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A THOROUGHLY NECESSARY CHANGE - ABOUT THE FUTURE OF FASHION IN THE “NEW NORMALITY” CONTEXT

Review paper

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Abstract

The themes to be raised in the article concern the changes in the clothing industry, which is one of the most harmful to the environment. I will describe how designers, artists, technologists, etc., are responding to the crisis of the industry and the social needs generated by the shape of the modern world (including the pandemic). The clothing industry, fashion and clothing are inalienable elements of people's everyday life, and they also combine aspects such as art, design, science and innovation. Looking at developments in this area will help better write possible future scenarios.

Keywords

fashion, design, new technologies, pandemic, environmental crisis, identity, responsible design, fast fashion, slow fashion, fashion experience

Towards the unknown?

Looking into the future, writing possible scenarios, reflecting on the development of different areas of life. Fantasies about the world, cities and men are an expression of the need to go beyond the horizon of the “here and now”, touching the most profound human questions and fears - what are we for, where is everything going? For this article, a quote by Marjanne van Helvert from her essay entitled *Dirty design – dirty utopia* is relevant:

When I think about the future, I have to think about the distinctly utopian and dystopian realities of science fiction. They are often worlds that revolve around an extrapolated aspect of contemporary society that turns out to have extreme consequences for future generations, both positive and negative, sometimes fraudulent¹.

Human nature and its drive towards infinity, immersion in and analysis of the past often result in a lack of attention and focus on the present moment. We fail to see that the future is already happening, and that every step we take has consequences. When thinking about the changes in the modern world, researchers often use the term VUCA. Volatile, Uncertain, Complex and Ambiguous) also describe the ‘new normal’. The term, used concerning the Cold War, has appeared, for example, in Zuzanna Skalska’s² statements on the post-pandemic world. There is no straightforward recipe for the future. However, the concept of sustainability is becoming a challenge that designers, consumers and the entire complex system of interconnected vessels of the fashion industry are currently facing more than ever. The subject of this article concerns the changes that have taken place and are still taking place in the fashion industry (also in relation to the pandemic) and the actions taken concerning the environmental crisis, in which the clothing industry plays one of the leading roles.

The pandemic was not a “Black Swan”³. Trend researchers expected a crisis, but it was unclear what form it would take. We live in uncertain times, and subsequent media reports add to the sense of shaky stability in the western world, which was already supposed to last. The spread of the SARS-CoV-2 virus is not a cataclysmic event on the scale of a global war. However, it is a natural front they are fighting (e.g. doctors) for many. It has changed for years, if not permanently, many aspects of life, e.g. the way and possibility of travel, schooling, sense of security, availability of materials (the problem with paper in printers or building materials), market speculation, the polarization of societies. The consequences of a pandemic are still challenging to predict, and its effects will probably be outlined for decades to come. The clothing industry, fashion and clothing are inalienable elements of people’s everyday life, which also reflect the changes affecting the whole complex reality, which consists of multiple perspectives: from the work of the designer, through the work of technologists, factory

1 M. van Helvert, *Dirty design – dirty utopia*, <https://dirty-design.net/> [accessed: 20/04/2021].

2 M. Bachowski, wywiad z Z. Skalską, *Świat po epidemii będzie jak Polska lat 90. Stary system się skończył*, <https://noizz.pl/opinie/zuzanna-skalska-swiat-po-koronawirusie-bedzie-jak-polska-lat-90/rybmzvr> [accessed: 20/04/2020].

3 Określenie nieoczekiwanych zdarzeń, autor określenia: Taleb Nassim Nicholas.

workers, transport, to the individual choice of the consumer. Fashion and its carriers in the form of clothing elements, fabrics, modern technologies are unique materials for analysis in future scenarios.

You can never say about fashion that it is. Fashion always becomes real⁴.

This is how Georg Simmel wrote about fashion, and in this one sentence, one can read the whole complexity of this notion, its ephemerality and constant fluctuation.

The world of fashion before and after (during) the pandemic

Societies of the Western world quickly have become accustomed to consuming fashion. The number of daily transactions, the lifestyle, in which shopping is a form of weekend relaxation, shape the enormous economic value of this industry. The way clothing functioned in people's lives evolved, influenced by technological developments and social change (Marie Antoinette's frequent purchases were considered extravagant and sowed scorn among her subjects). In the past, fabrics and precious garments were inherited, so they served not only for years, but also for generations. Today, excess, momentariness, ease characterizes fashion (e.g. online shopping with a smartphone), the variability of trends every season pushes designers to work, and crowds of customers to shops. Shops, furnishings, architecture and merchandise layout are a real battle for attention and wallet resources. Just as in the case of online shopping, various traps await the receipt of the message and the potential customer. Nothing in such a space is accidental. If you look at individual brands' alphabet, common patterns can be observed. The colours used, the furniture, the messages (promotion, price), the trinkets at the checkout, and the promotion at the entrance are designed to make the transaction go through and with the longest possible receipt.

Referring to Victor Papanek, it is worth mentioning the classification of design into commercial and responsible. Commercial design - is based on profit, designing attractive forms and driving demand for novelty. Responsible design is an activity that is based on attention to quality, safety, needs, whose creators are aware of aspects such as environmental protection or influence on the shape of society⁵. How do you place fashion and industry at these two opposite poles? Has the pandemic changed anything beyond a worldwide pause for breath?

Narrating fashion in the context of responsibility and design ethics is difficult due to the bipolarity of 'slow fashion' and 'fast fashion'. On the one hand, there is talk of a global market made up of interconnected links; a market of enormous economic value, driven by profit; which provides jobs but also

4 G. Simmel, *Philosophie der Mode* („Moderne Zeitfragen”, 11 [1905]), ed. H. Landsberg, Berlin 1905, pp. 5–41 (unter dem Titel *Die Mode* wieder abgedruckt in: G. Simmel, *Philosophische Kultur. Gesammelte Essays*, Leipzig 1911), [in:] S. Magala, *Simmel*, Warszawa 1980, pp. 182–183.

5 V. Papanek, *Dizajn dla realnego świata. Środowisko człowieka i zmiana społeczna*, Łódź 2012.

raises issues of work ethics (e.g. child labour); on the other hand, there are the ideas of the “slow” movement, responsible fashion, which wants to help shape a better world or at least save the remains of the current one. Therefore, the fashion market is of great economic and social importance, in addition to its moral and ecological weight (millions of consumers make transactions every day, each of these transactions leaves a carbon footprint and has social and personal consequences, e.g. the experience of pleasure during a purchase).

Why else does fashion matter so much? „Design can also become a means of creating a sense of identity - civic, collective or personal”⁶ – fashion likewise. Fashion and identity are linked because they are based on an identical dualistic mechanism - they are meant to give a sense of belonging to a community while at the same time emphasizing uniqueness, difference and allowing the „self” to emerge. A unified dress code often characterizes future societies living in a dystopian world in science-fiction stories. Nowadays, however, it is different - the number of trends and their changeability, the democratization of fashion (which also has its negative consequences), the social consent to many possibilities of creating one’s image, the perception of fashion as an aesthetic message available to everyone to convey information about oneself and to shape one’s identity, cause individuality to prevail over unification. Looking at shopping trends during the lockdown - consumers focused mainly on comfort (tracksuits) and safety (masks). Closing time called into question the importance of shopping centres - the era of the big malls was prophesied to be over, and eCommerce became not just an option but a necessity. Actions aimed at supporting domestic producers and local brands have been created (vide: e.g. Szczecin’s action: “Present yourself locally”), the popularity of clothes exchange has grown⁷. Consumers, however, continue to be active participants in the “disposable tissue culture”, as evidenced, among other things, by CSO research, which clearly shows that Polish men and women rushed to the shops after a lull caused by the pandemic, rushed to the shops⁸. The growing popularity of #OOTD since 2012 (currently more than 388 million posts with this # on Instagram) shows the immense power of the fashion message, consumer interest, and emphasizes the need to define oneself through clothing every day.

Will fashion save the world?

The perception of fashion in relation to unification and uniformity is not entirely unfounded in creating the future. However, this is not about shaping an obedient, tailored society, but about looking at clothing and the functions it performs or can perform. A unification that would bring total convenience,

6 https://www.propertydesign.pl/wywiady/109/design_dzis_jest_miedzy_tym_co_lokalne_i_globalne,10863.html [accessed: 20/05/2021].

7 *Spoleczne aspekty mody zmiany w dobie Covid 19*, http://cpt.org.pl/wp-content/uploads/2021/01/Spoleczne-aspekty-mody-_Zmiany-w-dobie-Covid-19-ThinkTank_NPS.pdf, s. 18 [accessed: 20/05/2021].

8 <https://spidersweb.pl/bizblog/sprzedaz-detaliczna-ubrania-buty-sklepy/> [accessed: 20/05/2021].

for example? Breaking out of cumbersome shoes and outfits? However, this sense of individuality is the impulse that shapes and pushes fashion forward, underpinning its constant transformation. „Individualism” cannot be excluded. It is indispensable and testifies to the society in which it grows, values diversity, and does not block individuality - is this not the society that future generations have come to dream of? The question is whether the next few years and the environmental crisis will allow individuality to develop, rather than hinder it? Will this not be a superfluity, poorly received socially?

Mass fashion often results in poor quality products, uncomfortable and quickly damaged. Clothing was initially intended to protect, and in the context of a future pandemic, clothing should fulfil precisely these functions: comfort and a sense of security. Do we imagine that everyday clothing could heal? Filter the air? Technologies, materials linked to the future, which seem to be science-fiction scenarios, already exist. However, they are not widespread use, and adaptation has not occurred. Integrating technology into everyday life is long, involves costs and, above all, time. It also raises the question of whether society will adopt the technology?

Modern Meadow⁹ is a company that pushes the boundaries in creating new materials but has a problem adapting its products. Already in 2017, after five years of research, the company's T-shirt – ZOA¹⁰ – was unveiled at the “Is fashion modern?” exhibition at MOMA in New York, a summary of the innovation area exploited. It is made of biofabricated skin from collagen grown in the laboratory. The company aims to breathe new into the material world through the work of experts in molecular biology, materials science, engineering and design. Staff changes and an influx of funding are expected to drive commercial-scale development of the company's proposed biofabrication technologies, which can replace fossil fuel-based materials and increase the efficiency of natural materials. Fashion brands are interested in Modern Meadow's work, but there is still a long way to go before their fabrics are widely available.

Material is only one element that makes up a garment (but does the consumer think about what dyes/chemicals were used to dye it?). A garment should be considered a sum and other components, such as labels, thread, and buttons (the production of which also has an environmental impact). Most considerations about clothing are made at its production, purchase, and use. The next step, recycling, is rarely thought of, and the issue of recycling clothes and their impact on the environment is also relevant to everyday use. Washing fabrics results in countless plastic fibres entering the water cycle every day. There are solutions, such as special filter bags, which filter the water during washing, and after a given cycle, the fibres must be picked up and disposed of properly. The average consumer is unaware of which fabrics, material blends can be recycled, and unfortunately, are problematic waste. This makes the clothing alteration initiatives and the growing popularity of #refashion activities all

9 <https://www.modernmeadow.com/> [accessed: 20/05/2021].

10 <https://www.moma.org/artists/69271> [accessed: 20/05/2021].

the more welcome. In Poland, the dialogue with already unwanted clothes is undertaken, among others, by the artistic duo Szare Wrony (Grey Crows), who tenderly transform unwanted worn-out clothes into real works of art¹¹.

In terms of an ethical approach to fashion, but also with awareness of the harmfulness of certain materials, an alternative to synthetic artificial fur was created, which, although it spares the suffering of animals, is unfortunately not without its impact on the environment. Stella McCartney is a designer who was among the experts invited to attend the 2018 Climate Summit. Since the beginning, she has focused on sustainable and responsible fashion aspects. She tries to make her actions radiate beyond her brand and gets involved in actions connected with ecological education to raise consumers' awareness. She also tries to be an active participant in solving problems brought about by the activity of the whole clothing industry. For the 2019 launch of her new collection, Stella McCartney unveiled a fur made with plant-based materials - Ecopel's Koba® Fur-Free fur, made from recycled polyester, and DuPont™ Sorona® plant fibres - making the product recyclable. Of course, fur (even the artificial and organic kind) remains a luxury good, a confirmation of a statute, a specific taste, an expression in the fashion dictionary that defines a particular individual. A change in the need for fur may be possible with the following global transition - currently, it remains a willingly purchased commodity.

The designer also encourages us to approach purchases consciously - to gather information about a given product and ask whether we want it to accompany us for years?¹² This communicates a critical trend - entering into relationships with brands and clothing just as you enter into relationships with people. This connects to the issue of building one's own identity through clothes - will customers make more conscious choices, act not on impulse, but a considered decision, thinking about long-term interaction with a given product? The power of the fashion message also stems from the pleasure it gives the consumer, and impulsive purchases often fill the void of everyday life. So it is unclear whether shopping strategies will change soon.

Science provides the techniques and processes through which the materials that shape the market's future are created. Innovation is essential for development. The search for new solutions is not only about new cuts, but also about new materials and technologies to reduce the burden on the environment and take care of additional aspects, such as health. There are already T-shirts that measure a runner's performance during exercise, or T-shirts that allow deaf people to feel music¹³. The SIMPLESKIN project, which lasted three years and involved researchers from Germany, Switzerland and Sweden, produced a washable sensor fabric with which body movements, electrical signals, activity and changes in body capacitance can be recorded¹⁴. The researchers involved in this project would

11 <https://www.facebook.com/SzareWrony> [accessed: 20/05/2021].

12 <https://www.stellamccartney.com/us/en/stellas-world/the-a-to-z-of-stella-mccartney.html> [accessed: 20/05/2021].

13 <https://cutecircuit.com/soundshirt/> [accessed: 20/05/2021].

14 <https://cordis.europa.eu/article/id/190905-researchers-aim-to-bring-smart-textiles-to-the-masses/pl> [accessed: 20/05/2021].

like their technology to go the way of adaptation by societies, just as the road from the telephone to the smartphone has gone. They see many possibilities for the use of 'responsive' fabric, not only for sports, but also for other people, e.g. as an aid to diet monitoring.

The Levi's® brand has combined its iconic Trucker jacket with innovative Jacquard (Google) technology, allowing you to change music and answer calls by touching the jacket cuff¹⁵. These are still little-known technologies, but already widely available - the "only" barrier is the price. For example, will they become as popular as electric blankets used to be? Time will tell, and the public will decide.

To take a look literally from the kitchen at creating modern textiles, it is worth mentioning objects such as pineapple, mushrooms, oranges or apples. The use of pineapples in the textile industry dates back to the 1990s. The company Ananas Anam, creators of Piñatex®, is well established in the market, but as with faux fur - their product allows an alternative to natural leather. However, the issue of recycling this fabric is problematic. Another solution is that proposed by scientists and engineers at Bolt Threads. Their product is a 'skin' made from mycelium - Mylo material is used by Stella McCartney and brands such as Adidas and Lululemon. Hermes, on the other hand, is using a solution from the MycoWorks startup called Fine Mycelium™¹⁶ to create the Victoria handbag model. Also in Poland, many brands and designers are looking for alternatives to their products - the brand Balagan has vegan shoes in its collection and 99% biodegradable ones. In Poland, one of the elementary wastes of fruit and vegetable processing is the basis for activities related to working on a modern material that could replace leather. Bio2Materials uses apple pomace, which corresponds in appearance and functionality after processing to animal skin¹⁷. Mushrooms and plants are also a platform of exploration for young female creators - Dobromiła Hada-Jasikowska created a dress made of kombucha as part of her project „Self-grown Sustainable Dress”¹⁸. thanks to this project, she won second place in the Fashionetics competition (2017), Manuela Korea, who proposed a project made of banana peels and cotton, also made it to the final round.

Another ethically and environmentally inappropriate material is silk. There are vegan alternatives to this material, but their production and recyclability bring another environmental burden. Italian brand Orange Fibre has invented a new version of 'silk' from orange. The company uses local citrus fruits for its production. Orange Fibre's proprietary technology extracts cellulose from fruit residue after juicing, which can then be transformed into fabric. 2021. Lenzing & Catania - Lenzing Group, a leading global manufacturer of speciality wood fibres, has partnered with Orange Fibre to produce TENCEL™ (lyocell) made from orange and wood pulp. The brands focus exclusively on using

15 <https://atap.google.com/jacquard/products/levi-trucker/> [accessed: 20/05/2021].

16 <https://www.madewithreishi.com/stories/the-making-of-fine-mycelium> [accessed: 20/05/2021].

17 <http://bio2materials.com/> [accessed: 20/05/2021].

18 <http://www.girlsroom.pl/wasz-pokoj/7286-sukienka-z-grzyba> [accessed: 20/05/2021].

natural raw materials to help retailers produce high-quality clothing and accessories that are cruelty-free and do as little harm to the environment as possible.

The context of using food processing waste to create clothes is not without its black side. As Stanisław Lem wrote in *The Megabit Bomb*: “...every new technology, without exception, has the obverse of benefits and, at the same time, the reverse of new, hitherto unknown miseries”. It is difficult to predict what the consequences might be in the future of using waste on a massive scale and converting it into clothing that is not its ‘natural’ purpose. Careful steps should not disturb harmony and cause further damage.

We design new materials, but do we design change? (And are we ready for it?)

An interesting and fresh voice in the context of new technologies and intelligent materials used in clothing is Iga Węglińska’s doctoral dissertation entitled *Human-Interaction. Textiles - New Technologies*¹⁹ with public defence in October 2021. One of the work aims is to identify new forms of experiencing clothing. Appropriate materials are an essential element in developing the wearer’s sense of participation. The term sense of participation was taken from Wisława Szymborska’s poem *Rozmowa z kamieniem* and is meant to emphasize attentiveness and relationality, interaction or even dialogue between the wearer and the garment. This work is fascinating and valuable both in its theoretical layer and (perhaps above all) its practical layer, which consists of two polysensory silhouettes using biofeedback to signal psychophysiological changes in the user’s body. Due to the properties of their materials, they respond to aspects such as body temperature and heart rate. These projects are designed to stimulate cognitive engagement and expand the field of clothing experience. They are rightly called *Emotional Clothing* - emotion is a state of moving the mind, and through the mind, also the body.

I would like to see real innovation²⁰

– says Lauren Bowker, a self-described ‘materials alchemist’, founder of THE UNSEEN. The designer is, for example, the author of the Air collection, made of fabrics that change colour under the influence of external factors, but also depending on who is wearing the clothes - after all, every person has a different heart rate and body temperature (of course, they are within specific ranges)²¹. The artist draws attention to aspects such as digital fashion/digital fashion, which is no longer just an interface for shopping, but a value stored in a cloud of data. Gucci has already entered this market with the Virtual 25 trainers²², which can only be worn “digitally”. This shows the trend of taking

19 <https://igaweglinska.com/emotionalclothing/> [accessed: 28/11/2021].

20 https://www.dazeddigital.com/science-tech/article/53653/1/dazed-studio-trend-report-2031-a-future-world?fbclid=IwAR24Zbg8afR0fBSSOKCWzpcQB2W0lGwFJ-zRv_N-0VYR1rjy4kMiCX4qQEs [accessed: 30/08/2021].

21 <https://www.creativereview.co.uk/creativeleaders50/leader/lauren-bowker/> [accessed: 20/05/2021].

22 <https://gothammag.com/gucci-virtual-25-sneaker> [accessed: 20/05/2021].

clothes online and creating their new identity beachhead there, which is not only based on real-world images published on social media, but also shows the opportunity for sales and consumption that the world's biggest brands have picked up on. Will this trend change the world of fashion and consumer needs? Will it be adapted? Will responsibility for consumer decisions and the development of modern materials and technologies help shape the world for future generations? Are societies ready for the change? It remains to be hoped that at least some future scenarios written in laboratories will influence progress and upgrade reality without harming the environment.

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