Stereo Imaging In Fashion Photography: How Hollywood (May Have) Inspired a Swiss Knitting Company In The 1950s

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ABSTRACT
Fashion photographs are generally two-dimensional images showing one side of a three-dimensional model. This paper, however, deals with far less well-known stereoscopic fashion photographs. Stereoscopy is a technique that creates the illusion of a 3-D image. Based on the image collection of Swiss textile and clothes company HANRO, the article analyzes the composition of 3-D pictures by putting them in a broader media-historical context. The archived stereoscopic photographs date back to the 1950s and show a series of women's fashion. In the same period, Hollywood experienced a 3-D-boom that may have had a technical and aesthetical impact on these photographs. Although fashion is not mediated in moving images in this case study, codes or formal languages of a film are inscribed in the images, as will be shown in the following text. Building on these findings, this paper further discusses the influence of cinematography and other media practices on the fashion industry’s attempt to free its fashion imagery from the confines of a two-dimensional page.

KEYWORDS
Fashion; Fashion Photography; 3-D, Stereoscopy, Photography

Introduction
HANRO and Hitchcock, two names that could not be more different. The former may provoke a big question mark, whereas the latter conjures a myriad of images. HANRO was a Swiss textile company located near Basel. The director Alfred Hitchcock, on the contrary, is considered as the “Master of suspense, […] internationally recognized as a technical and stylistic innovator in the history of cinema” (Deutelbaum/Poague 2009, book cover blurb). What is the connection? There is an associative link between Hitchcock’s imagery and a series of HANRO fashion photographs from the 1950s. The photographs I am referring to are part of the extensive HANRO archive. These particular images differ from ordinary fashion photographs of those years because they are stereoscopic diapositives.

The 1950s were a decade when many film studios based in Hollywood produced 3-D movies (Hayes 1989). Most were science fiction films or B-movies. One exception is Alfred

¹ I would like to express my cordial thanks to the reviewer for their constructive suggestions, as well as to Felix Gerloff for kindly proofreading the paper.
Hitchcock’s *Dial M for Murder* from 1954 which helped to popularize this (moving) image format. The film is a thriller about a husband who plans to kill his wife after he finds out that she had been cheating on him. *Dial M for Murder* is Hitchcock’s only film shot in 3-D. The story is based on a play by Frederick Knott. Therefore, most of the scenes are situated in the married couple’s apartment which produces the impression of a chamber play.

In the same year *Dial M for Murder* was released, HANRO for the first time produced stereographic photographs featuring women’s fashion. The essay is conceived as an exploratory work with a focus on the technique and history of 3-D media. It deals with the question whether the compositional similarities between the HANRO fashion photographs and 3-D media are typical for this period or due to the media specificity of stereoscopic images. Three issues are leading my study:

1. What is the media aesthetical specifics of the HANRO fashion stereographs?
2. Which benefits did 3-D photographs provide as a technique of fashion photography compared to conventional images?
3. How can the relationship between body, textile, and space in 3-D imagery be described?

The paper begins by considering the media history and theory of stereoscopic photographs. It moves on to analyze the source materials of the HANRO collection. In this section, I provide a critical interpretation of HANRO’s stereoscopic photographs based on the previous part. The concluding section questions the relationship between fashion photography, body, and spatial perception.

**Media history and theory of stereoscopic photographs**

The term “stereoscopy” represents a technical process of three-dimensional image making to create the impression of space and depth. It is a technique of capturing two images of the same scene from slightly different positions that correlate to the distance between the left and the right eye. *Stereoscope* is derived from Greek *stereos*, solid, and *skopeo*, to see (Brewster 1856, 1). The stereoscopy evolved in the nineteenth century and is attributed to the British physicists Sir David Brewster and Sir Charles Wheatstone who both worked on optical illusions and optical devices.

Stereoscopy builds on knowledge gained in the field of physiology and on subjective, binocular vision (Crary 1999, 118). In 1838, Wheatstone showed that we could see depth because of the disjunction between our eyes. He proved his hypothesis by drawing two images of the same object from different viewpoints corresponding to the spacing between the left and the right eye. Our brain then puts the two images together, and a twin-picture appears to render depth. To perceive the two separate images as one three-dimensional illusion, it is necessary that the left eye is focusing the left picture and the right eye the right one. Thus, Wheatstone invented an optical device called “stereoscope” that amalgamates the two slides. Another scientist that played an influential role in the development of stereoscopy is Sir David Brewster. In his 1856 treatise “The stereoscope” he describes the function of binocular vision. As Jonathan Crary outlines in his study “Techniques of the observer,” Brewster
discovered that the illusion of a stereoscopic image is nothing but a conjuration based on the observer’s experience of the differential between two other images (1999, 122). Furthermore, Brewster discussed different fields of application of the stereoscope such as painting, sculpture, architecture, engineering, educational purposes, and purposes of amusement (Brewster 1856).

Stereoscopy and photography were invented at about the same time but entirely independently. Nevertheless, it is a challenge to build stereoscopic images drawn by hand. Consequently, cameras have been used to produce stereoscopic photographs. Technical improvements, e.g., paper photography and special cameras that operated with two lenses, promoted the success of the stereograph (see fig. 1). Mary Warner Marien even underlines the great significance of stereographic photographs for the history and development of photography. According to her, it was the stereograph, which made photography a desired mass medium (Warner Marien 2014, 81).

Fig. 1: A conventional camera, equipped with a stereo lens attachment. Modell from 1931. H. Lüscher: Stereographie. Einführung in die Grundlagen der Stereoskopie und Anleitung zur Erzielung einwandfreier Stereobilder für Liebhaberphotographen, Berlin 1931, p. 31.

Indeed, stereoscopy became one of the most popular domestic media of the nineteenth century. Tourism, for instance, was not yet an industry. Hence, many people collected stereographs of unknown, “exotic” places like the pyramids of Giza to go on imaginary journeys while staying in their parlors. Beside rather harmless and humorous narratives of everyday-life, mountains, steeples and archways or monuments, stereographs included erotic and pornographic scenes as well (Williams 1995, 6–7). In fact, any motif that was qualified for spatial effects was chosen for albums and private collections.
The photographer must place distinctive objects in the near or middle ground of the scenario to achieve the most favorable stereoscopic effect. In Europe and the United States, a true stereograph industry emerged comprising enterprises for photo equipment, picture agencies, and journals. Discursive proponents of stereographs harshly criticized popular motifs. They considered stereoscopic photographs nothing but art, as the following quotation published in the (British) Photographic Society’s journal illustrates:

‘To see that noble instrument prostituted as it is by those sentimental ‘Weddings’, ‘Christenings’, ‘Distressed Seamstresses’, ‘Crinolines’ and ‘Ghosts’ is enough to disgust anyone of refined taste. We are sorry to say that recently some slides have been published which are, to say the least, questionable in point of view of delicacy.’ (Macdonald 1980, op. cit. in: Wells 2009, 146)

First and foremost, the author criticizes not only the pop cultural “abuse” of stereographs but also attests that photographers and recipients have bad taste. What is more striking in the context of fashion photography is the fact that the author mentions at least two motifs that correlate to clothes: the profession of a seamstress and the crinoline – a frame worn under skirts to increase their circumference. Presumably, textiles and garments attracted a rendering in this media technique. Three-dimensional photographs, especially, have been able to show the vast shapes of Victorian fashion in all its dimensions. Today’s audience is probably not as much affected by static stereoscopic scenes like the one in the nineteenth century due to the changed viewing habits. The visual experience at that time may have elicited a similar effect as virtual reality environments provoke in our days. Contemporaries were overwhelmed by the illusory effect of the stereoscope. As Modrak and Anthes put it, the pleasure laid “more in the effort of achieving the illusion of deep space on a flat plane than in actual picture” (2011, 39). The American physician and poet Sir Oliver Wendell Holmes also commented on stereoscopy and its popularity. He described his impression when looking at a stereograph as follows: “[…] by this instrument [= stereoscope, L.H.] that effect is so heightened as to produce an appearance of reality which cheats the senses with its seeming truth” (Holmes 1864, 140). Holmes certainly believed in photography’s ability to show the world as it is, without any distortion, and as a source of information. He considers stereographs as offering immersion and illusion rather than artificiality – as it may appear to today’s observers. The quote reflects debates that took place at that time on the nature of photography and raising the question as to whether it is a pure image of reality or rather a filtered, subjective gaze (Solomon-Godeau 1991). Further on in his essay, Holmes is persuaded that the stereoscopic photographs can even replace the pictured object. He asserts:

‘Form is henceforth divorced from matter. In fact, matter as a visible object is of no great use any longer, except as the mould on which form is shaped. Give us a few negatives of a thing worth seeing, taken from different points of view, and that is all we want of it. Pull it down or burn it up, if you please. We must, perhaps, sacrifice some luxury in the loss of color; but form and light and shade are the great things, and even color can be added, and perhaps by and by may be got direct from Nature.’ (Holmes 1864, 161 emphasis in original)
German media theorist Friedrich Kittler even interprets Holmes’ essay as the starting point of media technical information. In his view, Holmes designs stereoscopy as a combined concept of archiving, standardization and circulation of information through stereographs (Holmes 1864, 162–64; Kittler 2010, 41).²

A recent study on the history and theory of stereoscopy is Jonathan Crary’s already mentioned and well-received study “Techniques of the observer” where he examined physiological optics in the nineteenth century and the advent of geometrical optics at the turn of the century. For him, stereoscopy is an emblem of modernity. But when analog cameras became more affordable and user-friendly, stereoscopic photographs disappeared according to Crary. On the contrary, a second rather opposing study published by Jens Schröter (2014) criticizes Crary’s linear historiography on vision and optics and argues that stereoscopy did not disappear at all at the beginning of the twentieth century. Thus, Crary was wrong to assume that one optical regime replaced the other one. Instead, Schröter suggests a co-existence of both, geometrical and physiological optics. He strengthens his argument by giving examples of the stereoscope’s use in the first half of the twentieth century that are less known because of their niche role in the history of photography and beyond popular mass media (Schröter 2012, 126–131). He points out that stereoscopic slides have been used in military air reconnaissance to gain additional spatial information of territory, in the sciences (e.g., in particle physics) and arts, especially to get three-dimensional pictures of sculptures from every perspective. Schröter also points out the widely unknown hype of stereoscopy during the so-called “Third Reich” in Germany. During this period, the “Raumbild-Verlag”³ successfully marketed stereoscopic photographs and well-known NSDAP members such as Albert Speer or Heinrich Hoffmann were stereograph aficionados. Schröter assumes that this phenomenon is related to the general ideology of Lebensraum in National Socialism (2012, 136).

After the Second World War, stereoscopic photographs mainly remained in the range of children’s toys whereas three-dimensional moving images became popular for a brief time. Hollywood used the stereoscope technique to compete with the new medium of television. Generally, “3-D” was a buzzword to market technical devices. For instance, radios were sold with special “magic” buttons for “3-D surround sound” although the speakers were in one single case and not yet able to play multi-channel sound. In the same period, the Swiss HANRO knitting company produced three-dimensional photographs.

² For a more detailed discussion see Schröter 2014, 378–79.
³ = stereogram agency, L.H.
HANRO’s stereoscopic photographs

Swiss textiles and garments have had a long tradition. The range included a huge silk and passementerie industry, synthetic fiber development and knitted underwear. HANRO was one of the biggest knitting companies, located near Basel on the border of France and Germany. It achieved worldwide recognition as a symbol of the highest quality in the field of knitwear. In 1884, Albert Handschin founded a small factory. Nine years later a partnership began with Carl Ronus that led to the trademark “HANRO” in 1913, which is an acronym for the names of both leaders. At first, HANRO specialized in the new and growing field of fine knitting, used in women’s, men’s and children’s underwear, e.g., body-shaped tops and pants, knickers and camisole combinations made from wool, silk, and cotton (see fig. 2). Other product lines were nightwear, petticoats, home- and leisure-wear. From the 1930s to the 1980s the product range also contained ready-to-wear double-knits consisting of functionally elegant clothes. Besides Switzerland, the sales markets were primarily France, England and the U.S.A.

Fig. 2: HANRO advertising from the 1920s, body shaped top and pants made from knitted wool. © Hanro collection, Archäologie und Museum Baselland, Switzerland.
HANRO was sold in 1991 to an Austrian holding company. However, its extensive archive and textile collection of about 20,000 garments remained in Switzerland and became the property of Archäologie und Museum Baselland⁴. Both archive and textile collections are still located at the erstwhile company grounds which have since been redeveloped. The stereo photographs were found by chance during an inventory, although they were supposed to have been discarded. This finding is particularly noteworthy because the photographs can provide information about the outer garments. In contrast to the underwear collections that are very well preserved, the reference pieces of the women’s fashion were almost entirely decimated in the course of the Austrian enterprise’s takeover. Thus, the stereoscopic photographs can tell about color, cut and design, patterns and style. They show many more pieces than the highly-selected advertisements archived over the same period.

The subsequent analysis section is based on the methods of “Bildwissenschaft” and visual culture studies (see for example Bredekamp 2003; Mirzoeff 2002; Mitchell 1995). In contrast to art history, Bildwissenschaft also focusses on advertising, (nonart/mass/amateur) photography, film, video, and political iconography (Bredekamp 2003, 418) – and even on surveillance and technical images or ostensibly insignificant images. Both methodological approaches emphasize considering not only the images’ indexical or representational character but also the contexts of production, distribution, consumption, and media techniques. Relationships between other images and media always are reflected as well. In other words, Bildwissenschaft and visual culture studies analyze visual discourses (Rose 2007, see in particular chapters 7–8). This approach seems to be important considering that the stereoscopic photographs differ from “ordinary” flat HANRO fashion photographs in many ways, which I intend to show. They are neither editorial images nor conventional fashion photography for advertising.

The image collection includes approximately 1400 double pictures, more precisely color diapositives. They were created from 1954 to 1958. Half of the diapositives are mounted in aluminum masks, the other half is in paper mounts (see fig. 3–4). Every paper item is marked “Kodachrome Stereo Transparencies Processed by Kodak” at the front. On the reverse, there is the information “view from this side” and “Made in U.S.A.”. A HANRO employee, probably, complemented each slide with a sticker that indicates a hand-written item number as well as a season number (“I” for spring, “II” for autumn). Below the stickers, one can find a model name documented such as “Mélancolie,” “Métropole,” “Celeste” and further imaginative names. The Museum Baselland, which maintains the Hanro collection, has converted all the stereographs into a digital format. Digitized photos enable constant research, regardless of conservation measures. But to understand the value of three-dimensional pictures I also analyzed 50 originals by using a stereo-viewer.

⁴ Archäologie and Museum of Baselland.
The fashion presented on the stereographs is mostly elastic knitwear such as dresses, coats, robes, suits, i.e., machine embroidered jerseys, chiffons or heavy double knits. HANRO’s women’s wear can be characterized by never creasing nor losing shape. It was beautifully tailored, comfortable and mostly made of Australian wool rather than of synthetics. Buttons, belts, and lace were carefully selected and the colors matched perfectly due to the in-house dye works. Studying the stereoscopic photographs, I spotted repetitive patterns and motifs regarding setting, pose and objects. Every chosen image that will be discussed is exemplary and represents the series. Let’s start with describing the setting: about half of the stereographs were situated inside a building, the other half outside. I will concentrate on the interior photographs. They were shot in a rearranged private space that probably served temporarily as a temporary photo studio. Skirting boards and curtains evoke the impression that usually the room was not used for photo shoots and only had occasionally been emptied. As Jonathan Crary emphasizes, “[…] stereoscopic effects depend on the presence of objects or obtrusive forms in the near or middle ground” of the image (1999, 124). His finding can be confirmed in my case study. Every HANRO stereoscopic image is composed similarly to obtain spatial depth and the illusion of three-dimensionality: The mannequin is often placed in front of a white wall, near a window, a chimney or various pieces of furniture. She is standing in the foreground, holding an accessory (e.g., a handbag, gloves, a newspaper, a cigarette, etc.). A small piece of furniture is usually placed next to her, for instance, a chair or a side table. Besides, the white wall is decorated with a picture or a simple poster (see figure 6–7). Props, such as flowers or plants, complement the image composition. In cinematographic terms, most of the photos are long shots. Following Bordwell/Thompson, the protagonists are prominent, but the background is clearly visible (2008, 191).
As you can see in figure 5, the mannequin is wearing a grey and white cross-striped afternoon knit-dress in calf-length and i-shape. The robe is contrasted with red gloves and shoes. The mannequin is in the middle of the picture, and her body is turning to the observer. Her right arm is slightly bent but looming to the side whereas her left hand is pointing to a Victorian chair. On the left, behind the model, there is an antique chest of drawers on which a vase of red flowers is placed. Above the drawers, a mirror is hanging on the wall that reflects the mannequin’s back so one can see the reverse part of the robe. In the context of stereoscopy, the image composition becomes comprehensible. Remember the imagery of *Dial M for Murder* in which it was necessary to place different objects one behind the other, e.g., a desk lamp or a group of bottles in the Wendice apartment. They are placed very prominently without having a narrative function but to achieve the illusion of spatial depth. This kind of composition is applied to the fashion photography and may explain the mannequin’s arm gesture protruding from the screen. Her pose seems a bit rigid and unnatural but may be due to the media specific aesthetics of a transplane image.

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Fig. 5: Stereo twin-picture from 1954. The mannequin’s gesture is typical for stereo photographs. The arm seems to protrude from the image.
© HANRO collection, Archäologie und Museum Baselland, Switzerland.

5 As Schröter points out, “everything that can enter into books has to become plane in the first place” (Schröter 2014, 52). Consequently, the stereoscopic photographs from HANRO only can be displayed two-dimensional. Nonetheless, I provide the images as pairs, yet you must squint in order to achieve a three-dimensional effect.
Fig. 6: Stereo twin-picture from spring collection 1956. The arrangement of objects ensures multi-plane space for composition in depth.
© Hanro collection, Archäologie und Museum Baselland, Switzerland.

Fig. 7: Stereo twin-picture from autumn collection 1956. Note the posters on the wall as well as the fashion magazine.
© Hanro collection, Archäologie und Museum Baselland, Switzerland.
Many photos are composed in a quite similar style, as figure 6 shows. In this example, the mannequin is also pointing her right hand, namely at a Swiss cheese plant. She is standing in front of a sofa, head to the camera, but looking at something outside the picture frame. The mannequin is stretching her head to the right, so the camera is displaying her profile while her body – she is wearing a yellow dress – is shown in full frontal position. At the left edge of the picture, you can see a white curtain. Invisible spotlights cast multiple shadows on the wall where a framed picture is hanging at the extremity. The mannequin’s pose, the curtain, and the shadows reinforce the image’s theatrical elements. For today’s observer, artificiality dominates the visual impression rather than immersion and illusion, as Sir Oliver Wendell Holmes put it previously.

Considering the accessories and props, I kept making another intriguing observation. At first glance, they seem to be randomly chosen, with no other function than to embellish the mannequins, probably to underline the luxury and glamorous lifestyle HANRO intended to market. These include, for example, suitcases, handbags, ashtrays or long drink glasses. A closer look, however, reveals that some of them are reflecting all three of the spheres of fashion, media, and film rather explicitly and thus become quite self-referential. Figure 7 is a striking example: The attention is drawn not only to the simple grey leisure dress but also to the two posters on the wall, the fashion journal, and (maybe unintentionally) to the colonial style side desk. The posters are surprising because they do not fit into the setting. The left one shows New York’s skyline at night (as one can identify by the Chrysler building), the right one pictures a sand desert and a camel rider. Both scenes remind us of early stereoscopic photographs when distant countries and tourist attractions were popular scenarios. The visual vocabulary aligns itself with the visual discourse of exoticism. This impression is intensified by the non-p.c. sculptural side table that represents a small colored, nearly naked boy carrying the tabletop on his head. The Vogue magazine, by contrast, recalls the fashion context. The mannequin is browsing through the famous fashion magazine whereas the observer her/himself is looking at a fashion photograph. Many similar stereographs can be found in the HANRO series. To describe it differently, the photo makes its mediality a subject of discussion. In the following figure, too, the photograph adopts media aesthetics in terms of self-referentiality (see fig. 8). Here, the mannequin is represented as a photographer. She is operating a camera that is mounted on a tripod. Though not a stereoscopic camera, it reflects the shooting situation and therefore the specific mediality of the situation. Particularly the fact that the mannequin is posing, not reenacting, reinforces the impression of artificiality. At the same time, it should not be neglected that her pose enhances her outfit. She is wearing a pink and white striped jumpsuit with a white belt and black thongs. It is an outstanding sample compared to the rather conservative HANRO frocks and two-pieces.

\[^6\] For more on the topic of media aesthetics see Hausken 2013.
Furthermore, parallels can be drawn with Hitchcock’s movie *Dial M for Murder*. The movie is about a failed attempted murder and a love triangle. Margot (Grace Kelly), the wife of the former tennis star Tony Wendice (Ray Milland), was having an affair with an American mystery writer. Tony became aware of it without Margot’s notice. He then starts to blackmail her as the first part of an evil plan. Tony wants to have Margot killed. Thus, to not be suspected of the murder, he forces an old college friend to murder his wife. As the film title implies, the telephone is playing a pivotal role in the plot. The phone ring is the arranged signal for the murderer to kill Margot. Several HANRO photographs pick up the telephone motif, presumably to allude to the movie that had been released a short time before the first stereographs were created. In figure 12, the mannequin is reaching for the phone but in a very cumbersome manner. Both she and the telephone are turned towards the camera, so the telephone gets the viewer’s attention as well. Instead of being a simple prop, it clearly comes to the fore (see fig. 9 and 12). The reason why the movie’s and the stereographs’ imagery is quite similar is probably that of the setting. The film plot is mainly set in the Wendice apartment, making it a chamber play. Many objects are prominently displayed in the immediate foreground to achieve spatial depth such as bottles or a table lamp. Watching the film flat – which has generally been the case even when it was released in 1954 (Hall 2004, 245) – might sometimes provoke confusion regarding these objects (see fig. 10–11).

The HANRO stereoscopic photographs are quite similarly composed. The indoor shots focus on an extremely limited surrounding. Sequentially viewed, the photos give the impression of very limited space and little variety. For technical reasons, the photographs’ motifs seem quite exaggerated and a bit overdrawn or overemphasized. It is also apparent that the mannequins were not familiar with the stereoscopic media technique. In researching the personnel files, I

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7 A very profound film review can be found in Bordonaro 1976.
found out that at least two HANRO mannequins worked in the design department in the mock-up room (“Musterzimmer”) and as in-house models. Consequently, they were not necessarily professional models. This may also explain their inexperienced poses.

Fig. 9: Official film poster of *Dial M for Murder*, directed by Alfred Hitchcock, released in 1954. [http://fantasy-ink.blogspot.ch/2012/02/crime-murder.html](http://fantasy-ink.blogspot.ch/2012/02/crime-murder.html) (02/03/2017). Available under fair use.

Fig. 10 + 11: Screen shots from *Dial M for Murder*. The table lamp has no function other than creating spatial depth. DVD Warner Home Video, 2004. Available under fair use.

Fig. 12: Stereo twin-picture from autumn collection 1956. The black telephone alludes to *Dial M for Murder*. © Hanro collection, Archäologie und Museum Baselland, Switzerland.
Unfortunately, due to the limited text size, I cannot expand on the outdoor photographs. Suffice it to mention that they are shot in front of different detached houses, entrances or limousines. Other settings, e.g., in a garden, in the countryside or on the riverbank, rather evoke the impression of pastoral amateur photography (what they might be) than of professional fashion photography. At the same time, they seem more organic than the theatrical and backdrop-like indoor images and therefore communicate more liveliness than the interior shots.

Beyond the information the 3-D photographs themselves can provide, nothing is known about the production process nor their intended purpose and the circumstances of their presentation. As we have seen, technically it is very easy to make stereoscopic photographs, once you have an appropriate lens attachment for the camera. The image composition, however, needs special knowledge about how to achieve different depth layers. Who initially had the idea to make stereoscopic photographs? Who were their intended viewers – customers, agents or maybe salespeople? In this respect, it would also be very interesting to know the context of their reception. Have the stereographs been shown to a group of people in a projection room or individually? Or have they even been mailed to potential clients? For now, unfortunately, those questions will have to remain unanswered.

However, it is certain that the photographs lack any obvious commercial context. There is neither a reference to the HANRO brand nor any information about prices or sizes. Certainly, they have not been used for official advertising, as I could find out based on the data of the advertising department. In contrast to the stereoscopic photographs, most HANRO advertisements placed in magazines in the 1950s were printed in black and white. Besides, the garments were often presented as drawings instead of mannequins (see fig. 13). These images are usually accompanied by a reference to Switzerland whereas the stereographs lack the emphasis on a Swiss product – be it visual or in a textual description. It can thus be concluded that the stereoscopic pictures were not necessarily produced for foreign customers. Further questions arise about the photographs’ purpose(s). Can they be interpreted simply as a gimmick? The fact that the stereographs were produced over a period of five years leads to the conclusion that this project was not a spontaneous campaign for entertainment, but rather to document the women’s fashion in a particular way. But what is the additional value of three-dimensional photographs indeed? And did HANRO made full use of it?
Conclusion

Stereographic photographs have been presented here in the context of fashion photography while concentrating on a specific photo series of Swiss Knitting Company HANRO in the period between 1954 and 1958. Notwithstanding, stereographs had already emerged in the second half of the nineteenth century and produced double pictures that gave the illusion of a three-dimensional image. This effect made them perfect for motifs where additional spatial information and knowledge about relations between two objects were useful, such as military air reconnaissance, sculptures or architecture, as Schröter demonstrated recently (2014). However, the use of stereoscopy in fashion photography is less common.

The HANRO stereographs unite three interesting concepts regarding fashion and media: firstly, the from today’s perspective outdated technology of transplane imagery, secondly the attempt to display clothes in their three-dimensionality, thirdly the stereographs reveal the taste of the time – the ‘zeitgeist’ and image of women of the 1950s are communicated in this photo series through fashion, setting, make-up, facial expression, and accessories. On account of the fact that little is known about the production context, I can only speculate about HANRO’s aims of using this exceptional media technique. Conceivably, the advertising department’s employees or whoever was charged with the production were fascinated by this
media technology. From that angle, HANRO deserves credit for its refreshing approach to convey its collections and for varying the traditional static photography. As far as I know, hardly any apparel manufacturer utilized the stereoscopic media technique to promote its items.

It is probably not a coincidence that HANRO’s production of stereoscopic slides took place at the same time when Hollywood featured 3-D films to fight against the advent of competing television. Amongst these films is Dial M for Murder by Alfred Hitchcock. Although there cannot be verified a direct link between the movie and HANRO stereographs, the visual strategies of both media reveal a visual discourse due to the media specifics of three-dimensional image making. What is striking here is the similar image composition. Space is organized as different linear layers instead of building a rather ‘organic’ or dynamic 360° surround space.

Clothes need to be modeled and are themselves three-dimensional, spatial textile structures. For a long time in the twentieth century, the usual way to market new collections of Haute Couture was through expensive catwalk shows in Paris, New York, Milan, London, and Tokyo. Nathaniel Dafydd Beard, however, stresses that fashion nowadays is rather mediated through images and films than presented at live catwalk shows (2014, 600). The obvious drawback consequently is that the clothes can only be perceived visually; the tactile and the haptic experience are missing as well as the possibility to watch the clothes from all sides to gain an impression of the drapery and the cut. Regarding HANRO, 3-D photographs then may have offered an acceptable compromise between a flat image and a three-dimensional live demonstration at that time. Nonetheless, I would argue that HANRO did not realize the full potential of stereoscopic photographs, which provide more spatial information. Their affordance is to furnish more spatial information. Applied to fashion, this would mean to show the same dress from different angles, so the observer sees not only the volume but also the garment’s proportion and drapery. Taking this into account, 3-D moving images would be a good way to mediate fashion when foregoing a fitting in “real” life. In contrast to the fashion industry, recent works in the artistic field of fashion photography have been experimenting with 3-D, such as the ones of the Slovenian artist Matjaž Tančič. In his series “mimicry china” he combines fashion photography with Chinese architecture to create a new dynamic space by using anaglyphic stereoscopy. However, future exploration of the intersection of fashion, photography, and space should not only focus on semiotic image analysis but also on contexts such as media aesthetics and phenomenon of perception.

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8 See Tančič 2012, [http://www.matjaztancic.com/](http://www.matjaztancic.com/).
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Biography

Leonie Häsl er works as a Junior Researcher at the Institute of Experimental Design and Media Cultures/Critical Media Lab at the Academy of Art and Design FHNW Basel (ixdm.ch). She is a PhD candidate at the University of Basel. Her dissertation takes a look at the design processes and manufacturing in the fashion and textile industry. It is settled in the field of design history and aims at leading the wide-spread concept of designing (in the sense of the German term “entwerfen”) back to the industrial context. To gather her data, Leonie is working with the archives of the former Swiss fashion company “Hanro”, mostly known for its underwear. Leonie received her B.A. in Literary, Cultural and Media Studies (German/French) from Siegen University in Germany and holds an M.A. in Media Culture from the same institute.

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