

[Original Article]

## Keyword-based network analysis for contemporary fashion show affected by intermedia

Seulah Lee, HyunJu Shin\*, Younhee Lee\*\*, and Hyun-Jung Lee\*\*\*†

Post-Doctor, Dept. of Electrical and Electronic Engineering,  
Hanyang University, Ansan, Korea

Visiting Professor, Dept. of Global Marketing, Korea Polytechnics, Korea\*

Professor, Dept. of Clothing & Textiles, Hanyang University, Korea\*\*

Ph. D., Dept. of Clothing & Textiles, Hanyang University, Korea\*\*\*

### Abstract

Intermedia refers to the convergence of media. The advance of intermedia has not only facilitated the delivery of brand messages in contemporary fashion shows but also facilitated interactive communication. This study investigated the mediating roles played by various media in fashion and fashion shows, focusing on the phenomenon of intermedia in contemporary fashion shows. To investigate the impact of intermedia on contemporary fashion shows, we conducted a social network analysis—a promising approach for research into fashion trends. Analyzing 159 fashion-related articles published in the 2000s, we extracted intermedia-related words ( $n=253$ ). The relationships between keywords made an analysis of between centrality, and cluster variables applied Clauset-Newman-Moore by using KrKwic and NodeXL programs. The results of the between centrality analysis indicated that the most important factors in contemporary fashion shows are “models” and “stages.” We found that the impacts of intermedia on contemporary fashion shows can be divided into four categories: “model performance,” “symbolic stage management,” “new media utilization,” and “convergence in arts.” Our analysis thus identified considerable synergy between the characteristics of intermedia and contemporary fashion shows. These results have found intermedia-related commonalities in intermedia and fashion show, and this might increase customer interest in fashion, a positive outcome for the fashion industry.

Received June 04, 2020

Revised June 18, 2020

Accepted July 23, 2020

† Corresponding author  
([fashionlhj@gmail.com](mailto:fashionlhj@gmail.com))

#### ORCID

Seulah Lee

<https://orcid.org/0000-0002-7251-9851>

HyunJu Shin

<https://orcid.org/0000-0002-8692-4129>

Younhee Lee

<https://orcid.org/0000-0002-2241-3899>

Hyun-Jung Lee

<https://orcid.org/0000-0001-9304-6021>

*Keywords: intermedia, fashion show, social network analysis (SNA), runway show, collection*

## I. Introduction

The advent of diverse media has amplified people’s tendency to constantly seek new stimulation. Extended boundaries of media have emerged in various experimental attempts. Intermedia has characteristics that go beyond mixed media, incorporating the attributes of one medium into another, and it is also expanding to various fields (Spielmann, 2001). Intermedia refers to media convergence in the arts. Dick Higgins, a leading writer in the Fluxus movement in the 1960s, developed

the term to describe a new concept of art that does not strictly fit into existing art genres or media categories (Kim, 1993). In other words, an intermedium is a third complex art form that has emerged and begun breaking down the boundaries between art genres and media. This phenomenon has had a strong impact not only on the arts but also on society as a whole. In contemporary fashion, the intermedia phenomenon has manifested in attempts to converge various media.

Fusion and interaction between art genres break down the distinctions between media. The various fashion media in the world of fashion include fashion shows, fashion films, fashion advertisings, and so on. These fashion media made sets as visibility parameters between fashion and consumers and tried to converge on experimental attempts to integrate the genres between various genres and the philosophy of designers. The fashion media with the longest history is the fashion show and fashion shows have developed in various ways and taken various forms over time. Early fashion shows consisted of stages, models, and audiences, and they focused on the models wearing clothing; however, contemporary fashion shows have made experimental attempts to combine various media and integrate features such as dancing and performances. In other words, while the purpose of early fashion shows was to promote products sales, the purpose of contemporary fashion shows is to deliver messages regarding designers' philosophies and season concepts through comprehensive art shows that combine various genres and media. Thus, in contemporary fashion shows, intermedia serves as a means of communicating philosophies of fashion to audiences. In contemporary fashion shows, it is expanded to the study of the fashion show from the media point of view as expanding of the intermedia phenomenon, which is a convergence between media and the others, and need to develop a method that can be applied to the contemporary fashion show by establishing the theoretical system about common characteristics among them.

As big data and social network analysis (SNA) have gradually developed, the concept of fashion informatics has emerged as a method for analyzing vast amounts of data using big data analysis, SNA, and machine learning (Lin, Zhou, & Xu, 2015; Zhao & Min, 2019). Especially the luxury fashion brands are pulling in methods for using SNA to enhance their messages and the originality of their brands (Kim & Ko, 2012; Phan, Thomas, & Heine, 2011). Previous fashion shows depended on stage designers' inspiration and creativity, attributes that are difficult to quantitatively measure; these advanced analytical methods let us take a quantitative approach. Although fashion shows have been continuously studied in the context of fashion design, fashion media in and of itself has not yet received sufficient scholarly attention.

This study set out to examine contemporary intermedia-based fashion shows by analyzing fashion magazine articles about fashion shows using SNA. For this purpose, we used both objective and literature research to investigate the intermedia used in various artistic fields and the history of fashion shows.

## II. Background

### 1. Intermedia in art

The concept of intermedia originated with the work of 19th century German composer Richard Wagner. Music as the closest form to life, dancing, theater, and stage art is integrated into the art show that is nearest to the life, and it pursued degeneracy by claiming the concept of "total art" (Kwon & Kim, 2011). The characteristics of intermedia also manifested in the early 20th century Dada movement, an originator of contemporary art centered in Europe and America. The "fountain" by Marcel Duchamp, a representative Dadaist painter, shows how objects and experiences from new areas spanning traditional art and everyday media domains can be used to create integrated artwork (Packer & Jordan, 2002). Accordingly,

“ready-made” is existed and located in genre and genre, some art that is different from sculptures and Duchamp gives meaning to the household items called toilet (Higgins & Higgins, 2001). The contemporary “ready-made” challenged traditional conceptions of art as the exclusive domain of pure mediums like painting and eventually began to be recognized as a kind of art itself.

In all fields of modern society has a phenomenon that has an unfixed medium and tries to present experimental changes in the whole society. This phenomenon originated in the turbulent era of the 1960s and has rapidly grown throughout the latter half of the 20th century, taking root in all areas of society including culture and arts. Modern media are no longer fixed in traditional roles; they are now being combined to produce new hybrid forms. These forms gave rise to the term “Intermedia,” a compound word that combines “inter,” meaning “among” or “between,” and “medium,” meaning “media” or “genre.” The term describes efforts to develop new art by crossing the boundaries of various genres including music, art, dance, and film, and bringing them together to create new forms of expression (“Intermedia,” 1999).

As the importance of digital development and media has increased, intermedia has taken on various forms. It has strong genetic characteristics of after 20th century artworks that cannot be explained. Each piece made its media and form by the reason why it is needed. In particular, after digital era of the 1990s, the phenomenon of the convergence between art genres has become increasingly popular, and the visual media environment represented by arts and technology is now in full swing. As various digital media such as visual media have developed and combined with technology, new forms of art have begun to emerge (Kim, 2015). These new forms tend to blur boundaries to the extent that they cannot be classified as of a single genre; indeed, such work has evolved to take on a boundless, multidimensional character. Thus, creators select the mediums and forms of their

work as needed (Packer & Jordan, 2002). Moreover, art media tend to challenge a breakthrough and various attempts by the generalization of convergence with developing of digital media, emerging of new media, and performance arts. As the boundaries between everyday life and art become blurred, contemporary artists have started to share their artistic values and the meaning of their work with audiences. Art audiences have thus also experienced the changes resulting from artists’ continued pursuit of diverse forms of expression.

## 2. Contemporary fashion shows

The fashion show is one of the oldest forms of traditional fashion media. Many designers and brands have contributed to the transformation of fashion shows (Duggan, 2001). Fashion shows are also called runway shows. They are defined as a marketing event that put designers’ styles on display and they range from “haute couture,” which means a luxury boutique, to “pret-a-porter,” which means ready to wear. Fashion shows are usually held in showrooms or locations frequented by celebrities; recently, fashion shows have also been broadcasted live on the internet as virtual shows (Vilaseca, 2010). In the past, the fashion shows were simple events where models wore and “showed off” new styles to the public. However, contemporary fashion shows have become hybrid forms of performance art. Contemporary fashion shows deliver their concepts and images in diverse ways, seeking to convey the philosophies and messages of designers and brands while promoting sales. This means that fashion shows have become more important and meaningful in both commercial and artistic terms.

As a form of mixed media, fashion shows intermingle various media including show, art, culture, and new media. Intermedia, a term that became popular in the 1960s, describes the mixture of new and old genres of art (Breder, 1995; Higgins, 1967). The fashion industry leads the live streaming and 3D runway

regardless of time and place. In addition, along with the increasing importance of science, culture, and art, and the increasing variety of media such as social network services (SNS), intermedia fashion shows have become a more common means by which designers share their interests and ideas. Not only avant-garde designers such as Alexander McQueen, Viktor&Rolf, and Hussein Chalayan but also traditional designers such as Chanel and Burberry, have begun releasing intermedia fashion shows using various media to express their unique visions (Lee & Lee, 2016).

As fashion shows have developed, fashion show production has become a field of its own. The field of fashion show production requires creative ideas, quickness, and strong teamwork. Twenty or more top experts in various fields work together for between two and five months to produce 20-minute shows. The actual stage production of fashion shows involves the carefully choreographed movement of an average of more than 200 persons and the scale of these shows continues to grow, exemplifying the term comprehensive design (Kimbeck, 2011). Despite the related time and space limitations that other types of fashion media including ads and movies are not subjected to, contemporary fashion shows are the fashion industry's most effective and general marketing method. The artistry and popularity of modern fashion shows stem from the use of various creative and performance elements of modern media that take different visual and behavioral elements into consideration (Sung & Kwon, 2009). Indeed, contemporary fashion shows have now become a common part of civilized life because people can enjoy them through the internet, social media, and so on.

### III. Methods

#### 1. Analysis object

Brands and designers introduce the themes and clothing of season collections to audiences by com-

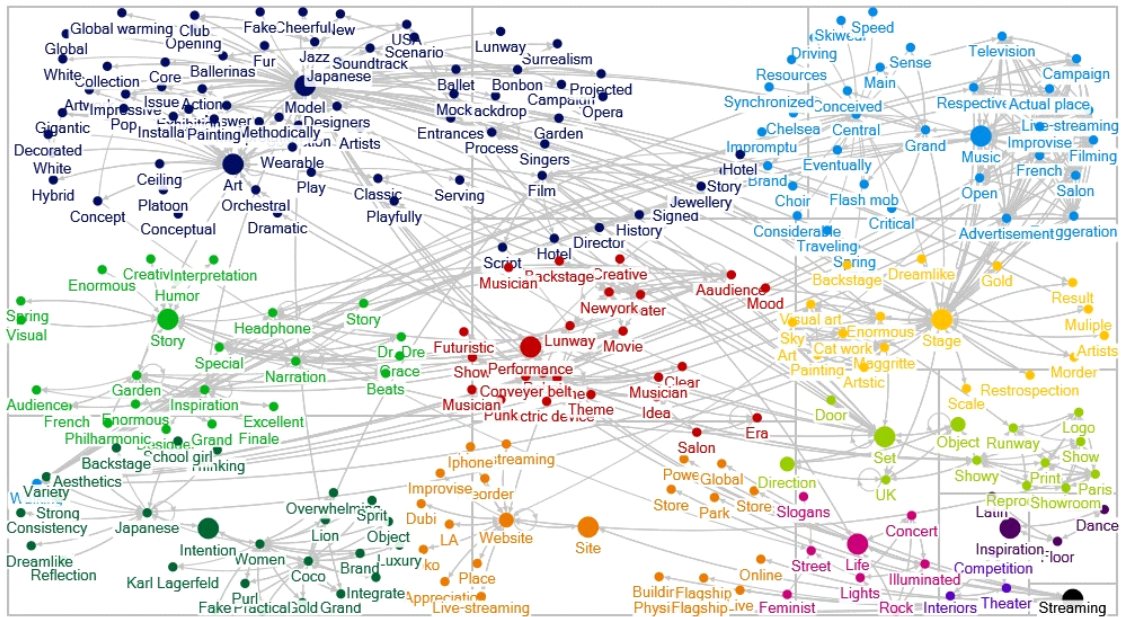
binning various elements including models, stages, and music in their fashion shows. This study analyzed fashion shows that combine various components including the clothing, with relationship from directing methods to designers and audiences. To analyze the characteristics of intermedia in contemporary fashion collections, we selected a range of designers who utilize intermedia in their fashion shows. We collected data by searching articles on fashion magazine sites (e.g., Vogue US, Vogue Korea, W Korea), designer's official website (e.g., [www.alexandermcqueen.com](http://www.alexandermcqueen.com), [www.chanel-news.com](http://www.chanel-news.com)), and Korean fashion information sites (e.g., [samsungdesign.net](http://samsungdesign.net)). We analyzed 159 articles covering twenty-two designers. Through this analysis, we collected content and words about fashion shows and intermedia tendencies.

#### 2. Analysis methods

We extracted keywords ( $n=253$ ) related to intermedia tendencies from 159 articles published since the 2000s. All articles covered the collections of 22 designers in New York, London, Paris, and Milan. We established the relationships among the keywords via an analysis of between centrality and applied the Clauset-Newman-Moore algorithm to interpret the cluster variables by using the KrKwic and NodeXL programs (see Fig. 1). Through this procedure, we determined the general characteristics of intermedia in contemporary fashion shows by combining similar concepts and common factors.

#### 3. Establishing analysis criteria using social network analysis

We observed that the Paris collection was most affected by intermedia. To communicate their brand philosophies to the public effectively, designers in Paris have put on numerous experimental fashion shows. Of these shows, we found the Channel collection (32 sections) in Paris to be the most intermedia-heavy show, followed by Rodart, Thome Browne, and Louis Vuitton. The results of the be-



<Fig. 1> Social network analysis for the contemporary fashion show

tween centrality analysis indicated that the most important factors in contemporary fashion shows are “models” and “stages,” which had the highest involvement in in-degree centrality and centrality. As mediators between digital media and fashion shows, websites also have high centrality; however, their in-degree centrality is lower since they are rarely used in fashion shows. As a result of cluster analysis, we identified ten groups of important factors in contemporary fashion shows as shown in <Fig. 1>. These groups are; model & art, music, intention, story, performance, stage, set, life, website & streaming, and inspiration.

Based on the similar concepts and common factors of these groups, we further classified the characteristics of the contemporary fashion show into the following four categories: “model performance,” “symbolic stage management,” “new media utilization,” and “convergence in arts.” Each category was analyzed by focusing on the representative designers who have high centrality with the words in the category among 22 designers.

## IV. Results and Discussion

### 1. Model performance

Performance is a genre of contemporary art, an experimental and avant-garde form of the performing arts. As these performing arts became popular, they became universalized in everyday words. Contemporary fashion shows emphasize performance elements that evoke multiple senses, so factors such as stages and models have close relationships with fashion shows. Contemporary fashion shows aim to deliver images through experimental production, deconstructing existing forms and creating new ones.

Viktor&Rolf is representative designers who produce model performances in fashion shows; it presented a romantic collection that incorporated the dancing of the Dutch National Ballet in the 2014 S/S Haute Couture collection opening that promoted the new perfume “BonBon.” From the artistic point of view, it was a surrealist fashion show in which the designers combined fashion, dance, and surrealistic art through model performance and other performance

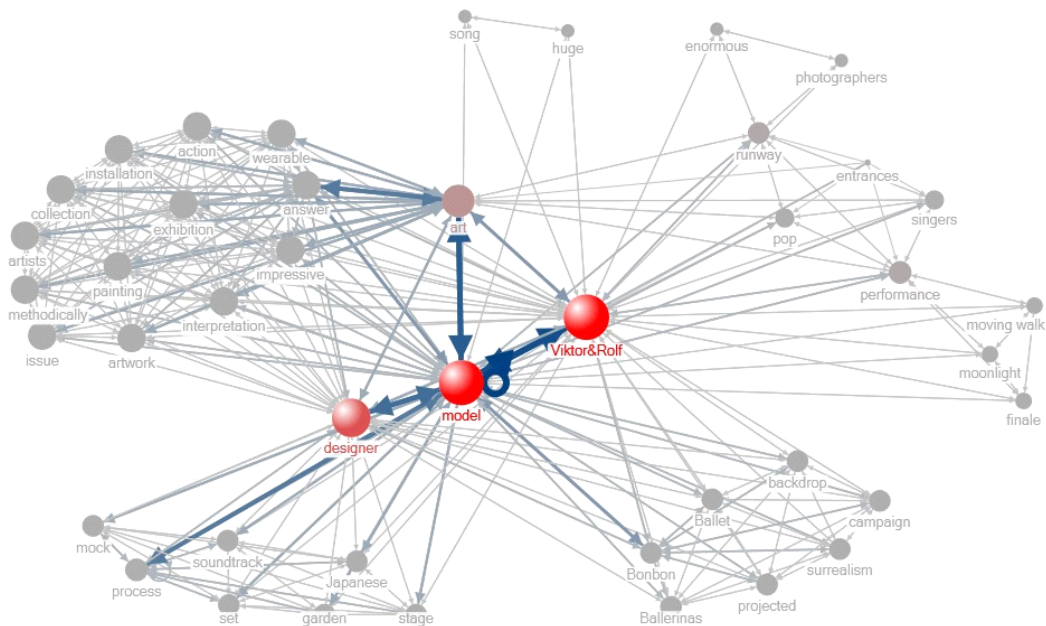
elements. Our analysis of articles identified “model” and “designer” as the main keywords (see Fig. 2). As such, model performance in the contemporary fashion show gives artistry through the performance of models and designers. These factors facilitate the production of newness and innovation, revealing to the audience the transformation and process of design that cannot be seen in the two-dimensional media like photographs.

## 2. Symbolic stage management

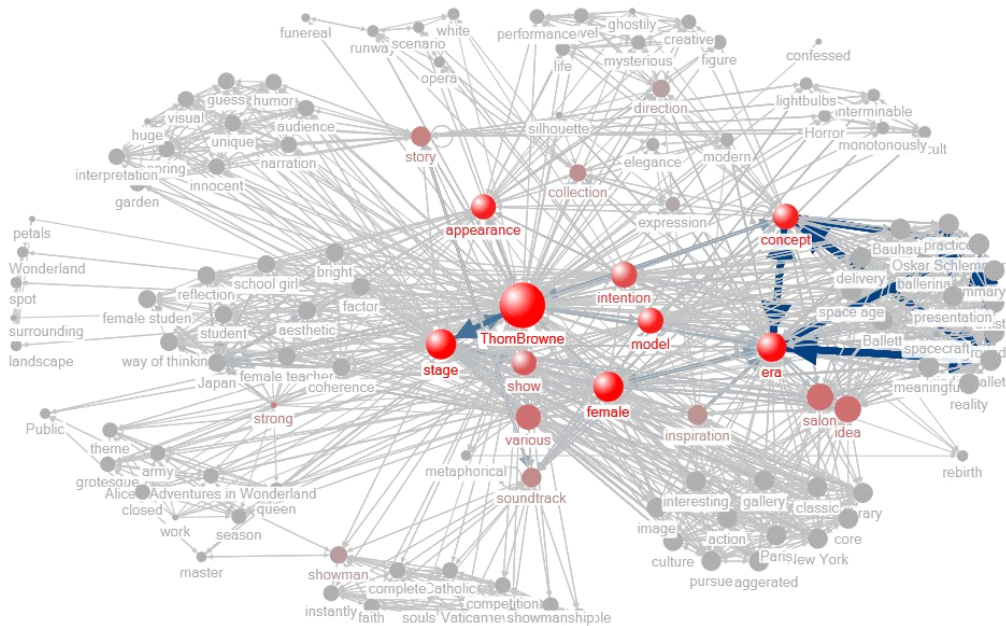
Stage management in contemporary fashion shows is a direct expression of the subject as a mediator between clothing and audience; it has gradually become a gorgeous and creative element used to maximize aesthetic effects. It can be said that it is a comprehensive art itself that makes the work of designers more outstanding, rather than simply a space for presenting works. Large-scale production has emerged as a means of creating an artistic stage, involving dozens of specialists in show direction, lighting design, location scouting, finances, music direction, and so on. The runway, which is the fashion show stage, is

among the most important factors in highlighting clothing. Recently, as the importance of stage design has increased, there has been an increase in the stage production, where professionalism and artistry stand out through the hiring experts. Therefore, stage management plays a role in enhancing and supplementing clothing. It also serves as a space to reinforce designers’ concepts.

Thom Browne is a representative designer in the use of symbolic stage management in fashion shows. He directs his own coherent fashion shows with theatrical stage designs that magnify storytelling elements and clothing themes to deliver his intended concepts to the audience. As shown in (Fig. 3), the analysis of articles identified the following keywords: female, concept, stage, intention, era, model, appearance, and show. The stage depicted a library, a gallery, a classroom, a garden, a salon, and so on, bringing visual entertainment and fashion show themes to the audience. In the 2016 S/S collection, a Japanese-style classroom was set up in the center of the stage; 28 models walked slowly into the classroom and sat down, and the show



<Fig. 2> Social network analysis of Viktor&Rolf collection



<Fig. 3> Social network analysis of Thom Browne collection

ended with a female teacher standing in front of the teacher's table. This scene was to reflect the aesthetics of Japanese female students, and the show utilized stage designs to convey this overall concept to the audience. As such, the symbolic stage management contains the intuitive and metaphorical symbol through objects and stage, depending on the designer's intentions.

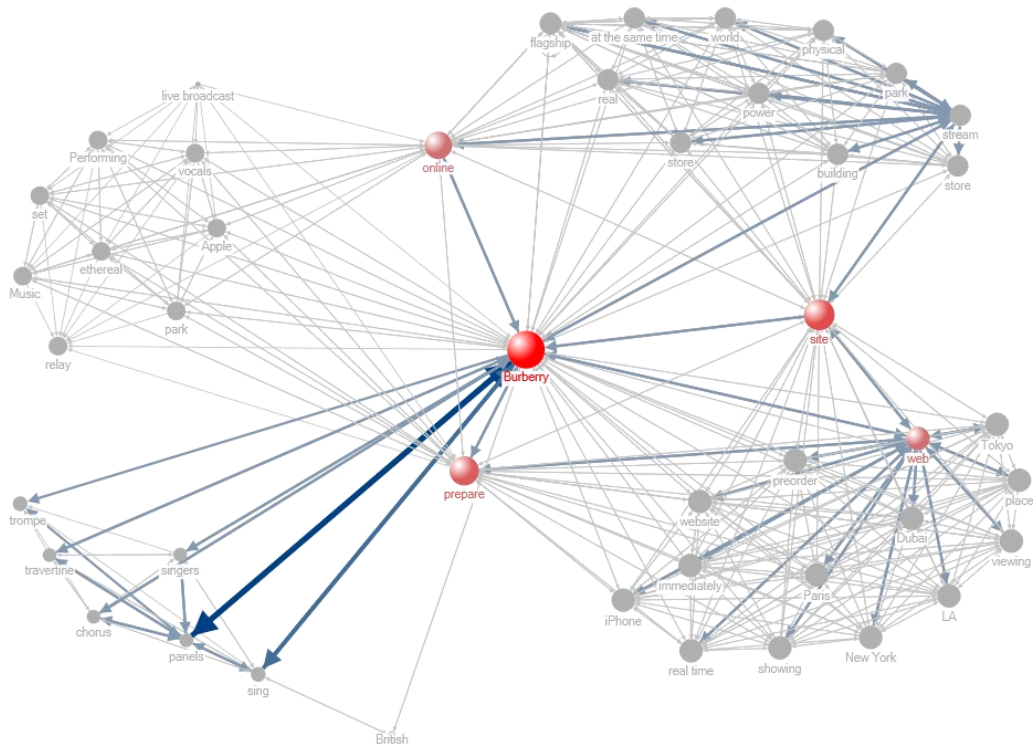
### 3. New media utilization

The advent of new media has produced many changes in people's perceptions and gradually expanded various means of expression in the field of fashion. Contemporary fashion shows have thus transformed into new media events targeting the global public (Rocamora, 2017). New media has introduced many revolutionary changes into contemporary fashion shows. In particular, interactivity, the most important characteristic of new media evident in SNS and live streaming services, functions as a means of communicating with audiences.

For example, Burberry's use of new media has had a great impact on contemporary fashion shows. In

spite of the recession, Burberry embraced the transformation from traditional to digital technology. Using new media, it delivered new experiences to audiences. Burberry steadily transformed its image by hiring young designers from Christopher Bailey to Riccardo Tisci. Additionally, it has maintained the tradition of using British brands by collaborating with musicians from the UK. Burberry utilizes new media not only in fashion show direction but also in marketing, as it conducts digital projects every year. In our analysis of articles published since 2010, we identified "site," "prepare," "online," and "web" as associated with new media keywords (see Fig. 4). Therefore, new media might be described as a typical characteristic of Burberry fashion shows. Since 2010, Burberry shows have been live-streamed through a variety of channels, including websites, Facebook, Instagram, and YouTube. The 2013 S/S fashion show, which presented a newly opened flagship store on Regent Street, as held in a park and simultaneously live streamed online. In addition, Burberry unveiled elements from its first straight-to-consumer collection in 2007.





<Fig. 4> Social network analysis of Burberry collection

Contemporary fashion shows have embraced a new direction by showing or selling collections directly to consumers using new-media. The development of new media has influenced not only the direction of fashion shows but also fashion companies' channels of distribution. Our analysis thus showed that contemporary fashion shows have broadened their methods of expression with a variety of applications, enabling them to communicate with the public and to establish brand images in the era of the Fourth Industrial Revolution.

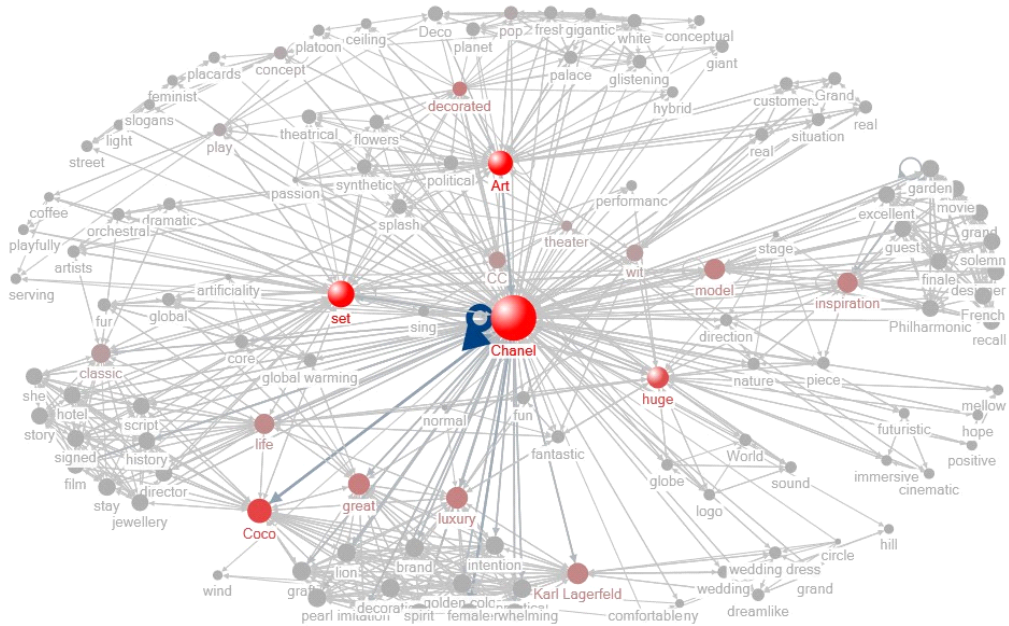
#### 4. Convergence in art

Artists who pursue intermedia convey their beliefs and philosophies through the medium of new art in various fields. This can be seen in the tendencies of contemporary fashion designers to collaborate across various fields of art to deliver themes and messages to their audiences at fashion shows. However, contemporary fashion designers are inspired by works of

art. They constantly seek to integrate artistic aesthetics into fashion by combining art with new styles, through collaborations with artists. The beginning of the fusion of fashion and art was a collaboration between Elsa Schiaparelli and Salvador Dali, which resulted in the creation of a surrealist fashion and artistic perspective on the early 19th century. In addition, Comme des Garçons collaborated with Merce Cunningham, one of the progenitors of modern dance, in 1997. Merce Cunningham founded a new movement with the Rei KawaKubo's dress. Fashion and art have gradually developed an interactive relationship that has blurred the boundaries between fashion and art.

According to our SNA of Chanel, the representative keywords associated with convergence in the art are "art," "set," and "huge" as shown in <Fig. 5>. The Chanel collections produce stage through convergence with art in various fields. The Chanel 2011 S/S Collection was presented on fashion show stage with the





<Fig. 5> Social network analysis of Chanel collection

motif of the Palace of Versailles. Additionally, in the Chanel 2014 S/S collection, The Grand Palais served as the fashion show's stage, displaying seventy-five of Lagerfeld's artworks. Thus, Chanel was pursuing to deliver the brand value to the customer through the combination of art.

## V. Conclusion

In this paper, we analyzed the use of intermedia in various artistic fields through objective and literature research, focusing on the characteristics of intermedia in contemporary fashion shows from a cultural and artistic perspective. Given that various media play mediating roles in the fashion industry and fashion shows, to examine intermedia in contemporary fashion shows, we conducted an analysis of intermedia trends in contemporary fashion shows using SNA. Significantly, to understand the current images of designer brands, we based this research on analysis of actual articles. We classified the results of the analysis into four categories—"model performance," "symbolic

stage management," "new media utilization," and "convergence in arts."

These results showed the considerable synergy between the characteristics and expression methods of intermedia and contemporary fashion shows. First, contemporary fashion shows are able to communicate between designers and audiences and thereby enhance brand images and broaden awareness. Thus, significantly, contemporary fashion shows not only allow designers to express themselves but also enable audiences to participate and communicate. Secondly, the use of various methods and techniques in personal expression can strengthen designers' characteristics and expand their influence to wider audiences; it can also increase brand power. Such diverse approaches increase audience interest in fashion, a desirable outcome for the fashion market. Ultimately, the fashion show of the past was an example of media creating a simple message, but the contemporary fashion show is understood to be a place of experimentation and performance.

This study is limited in that our interpretations of

the relationships between intermedia and contemporary fashion shows cannot be extended to the fashion shows of all designers, being limited to the analysis of contemporary shows. In addition, since this research focused on media that convey fashion to audiences and on the direction of expression, it did not take into consideration morphological factors such as the details of fashion design.

## References

- Breder, H. (1995). Intermedia: Enacting the liminal. *Performing Arts Journal*, 17(2/3), 112-120. doi:10.2307/3245784
- Duggan, G. G. (2001). The greatest show on earth: A look at contemporary fashion shows and their relationship to performance art. *Fashion Theory*, 5(3), 243-270. doi:10.2752/136270401778960883
- Higgins, D. (1967). Statement on intermedia. In W. Vostell (Ed.), *Dé-coll/age (Décollage) 6*. Retrieved June 24, 2019, from <http://www.artpool.hu/Fluxus/Higgins/intermedia2.html>
- Higgins, D., & Higgins, H. (2001). Intermedia. *Leonardo*, 34(1), 49-54. doi:10.1162/002409401300052514
- Intermedia. (1999). In Monthly Art (Ed.), *세계미술용어사전 [Art terms]*. Seoul: Monthly Art. Retrieved March 20, 2019, from <http://terms.naver.com/entry.nhn?docId=894928&cid=42642&caegoryId42642>
- Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, 65(10), 1480-1486. doi:10.1016/j.jbusres.2011.10.014
- Kim, H. H. (1993). *Fluxus*. Seoul: AP International.
- Kim, H. J. (2015). A study on understanding about directing methodology of media performance: Focused on directing structure. *Journal of Korean Society of Media & Arts*, 13(6), 143-158. doi:10.14728/KCP.2015.13.06.143
- Kimbeck, J. (2011, September). 더불어 주목할 만한 패션쇼 프로덕션 [Notable fashion show productions]. *Design*, 399, 106-107. Retrieved June 26, 2019, from [http://mdesign.designhouse.co.kr/article/article\\_view/101/57144](http://mdesign.designhouse.co.kr/article/article_view/101/57144)
- Kwon, K. R., & Kim, K. J. (2011). The art of tangle: Inter-media art. *The Korean Journal of Art and Media*, 10(2), 163-173.
- Lee, S., & Lee, Y. (2016). Relationship characteristics of intermedia and fashion show in the Chanel collection. *The Research Journal of the Costume Culture*, 24(3), 367-384. doi:10.7741/rjcc.2016.24.3.367
- Lin, Y., Zhou, Y., & Xu, H. (2015). Text-generated fashion influence model: An empirical study on style.com. *Proceedings of the 2015 48th Hawaii International Conference on System Sciences, USA*, 3642-3650. doi:10.1109/HICSS.2015.438
- Packer, R., & Jordan, K. (2002). *Multimedia: From Wagner to virtual reality* (Expanded ed.). New York, NY: W. W. Norton & Company.
- Phan, M., Thomas, R., & Heine, K. (2011). Social media and luxury brand management: The case of Burberry. *Journal of Global Fashion Marketing*, 2(4), 213-222. doi:10.1080/20932685.2011.10593099
- Rocamora, A. (2017). Mediatization and digital media in the field of fashion. *Fashion Theory*, 21(5), 505-522. doi:10.1080/1362704X.2016.1173349
- Spielmann, Y. (2001). Intermedia in electronic images. *Leonardo*, 34(1), 55-61. doi:10.1162/002409401300052523
- Sung, Y.-J., & Kwon, G.-Y. (2009). The design of a fashion storytelling method for fashion show. *Fashion & Textile Research Journal*, 11(6), 857-866.
- Vilaseca, E. (2010). *Runway uncovered: The making of a fashion show*. Barcelona: Promopress.
- Zhao, L., & Min, C. (2019). The rise of fashion informatics: A case of data-mining-based social network analysis in fashion. *Clothing and Textiles Research Journal*, 37(2), 87-102. doi:10.1177/0887302X18821187