Investigating the relation between halftoned, placed prints and garment.

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Abstract

"...the "how" and "why" of printmaking can hold many creative opportunities."

(Grabowski 2009 )

This bachelor degree work investigates fashion as a non-verbal form of communication by the use of prints. Prints in fashion design today are categorized as placed prints or all-over prints. This work explores new dimensions in the use of a placed print by allowing it to interact with garment and body. It strives to take the prints within fashion one step further then just been pure surface decorations.

With the main inspiration in T-shirt print design, the aim is to investigate the relation between halftoned, placed prints and garment by trying to achieve a depth within the expression.

The main focus in the process is to find and define the depth within the printed textile and then to be able to apply it on garments on the body. Through research in material transparency in combination with screen printing, the work strives for a 3D moiré effect while moving.

The work is to be seen as a suggestion of principles for interaction between prints, garments and body and to open up for a more complex way of working with prints within fashion. The combination between the striking 3D prints and the sharp black and white halftones creates a dynamic line-up. The collection provides the viewer with recognisable graphic pictures and elements as well as more abstract prints through layering.

In this work it is found a possible technique to allow a message in a print to be communicated stronger. Through layering the printed textiles a new dimension were added to the expression in the motives and garments when interacting with the body. The continuation of this could be to try this effect with different motives and messages to be told. An interesting point of view would be to start with the viewer or receiver rather then the designers personal development in the project. It could possibly be as simple as creating a traditional T-shirt print with the message to communicate. Another alternative could be to carry out the communication of the motive in a whole garment and in how different garment types meet each other.

Keywords:
design, fashion, textile print, screen print, graphic design, communication
"Print in fashion is rarely connected to performance..." is the first sentence of the book 'Print in fashion, design and development in fashion textiles.' It somewhat sums up the idea of how prints are looked up on and used today. The book then continues saying that "The most obvious assumption is that the print comes before garment, but that is not always the case. Sometimes the print is the garment." (Fogg 2006). This statement suggests that prints within fashion are not created with the garment in mind and are some cases even bought from someone else. The development of prints in fashion is rapidly moving forward. However the interaction between garment and print is in most cases rather with the flat construction than between garment rather then together with the body wearing it. This book, as many others, reflects the idea of prints in fashion as an “add on” rather than a possible method for the development of new expressions that have become the main focus for this work.

The question of how to translate 2D to 3D has been a constant struggle and focus for a lot of fashion designers since the beginning of dress.

The conventional method of transforming the flat surface that is the fabric in to a 3D garment is through draping and construction. This work aims to approach this problem in a different manor starting off by investigating the often bland expression of a classic overall print compared to the expressive placement print.
Prints

To be able to transfer a detailed picture in textile printing and other graphic areas you use halftoning either to print in only one color or by color separating the motive and print several halftoned pictures on top of each other. This technique relies on a basic optical illusion - that these tiny halftone dots are blended into smooth tones by the human eye. (Wikipedia: Halftone)

Halftones are also used as the conventional structure for making multi colored prints by using the CMYK color model. The moiré effect is frequently spoken of when looking at guidelines of how to create correct color separated prints and how to avoid for the eye somewhat disturbing effects that can occur when printing different colors on top of each other.

Moiré patterns occur when two halftone patterns meet but can easily be avoided by rotating the angle of the halftone dots by a specific amount of degrees for each color. The effect can be seen in some of Helyar's pieces (fig. 7) as circular or rosettes forms. (Johansson, Lundberg, Ryberg. 2008, p. 293)

The principle of printing several colors or patterns on top of each other is used when printing in the CMYK color model. It can also be seen on classical shirt fabric. In Tattersall (fig. 1) and Shadowprint (fig. 2), it is used only to achieve a little more depth in the pattern but without being over decorative.

It is difficult to talk about printing without mention artists from the pop art movement in the 1960s. Andy Warhol is famous for his mass-produced screen prints that were efficiently produced by the screen print technique. The example in Fig. 3 is a screen print of Mick Jagger made by Warhol where he uses only a few key elements to build up the whole picture.

The abstract almost cubistic background together with the clear, hand drawn black lines and the simple shading is enough to give the artwork a realistic feeling. It has the same qualities as a regular photo only by showing the true essence of the picture. This makes the work very minimalistic in its composition but still allows Warhol to use bright colors in the block patterned background.

Thomas Kilpper is an artist who works with sight related print installations. His project 'Don't look back' from 1998 is made on an old basketball court where he used the wooden floor to carve out the motive. His 300 square meter print tells the story of the abandoned site. It was displayed on the actual court printed in pieces on banners and poster distributed around the room. (Grabowski 2009, p.100-101)

This made the exhibition an interaction between the block, prints and visitors. His work takes on scale in an interesting way where the original print is carved on the floor. The prints are presented as several smaller pieces in the room. Here the aspect of what is an overall print and what is a placed print is dealt with in a pedagogic way that inspires to push the boundaries even further.
Prints in fashion

Charlotte Helyar presented her MA collection CMYK at Central Saints Martins in 2012. The work is based on the color printing system CMYK where she worked with hand printing halftoned pictures to achieve an almost photographic effect. The motive is fragments of historical dresses printed on clean white garments as her canvases to explore the effect of digital printing but by using traditional craftsmanship. (fig. 5-7)

She works with different sizes on the halftone dots in the prints that you only see up close but from a distance they all give the same impression. She explores the possibilities of simplifying the pattern in terms of enlarging and there for reducing the amount of halftone dots but still manage to keep the motive intact. By incorporating the small details like test colors and registration marks she clarifies even more that the focus is on the printing and the extreme precision that it requires.

Helyar also worked with the placing of the prints to get a dynamic line-up where the prints seems to be traveling around the body and is perfectly matched where sleeve and body meet. (Charlotte Helyar)

Katherine Hamnett launched her oversized t-shirts with big block letters in the mid eighties and since then has been one of the most copied designers in history.

With the white T-shirt as her canvas she takes the opportunity exposes slogans like NO WAR, BLAIR OUT, STOP ACID RAIN or CHOOSE LIFE to evoke peoples awareness for these different questions. She saw the manifestation possibilities in clothing and took advantage of it in an, at the time, unusually bold way. As a garment the t-shirt does not really has its own voices and therefore allows the messages to be very clear with no other distractions for the eyes. Hamnett works with the letters in different sizes to emphasize the words of importance in her slogans and also to achieve a balance within the print, where the words together form a perfect square. (Katherine Hamnett)

The T-shirt becomes even more interesting when combined with the longer cardigan in fig 8. The numbers on the cardigan in comparison to the slogan on the shirt gives an impression of a organic and purely decorative print. The composition suggests that the letter or numbers means nothing when standing by themselves but still share the same expression as the T-shirt.
Henry Holland seems to have copied Hamnett when he kick-started his career in 2006 with his collection of 'Fashion Groupie T-shirts'. In his SS09 collection he worked with combinations of a realistic multicolored floral print combined with a simple black and white dot (fig. 9 & 10). Even though the fabrics are completely different in motive they are still built in the same way with the same kind of repeat. The dotted fabric could possibly be used as a scheme of how to repeat the floral print. The layering with the different fabric qualities and transparency allows the prints to interact with each other and highlight their similarities even more.

In Castelbajac's SS13 collection there are a few examples of how to work with the relationship between placed figurative and abstract prints within the outfit compositions (fig. 11 & 12). In this specific outfit where he works with a large placed print on the dress and on the jacket. It gives another suggestion of a pattern capturing the essence of the print on the dress without being figurative, in a similar way as the House of Holland example. He manages to by using the same components and graphical language manage to communicate the same feeling in both printed fabrics. When presented together they reinforce and help the expression to get even stronger in both garments.
The German brand Anntian works with prints as a main focus in a lot of their garments. They seem to work in a way where the garments become canvases to expose their, often large-scale prints on. Their collections can consist of everything from garments to bags, shoes, pillows, rugs and even china. To see the garments in the same context as all these other everyday things helps to objectify them in a way that is hard to accomplish when only presented in a fashion context. The printed garments feel equally interesting flat on a table as on a body and are maybe easier to compare to paintings then to other sorts of fashion. Through this way of working Anntian, has managed to achieve a very unique type of clothing where the prints are always the main focus point.
Area of interest

Based on these different references, two areas of interest have emerged that has also been present in my previous work, layering and printing. By using them together my aim is to achieve a new kind of depth in the prints as well as in the overall composition.

With the technology of today where prints can be created in a computer and be printed on fabric in no time, it seems valuable to look at the characteristics of hand printed fabrics impossible to recreate without the touch of a hand. By mixing different medias to find combinations of printing techniques, high-tech and low-tech can meet and together communicate an improved expression in the print.

When comparing screen printing to digital printing and transfer printing there is a sharpness to the motives that is hard to emulate, but also requires a great amount of skills to get it exactly right. Charlotte Helyar uses her collection CMYK as a canvas to manifest her incredible technique with a clean and precise finish. Therefore she is able to make a comment about the craftsmanship in printing that you generally do not talk about today when the more-is-more manors are overrepresented among fashion designers.

Hamnett, on the other hand, uses the easiest garment of all times to relate to, the T-shirt, for concrete slogans to manifest her ideas. The given canvas that is used repeatedly in her work allows the print, in this case the words, to become the main focus of the design.

T-shirt designs with slogans or halftone pictures where the print stays within a fixed frame and placement is a recurrent feature of today’s fashion especially in a more casual, everyday context. Brands, such as Anntian, question and develop placed prints in a larger scale but almost always by going in a more abstract direction. The work by Kilpper shows that it is very much possible, within arts, to use the impact of the scale to make the work even stronger.

But what about in fashion? Is it possible by expanding the given frame on a T-shirt to carry out the instant impact of the slogan T-shirt to a whole garment, outfit or even collection?

For screen-printing, there is the question of simplifying the design to the least amount of screens, therefore colors and details. To mix medias and use digital printing for the more detailed part and then add the sharpness and precise effects provided by the screen-printing is a way to work around this to get the best qualities of both techniques.

Using halftoning to transfer shadings in a picture is very effective, as seen in the Warhol example but the halftone dots also creates a new pattern by it-self, as the House of Holland example could be a suggestion of. The large dots can be seen as the figurative floral patterns graphic counterpart, in form of an extreme halftoning of the pattern. When they overlap they form a new kind of pattern that can tell another story about the background of the print.

This would enable possibilities to present the relation between the halftone pattern and the origin picture next to each other. To work with them hand in hand in the design process and let them represent the modern and traditional printing techniques as well would add another dimension to the motive.

One interesting aspect of the House of Holland example is also the use of transparency, which allows the two layers to move on top of each other in some areas and create an almost 3D effect. Moiré as in some of Helyar’s pieces is frequently mentioned when looking at guidelines of how to create correct color separated prints and how to avoid for the eye somewhat disturbing effects. This gives the illusion of a glowing or almost floating edge to the motive that of course you do not want in a photographic print but could possibly be effect full on fabric.

Where printed fabrics have a flatness to them that is hard to get away from, even when working with 3D shapes on the body, there is here a possibility to instead add an additional 3D effect by intentionally playing with these graphic mistakes within the fabrics. This would allow the prints to get a stronger expression and stay in focus throughout the whole composition and would enable another approach for the development from 2D to 3D, often investigated within fashion, but by involving the prints and let them lead the way.

If used intentionally the effects caused by graphic errors can give unexpected results to challenge the eye of the viewer and in extension also the perception of prints within fashion.

Where in fashion design today prints are is generally created as a surface decoration on the garments. Here the aim for the motive is to come to life when combined in the right way on the human body and in movement.
**Printed T-shirts & Graphic Design**

“We express who we are by making our bodies readable.”

(Deunissen 2013, p.12)

When working with producing prints there is also a need for a canvas. The T-shirt, as mentioned earlier, is today our most communicative garment when combined with prints and it is one of the reason for its continuous popularity. The neutral and well-known shape works as a wearable banner on your chest, and would be a shame not to use.

T-shirts were first worn by soldiers under their uniforms but quickly became a sign of rebelliousness when introduced as an outerwear garment in the 1950s. Actors like James Dean and Marlon Brandon wore tight fitted T-shirts to show off their bodies in a way that men had not done for years, at that point.

The political situation that was in the 1960s became the starting point for the T-shirt as a channel for communication. It became a media for the young people since it was a cheap garment for the people. But through designers like Vivienne Westwood and Katharine Hamnett it also leads to a new avant-garde scene with a rebelliousness approach to fashion. (Deunissen 2013)

T-shirt print design is in its form more related to graphic design or poster design, rather than conventional textile design. The placement of the print is fixed within a given frame and stays the same for all sizes. It is usually not dealt with in the same manner as when creating prints for pieces of fabric and therefore they also tend to be very different in expression.

“Graphic design is the activity that organizes visual communication in society. It is concerned with the efficiency of communication, the technology used for its implementation, and the social impact it effects - in other words, its social responsibility.”

(Frascara 1988)

This definition made by Jorge Frascara is used when looking into the question if graphic design is to be seen as a fine art or a social science. He also defines how to measure quality in graphic design by suggesting that it is the changes it produces in the audience, saying that the essence of graphic design is that someone has something to communicate to someone else. (Frascara 1988)

This movement away from the purely aesthetic qualities of design was within graphic design made in the 1950s but is in fashion possibly only represented within the more communicative T-shirt prints.
Fashion as communication

“Fashion is the dressing of clothing; it is the interface between creation and social communication, between form and medium.”

(Loschek 2009, p.18)

The printed t-shirt is the most direct way of communicating through clothes and at the same time the most expected way. Fashion is to be seen as a non-verbal way of communicating closely related to body language and in many ways underestimated. Visual appearance is in most cases previous to both gesture and speech and therefore key to how a person, or in this case collection is perceived. (Lemon 1990)

There are several dimensions to how we communicate through fashion but it is as in all lot of cases dependent of the receiver to withhold some knowledge to be able to get the message. The message is filled with information only in the meeting with a receiver that can translate the symbols and codes that are presented to them. A garment can carry a meaning by itself or it can be the way different garments are combined that will give them a specific meaning. (Jacobsson 1994)

Clothing can never be quiet, it always withholds information but the information can be different for different people. It is affected by the relationship, knowledge and memories we have or it can be the simple fact that we do not understand it and therefore we do not like it. Umberto Eco states that the function of a aesthetic messages is to provide us with something unexpected, something that is beyond what we expected of the situation. For this to occur it is dependent of a certain amount of credibility in order to create an informative tension within the aesthetic message. The symbols are filled with content in the interaction of the context and can be changed drastically only by small shifts in the elements of the context. (Eco 1971)

When the t-shirt is used as the canvas for printing it allows the message of the motive to stay in focus but can also in many cases be toned down by the neutrality of the garment. In the Dries van Noten example, fig. 15, large colorful letters were printed on basic white shirts and stood out next to the other printed garments of the collection because of the interaction of print and garment. A shirt that is not printed as we know it and especially not with a placed print on the chest is unexpected and come a cross as bold even though the print is not larger then a regular t-shirt print we see everyday.

A print can be used as a very much in-your-face way of communicating through fashion that is rarely taken advantage of in the high-fashion field. Fashion designers directly associated with prints today like Dries van Noten works with complex patterns in interesting ways, composition wise, but the motives are rarely discussed further. As in the printed shirt example the text says “SCATTERED” and leaves the viewer intrigued by the placement and combination but not at all moved as by the Hamnett expressive slogan t-shirts.
General Methodology

“...design practice may involve research and design research practice may involve design...”

(Brandt & Binder 2007)

Brandt and Binder suggests in their text about experimental design research that researchers investigating different areas with completely different references as input to their work can very much learn from each others research to be able to bring their own forward. They state a basic methodological for design research that is divided in to three to frame the work. The largest frame is named Question where the problematization is to be done to distinguish what will be investigated in the work. The next one is Program that will provide the tools to deal with the centered and last one called Experimentation.

This idea of using research material over the boundaries of different projects is to be seen as a step closer for design research to be associated with science and humanities. (Brandt & Binder 2007)

The work Novum Organum by Francis Bacon is aiming to establish a way for science to be a instrument for discovery not only explanation. Bacon’s idea of Idols that are presented in the book is to protect the mind from falling in to old habits and therefore not being able to bring the research forward. For example the ‘Idols of the ‘Tribe’ represent how we tend to look for facts confirming what we already believe and do not question our own assumptions and therefore will hinder us to achieve new results within the research.

Bacon suggest that pitfalls that the ‘Idols of the Mind’ represents should be carefully avoided in the research phase and then use his method ‘Tables of Instance’ to organize the observations made to show the relationships that are not self-evident within the phenomenon trying to be explained. (Bacon 1620/1990)

Biggs addresses the problem in the way art and design presents artefacts as a answer to the researched question and therefor leaves the embodied knowledge to be interpreted by the viewer. The question asked is whether artefacts have the capability to embody knowledge or is the knowledge here lost by misinterpretations along the way? Biggs suggests that to be in complete control of the knowledge communicated by a artefact created through a practice based research, there is a need for contextualization of the work through writing.

“It is only an activity that is significant for others that can supply a suitable rationale for why it should be undertaken. Personal development does not make a contribution to the ‘advancement of knowledge, understanding and insight’, except in the most parochial sense, i.e. my advancement.”

(Biggs 2002)

The contextualization described by Biggs in this quote is something very much present in fashion design research since the receiver also potentially is the wearer. Therefore the research must be done with others in mind. Investigating how this is new to the field and what kind of target group could be interested is the starting point of all research based work in fashion, weather it is done by a fashion student or a large commercial company.
Rapid decisions and chaos theory

Thornquist talks, in 'Artistic development in [fashion] design,' about the break between abstract theory and concrete practice. He suggests this exercise, fig. 16, for training to make rapid design decisions.

This method has been of great importance when composing the line-up in this work. By keep pushing the experiments forward but still revisit the older ones to make sure that the essence of the work is still there. It is easy to see a tendency for the later experiments to have been overworked and not as distinct as the first ones. So in order to achieve a dynamic line-up, experiments from different part of the process has been chosen for the result.

Thornquist also refers to the work In the Wake of Chaos by Stephen H. Kellert

"I suggest the following definition: chaos theory is the qualitative study of unstable aperiodic behaviour in deterministic nonlinear dynamical systems"

(Kellert 1993)

By first contextualize the starting point for the work in writing and visually to establish what knowledge the end result should embody the first variable for the experimentation is given. It is of great importance, with the visual expression of the yet unknown end-result in mind, to be able to distinguish one experiment from another in terms of good or bad in relation to the basic idea.

To contextualize the result is also to be aware of the communication possibility within fashion discussed earlier. The different messages provided by the garments and details that are chosen for the collection sets the tone for how and for whom the work is presented. It can be used to answer a lot of the questions provided by Biggs. As a designer it is crucial for the presentation of a work to have awareness of what you want people to see and make sure it is presented in the right way by using any media possible.

Fig. 16

<table>
<thead>
<tr>
<th>Active design decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idea</td>
</tr>
<tr>
<td>Description</td>
</tr>
<tr>
<td>E.g.:</td>
</tr>
<tr>
<td>[i] Start from an idea that includes live reference material.</td>
</tr>
<tr>
<td>[ii] Sketch a xxx design suggestions based on the concept.</td>
</tr>
<tr>
<td>[iii] Select xxx/2 sketches.</td>
</tr>
<tr>
<td>[iv] Refine the sketches and narrow the selection to xxx/8.</td>
</tr>
<tr>
<td>[v] As the limited whole now have changed, rework and revisit the first xxx sketches to see if you need to exchange any in the final selection to the earlier disregarded ones to reform the whole.</td>
</tr>
</tbody>
</table>

Cf.

Specific method

As stated before the main goal in this work is to achieve as much effect as possible in every single experiment. Therefor my work is based on the 3D effect, depth as the dependent variable, and materials, colors and shape as the independent variable.

Looking into prints within fashion today, how they are used and what potential gap there is in the field, made the contextualization. The next step was to investigate what can be done differently and then most importantly, what do I want to do.

The work is to be seen as a suggestion of principles for interaction between prints, garments and body to open up for a more complex way of working with prints within fashion.

The starting point for experimenting was in mixed media, how old and new techniques can meet and enhance each other. There is a sharpness to the screen-printed motives that is hardly ever achieved in a digitally produced print. When a printer drips the pigment color on to the fabric it is inevitable to get blurry edges, something that will never be a problem with a well-executed screen print.

This project has been focused on the effects achieved in hand printing by allowing the motive to be the digitally produced part and the actual making being manual.

Screen-printing is a developed form of stencil printing to make the process more durable and affiance. Stencil-, and screen printing was in the early twentieth century mostly used for printing book illustrations and textiles but it wasn’t until the 1930s that screen printing made it’s way into the fine arts. Printing workshops were set up where technicians, designers and artist could meet and work collaboratively. Starting with poster art in the 1930s and then really gained popularity with the Pop Art movement in the 1960s. Screen-printing allows you to combine photographic elements with hand drawn pieces and therefor the expression in the motives can be very well worked through. (Grabowski 2009, p.55-61)

A complex screen print is built by relational layers printed on top of each other. The original image is separated on to different screens, one for each color. Beth Grabowski and Bill Fick write about the layering within screen-printing that:

“Independent images exist in relation to each other rather than as images derived from a common source.”

(Grabowski 2009)

It suggests that the screens can be seen as individual art works but when combined together in the right order and colorway a more complex print can occur. The layering and color separation principle in screen-printing by it self opens up for a lot of possibilities to create depth within textiles.
Creating depth

In comparison to other printed medias as interior fabrics or printed posters, the most important feature of garments are that they are worn on a 3D moving body and therefore also opens up for other possibilities within the prints.

The aim to create depth within the motive and expression of the prints has been developed through the layering of the print. Not only by separating the colors on to different screens when printing but also by printing them on different transparent layers for them to be able to move on top of each other. This development of the layering has been the main factor for the design choices along the way in terms of color, shape and fit.

Rudolf Arnheim describes depth by using two simple shapes and their relation to each other.

Fig. 17

This theory was applied in the process of creating depth by using two halftone pictures on top of each other. When overlapping, another dimension is added to the motive but when the halftone dots are not interacting at all the effect is lost.

Most experiments were made with a specific result in mind that derives from the first basic principle sketches made. When an experiment was carried through the evaluation process started. By folding, layering and rotating the fabrics new experiments derived and the first idea were in a lot of cases put aside. In this way the whole process was carried through with experimentation periods that sometimes consisted of hours and sometimes weeks of work before organizing, evaluating to see how the research could be brought forward.

(Arnheim 1974/1954, p.245-247)
Development

Material Experiments

Experimenting with different printing techniques and mixing medias was important investigation to establish one or a few basic principles to base the collection on. The main focus for the material experiments have been to explore the possibilities in different transparent fabrics combined with different printing techniques to achieve a precise sharpness in the prints. During the working process the four different parameters of relevance: scale, placement, halftoning and color separation have been balanced against each other. By investigating the extremes in these different areas and gradually opt them out until a focused and dynamic line-up derived.

Finding Materials and Techniques

Materials were chosen for their transparency and the way they interacted with the pigment color and each other. It turned out to be three major factors that have impacted the choices of materials the most. The construction of a transparent material is most commonly made with thin fibers weaved in a loose net like structure consisting of a lot of holes and therefore lead to the first obstacle. The net structure in combination with the thin polyester fibers made it hard for the pigment color to stick to the fabric and the prints became very see-through and not as sharp as wanted for the right effect. When layering these fabrics on top of each other another problem occurred when the colors weren’t strong enough to shine through more than two or three layers before the motive just appeared as a blur and the 3D effect was lost.

The most transparent fabric found during the process is woven with flat polyester fibers, which allows the pigment color to stay on the surface of the fabric and create a solid shape. Because of the flat plastic fibers the fabrics has a lot of shine to it and when layered on top of each other the surface reflects the light and can come across as white from some angles.
Finding Motive

“Women in non-feminine trappings do not look politically opposed to their ornamented sisters so much as just fashionable in a different style.” (Hollander 1994, p.193)

My aim with the collection has been to work in a way closer to graphic design rather than textile printing design to get to the expression of classic t-shirt prints. The basic idea was to establish a graphic profile with pictures, logos and a type to have a library of material to use when starting the experimentation with fabrics. The message that I choose to work with is a comment to women's liberation in society in general and in fashion in particular. The liberation of women has always been a question of regaining power from men and is in fashion represented by women wearing traditionally masculine clothes to symbolize this important shift. Judith Butler argues in Undoing Gender that gender is something performative and socially constructed as opposed to anatomy and sexuality and is therefore also a subject of constant change in relation to historical and ethnical parameters (2004). However, the borrowing of clothing over the gender boundaries is very much a one-way street and is today not at all as provocative when masculine garments are put on women as the other way around.

“The idea seems to have been that women were both fanciful and diligent, and clever with their hands, but not essentially imaginative, that is, not technologically imaginative.” (Hollander 1994, p.66)

When women founded the dressmaker’s guild in the eighteenth century, corset making stayed as a division of the male tailor’s art and the only real craft executed by the women was draping a skirt and sleeves onto the already made corset bodice.

“Fashion” as opposed to developments in tailoring, came to be something created and consumed by women…” (Hollander 1994, p.65)

Parallels can be drawn to fashion today where the most successful designers in the industry is men telling women how to dress and to be harsh, not to far from the tailors back then. Here again the T-shirt design is an interesting aspect of something being decorative in a masculine way, but can of course be modified in execution and motive.
"I think for many of us it is a sad time for feminism, perhaps even a defeated time."
(Butler 2004, p.178)

There is a frustration over how slow things are changing and how the changes that have been done is overshadowed by the fact that it is more a question of men allowing women to change, as in this case allow women to wear their garments, but no fundamental differences are done. It is a subject worthy of a project of its own and this work holds unfortunately no further intentions of changing the system fundamentally either. It is used as an inspiration for the motive in the graphic profile created for the collection and also shines through in some of the decisions made concerning shape and fit.

For my motive I decided to use two dolls to represent the only stage in life very we are as equal as we will ever be, as small babies treated and dressed in the same way. In this stage we can almost in our selves be seen as blank canvases, before the norms of femininity and masculinity has been projected on us and is possibly also the time for fundamental differences to be done. The dolls were modified to gain an aggressive and more adult undertone, but still stay in the land of genderlessness, by collaging directly on the dolls. They were then photographed and scanned in to the computer in different constellations to be used as the raw material for creating the prints. To stick to the theory that prints designed for t-shirts tend to have a stronger expression I started out by creating a t-shirt collection to test the motive in that context. Two logos were created along side the doll motives by playing with the word 'Feminine' in letters and numbers. The characters were then placed in the form of a traditional phallic symbol to achieve some subtle tension.

The collection consists of 5 motives represented by 5 screens and one set of stencils for the numbers that are all hand printed on the fabrics. One aim was from the beginning to work with viewing distance and how it effects the scale of the halftone dots which came to be an interesting investigation in when a print is perceived as something figurative in comparison to just being a square pattern.

The motives has been worked with in a small scale on the computer as if they were supposed to be used as a t-shirt placement print and then scaled up around 500% to become a size that is suitable to use for whole garments.
Initially the idea was for the collection to handle the relationship between halftoned prints and their original picture source. Shown here are some of the first ‘principle sketches’ made along with some early projections and prototypes. It was soon realized that it was by the printing table with the real materials at hand where the progress of the work was done. Therefor the sketches were only kept in the work as inspiration and contextualization.
Finding the Effect
In the beginning of the process the idea was to work with mixed media printing but the amount of possibilities provided by the screen printed experiments were more than enough to develop a whole collection. Initially the idea was to work with traditional color separation by either using the CMYK- or RGB colormodel where each color is represented by a halftoned picture to achieve the right shadings in the end result. The print in screen 2 & 3 is created in this manner but in a two-colored version. What was realized here is that the 3D effect is better with two identical prints on top of each other, slightly overlapping as described by Arnheim earlier, so the experiments were from that point created with one screen per motive. A lot of experiments with the attempt to maximize the amount of colors and layers were made but the only successful one was the bomber jacket. The big blocks of color allow all layers to shine through properly and together create a nice spectrum of color that shifts when moving.

Screen Measurements

1. 65 x 130 cm
2. 65 x 105 cm
3. 65 x 105 cm
4. 60 x 95 cm
5. 65 x 105 cm
Documentation of Printing Process
From Picture to Garment
Finding Shape

The aim for the work has been to create form in order to enhance the effect in the prints. The research process have been focused upon finding new possibilities within the textiles and then transport the samples to the dummie, in full- or half scale to see potential ways to be used. The overall aesthetics is a oversize sportswear look in combination with some more feminine garments like skirt and underwear to here also create a subtle tension between gender differences.

Some attempts were made to work in a traditional form-first way by creating t-shirt inspired garments to use as canvases for printing later. All the ideas were later rejected because the process became completely backwards by trying to fit in the large scale prints in to the fixed frames created.

Another technique to achieve new form together with the printed effect was through different folding constructions were the goal was to print several colors after each other and then when folded together achieve both volume and effect on the body. In these cases it was also hard for the prints when the shape felt very much forced that was the complete contrary of what this work is aiming for.

The method for finding the shapes has therefor very much been in line with the chaos-theory mentioned earlier. Starting of with a principle sketch or idea to frame the outcome in terms of technique and wanted effect the experiment was then executed and brought to the dummie to evaluate. Again most experiments changed direction when the first print was made shape, garment type, layers or colors.
Working with Garments
This outfit started with the intention to maximize the amount of layers in this specific net fabric. The basic shape was meant to be a long t-shirt dress with open sides in four layers plus a sweater tied around the waist. When the first orange layer was printed and held against the green and blue test print, the two layers together made the colors come to live in a way that way lost when adding another layer. The simple shape in just one layer gave a very blunt expression and therefore the next step was to see what could be added to give the garment more credibility and weight as a garment rather than just being a piece of fabric. I saw the collection in need for more outerwear and decided to add a hood and classical drawstring details to provide it with something known in relation to the unexpected fabric and effect created in the print.
Result
Jacket in polyester organza.
Stencil printed in four layers and lined with screen printed polyamid.

Tank top in polyester tricot.
Stencil printed on both sides.

Shorts in 'flat fiber polyester'
Screen printed in two layers.
Tank top in polyester organza. Screen printed.

Top in polyester tricot. Screen printed.

Shorts in ‘flat fiber polyester’. Screen printed in two layers.

Thighs in light polyester tricot. Screen printed.
Long sleeve shirt in polyester organza. Stencil printed.

Tank top in polyamide. Hand painted and screen printed.

Shorts in polyester organza. Screen printed in two layers.
Dress in polyester net and polyamid. Screen printed in four layers.

Trousers in wool and elastan. Screen printed.
T-shirt in 'flat fiber polyester'.
Screen printed with stencils.

Top in polyester tricot.
Screen printed.

Shorts in cotton satin.
Screen printed.
Sweatshirt in cotton tricot.
Screen printed.

Folded skirt in polyester organza.
Screen printed in three layers.

Shorts in polyamid.
Screen printed.
Emma Lindqvist

T-shirt in ‘flat fiber polyester’
Screen printed.

Top in cotton tricot.
Hand painted and screen printed.

Trousers in polyester net.
Hand painted.
This work addresses fashion as a non-verbal form of communication. However, it is mainly an investigation of printing technique. Therefore all garments and all shoes in are hand printed as a clear statement of the focus in the collection.

**Printing Technique**
One of the early conclusions made through the experimentation of materials and printing techniques was that the main focus of this work would be on screen-printing. Because of the endless possibilities it provided it seemed like the mixing of media would be confusing rather then bringing the work forward.

"The print quality of the inkjet printing on cotton fabric was, thus, better. However, the inkjet ink printed cotton fabric needed to be printed three times to produce the same color and tone reproduction as that produced by screen printing."

A study, made on inkjet printing in comparison with screen printing, shows that it is possible to get the same result but it takes more time and effort. For this work I needed a technique that would provide me with a direct result in order to keep up a high speed in the experimentation and not have to worry about getting the colours right every time. It is a question of staying in control and to make sure that the ‘blurry’ effect is from the overlapping of the print and not the actual print. Even the tryouts made using reactive dye when screen printing was too uncertain and the quality of the print and the fabric changed too much when steaming, washing and drying. However, mix-media printing still holds many possibilities and I think transfer printing in particular could add one more dimension to the relationship between the original picture and the halftoned and colour separated print. In the collection, it is used as a complement on some shoes. However, it would be interesting to develop the expression in the digital printing techniques in the same manners to get them away from just being add-ons on a garment or collection.

**Discussion**

**Balance**
The combination of layered, 3D effect prints together with solid black and white prints is important for the collection to get some weight and not only consist of light fabrics. The process of this work was mainly focused on the layered pieces. Then when looking at it as a whole, the solid and sharper elements were added. The most successful example of this is outfit No. 4, with the blurry dress and the sharp trousers together. The trousers work as a presentation of the print in the dress and therefore help the communication of the motive in the outfit. This relationship between these two different garments with the same print is a recurrent feature in the collection. It could in a further development be used with more consciousness from the beginning.

**Technique and expression**

When working with a print collection there is a need for a motive and a canvas. Therefore it was necessary to frame the work in these different areas to be able to put the main focus on the actual experimentation with prints.

The motive is of great importance and especially if working with the communication through fashion. It has been a subject frequently discussed during the seminars and final presentation. I decided to work with these gender issues that is always current topic in our society, in one way or another. However it has been used as a visual inspiration for the printmaking. It is hardly visible if you do not know that it is there. This is a conscious choice that I made for keeping the technical focus in this work and not get caught on the expectations and pressure to deliver something revolutionary communication wise. I have in this work found a possible technique to allow a message in a print to be communicated stronger. The next step could be to try this effect with different motives and messages to be told. The next step could be to look more closely into the communication possibilities that this provides to be able to make the result even stronger.
Communication Design
If looking at fashion design as a way of communication, graphic design is something closely related and highly relevant to study. Forlizzi and Lebbon writes about the fact that the method for graphic design has historically been to translate the written word into something aesthetically interesting but becomes more and more complex as the society and ways of communicating is changing (2002). The traditional methodology for fashion has been to translate a sketch into a 3D creation. The changes in the methodology lately has mainly been in the ways of sketching. Whether it is through draping, deconstruction or collaging, the designers personal aesthetic development is still the focus of typical fashion design research. When talking about graphic design, the viewer is always present in the research. He is considered in the process to make sure that the result is communicating in the right way. Otherwise the whole project would be made in vain. Even though you, in fashion, work consciously with target groups, the goal is to present something new rather than to open up for communication.

An interesting point of view would be to start with the viewer or receiver rather than the designers personal development in the project.
What do you want the viewer to see?
What do you want them to experience and how do you want them to react?
It could possibly be as simple as creating a traditional T-shirt print with the message to communicate. Another alternative could be to carry out the communication of the motive in a whole garment and in how the different garment types meet each other.

Shape
The weakness in the end-result and also in the process of this project has been to keep focused on the development of the technique and allow the rest to follow.
A collection needs to be aesthetically appealing in terms of shape and fit to be able to fill it with a meaning. In this work the shape was at many points put aside. However, it was reworked along the way to make the prints stand out. A quality that I appreciate, when working in this print-first manner, is the move away from the traditional sketching towards draping in an exciting way. This means not only working with the fabric in relation to the body but also with the print and how it is reacting in the composition.

This collection mainly consists of basic box shaped garments as a result of the focus on printing and using the printing screens as the basis of construction. At the same time this collection is to be seen as a presentation of printing techniques. The garments are first of all used as canvases to try out these different experiments on the body. A possible continuation of shape could be to work closer to block patterns as a limitation for the prints rather than the square shape of the printing screen.

Reflection
The aim of this work was to investigate the relation between halftoned, placed prints and garment to achieve a depth within the expression. It turned out to be a question of finding this depth, through technique and material experimentation, in order to apply it on garments. Looking back at the process, it is easy to point out things that could have been done better and parameters that should have been taken into a count earlier. This is, however, one step for further investigations regarding the use of prints in fashion and a necessary process to go through to develop this effect in the expression.
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Katharine Hamnett


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Fig. 0
Malmö: Bokförlaget Arena

Fig. 1 & 2
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Fig 3
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Fig. 4
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Fig 9 & 10
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Fig. 11 & 12
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Fig. 13 & 14
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Fig. 15
[2013-05-05]

Fig. 16

Fig. 17
The basic principle of Annas work is the use of squares in order to construct garments. The collection presents a new and interesting way of looking up on what is an unconventional material and how they can be used.

The background goes back to the beginning of dress when the first garments were cut in rectangular pieces from animal hides. The idea to start over in the history of dress is an intriguing thought. To carry out the same idea of that time with the materials and techniques of today is, as I see it, a great aspect of this work. I appreciate the minimalistic approach in all aspects of the work with the clean surfaces and block colours.

Anna strives to find new expression in dress, but this new expression stays undefined. I would say that it is the unexpected combinations of materials and colours that add another dimension and creates the new expression in the collection.

The hairy material feels unconventional and unexpected in relation to all the plastic as well as the yellow colour that pops out from the other very earthy nude colours. In terms of form I think the gloves ads the most unexpected and interesting dimension with the small detailed construction required for the fingers in relation to the otherwise clean garments.

The earlier experiments in the report show some more complex draping with the square that I think would be interesting to see in the materials used for the final collection to really try the potential of the material.

The choice of material is interesting in the way that Anna has created her own library of ‘basic fabrics’. I like the way the foam represents the outerwear wool and the latex a single jersey as the most natural thing in the world and really turns the table on what is the odd material in this collection.

The finished line-up dynamically composed in terms of colour and presents these new materials in a way that makes them credibly as clothing materials and triggers to new exciting possibilities. Maybe it should be even more repetitive in terms of layering, as seen in the plastic vest outfit, or maybe by using the colour blocks in a more complex manner as in the outfit with the yellow underwear.

I would like to enhance the unit-by-unit concept in the collection by dividing the garments in other ways and let the materials meet not only as separate garments in the lineup as whole.