Ideas for Another Workwear

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Abstract
Earth’s current state demands new perspectives in many fields; political, private, global and local. This article examines sustainable functions within workwear and fashion. A design process is argued to be developed within a sustainable frame concerning the whole chain of ecological, sociocultural and economical factors. The two construction traditions of a. tailored: pattern pieces constructed next to the body, and b. empty space: simplified construction using squares and space between body and garment, are investigated and contrasted in order to find elements of sustainability within aesthetic. The article argues for a greater view upon what could be sustainable aesthetic, in forms and values. This is related to a construction of clothes which allows movement and durability. A proposal is finally given which contains three various shapes and constructions for workwear trousers.

Keywords: workwear, sustainability, aesthetic, ecological age, construction, Wabi-Sabi.

In the Brunel Lecture Series, Peter Head (2011) states that by the year of 2050 everyone of us will have 1,44 hectare land to be supported from. The ecological footprint today in Sweden is 5,9 hectare per capita (Globalis 2012). These two facts demands the need of a change. But what change? We need to be more efficient in govern natural capital, producing more with less and consume better and less (WWF 2012).

We need a culture shift. Not just an easy adaptation from conventional to organic which we often seems to be willing to do when possible: we still drive cars but biofuelled, we climate compensate when travelling by air plane, and we have the possibility to buy organic cotton t-shirts very cheap today, as an example an organic top costs only 10 Euro in H&M:s spring collection 2012 (H&M 2012). As already stated, we can’t keep up with our current consumption, organic or conventional, since we already today uses the resources of 1,5 planet and will use 2 planets by the year of 2030 if things won’t change to the better (WWF 2012). Thus, a culture shift could be seen as a needed movement into an ecological age, which is different from both the industrial as the former agricultural. A culture where 80-100% of all products need to be sustainably sourced (Head 2011), which argues for new ideas and proposals in every field there is: political, private, global, local and of course, one of many, in fashion.

The Great Hunt for Function
The function of cloth could be seen as manifold; primarily the practical - the shelter-, secondarily the aesthetic and the social. These functions seems often to be put aside in benefit for the market, a channel for buyer demands and opportunities for sellers to fulfill these demands. The sellers on the market, brands, create new demands or shift them towards their own products trough branding and advertising (Klein 2001). This could be seen as a shift in function: where clothes are more and more seen as business
rather than the original functions as practical, aesthetic and social. The current trend of fast fashion is a clear example of meeting the demands of the consumer, while at the same time creating these demands, where “the goods have a short-life cycle measured in months or even weeks” (Larson, Ogden 2009). All these functions have to be considered when speaking in terms of sustainability, and that’s why only, for example, a conversion to organic cotton in production won’t make a garment sustainable if there is a lack of sustainability in the rest of the chain. If sustainability is seen as a framework, different functions are co-working in a hierarchic order, dependent upon and subordinated each other. For instance, as argued in fig 1, the ecological function is superior to the agricultural functions, which are superior to the economical functions. An economical system is not sustainable if it depletes ecological resources.

Sustainable Aesthetic?

All artefacts have an aesthetic function which needs to be considered, where the practical function by itself is not enough from a holistic viewpoint. Nature is a good example containing both a practical and an aesthetic function. The knowledge of rationale and non-rational is merged together within the experience of nature. So, if the aesthetic is important and needs to be considered, how will aesthetic be sustainable? I argue that the key is to add values that is sustainable within the aesthetic frame. A great example is the Japanese aesthetic tradition of Wabi-Sabi, often described as the aesthetic of the imperfect (Fridh 2004).

Wabi really means ‘poverty’ or negatively, ‘not to be in the fashionable society of the time’. To be poor, that is, not to be dependent on things worldly: wealth, power and reputation— and yet to feel inwardly the presence of something of the highest value, above time and social positions, this is what essentially constitutes wabi. (Suzuki 1993)

Another example of the aesthetic of Wabi-Sabi is the conception of cleanliness which do differs from a traditional western view. In the novel, In Praise of Shadows, Tanizaki Junichiro states how will aesthetic be sustainable? I argue that the key is to add values that fit better with a shift towards an ecological age. Fridh (2004) describes an alternative, rooted in the Zen tradition of Japan, named the fundamental subject, which is: asymmetry, simplicity, naturalness, subtlety, profundity, freedom and timelessness. The second-hand sourcing to be flexible and the production to be a smaller scale. The quality and quantity vary but these circumstances will form the products, a designing dependent on necessities which could be seen as Wabi-Sabi.

A possible outcome when admitting that our pursuit of beauty is vanity and non-sustainable is to simply reject the aesthetic values and create artefacts which only has a practical function. I argue that this will be a dead creation and therefore not sustainable. A greater option would be to shift our conception of beauty to values that fit better with a shift towards an ecological age. Fridh (2004) describes an alternative, rooted in the Zen tradition of Japan, named the fundamental subject, which is: asymmetry, simplicity, naturalness, subtlety, profundity, freedom and timelessness. As for second-hand fabrics the field is open; industrial waste, military surplus or end of the consumer life: it is often about to find a solution that fit that certain place and the possibilities nearby. The material is left-over from former kind of usage and is always dependent on a first-hand use which requires the second-hand sourcing to be flexible and the production to be a smaller scale. The quality and quantity vary but these circumstances will form the products, a designing dependent on necessities which could be seen as Wabi-Sabi.

Material
To achieve the values of Wabi-Sabi the choice of material is of greatest importance. The material needs to be able to tell a story, where usage and time is two factors that will purify the aesthetic. Also the source needs to be consistent with the values, hence two good alternatives are organically sourced raw nature fibres and different types of second-hand materials. The subject nature fibres is very broad and won’t be discussed here, it’s a game with nature.

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The foundation of Western aesthetic in clothes is a constructed design method where the relation between the body and the garment could be described as tailored. Pattern pieces are often constructed to follow the body in an upright standing position, where extra fabric is cut away. Here the cloth could easily be seen as a tool, a resource to create a garment, and not containing great values just by itself, which could be compared to traditions where every bit of the cloth is precious and therefore cuts are avoided as much as possible. The outcome of the latter way of making garments often results in an aesthetic, which can be described as empty space or negative space, were the space between the garment and the body is a vital part of the aesthetic.

To argue for sustainability in one shape rather than the other might tend to be a non-rational discussion, which indeed is an important aspect. Perhaps we can’t reason for an sustainable aesthetic with words, it might be beyond us, which is not the same as not important to examine, or rather, experience.

Construction for Movement

As argued above, in order to create a sustainable design process all functions has to work together in a sustainable way. Thus, the function of aesthetic has to correspond with the other functions, which in workwear primarily is the practical. The garment is expected to handle tougher conditions and not tear apart. This is often solved material wise, an example is the Swedish workwear company Blåkläder, which uses Cordura® fabric as reinforcement at selected areas where tearing often occurs (Blåkläder 2012). What many manufacturers are missing is the availability of movement within the garment. When a garment doesn’t follow the movement of the body the fabric will be stressed which will decrease the durability. This issue is often examined and worked through when stressing the fabric while bending the knee, as shown in Fig 6.

Theoretically this can be explained that the body has several points which can be stretched when moving and bending parts of the body. When bending the knee the length of the knee will increase which a pair of trousers often doesn’t consider. For great freedom of movement the trousers has to consider all these factors in order to prevent tearing. Trousers often tends to have a restriction of movement when, as in Fig 7 stretching the length of the measurement z, where the width between the thighs is to short. This can be solved with extra width as described in Fig 8.

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Another interesting point is the constructions of a sleeve, which tends to differ in traditions. The western tradition of the suit jacket sleeve, entitled as tailored, gives the wearer a proper look but is at the same time not really paying attention to freedom of movement. It’s made for keeping your arms downwards to the body and not for movements upwards. This could be compared to the construction shown in Fig 9, where the standard position of the arm is straight out from the body, which gives availability of movement both downwards and upwards. The outdoor clothing company Arc’teryx is paying attention to this when as a foundation in their construction method of a sleeve considering the latter of the two traditions of construction. Their jackets could be seen as a synthesis between the tailored tradition and the empty space tradition. Tailored gives lighter garments while empty space gives more air and space, which is an important aspect for the durability and maintaining of the garment; as for example the need to wash because of sweat occurred when the garment has been lying to tight next to the skin might decrease. These issues is often tried to be solved material wise with breathable fabric, still that is only one solution and a diversity of solutions is to be seen as good, especially when breathable fabrics often tends to made out from oil and environmentally uncertain coatings, such as GORE-TEX® (Sveriges Natur 2006).

Proposals for Trousers

When the measured needs for movement is considered, the actual shape of the garment could be anything and everything: empty space, fit, trousers or skirt. This leads to an freedom of aesthetic which could be emphasized with previous argumentation of sustainable aesthetic. The role model nature does always fit form to function (Benyus 1998); still nature could claim to possess characteristics such as beauty. It challenges our perception of the term workwear. Perhaps workwear could and should be described as a garment with a sustainable practical function, developed for a special physical activity, whether it is a skirt or trousers doesn’t matter just as the volume of the garment could heavily differ. When the choice of material and the construction works together with the aesthetic in a sustainable framework it is possible to give a nuanced perspective upon the current issues of sustainability. Fig 10, 11 and 12 is to been seen as proposal to what this could be. It’s a skirt, and two different pairs of trousers.

The skirt, Fig 10, is made of organic hemp, constructed as a square considering different kind of movements. A waist belt is adjusting the size making the garment an one-size. It could be emphasized as an empty space garment with a very simple construction, still fully functional as workwear, yet not an ordinary one.

The trousers in Fig 11 is a translation of common western workwear trousers, yet constructed for greater movement abilities when walking/running and bending down. The material is sourced from military surplus towels and dip dyed in Indigo. Besides the environmentally friendly aspect of using second hand cloth, it also adds a history to the garment and a uniqueness only possible to achieve when using and maintaining the cloth for a long time.

The last trousers, Fig 12, is a blend between the empty space aesthetic and the tailored. The construction for movement is a fusion between western ideas of construction, as darts and smart pattern pieces, and the idea of empty space, using the advantage of great space in the garment. The trousers are coated with bee wax and candle left-overs, as a sustainable option in order to make the garment more tear-, rain- and wind-proof.
Conclusion
These proposals are to be seen as one of many alternatives to cover a holistic sustainable view. These ideas must be discussed not only in workwear but for fashion as well. I find it is fully possible to work with these questions from smaller companies to larger, even though locally linked and more hand-crafted ideas could be easier to implement. A good example is the idea of slow fashion, where the ideas expressed in this article could be implemented. What is important and now, is the strive for a culture shift.

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