

Textile Material Trends in Fashion Magazines from 2017 to 2019

Tyar Ratuannisa¹, Imam Santosa², Kahfiati Kahdar³, Achmad Syarief⁴, Annisaa Nurfitriyana⁵, ¹Doctoral Study Program of Visual Arts and Design, Institut Teknologi Bandung, Jl. Ganesa 10 Bandung, Indonesia, ^{2,3,4}Faculty of Visual Arts and Design, Institut Teknologi Bandung, Jl. Ganesa 10 Bandung, Indonesia, ⁵Master of Design Study Program, Institut Teknologi Bandung, Jl. Ganesa 10 Bandung, Indonesia, Email: ¹tyar@fsrd.itb.ac.id, ²imamz.santosa@gmail.com, ³kahfiati@gmail.com, ⁴asyarief.phd@gmail.com, ⁵annisaa.nurfitriyana@gmail.com

Textile material, as research objects, can be observed by examining visual and tactile aspects as the main research information. The visual appearance is also an important aspect in recognising past objects in printed images with certain messages, such as in fashion magazines. However, for textile objects, particularly fabric on clothes, this means that there is no tactile element and little information can be found about the original surface. The information about fabrics in images can be recognised using the visual perception technique. Basically, the technique on clothes is to identify the type of clothes, maintenance, and the condition of the fabric (new, worn, faded, torn or wrinkled). The source of the documentation is a fashion magazine, which consists of pictures containing information on how clothes are worn by consumers, in selected editions between 2017 to 2019. This study identifies groups of fabric, made from both natural and synthetic fibres. The first visual indicator is the surface or texture of the fabric, as well as the thickness, shine, and wrinkles. The second indicator is the logic of using a fabric for the type of clothes. For example, a kaftan usually uses a soft, flowing fabric, such as chiffon. The results showed that the latest fashion trends and the majority of consumer preferences affected the identification of textiles in visual perception techniques. The fabric classification represented in fashion magazines from 2017 to 2019 showed the tendency of consumer preferences towards sustainability trends, which are manifested in natural textile choices, as well as classic and timeless clothes choices, but are also balanced with the use of synthetic materials along with the development of digital print trends for clothes. This research provides a new insight into an alternative focus of research related to textiles and fashion in observing the application of fabric to clothes based not only on consumer's personal taste and preference, but also the fabric trend.

Keywords: *Clothes, Fabric, Fashion magazines' images, Trend, Textile material, Visual perception.*

Introduction

Clothes are one of the basic human needs and are as important as food and shelter, as well as other needs that are not only physical but also psychological. Barnard states that wearing clothes is not just an act of wearing but is also an act of dressing up or making up. The term, 'clothes', as a verb, means to wear, in the sense of dressing and covering with a garment, woven goods or textiles (Barnard, 2009). Since the beginning of the use of textiles to cover the human body, the use of various textile fibres has been developed. Clothes not only fulfil a function as mere body covering items, but also as the consumer actualisation of the trends that are taking place at one time, as well as serving as a representation of the consumers.

The rapid development of textiles is supported by technological advances and the increasing diversification of textile manufacturing techniques. This also encourages textiles to become one of the objects of scientific research. The observation and testing of textile fibres are common practices in research. The most common methods for identifying textile fibres include the handle vision, microscopic observation, and chemical and physical analysis. The handle vision method is utilised to distinguish fibres, which is primarily based on fibre surface parameters, such as length, diameter, wrinkle, and lustre. To improve identification accuracy, the handle vision method is combined with flaming, so that the fibres can be observed and smelled. The disadvantage of the method is that it is easily influenced by subjective judgment. Additionally, due to the after-finish technique, many synthetic fibres are finished to achieve similar surface parameters, which confuses the identification process (Zhou, 2019).

This study seeks to find another approach in recognising fabrics without a direct interaction with the textile artifacts. Instead, this study considers the visual observation of textile photos by using the perception technique. The objects that will be perceived are images of fashion consumers' clothes in fashion magazines, in which there are adjustments, so that the actual object and the printed image of the object are different. So far, the perceptions made upon images in magazines tend to be in the form of the types and brands of clothes. The fabrics are rarely perceived, thus this issue is interesting to discuss. This study also tested the perception reference indicators, as well as the strengths and weaknesses of this perception technique. One of the supporting factors in being able to make the perceptions of fabrics, is to pay attention to trends in fabrics that are happening at one time because fashion consumers in magazines are usually trendsetters who are the starting point for the diffusion of a trend, which can vary from the silhouettes and styles to the clothes materials shown in magazines at that time.

Materials and Method

This study contains several data materials related to the topic, namely fabric in clothes and images in fashion magazines. The method used in this study is the visual perception of fabrics.

Fabric on Clothes

In terms of clothes, style can refer to the characteristics of certain categories. For example, the skirt category has various styles from miniskirts, pencil skirts, A-line skirts, and pleated skirts. Prior research studies have been conducted by using only skirts as the research object, such as a study on women's clothes trends based on the height and width of the skirt silhouette by Kroeber (1919), which was followed by Lowe's research (1984). The style represents the choice of humans as users or consumers of products that are formed from one's taste. This style can be functional, if it discusses the social purpose of the clothes, such as when someone attends formal events. Clothes are made of certain fabrics with the consideration of the suitability of the characteristics and their purpose.

Zhou (2019) stated that fibre is the raw material used to manufacture thread and fabric. In the process of analysing and designing textile products, the inspection of export and import commodities of textile fibres is an important component. Fibre has various classifications, namely natural fibres, such as cotton and wool; regenerated fibres, such as lyocell and tencel; and synthetic or man-made fibres — which are made by extruding the fibre-forming material through the spinnerets into air and water, forming threads — such as polyethylene terephthalate (PET) and polypropylene (PP) (Zhou, 2019). Technology has allowed the diversification of textile fibres, so now more and more textile fibres are being created, which makes them difficult to quickly identify.

Natural fibres have various sources and different functions in human life. Among these natural fibres with the highest percentage of utilisation are cotton, silk, wool, linen, and hemp (La Rosa, 2019). Other natural fibres are also mentioned by La Rosa, such as kenaf and jute. Around the world, despite the abundant availability of modern synthetic fibres, natural fibre materials remain in demand and compete with wool, silk, and synthetics for their quality, durability, colour, and lustre (Aditya, 2017).

Images on Fashion Magazines

The media related to the fashion industry are divided in two categories: print, and electronic media. Print media can be in the form of magazines, newspapers or tabloids, while electronic media can be television or radio. In Indonesia, the media industry has an important role because it can provide learning information for the general public and establish an appreciation for the fashion industry players (Midiani et al., 2015). Magazines with a special segmentation, namely women's magazines, were originally part of the recognition of women's rights and freedom. The first women's magazine was initiated by Sarah Josepha Hale in 1828, in Boston, United States, under the name, *Ladies Magazine*. At almost the same time, in 1830, in Philadelphia, United States, Louis Antoine Godey founded *Lady's Book*. Hale and Godey then teamed up to form Godey's *Lady's Book*. The three main topics of their magazine were firstly, women's

freedom campaign material; secondly, entertainment material, consisting of fictional content, especially novels; and thirdly, general information, such as etiquette, fashion (exhibited using mannequins), beauty tips, consumer information, and cookery (Corsiglia, 1971).

Magazines as media have a position between designers, elite consumers, and consumers as an information source for designers and elite consumers. The basic principle of fashion states that a trend moves first in the upper social class, when a trend is introduced by designers or trend forecasters, as the agents of trend reformers. Subsequently, the trend is first adopted by high-class or elite consumers. Trends are interpreted as something that is popular or fashionable at a certain time (Holland & Jones, 2017). Meanwhile, according to Raymond, a trend is the direction of movement that affects other aspects, such as aspects of culture, community behaviour, and business (Raymond, 2010). In Indonesia, there are several fashion magazines or women's lifestyle magazines for the female segmentation, one of which comes from a local publisher, Dewi magazine, which is 40-year-old publishing dynasty that continues to keep the foreign media giants at bay with an integrated multi-platform strategy (Young, 2014).

In addition to presenting the latest trends, Dewi magazine also provides detailed information on fashion styles, not only in terms of themes and silhouettes, but also on the key clothes appearance obtained from visual information in a column. Some of the distinctive columns in Dewi magazine are 'Hot' as the column for special event reports, and *Liputan Khusus* (Special Report), which features guests at prestigious events. Unlike other columns created by the editors, such as 'design imaging' and 'fashion photography', the 'Hot' and Special Report rubrics present characters with their own concepts and fashion preferences.

The information in the form of photos within these two columns were then selected as the study's visual data in the visual perception process because of the suitability of the content; namely the use of clothes and the impression of the clothes. In Dewi magazine, the description of who is shown in a photo is clearly informed, making it easier to process code descriptions based on the user's name, age range, and their role in society pertaining to their appearance as one of the early adopters of a fashion trend. Dewi magazine, as a print media, is part of the distribution and marketing process of fashion trends in Indonesia, which is characterised by its visual style and way of conveying information.

The Visual Perception Technique

Perception is the process of achieving awareness or understanding of sensory information. The word 'perception' means receiving, collecting or the act of understanding with thoughts or senses (Qiong, 2017). Studies on perception, according to Solomon and Rabolt (2004), have three categories based on their construction: object perception, human perception, and physical perception. In this study, the type of perception studied is the perception of objects, which includes a contextual approach to objects by considering culture, social groups, social

situations, body space, a person's characteristics (age, gender), kinetic interactions, material and/or body interactions, and the material itself (Solomon & Rabolt, 2004).

The visual perception technique has been conducted as an evaluative experiment, similar to that carried out in this study. The idea of the experiment was the suitability and mismatch of the descriptions of textile materials in online shopping activities. The research conducted by (Ishikawa et al., 2015) found that an important evaluation of fabrics in online market activities is the thickness and thinness of the fabric, both of which were identified by appearance and tactile. Ishikawa's research tested fabric on consumers through two approaches, namely visual perception, and visual and tactile perception. The results regarding the thickness of the fabrics from the two approaches were not significant (Ishikawa et al., 2015). The research noted that there were two important factors in the thickness and thinness test, namely the light transmission properties of the fabric, and the development and evaluation of the photos that change the illumination level of the fabric's texture. However, the difference between Ishikawa's research and this current study is that Ishikawa's respondents responded to the actual fabric, not by judging the textiles based on photographic information.

According to Solomon and Rabolt (2004), visually, clothes have several design elements, which were specifically adapted for this article:

- a. **Line:** straight or curved; diagonal, vertical or horizontal; thick or thin; fuzzy or clear; broken or continuous.
- b. **Space or area:** small or large; open or closed; blank or filled; overlapping or separate; convex or concave.
- c. **Shape:** two-dimensional or three-dimensional; silhouette or form of the garments; shape of face and hairstyles; the shape of garment elements (collar, cuffs, and neckline).
- d. **Colour:** hue (colour family), value (light, dark) or intensity (bright, dull); colour of skin, eyes, and hair.
- e. **Motifs:** geometric, floral or abstract.
- f. **Texture of the material:** soft, smooth or rough; shiny or dull; translucent or opaque; noisy or quiet.
- g. **Apparent weight:** thick.
- h. **Fiber:** natural or synthetic.
- i. **Odour:** smell of fabric.

Actual clothes can be examined from all these elements. However, when visual perception is carried out on photo objects in magazines to identify the type of textile, many elements are not easy to be approached. For instance, in the line element, the visible lines of the fabric are those that appear in wrinkles or creases. In a photo, the three-dimensional shape of the clothes becomes two-dimensional, but the photo can be used to identify the silhouette, even though the clothes are now seen as 'flat'. The other elements used in the identification process are the

visible material texture, especially from the gloss; the visible weight, which can indicate the thickness of the material; and the fibre factor (natural or synthetic), which is not easy to approach because it is usually obtained from microscopic tests. However, in this study, the fibre factor is an indicator of the identification performance. The elements that are not taken into consideration are the distance or area, the colour, and the aroma of the fabric.

The following table describes the indicators of the visual perception of the fabrics that were tested in this study.

Table 1: Indicators of Visual Perception of Fabrics

Indicator	Assessment	Perception on fabric		Description
		Natural	Synthetic	
Thickness	Low	✓	✓	Synthetic fabric can have low thickness (tends to be thin), such as chiffon and satin. Natural fabric can also be low in thickness within the cotton and silk groups.
	Medium	✓	✓	Synthetic fabric can have medium thickness, such as in polyester blends. Natural materials can also be of medium thickness within the cotton, linen, and wool groups.
	High	✓	✓	Synthetic fabric can have high thickness in polyester blends. Natural fabric can also have high thickness within the cotton, linen, and wool groups.
Wrinkle	Low		✓	Synthetic fabric tends to be perceived as having a low to medium crease, while natural fabric tends to have a medium to high crease, and is applicable to all fabric groups.
	Medium	✓	✓	
	High	✓		
Shine	Low	✓	✓	Both synthetic and natural fabric can have the same lustre intensity (low, medium or high), but in natural fabric, high lustre can only be achieved by silk. Meanwhile, in synthetic fabric, the types are broader, such as within the satin group.
	Medium	✓	✓	
	High	✓	✓	



Apart from using the indicators in the table above, there are other factors supporting the identification of clothes fabric because basically, according to Solomon and Rabolt (2004), fashion appearance is the basis for one's perception in assessing fashion. To decide what to wear on an occasion, it requires consideration from one's taste and preference, which is highly related to the fashion trends at the time. Moreover, this is especially so if he or she is the trendsetter or early adopter of a new fashion.

Results and Discussions

The perception on clothes is carried out by considering how the clothes look and the logic of the type of clothes. For instance, a shirt with a stiff character is usually made of cotton. The considerations are also based on what trends are happening in the magazine's edition. As an example, in the 2010s, the sustainable design trend of the time raised the awareness of the use of environmentally friendly textiles and minimised the consumption of the latest fashion by starting to re-wear, up-cycle, and choose pieces with a classic and timeless style or with a vintage or retro look. On the other hand, the sophistication of printing technology has influenced the increasing number of digital printed textile productions and its diversification, such as three-dimensional (3D) printing, sublime, laser cutting on textiles, and others.

In this study, a sample of three editions of Dewi magazine, which were taken over a period of three years, were selected based on the consideration that trends data in consecutive monthly editions may not be vastly different. In the selected editions, not all the data on clothes usage by actual consumers can be perceived. The following are the perception results of the clothes usage in the representative editions.

Table 2: Visual Perception Technique of Fabric based upon Figures of the February 2017 Edition of Dewi Magazine

Number	Image	Clothes Type	Indicator			Interpretation
			Thickness	Wrinkle	Shine	
1.		Wrap dress	Medium	High	Low	Natural cotton with a mix of polyester (no more than 5%).
2.		Sheath dress with brocade application	Medium	Low	Medium	The basic fabric on the dress is synthetic satin, based on its fit line and soft shine. Brocade is also a synthetic material.
3.		Kimono cut blouse with abstract printing	Low	Low	High	It is a basic fabric that is printed with a synthetic satin type. The silhouette of the clothing makes it look wrinkled, but not on the actual fabric. The technique applied on the fabric is foil print.
4.		Peplum sleeveless brocade top with mini skirt	Medium	Low	Medium	This two-piece is made of brocade fabric, which is combined of synthetic and natural fibres. It is represent the sophistication brocade-making technique.

Number	Image	Clothes Type	Indicator			Interpretation
			Thickness	Wrinkle	Shine	
5.		Basic blouse with chino pants	Medium	High	Low	Basic blouse, particularly on white colour, which is a rise on 2010s trends. This look shows the use of the cotton blouse, observed by the wrinkle characteristic.
6.		Basic blouse with trumpet or bell sleeves and pencil pants	Low	Low	Low	The look shows synthetic fibres in the basic blouse, evident from its low wrinkle effect. The thickness is also low, shown from the transparency level.

The use of clothes with natural and synthetic fabric was relatively balanced, even though clothes made with natural fabrics were more dominant in 2017, which is found in the types of clothes with classic silhouettes, such as white basic shirts, wraps or sack dresses. The basic white shirts worn as standard outfits in office look suits were usually made of cotton, along with the normcore style trend that boomed in 2014 (Ratuannisa, 2020). The use of sporty pants, such as yoga pants, leggings, jogger or trainer pants, were also found and were worn by consumers with flexible materials, such as lycra, following the trend of athleisure that occurred in this period.

Table 3: Visual Perception Technique of Fabric based on Figures of the July 2018 Edition of Dewi Magazine

Number	Image	Clothes type	Indicator			Interpretation
			Thickness	Wrinkle	Shine	
1.		Drappery dress	Medium	High	Low	Natural cotton. The wrinkle shows not only from the drapery and big ribbon with the same fabric, but on the pressure that is applied to the fabric.
2.		Blouse with bishop sleeves and pencil pants	Low	Medium	Medium	The fabric is silk organza, which has a high transparency. It is made of silk, so the wrinkle effect comes from natural fibres.
3.		Shirt dress with basic shirt and tied with belt	Medium	High	Low	This shirt dress is made from cotton material, shown by the maximum wrinkle and minimum shine.

Number	Image	Clothes type	Indicator			Interpretation
			Thickness	Wrinkle	Shine	
4.		Spaghetti strap camisole and culottes	Medium	Low	Medium	The two-piece is made of brocade. From its shine and thickness, the brocade is made of combined material, mostly natural, but the inner layer (vooring) is made from satin silk fabric.
5.		Sleeveless blouse and ruffle skirt	Medium	Low	Medium	This two-piece consists of a spandex cotton sleeveless blouse. It fits in body and shows elastic fabric. The thickness is low, while the short has high thickness from the synthetic wool material.
6.		Empire dress with peasant short sleeves	Low	Medium	Medium	Made from chiffon material, it has a maximum transparency level. The inner fabric did not use a shine material.

In the representative edition in 2018, it was found that the utilisation of natural materials were dominated, such as cotton. This is shown by the wrinkle effect on most of the clothes within the visual data. Some clothes have particular constructions, such as drapery at waist, bishop hand, peplum top, and culottes. The use of these clothes follows the 2018 trend of large and oversized silhouettes that do not fit the body.

Table 4: Visual Perception Technique of Fabric based on Figures of the February 2019 Edition of Dewi Magazine

Number	Image	Clothes type	Indicator			Interpretation
			Thickness	Wrinkle	Shine	
1.		Modern kebaya with wrap kain batik	Medium	High	High	Natural silk from kebaya and kain. It makes the shine high, as well as the wrinkle, although it is not shown.
2.		Sleeveless modern kebaya and sarong batik	Medium	Medium	Low	The modern kebaya shown is made from cotton or added with silk. The wrinkle is medium for the combination. The sarong batik has a minimum shine for cotton material.

Number	Image	Clothes type	Indicator			Interpretation
			Thickness	Wrinkle	Shine	
3.		Kaftan	Low	Low	Low	Made of synthetic thin chiffon. All indicators show a minimum level.
4.		Shawl collar shift dress	Medium	Medium	Low	The minimum level of shine did not indicate this dress was made of natural fibres because the wrinkle is medium, and the collar is easily adjusted.
5.		Square neck spandex blouse with wrap midi skirt	Medium	Medium	Low	Consists of a spandex cotton blouse. It fits in body and shows elastic fabric. The short shows a high thickness because it is stiff.

Number	Image	Clothes type	Indicator			Interpretation
			Thickness	Wrinkle	Shine	
6.		Pleated halter neck shift dress	Low	Low	High	The dress shows a high level of shine. The pleated texture on the dress makes the wrinkle harder to observe.

Based on the selection of the visual data perceptions from the studied editions, the trends from the magazines during the three-year period were not vastly different in terms of the types and lengths. From this trend, white shirts and similar forms, such as blouses and white tunics, are now starting to use materials that have a more exclusive impression, such as fabric that flows and does not wrinkle easily. The lighting factor and photo quality are determining factors in this observation, as well as factors that are not previously considered by consumers, such as the gestures or poses used in the photos. For example, a gesture with crossed legs creates an impression and the light reflections on the legs allow the shine of the fabric to be visible.

As reported by Dewi magazine, several fashion consumers in the perception data chose to wear formal clothes to attend official events at night. Therefore, they closely consider the choice of what to wear, including how the material flows and the gloss. It was determined that clothes with a high shine were preferred. One of the factors considered to be an obstacle in the visual perception process was the colour of the clothing. In some of the visual data that depicted clothing with dark colours, no matter how good the quality of the photo is, it was difficult to observe the texture, wrinkles, and sometimes the shine. However, the colour factor helps to observe the fashion colour trends, and how consumer's preferences drive the choice of clothes.

Conclusions

The rich and growing body of research in the field of textiles allows new techniques and methods of research into textile artifacts. The visual perception technique has been applied in previous studies, but only on an actual textile object. Using the visual perception technique to identify the visual data of textile materials has a relatively low probability of accuracy, and one



of the reasons is the absence of tactile elements. The visual data element also has a weakness in the difference between the actual object and the resulting photo. In other words, the difference in lighting and print quality. The visual perception technique upon documentation or printed visual data can identify and produce information about a group of textile materials for their visual characteristics but not the types or characteristics of the textiles in detail. This research found a new insight into research topics related to textiles and fashion, specifically about the chemical or technical parts of textiles or how fashion is represented. This research may lead to the future study into the topic between textiles and fashion by observing the application of fabric to clothes based not only on a consumer's personal taste and preference, but also the fabric trends.

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