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Abstract

I want to make sartorial proposals that can create a desire to move, playfulness, curiosity, and presence. Through work with knitted rib, I am searching for different variations of bounce and dynamics. This project is fashion playing sportswear, but it works against the logic of distraction-free clothes and the idea of overcoming new goals. The process is the goal. Activewear today is made to be as unnoticeable against the body as possible, but I want to do the opposite; make clothes that react to the moving body as a constant reminder of what we are doing via its rhythm, heaviness, and lightness and bounce.



Figure 1. Carl Normanns Kunstforlag. Sogn - Årdalsveien - Tyin. Guttormsgaard Arkiv.

Theme

Introduction:

This master project is about creating clothes that respond to our movements. I see my garments as sartorial partners to run, play and create rhythm with.

I knit rectangles in rib on Dubied hand knitting machines. The rib acts like an elastic function. I link each knitted rectangle together to find the right pull, weight, bounce, and direction in the garment. The aim is to create as much bounce as possible. This has resulted in a collection of sweaters, skirts, and vests. These clothes are fashion playing sportswear, but it works against the logic of distraction-free clothes and the idea of overcoming new goals. I like to think of clothes as something active together with us; clothes that respond to our movements and can remind us of what we are doing via its rhythm, weight, and bounce. My garments work against efficiency by appreciating the impractical. I question why sportswear often is made to be as unnoticeable against the body as possible. With my clothes I want to encourage movement that frees itself from the goals of the training, to concentrate on the meeting between the body, the bouncy garment, and the surroundings.

During the research period, I tested the clothes myself and invited others to run, dance, walk and in their personal ways interact with them. I have found it important for the process, and I will take you through some of the experiences I made, see page 13.

I see my master collection as the first visual chapter of Encounters with Bounce. I feel like I've only scratched the surface of what I can do with visual and material explorations to make clothes that respond to the body in different ways.

Questions I have been thinking about throughout the process:

Can bouncy clothes create more presence and attention for the person wearing it?

Can bouncy clothes be a tool for experiencing the surroundings in new ways?

Can clothes become a partner when we run and move?

Keywords:

Bounce
Running partners
Movement
Activating clothes
Mobility
Sportswear
Process based
The body in motion with bouncy clothes
Practicality
Against efficiency
The rhythm of knit

Background

Two years ago I found an article about the Japanese Marathon Monks. The monks embark on a seven-year race called Kaihōgyō (circle the mountain). They subject themselves to extreme physical and mental exhaustion over seven years to achieve spiritual awakening. I found it interesting that they ran around in these impractical but beautiful costumes on narrow paths, in dense forests, and over and around mountains. That made me wonder if I could run differently than I have done before. I started running without thinking of how far, goals, or pulse, it was liberating! By changing the intention of why I was running, running was suddenly something I appreciated. I thought about the rhythms I created as I ran. Throughout the autumn I followed the changes on and around the path. Since I ran the same route every time I noticed more and more details; small puddles on the path that never seemed to dry, the Alna River rising and sinking with the rain, the transformation of the trees from summer to autumn, the forest was getting ready to go to sleep. I noticed all these natural rhythms, and as I ran I thought I would emphasize these rhythms because they helped to create calmness and presence in me. I wanted to make garments that underlined the movements I made.

As I started working with various materials that could create rhythm and bounce I had a look at the sportswear scene. Sportswear today is made to be practical, comfortable, distraction-free and should act as unnoticeable against the body as possible. You dress for World records.

But I wanted to do the opposite – I wanted to think of clothes as something active together with us; clothes that respond to our movements and can remind us of what we are doing via its rhythm, weight, and lightness, and bounce. I am making clothes that many people will argue are highly impractical for running and moving in, but I liked the idea of clothes that insist on their existence in their movements and responses to our bodies. I think too practical can lead to numbness, and distance, and I wanted to make an opposite.



Figure 2. Foto: Tadashi Namba. (1988).

Henry D. Thoreau once wrote “*I do not propose to write an ode to dejection, but to brag as lustily as chanticleer in the morning, standing on his roost, if only to wake my neighbors up.*” I have kept this quote with me during this project. I think the industry I am about to enter can feel overwhelming, and dark at times, but I don't want to design an ode to dejection - but rather come up with sartorial proposals to activate the wearer. I don't see my project as activist but I like to think that it can create some thought's.



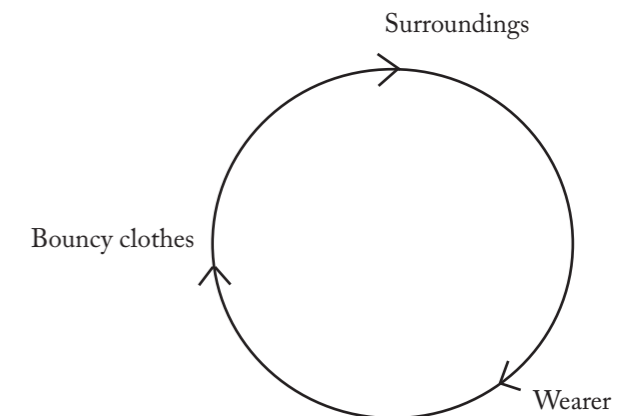
Figure 3. Screenshots from video. Running along Alna river in pleated garments. The footage is from various runs in the time period October-December 2022. Left at the bottom is my partner Stefan running in pleats, right side in the middle is me running in pleats.



As a thought experiment, I have related to clothes as subjects, as an *active* partner- to be able to think freely about what clothing can be and *become*. In Martin Buber's book «I and Thou» he writes about the I-it and I-thou relation. As I understand it «it» refers to the world as we experience it. In a «I-it» relation we tend to reduce people, nature or objects to a few characteristics and abilities. Our minds are set and we project our knowledge on to the object or person we interact with. But I-Thou describes the world of relations -when you are open and don't objectify. Distraction-free sportswear can be seen as objects, but imagine if we could make clothes that take the form of subjects instead? - a meaning-making encounter between the clothes and the person wearing them - an I-Thou relationship. In the interaction between the self and the clothes, a kind of dialogue and a presence will perhaps arise.

«Artist Francis Alys (Johnstone 2008) points out that walking is a physical engagement with place and one that frees you to process thoughts whilst simultaneously attending to a wide range of sensory experience in changing environments. He also hints at a call and response, or mutual relationship with the environment when he refers to the city as a «interlocutor».» (Roy, 2015:148).
 I like the idea of the surroundings as a conversational partner. Can the clothes also become a part of this? A sartorial interlocutor?

Tim Ingold writes: «*Locomotion and cognition are inseparable, and an account of the mind must be as much concerned with the work of the feet as that of the head*» (Tim Ingold 2011: 17). I read this quote to mean that knowledge is created through movement. What if clothes can become a part of this equation? What if clothes can help create more attention to our movements and surroundings?



< Fig 4. Foto: Tadashi Namba. (1988).

The monks run in straw sandals, big hats, and long kimono sleeves, and are just as good and probably better runners than most. They are far from wearing distraction-free and friction-free clothes, but rather clothes that, in a way, materialize their practice. Each part of the outfit has its own meaning, in a way, they wear their practice.

Aim og Context

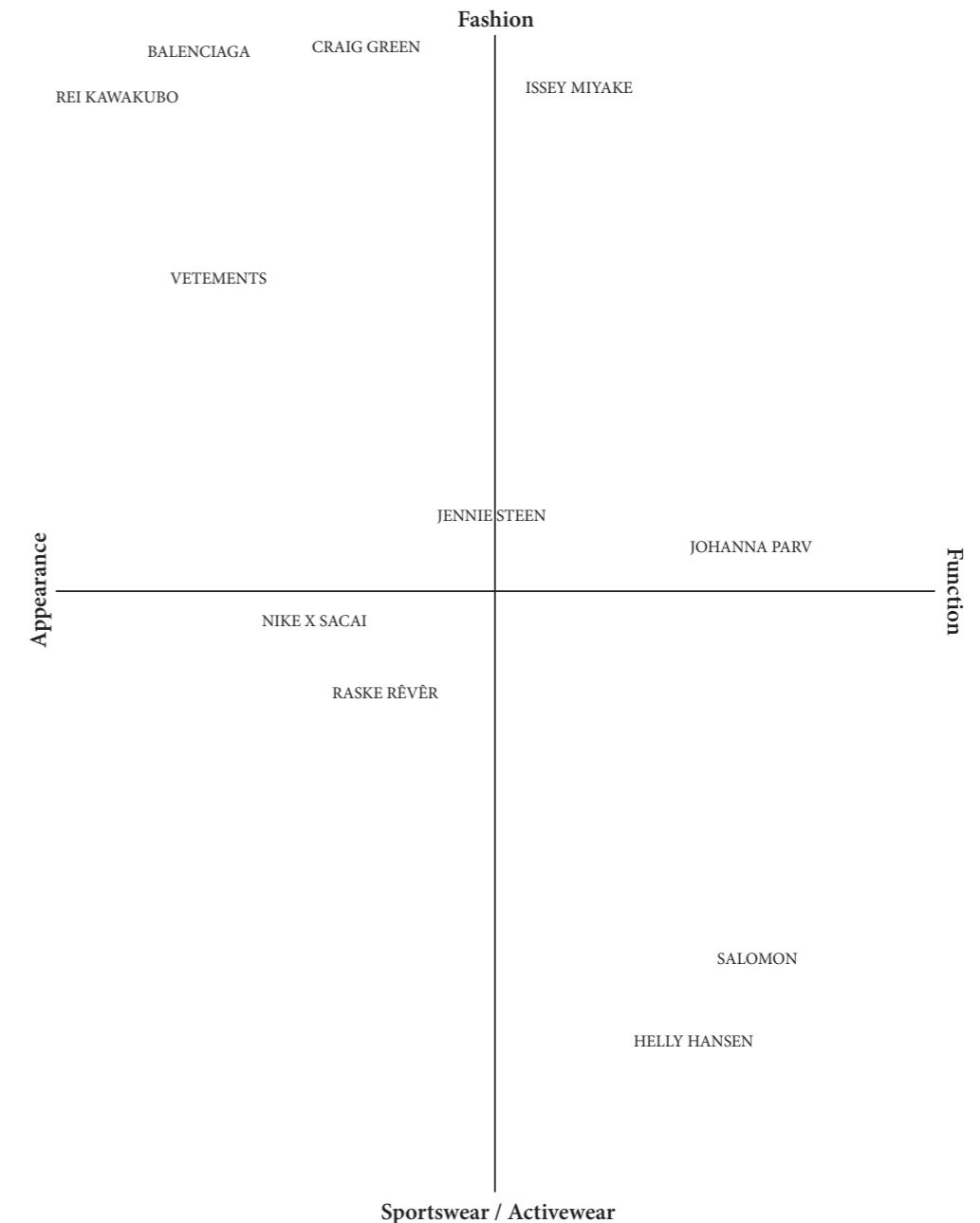
I have always wanted to make clothes that create some kind of dialogue between the garment and the wearer. Clothes can be seen as the body's immediate surroundings, as something that acts on the body, or almost as a part of the body, a kind of extension of it. Clothes can become a link between an inner and outer landscape. And it is in these surroundings and landscapes I want to work.

In my first semester at the master's, I worked with different variations of modular clothing. Some garments were easy to vary, while other garments required more attention and curiosity to wear actively. I wanted to create a «collaboration» between the garment and the wearer. By simply adding or removing a component, the expression and purpose of the garment was changed. When I look back on that project, I see many similarities to this project - I wanted to create a relationship.

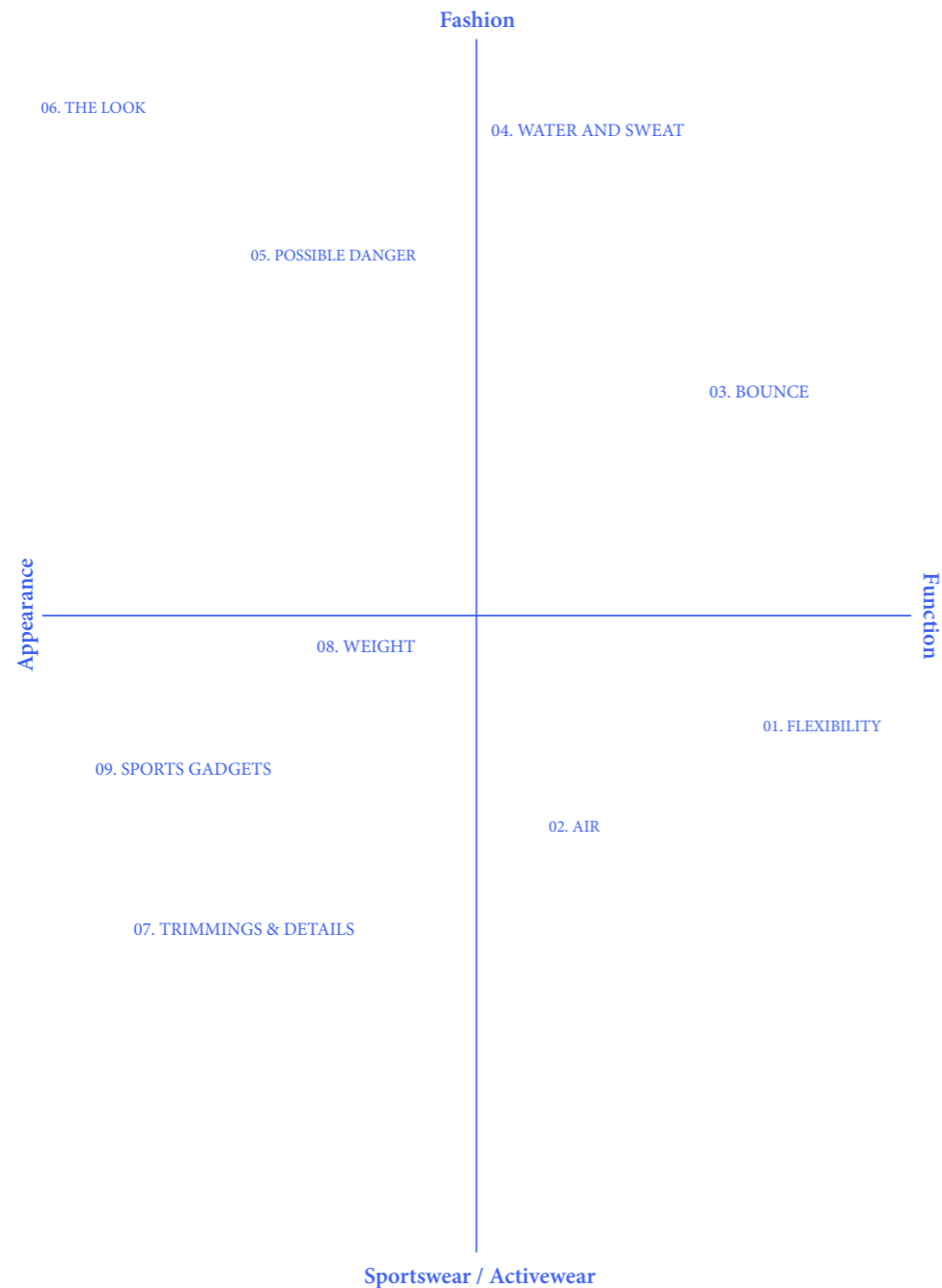
I think there is a kind of formation process, or a difference between active users who want to explore, and passive users who are satisfied with the garment being a garment. This is obviously related to interests, but I believe that we as designers can help create a connection or attention to what clothes can be or become. I think curiosity can generate more conscious consumers, but this is just speculation on my part. It is at least something I will strive to achieve in my work.

As this project has developed I have struggled to place it, is it fashion or sportswear? This question has come up in many discussions with teachers and fellow students. I have had problems with calling it sportswear but at the same time it has a connection to this field. The clothes are made to be active in and move in. They encourage movement. To clarify to myself I made a map where I placed different brands to see where they could fit in, I quickly noticed that many of them have their foot in multiple categories. Later on I categorised the properties of my own clothes in a separate map. I can place properties in all the categories and there is no distinct category that stands out.

So, for my masterproject I have decided to place my project in the fashion category, but fashion playing with sports. When I develop this project in the future I think it could be interesting to insist on this collection being sportswear. If I were to present my collection to the sports industry as it is today, there is a good chance that I would have encountered many difficulties. The industry can argue that the clothes are impractical, too heavy, and too loose on the body, maybe they would think the whole idea was stupid? But I would probably also meet someone who think the idea is fun and has potential. There are many categories in sports where there is more focus on the movement process than breaking world records. I imagine the dance and yoga industry could be attracted to my project, but I think it's also possible to find runners who might like my ideas.



I made this grid as a tool for understanding where I can place my project. I arranged different brands based on how I perceive them within the four categories; fashion, function, sportswear, and appearance. I think many of the brands can move between the categories. It was a fun exercise to do but more importantly, it led me to make a grid where I placed the properties of my own clothes, see next page.



In this grid, I have numbered the properties in my clothes from 1-8. See description on page 10. It was a good way to get a quick overview of my collection. In the future I want to bring this grid with me when I test the clothes on other people, maybe they will notice new things I can add. It can also be a fun thought experiment to put the words in new categories and find a way to work them into their new category. Ex: I have placed the word air between sportswear and function because I see it as function, but what if I placed the word between fashion and appearance? How would this affect the way I would design if I used this grid as a method of developing my clothes?

01.



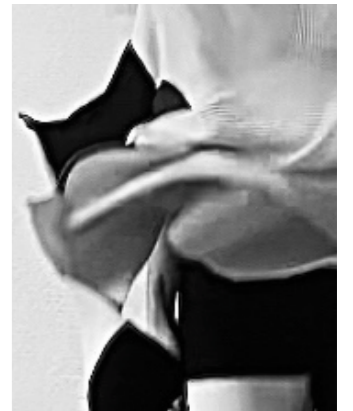
Flexibility. The ribb creates a very flexible surface.

02.



Air. Most of the garments are open under the armpits, which prevents too much sweat on the garment. Then you don't have to wash it so often.

03.



Bounce. The feeling of bouncy clothes against the body can create a feeling of lightnes,



06.



Look. The clothes do not have a typical sports look. Many people would argue that these clothes belong amongst people running to the bus rather than people running in the forest. But the clothes encourage movement through their bounce and mobility.

07.



Trimmings & details. Using sporty-looking trimmings.

04.



Water and sweat. The clothes are knitted with a yarn made of 70% viscose & 30% stretch polyester. I choose this material for its ability to create bounce. It does not cope well with too much water, but a bit of sweat and some drops of rain is fine.

05.



Possible Danger. Several of the garments have long knitted panels that can create tripping traps and the feeling of having too much going on around the body, panels that can catch on branches, door handles, or under the bum of someone you sit next to on the bus. I like the long panels as something visual, for the possibilities they give to tie the panels together and change the look of the garment, but also because I appreciated that the clothes jumped and bounced around my body when I was out running.

08.



Method and Process

Working tools:

- Dubied hand knitting machine 8 and 6 gauge.
- Linker

Type of rib: 3x3 & 2x2

Needle set up: (3x3) $\text{|||..|||..|||..|||..|||..|||}$
 $\text{|.|||..|||..|||..|||..|.}$

(2x2) ||..||..||..||
 |.||..||..||..|

Yarn:

- E. Miroglio, Heaven, 70% viscose & 30% stretch polyester.
- E. Miroglio, Heaven Eco, 70% eco viscose & 30% stretch polyester.
- E. Miroglio, Giade, 96% viscose & 4% stretch

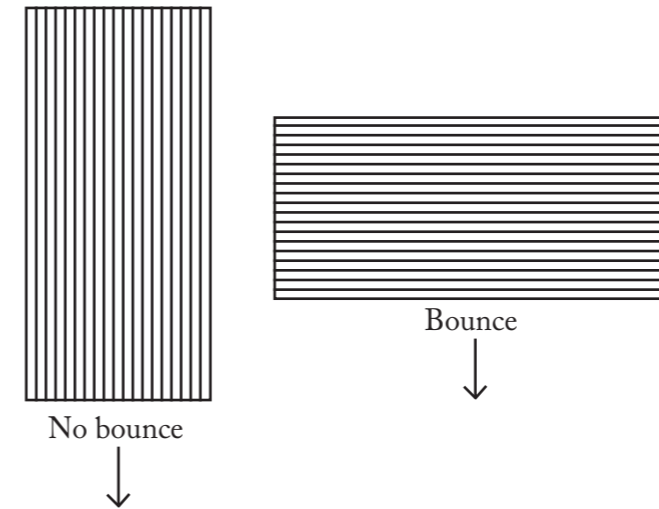


Fig 8. Dubied knitting machine, own photo. (2023).

My approach to knitting

I had worked very little with knit in the past, and I knew it was essential to start early to learn the logic of knit. Knit behaves different from woven material, especially when mounting it together. The weight and pull created a lot of unforeseen problems. Many of the garments I intended to make, did not take the shape I set out to create. I quickly understood that I had to work differently than I had done before. Normally I make toiles in woven material, then I see the result and shapes quickly. Now I had to knit the material first, not knowing how it would shape, stretch or pull when I linked the pieces together. Creating bounce was important, so I saw no point in sewing toiles in woven material because the woven material would give me little information on how the garment would move and bounce.

Instead, I knitted panels in various lengths, pinned them together, and tested them on my own or other bodies, then I changed the directions of the bounce, and the dimension, and pinned them together again. The process became dynamic, and I am at a point now where I feel like I follow the material as I work. Even though it is mostly rectangles I work with, they create very organic shapes when I put them on a body.



The fact that I use rib and turn it horizontally creates some limitations. I can only get the width of the knitting-bed in each piece and will therefore have to link bits together to create length. It is also far more difficult to knit things in shape. Therefore it became natural to make rectangles and puzzle them together in various ways.



Fig 9. Knit 01. (2023).



Fig 10. Knit 02. (2023).

Meetings with bounce

The important question for me during this process has not been what the clothes mean but rather what they *do* and how the clothes affect us. As I mentioned earlier in the text, I have tested the clothes on my self and others. This has been an important tool to develop the clothes and gather information for my project. At the beginning of this project I worked with pleated materials. On the first trip I ran outside with the pleats, I couldn't feel the textiles moving against my body, because of the lightweight material, the bounce was almost unnoticeable. It was only the visual that was present. I could see it jumping and bouncing around me. It was colorful and visually satisfying, but the weight was not there. I therefore set about knitting. I knitted variations of rib. Rib has some of the same properties as pleats – the rib has rhythms, surfaces that consist of height differences, and it is elastic. The rib turned out very bouncy and playful after several tests in different yarns.

My partner Stefan was the first person to try my knitted clothes (20.10.22), after a jog in our apartment he said it reminded him of an off beat hi-hat. Stefan drew a picture to illustrate.

«The hi-hat is a percussion instrument that consists of two cymbals mounted against each other in a stand.» (Almås 2021). In techno, and many other genres, the off beat hi-hat makes you want to dance. He also pointed out that the bounce helped to give a feeling of being pulled extra in the air/floating longer. On the off beat, you give the hi-hat a swing that is relative to the tempo. If there is no swing, the time interval between kick – hi-hat – kick is the same length. When you increase the swing on the beat, the time interval between kick and hi-hat changes so that it becomes longer, and then the time interval between hi-hat and kick is reduced. It changes the way we perceive the beat quite drastically, thus in relation to the amount of swing you have on the hi-hat.

I think there may be a transfer between the swing of the hi-hat and how the textile bounces related to the elasticity of the yarn and the type of rib I knit. In other words, different techniques can create different beats in the clothes when you run or dance with them. The kick is the feet moving and the clothes are the hi-hat, together they make a beat.

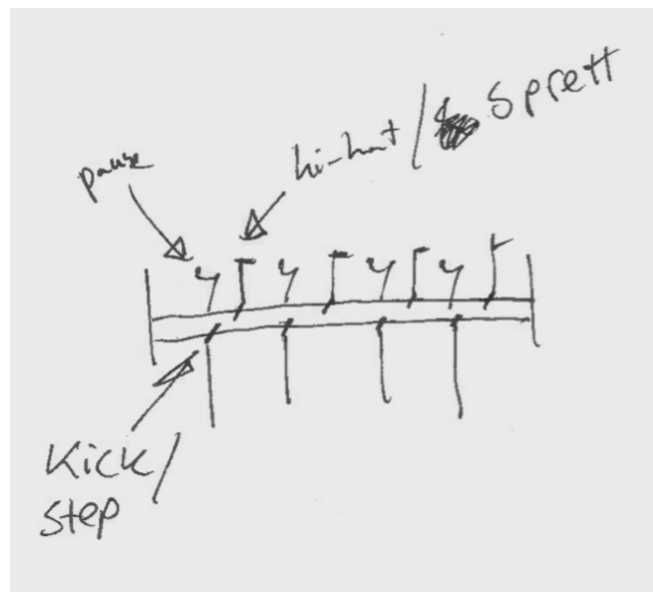


Figure 11. Illustration of off beat hi-hat. (2022). Drawn by Stefan.

Notes from my own runs

07.10.22

Running takes me into a more fluid state. I become more aware of my surroundings, and my head feels clear. Wearing the pleated garment adds another layer to the experience. The flow of the pleats surrounding my body is a constant reminder of my own movements. I wish there was more weight and pull, but still it creates a sort of dialogue between me and the garment. My movements activates the flow in the pleats, and we make rhythms together.

I think rhythm can become a portal to presence. When I feel stressed or anxious running is a great way of escaping the irrational mind. The rhythms calms and shakes of the tension in my body.

25.10.22

I had a good experience on my run today: I ran along the Alna river, and in some places there are small waterfalls where the water roars and bubbles. The water splashed to all sides, and the pleats I wore moved in the same rhythm as the river. As I ran it felt like I was being accompanied by the river, we were going in the same direction.

Oda Olivia Øverbø (dancer) borrowed a bouncing skirt and top. She wore the clothes on a run outside, and tried them in the dance studio. She was kind to share notes and documentation with me:

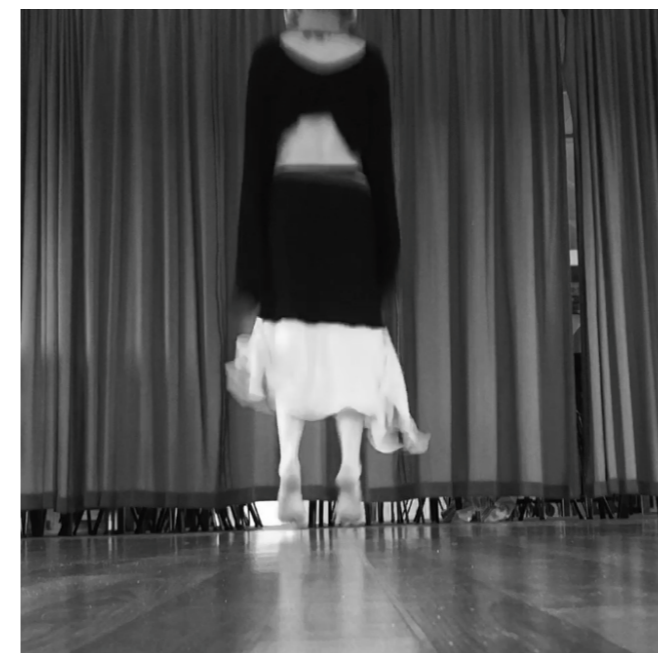


Figure 12. Screenshot from video, Photo: Oda Øverbø.



Figure 13. Screenshot from video, Photo: Oda Øverbø.

Notes from Oda (my translation): Ingrid Pettersson's clothes with bounce 18.04.23. First test in the studio, Fleinvær.

The clothes invite you to bounce, jump and run. It is moving up and down, I feel the weight of the clothes. And lightness. I activate the clothes, or the clothes activate me to feel them clearer on the body. The weight is clear. I have to have my arms down to feel the sleeves best. Then they bounce up and down alongside me, while if I bend my elbows or take my arms out to the side, the bounce and its striking sensation disappear. The bounce mostly takes place vertically. If I play with jumping a little to the side or setting a direction beyond what goes up and down, I can make the bounce move a little differently, slightly different rhythms, but the vertical direction must always be present for the bounce to be felt (I think).

Visually, the fabric on the front of the stomach is stimulating (if I have put it on the right way, with the short back and long front). I see flashes of black bouncing and waving in a flapping asymmetrical pattern. It pulls me forward. Teasing me a little, and I wonder what kind of shape each new movement will give the pattern in front of me. If I look straight ahead, it is only in my "side vision"/ "lower vision", in the periphery of vision. The skirt is less clearly present, but it also bounces around the thighs and legs, tickles me slightly. It's a bit big, doesn't fall off, but slides down a bit with the bounce. I wish it was tighter on the body. Rotation + bounce is fun with the skirt, jump that rotates.

Unresolved issues



Figure 14. Screenshot from video, Photo: Oda Øverbø.

Inviting people to test my clothes has been a very positive experience. And this is something I want to do more actively in the future. By running and wearing the garments myself I have gotten a better understanding of the clothes and how the bounce works - which directions to place the rectangles and how long they should be.

Sustainability

One of the things I admire about the marathon monks is their ability to devote themselves completely to what they are doing, but also the care they show nature and wildlife. In the book "There is No Point of No Return", Arne Næss writes about the care that is created in us when we are able to identify ourselves in other people, nature and wildlife. We move away from the ego, and the surroundings become part of ourselves. In that way, we can act right because we identify ourselves in the surroundings (a beautiful act), and not because of morality. I think this is an extra important quality to have as a designer!

For my project I have thought a lot about how clothes can be a tool to create presence and attention for the people wearing them. My idea was that a more attentive mind can generate more care for the surroundings.

Material:

The urge to create the perfect bounce made me choose a mixed material with polyester rather than a 100% natural fiber. I have used the yarn called Heaven in my entire collection. When I was working and developing swatches and surfaces I tried to find a yarn that only contained one material quality or a composition that did not involve polyester, but this proved to be difficult. All the tests I made were considerably looser in the bounce than the one I made in the chosen yarn quality. Getting good bounce was essential for this project, and it felt urgent to get started making the collection, so I decided to stick to the mixed yarn.

If I produce this collection in the future I want to contact a textile engineer to get help to find a better material. Then we could discuss yarn quality, duration, bounce and recycling. Since many of my garments don't have zips, buttons, linings, and such things, they have the potential to become a mono-material (if I find a yarn quality that only has one material in it). That makes it much easier to recycle.

Repair:

The garment is built up of rectangles, it will be easy to replace a broken rectangle with a new one.

Wash:

The sleeves are open under the armpit, which will avoid direct contact with the armpits.

Less sweat = Less washing.

Waste:

Knitwear = zero waste (mostly) + you can unravel the thread and use it again.

I have reused all the yarn in the garments that did not turn out as I wanted to. Some of the garments have been unraveled three times, and the yarn is still possible to use.

Care label suggestion:

Thank you for buying this garment!
This piece is knitted and mounted together with care. I hope it will bring you a lot of joy and bouncy moments!

Care:
These clothes need to rest after a day's use. Lay them flat so they can return to their original shape. Rib jumpers and tops are stored lying down, and should not be hung on hangers. That way you avoid hanging marks on the shoulders, and sleeves that pull the garment out of proportion. Handle the clothes with care and the clothes will bounce with you as you run to the bus or move on narrow paths.

Hand wash or steam / Dry flat



Result

This project has resulted in a knitted collection.

Color

I have chosen to work with the colors: red, off-white, black, blue, pink, and yellow. The blue and red reminded me of the colors you typically see in the Norwegian anorak. The color combination black + off-white + blue are colors I see a lot in sportswear. As I worked the color palette developed from a formal look to a more playful look as I included the yellow and pink.

Silhouette

Since I have been working with rectangles this has impacted the look of the garments. I have not tried to make clothes that resemble the Marathon Monk's clothes, but when I look at it now I can see that many of the silhouettes have similarities to the kimono. This was not intentional, but rather something that happened. I don't know if it is because of the format of the rectangles or how I mounted them together.



Fig 15. Foto: Ali Onat Turker. (2023). >





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Learning Outcome

One of the first research questions I asked was; Can bouncy clothes create more presence and attention for the person wearing them?

I still can't give a concrete answer to this, but I have made activating clothes - clothes that make people want to move. Garments that respond to our movements, and can become a sartorial partner in everyday life. I have created clothes that work against efficiency by appreciating the impractical, and questioning why sportswear is made to be as unnoticeable against the body as possible. Even though I have had some detours in the process it still feels like I have been working at a good and active pace. Along the way, I have acquired more knowledge about knitting and its inconsistencies and mysteries. Since the development of the various looks took much longer than I expected, I feel that I still have a lot of unexplored terrain to plow through. I have been working on this project for a long time, but I still get excited and feel the drive to take it further! There are different directions I can choose to focus on in the future;

- I can move more toward sportswear.
- Work on developing new surfaces, maybe I will find a new "mechanism" then bounce or other ways to create bounce than the one I use today.
- I can start my own running group for people who like to run with bouncy clothes and work on fine-tuning the clothes for this activity.

During the time I have been working on this project, I have understood that I am shaping my future practice. The values I want to live by as a designer and private person have become clearer. I have had mixed feelings about entering an industry that has caused so much destruction over a long period of time. But in the same way that I have created my own "category" for running, I can create my own category as a designer. Through sartorial suggestions, I might be able to help get us into the right rhythm. This may sound naive and overly hopeful, but I believe that this is exactly what is needed to persevere and continue to come up with proposals for how we can move away from the mechanisms that are taking us in the wrong direction. Through increased presence and attention, perhaps our footprints will be smaller.



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