: interweaving

Action; act of seeing 3: stretching

Reaction; act of doing 2: stretching
REFLECTIONS: MONOCHROMATIC PIECE

Fig. I1
Fig. I2
Fig. I3
Fig. I4

Fig. I5

Fig. I6
Fig. I7
Fig. I8
Fig. I9

Fig. I10
Fig. I11
Fig. I12
Fig. I13

Fig. I14
Fig. I15
Fig. I16
Fig. I17

Fig. I18
Fig. I19
For the ‘MONOCHROMATIC PIECE’, five T-shirts were used as seeing blocks in order to explore their expressional potential in the materialising mode. The T-shirts used were different shades of red, had prints on the front, and were cut open at the seams before being related to the body in different ways. Two were joined together by the front of one and hemline on the other, and the other three remained separate. The act of seeing ‘colouring’ was investigated through accessory acts of seeing such as ‘adding’, ‘extending’, ‘surfacing’, ‘layering’, ‘intersecting’, ‘releasing’, ‘rotating’, and ‘pulling’.
The ‘PERSPECTIVE PIECES’ experimented with new ways of seeing familiar arrangements. While the ‘REARRANGMENT PIECE’ proposes ‘repositioning’ of familiar garments, the ‘ANGULAR PIECE’ focuses on one arrangement, which produced diverse expressions when viewed from different angles. In the ‘TRANSFORMATION PIECE’, an archetypal jacket was merged with two symmetrical pieces of material to trigger the seeing of ‘transforming’ possibilities.
REFLECTIONS: REARRANGMENT PIECE

Fig. K1  Fig. K2  Fig. K3  Fig. K4

Fig. K5

Fig. K6  Fig. K7  Fig. K8  Fig. K9
A denim jacket and a silk shirt initiated an exploration of the act of seeing ‘positioning’ in relation to the body for the ‘REARRANGEMENT PIECE’. The standard order of placement of the garments was turned upside-down, inverting usual ways of wearing. In Fig. K1, the silk shirt is worn in its ordinary position, while the denim jacket is worn on the legs. This order is then inverted in Fig. K2, and the position of the denim jacket is altered in Fig K3; both garments were then redefined again through ‘repositioning’, with both collars being merged at the centre front line. Later in the exploration three blouson jackets were added. In this exploration, the accessory acts of seeing dealt with ‘inverting’, ‘draping’, ‘joining’, ‘layering’, etc. The photographic material, which documents the acts of seeing of the design process, could function as subjects for new investigations. On the following two pages, two image sequences of four photographs (Figs. K15-K22) are presented. The first three of each sequence are the same, while the fourth (Figs. K18 and K22) are different. The first three images of each sequence (Figs. K15-K17 and K19-K21) show a layering of garments on top of one another, with a dark blue blouson layered above a white silk shirt worn on the leg; a purple silk shirt followed by a red one were then added. The fourth image breaks the seeing pattern by introducing a new act of seeing, resulting in a change in the
REFLECTIONS: REARRANGMENT PIECE

‘storyline’ of the sequence.

The action/reaction chains for these examples could be described as follows:

Action/reaction chains for Sequence I:

Fig. K15:  
Action; act of seeing 1: positioning  
Action; act of seeing 2: layering  
Reaction; act of doing: layering

Fig. K16:  
Action; act of seeing 1: positioning  
Action; act of seeing 2: layering  
Reaction; act of doing: layering

Fig. K17:  
Action; act of seeing 1: positioning  
Action; act of seeing 2: layering  
Reaction; act of doing: layering

Fig. K18:  
Action; act of seeing 1: positioning  
Action; act of seeing 2: inverting  
Reaction; act of doing: inverting

Action/reaction chains for Sequence II:

Fig. K19:  
Action; act of seeing 1: positioning  
Action; act of seeing 2: layering
Reaction; act of doing: *layering*

**Fig. K20:**

Action; act of seeing 1: *positioning*

Action; act of seeing 2: *layering*

Reaction; act of doing: *layering*

**Fig. K21:**

Action; act of seeing 1: *positioning*

Action; act of seeing 2: *layering*

Reaction; act of doing: *layering*

**Fig. K22:**

Action; act of seeing 1: *positioning*

Action; act of seeing 2: *dropping*

Reaction; act of doing: *dropping*

Figs. K23 and K24 are close-ups of the silk blouse and denim jacket, respectively, worn on the legs. Both pieces were ‘designed’ garments that had already passed through complex action/reaction chains. Which acts of seeing might have been decisive with regard to their final outcome? With the silk blouse, for example, these may have been ‘shaping’ (e.g. front and back, sleeves, pockets, collar), ‘scaling’ (with regard to an oversized fit, pockets) and ‘positioning’ (of sleeves, pockets). In addition, questions of materialising must have been answered; the choice of silk may have been based on ‘upgrading’ or ‘flowing’. Depending on whether the shirt was the result of altering existing block patterns, the acts of seeing might have related to ‘adding’ or ‘reducing’ (of e.g. volume, length, details), ‘transforming’ (of e.g. sleeves), or ‘pleating’ (e.g. an inverted pleat pocket). Worn on the legs in this example, the silk blouse became a basis for new acts of seeing.
REFLECTIONS: ANGULAR PIECE

Fig. L1

Fig. L2

Fig. L3

Fig. L4

Fig. L5

Fig. L6

Fig. L7

Fig. L8

Fig. L9
A pink blanket was used for exploration in the ‘ANGULAR PIECE’. Here, a vintage piece of material that may have been manipulated through acts of seeing such as ‘embroidering’, ‘quilting’, ‘ruffling’, and ‘piping’ was placed on a mannequin and fixed above its right shoulder blade. This position was maintained throughout the exploration, with the mannequin rotating and the position of the camera changing through ‘positioning’, which changed the viewpoint in a series of steps (Figs. L1-L9). This was performed in order to obtain a diverse array of angles on the arrangement, each of which was characterised by its expressional values. These could be described through acts of seeing such as ‘abbreviating’, ‘extending’, ‘narrowing’, and ‘amplifying’; depending on the ‘angling’, the volume of the arrangement appeared to be narrowed or amplified, while its form was perceived as abbreviated or extended.

Action/reaction chain:

Figs. L1-L3;  Action; act of seeing 1: *angling*

L8-L9  Action; act of seeing 2: *positioning (camera)*

Reaction; act of doing: *positioning (camera)*

Figs. L4;L7  Action; act of seeing 1: *angling*

Action; act of seeing 2: *rotating (mannequin)*

Reaction; act of doing: *rotating (mannequin)*

Fig. L6  Action; act of seeing 1: *angling*

Action; act of seeing 2: *rotating (mannequin)*

Reaction; act of doing 1: *rotating (mannequin)*
Action; act of seeing 3: positioning (camera)

Reaction; act of doing 2: positioning (camera)

In previous reflections on explorations, different kinds of seeing were discussed in brief. If we examine the photographs that resulted from this investigation, acts of seeing such as ‘abbreviating’ (e.g. Figs. L8 and L9), ‘extending’ (Figs. L2 and L6), ‘narrowing’ (Figs. L1 and L6), and ‘amplifying’ (Figs. L2 and L7) could be considered to result from the ‘angling’. However, the possibilities of acts of seeing in the reference material are likely vast. Acts of seeing that expand on ‘angling’ could be concerned with ‘curving’ (Fig. L3), ‘twisting’ (Fig. L4), ‘dragging’ (Figs. L6 and L7), ‘interleaving’ (Figs. L2 and L6), etc.
REFLECTIONS: TRANSFORMATION PIECE

Fig. M1  Fig. M2  Fig. M3  Fig. M4

Fig. M5

Fig. M6  Fig. M7
The point of departure for the ‘TRANSFORMATION PIECE’ was a vintage garment – a red silk blouson jacket. Two mirrored fabric panels were related to the blouson in different ways based on the principal act of seeing ‘combining’. This was expanded upon through accessory acts of seeing such as ‘positioning’, ‘inverting’, ‘lifting’, ‘rotating’, ‘folding’, ‘twisting’, and ‘releasing’. In this example, the act of seeing ‘combining’ was intended to aid in seeing the aesthetic possibilities of altering the archetypal blouson. The applied panels were not final plans/proposals for how the blouson could have been transformed; instead, they suggested fragments of ideas relating to e.g. ‘lengthening’ (Fig. M1 – ‘The length could be altered as displayed’), ‘lining’ (Fig. M1 – ‘The graphical lining pattern, displayed as horizontal line divisions above the chest and hips could be interesting to pursue’), ‘twisting’ (Fig. M6 – ‘The idea of the twisting panels could be incorporated into the front pieces of the blouson to elaborate on the general idea of a wrap closing’), or ‘inserting’ (Fig. M6 – ‘The curved edges of the panels could be inserted into the pattern of the front pieces’).
The ‘COMPOSITION PIECES’ explored the idea of ‘composing’ with a focus on different acts of seeing. The examples were arranged based on their expressional values for composing within the forming and materialising modes. Consequently, relationships between form and material were probed by examining the proportions, balances, and relationships that were created. While two experiments focused on selected ideas – ‘building tension’ and ‘contrasting’ – a third investigated several concepts relating to forming and materialising for ‘composing’.
REFLECTIONS: TENSION PIECE

Fig. J1

Fig. J2

Fig. J3

Fig. J4

Fig. J5

Fig. J6

Fig. J7

Fig. J8

Fig. J9
The ‘TENSION PIECE’ explored ‘composing’ through ‘tensing’ and ‘relaxing’. Several materials with the potential to build different levels of tension were used to ‘compose’ on a body. Three elastic frill pieces (wide elastic ribbons, applied to three jersey materials under tension to create a frill effect), one tunnel piece (a piece that was sewn together as a tunnel with a piece of elastic passed through to create a crease effect), and one cut-open T-shirt were used. ‘Stretching’ and ‘relaxing’ possibilities were explored, which resulted in various expressions. In Figs. J1-J9, the potential of the manipulated materials was tested with regard to their compositional values on a body. Materials were gradually added to the composition, and their positions were constantly altered through accessory acts of seeing. Figs. J7 and J8 show an example of the tension of a positioned material being changed, when the piece on the right shoulder was released (act of seeing: ‘releasing’), dropping down and exposing the shoulder.
In the ‘CONTRAST PIECE’, the act of seeing ‘composing’ was explored with a focus on contrast. The arrangement contained several contrasting elements: light and dark, non-colour and colour, shiny and matte, stiff and soft, garment and non-garment. The main focus of this exploration was the red material (jacket), along with its contrast to the black, white, and grey materials and impact on the compositional values of the piece. Figs. N1-N3 show a foundational arrangement wherein a black technical fabric was combined with an inserted silk organza, a white rubberised cotton, and a grey wool fabric. The red material entered the experimentation in Fig. N2. From Fig. N4 onwards, the composition changed exclusively through actions that were performed with the red material. The acts of seeing conducted in this experiment included ‘positioning’, ‘adding’, ‘dropping’, ‘inserting’, ‘covering’, ‘entwining’, ‘framing’, and ‘expanding’.
REFLECTIONS: MISCELLANEOUS PIECE

Fig. O1

Fig. O2

Fig. O3

Fig. O4

Fig. O5

Fig. O6

Fig. O7

Fig. O8

Fig. O9
The ‘MISCELLANEOUS PIECE’ used a wide range of materials and ideas to experiment with the act of seeing ‘composing’. Throughout the exploration (Figs. O1-O16), materials of different colours were composed through acts of seeing such as ‘creasing’, ‘surfacing’, ‘entangling’, ‘scrunching’, ‘expanding’, and ‘covering’. Foundational questions of ‘composing’ were answered through these acts of seeing in relation to principles/concepts including ‘balancing’, ‘proportioning’, ‘emphasising’, ‘structuring’, and so on. Each figure represents a suggestion for compositional and expressional values, as is discussed above.
THEORETICAL REFLECTIONS
MIND’S MISCELLANY

Central to a design process is the mind’s miscellany – a mental storage unit containing everything that the individual’s mind has absorbed. This comprises an aggregation of influences; a vocabulary of form and expressions, memories of imagery, objects, and feelings, qualities of text and tone, trivial fragments, diverse stimuli, and complex working patterns (methods).

This knowledge can be of great value when designing, and can be used consciously in a process when working from memory (i.e. based on previous achievements or established working patterns). At other times, the mind’s miscellany might interweave in an unconscious manner, replicating or imitating expressive qualities that have been retained. Meyer describes the human mind and its worldview as a disorganised collection of stimuli whose relationships are, in essence, unknown (1967, pp. 80-81).

There are often great discrepancies with regard to the quality of recordings: Some are captured with near-photographic precision, while others are more abstract or fragmented in character. Visual memory can be described as a large storage unit – albeit one that possesses an insufficiency with regard to the ability to recall the specific qualities of recordings. This discrepancy is discussed by Albers, for example, in relation to the recalling of a specific tone of red (1963).

It can thus be argued that recordings of influences are highly individual. No individual absorbs the same impressions as another, and there often exist disparities in the quality of recalled memories and drawing of connections between them.

All of this emphasises the individuality of seeing, the fact that one person’s way of seeing is not identically reproducible by another’s mind or vision. Recordings are individually tinted, and integral aspects of a way of seeing. This aspect of individuality can be very valuable when designing, when different ways of seeing contribute to e.g. new ways of thinking and doing. In a design team or creative environment this diversity can be a highly stimulating factor in the development of ideas.

The miscellany is not only a large agglomeration of influences, but a web of connections and/or relations that interacts with the process of seeing whilst desig-
ning. A designer attempts to contextualise, draw relationships, and categorise, and so the miscellany is a system that defines a certain order.

‘Patterns of seeing’ – specific ways of seeing something – are formed through experience and informed by previous work and explorations that the designer has conducted, and consequently form part of the designer’s habitual design vocabulary. The recording of ‘patterns of seeing’ may be auxiliary with regard to the development of design ideas, particularly when a time limit is in place. However, this can become disruptive if long-established ways of seeing are perpetually repeated and new ones are not defined.

Through the recording of working/seeing patterns and other stimuli, the miscellany forms a repository of knowledge for idea catalysation and development, as well as what has been seen and done in the field and in what way. In that sense, it is an important foundation for evaluation and judgement, and so in this research is highlighted as a centrepiece for visualisation in design processes.
Central to the design process and creation of design examples is the discovery and development of ideas. Ideas are catalysed through the designer’s seeing, explored with regard to their design value and potential, evaluated, and eventually discarded.

Ideation starts when the designer’s imagination is stimulated. This is usually at the point of departure, when the designer searches for interesting ideas, but can happen at any stage of the design process, with ideas evolving and influencing the way of working. Consequently, acts of seeing may take place consciously, as at the beginning of a design process when the designer searches for ideas to pursue, or occur spontaneously as the result of, for example, a certain trigger being activated during experimentation.

When ideas are activated – that is, when the designer’s imagination and interest are stimulated – the potential expression might be of a very abstract nature, taking the form of vague impulses or fragments of stimuli that the designer tries to grasp and give form to. When ideas are developed during a design process, the designer aims to achieve the same expressional strength in design examples that were initially seen as ‘stimuli triggers’ in their inner eye. Often, it is through experimentation that the designer tries to capture this.

The experimentation media or tools can be diverse, ranging from drawing and sketching in two and three dimensions to collaging, photographic explorations, and prototyping. All of these tools are used to produce suggestions for the realisation of an idea, presenting different approaches and perspectives. Ideas are plastic, constituted of fluctuating sets of relationships between form and material, and can be used to build diverse connections. Consequently, they are able to produce strongly distinct expressions that the designer can mould in any way they desire.

When considering, for example, the idea of ‘lining’, a direction or a focus point is given to the experimentation by the act of seeing (‘lining’), providing a multitude of possible approaches to the concept. In order to further refine this, the designer differentiates between these approaches by adding accessory acts of seeing to the principal concept. The concept of ‘lining’ could, for example, be
approached through ‘layering’ and ‘colouring’ or ‘interweaving’ and ‘cleaving’. There are thus many ways of deepening a concept, based on which acts of seeing are applied. The designer explores the essence of an idea by defining focus points and delving into the directions that an idea has to offer. Experimentation is used to find the ways in which the essence of an idea can be enhanced, and so it is necessary to test and play with possibilities. In this way, ideas can be clearly defined and developed towards an aesthetic goal; a certain expressiveness, involving the juxtaposition of several ideas. The strength of combining several concepts has been noted by John Berger, who argues that the meaning of an object can be changed through juxtaposition (1972). The expressional values of ideas are created in conjunction with the connections that the designer draws on between different concepts.

When ideas are tested in design examples, they need to be evaluated in order to further define their direction. This can be based on simple personal preference or related to a certain context, such as a design brief with certain requirements. Contextualising an idea means that the act of seeing makes connections to time, function, and discipline, for example. In the evaluation process, the act of seeing focuses on the value of an idea in relation to how it has been realised and certain criteria of judgement. Further exploration of an idea can involve meticulously applying the slightest changes in position (‘positioning’) to design elements, changing the set of relationships (Simon, 2016). When ideas are reflected upon, their focus can thus be redirected or shifted. The designer turns towards certain ideas in order to understand their essence, as when the expressional value of a particular idea is explored within the two modes discussed above (forming and materialising) in relation to specific additional ideas and variables.

Ideas can arise at any time during design processes. Many of these are to be found in design suggestions, but not all are useful to pursue. Therefore, Edmund Husserl’s concept of bracketing ideas is of use: The designer picks up certain ideas while making no use of others, which are present but out of action (2014).

The seeing of ideas is individual. Seeing is not a general, universally valid judgement, but an individual and subjective tool that is used to direct and explore design ideas. No designer sees the same idea in the same way, but if one
comprehends seeing as a methodological tool that can be acquired and trained, an individual’s way of seeing can adapt to certain contexts and settings. In a team of designers, for example, individual ways of seeing find a certain synchronicity and correlation, contributing to the brand’s vision. Ideas are visual constructs of what has been seen, and so a design example can be comprehended as the visualised result of one or more acts of seeing.

DEEPENING OF IDEAS

The explorations in this thesis are examples of acts of seeing. Two questions are central here: ‘What can be seen?’ and ‘how can something be seen?’ The first refers to the initiation and selection of a principal idea, while the second relates to the exploration of the different possibilities stemming from that idea (i.e. accessory ideas that support the refinement/definition of the principal idea). The framework, based on the acts of seeing and doing and action/reaction chains, forms a foundation for deepening and refining ideas in order to create expressive values. The act of seeing deals with the what in order to decide which principal idea should be chosen for exploration. Further development of the idea requires further consideration of the possible focus points within the idea in order to ascertain their potential, and this is where how becomes important. How – or in what way the idea can be seen – is a central factor in creating a certain expression within specific contexts or categories – in other words, towards a specific aim. Furthermore, how is a key question with regard to fine-tuning an idea in relation to a desired expression and can be explicated through action/reaction chains. Being aware of what and how is crucial to a conscious aesthetic (Hallnäs & Redström, 2006, p. 151) as these questions are essential to defining the final outcome.
GENERAL REFLECTIONS
ACTS OF SEEING IN TEACHING

Teaching is a dialogue of seeing between students and teachers. When student works are reviewed and discussed, for example during supervision, this is usually based on the presentation of design examples or experiments that have been conducted. These examples or suggestions are embodiments of acts of seeing, i.e. they represent and are themselves the results of actions and reactions that the student has conducted in order to formulate their ideas.

The teacher reviews the examples with regard to the idea itself (recognising the principal and accessory ideas), the development of the idea with reference to its design potential and expressiveness, and the final outcome.

The teacher may then offer new suggestions and input regarding how ideas can be further developed, rethought, or clarified. The student revises, reflects, and elaborates on their design based on the suggestions, and possibly performs new actions accordingly. However, there may be a dissonance when two different ways or acts of seeing (student/teacher) are in conversation, as they are generally not wholly in agreement. The student presents examples which are connected to their greater vision and may contain elements of this; consequently, the idea(s) or potential of the idea(s) could be misinterpreted or not evaluated appropriately. Equally, the suggestions of the teacher are connected to their vision, with certain conceptions of how the work could be improved.

Both ways of seeing – that of the student and that of the teacher – must find a common foundation for communication. In this sense, seeing is a major part of communication within design education. The teacher makes suggestions based on what they see in the work of the student, and the student’s way of seeing the suggestions directs further actions and reactions in the form of refinements and developments (revisions) of the design examples.

As both ways of seeing are based on past and current training and experience they interweave with the mind’s miscellany, which has collected/recorded acts of seeing and constantly adds new ones. In this sense, the mind’s miscellany can be described as an individual framework of seeing in relation to which all design decisions are interpreted, evaluated, developed, categorised, and contextualised.
The dissonance between different ways of seeing—whether between student and teacher, creative director and design team, or senior and junior designers—might cause difficulties relating to, for example, communication, but can also be regarded as a valuable contribution. In established structures—such as the fashion system, design houses, brands, fashion schools, and education programmes—each unit is signified by specific framework(s) of seeing. Traditions, working patterns/methods, and signatures are defined in specific ways and give direction to ways or acts of seeing that are performed within the established systems. These specific ways of seeing are embodied in the final results (design examples, suggestions, products, etc.). The dissonance between the ways of seeing of individual designers can be valuable to an established framework of seeing as it contributes to, expands, and can even change such a framework. In fashion education programmes students are confronted by certain ways of seeing, represented by the works of other students and specific design methods, but also bring with them their own ways of seeing. This difference in seeing presents a very positive challenge as it results in additions to, rethinking and questioning of, and changes within established frameworks.

While some students may define entirely new ways of seeing during their education, some follow the frameworks of others and contribute to them through the development of certain aspects. Acts of seeing that have been particularly interesting or successful may be imitated, with or without further development.

In education, the imitation of acts of seeing is often part of curricula. Replica exercises are very valuable for comprehending and recording acts of seeing, understanding and exploring action/reaction chains through analysis and reconstruction, and eventually implementing them as part of new ways of seeing. The importance of ‘copying’ has been asserted by Yohji Yamamoto in an interview with Alex Fury, in which he suggests that students should begin by copying works that they admire, and in this way find themselves (Yamamoto, 2011). The recording of “desired/admired acts of seeing” is an act that is often performed unconsciously when such are perceived and thus retained in the mind’s miscellany. In a design process, these memories/recodings might be processed in the designer’s or student’s way of seeing. This could be interpreted as an abstract or fragmentary form of copying, wherein incomplete stimuli and fragments of acts of seeing are manipulated to form a new way of seeing, and consequently inform or shape this emerging way (of seeing). One can thus differentiate between
conscious copying (as a very effective and important form of learning) and unconscious copying (experienced ways and acts of seeing that become part of the individual’s way of seeing). Furthermore, it is possible to distinguish between a literal copy (i.e. a replica) that imitates an original as closely as possible and a manipulated or advanced copy; a work that is based on/refers to an original, but expands upon its idea or expressional value.

From the point of view of communication, the seeing of ideas and their development towards a final result involves various tools, such as sketching, prototyping, and drawing, which are ways of bridging the dissonance in seeing and help to communicate ideas and vision.

The teacher reviews examples and, based on their knowledge, sees certain possibilities and design values for creating expressions, and suggests further perspectives on the idea that could be tried. The seeing of the student might be (very) different (Ramsden, 2003), and so it is important to understand the student’s experience of seeing and direct suggestions accordingly.
THOUGHTS ON ACTS OF SEEING

This research presents one possible approach to ways of seeing. In the presented framework, practical examples are used to reflect on and illustrate acts of seeing that occur during design processes. The interactions between the act of seeing and the act of doing are broken down and explicated by action/reaction chains. Seeing is explored as a methodological tool which, through interaction with the act of doing, initiates ideas and their development.

As a wholly fundamental act, seeing has been argued to be a highly intuitive action that designers perform when creating. Beautiful and complex ways of seeing can be found within art and design. This research explores aspects of the fundamental structure of ‘ways of seeing’ by examining them using practical works in the form of sketches and experiments that were carried out in a three-dimensional context. These ‘sketches’ relate to the visualisation process of abstract stimuli or ideas that designers receive and give form to through experimentation. Each sketch can thus be described as a suggestion of how such stimuli can be given form. When explored as part of a sequence, stimuli are tested and shaped with a larger vision in mind. To give shape to what one is seeing in stimulus material can be intricate, and is often easier when considered in hindsight and in relation to a larger vision. The character of stimulus material is generally not clearly defined, but must be worked out/defined through experimentation. Realising stimulus material can be difficult due to the need for it to operate on the same level of strength as in the designer’s imagination in regard to expressional values, which is not always easy to achieve. Ways of realising structures and properties of stimuli/ideas in a convincing way must be found so that they possess the same expressional and qualitative strength, in order to ensure that their essence is as powerfully formed as their mental conceptions, which are – as is discussed above – vague, abstract, and undefined, but highly expressive and strong. These tiny stimuli must spark processes and grow into definitions of ‘artistic universes’, be it through examples, collections, design projects, or entire works. As a result, it is important that they are nourished through further definition and development. It is here that both enthusiasm and devastation are found; where, during experimentation, stimuli become promising ideas, or fail to meet the initial excitement and fade away.

GENERAL REFLECTIONS
As was stated at the outset, fashion design can be said to be in a perpetual state of having to produce new suggestions of dress, be these in the form of garments, silhouettes, experiments, showpieces, or collections. Seeing is the foundational tool for realising such propositions in a precise and focused way, regardless of whether these suggestions are based on expressional, functional, sustainable, or social specifications. Within the research described in this thesis, seeing is explored as a tool that is essential to idea generation and development in artistic fashion design processes. However, many other perspectives could be explored in relation to the notion of seeing, with or without elaboration on seeing as a methodological tool. Some suggestions for further investigations can be found in the ‘Kinds of seeing’ section.
One of the findings of the experimental explorations described in this thesis is the further differentiation of kinds of seeing (Schön & Wiggins, 1992) that can take place during a creative process. As is discussed above, there is a distinction to be made between the seeing that occurs in a process in which seeing and doing are in interaction, and the seeing that happens when design examples or reference material are reviewed. While the former can be referred to as a seeing that gives direction to the act of doing (seeing as direction), the seeing of references could be described as being analytical in nature (seeing as analysis). One could naturally reflect further on different kinds of seeing related to imagination, i.e. when ideas are catalysed and become suggestions. Furthermore, seeing must be involved in the development of examples and performance of acts related to evaluation and definition. Seeing can thus be differentiated into the following categories:

- Seeing as direction
- Seeing as analysis
- Seeing as imagination
- Seeing as development
- Seeing as evaluation
- Seeing as redefinition
- Seeing as focus

These kinds of seeing are not necessarily tied to a specific phase of a design process, such as the point of departure or sketching phase. Rather, they are activated in a non-linear way throughout the design process until aesthetic goals are defined.
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REGATHERING
NOW LEFT TO DECAY
IN
A TRIANGULAR PILE
PILING
WRAPPING
BUT QUICKLY
WRAPPED
IN A RED PUFFER VEST
WRAPPING
AND ENVELOPED
IN A SEQUINED BEAUTY
FROM EIGHTIES GLAMOUR
UNTIL

AT LAST

DEPLETED
VANISHING