

A Study on the Globalization Strategy of Korean Textile Design

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Abstract

This study discusses the strategies for the reestablishment of Korean textile industry by emphasizing the area of textile design which plays an important role in developing textile materials. The textile industry in Korea has been in stagnancy for a long period of time and appears to find no answer to the problem. The big part of the problem is that the industry itself does not realize the importance of textile design and its management does not understand its critical role in contributing the growth of the industry. To develop textile design, first, we need to foster textile designers who have the creativity, an understanding of international trend and a mind of management. This can be achieved through an education system with a close tie to the textile industry. Second, we need to globalize our textile design in three aspects: design, technology and marketing. A balanced and harmonized progression of these three aspects will guarantee a successful globalization of textile design. This progression, however, demands creativity, identity, and interaction on the design side, digital and networking on the technology side, and culture marketing, brand value, and global agent networking on the marketing side.

Key words: textile design, globalization, creativity, design, technology, marketing

1. Introduction

The development of high value-added materials becomes increasingly important for the textile industry to gain its competitiveness so as to reestablish itself as a future industry of the 21st century. Since the 1960s, Korea's textile industry has played a leading role as a main export business in the nation's economic growth. It, however, is faced with difficult problems of high wages risen fast since the 1980s and mass production-oriented industrial structure domestically, and pursuits by Southeast Asian countries including China, armed with price competitiveness, and protectionism of advanced countries internationally. The problems are not easy to

solve because the industry has focused on OEM-oriented exports based on the comparative advantage of price competitiveness. But such growth structure did not produce qualitative growth through material development of differential designs and technological innovation, even though quantitative growth was achieved by the mass production of low-priced goods. Therefore various high value-added materials should be developed to gain the competitive advantage of products for qualitative growth. The creation of high value added in textile depends on diverse factors including the features of textile itself, processing technique, new materials, and various designs. It, however, is essential to conduct systematic research to understand design and set up development strategies, since design is a

main factor in the commercial value¹⁾ and uniqueness of textile. Although intermittent research is found including case studies on textile designs in costume, and historical inquiries relating to the trend of art and traditional patterns, very few studies are done on textile design and its development strategies to develop high value-added materials in Korea.

This study examines the present state and problems of Korea's textile design industry by investigating and analyzing all the related circumstances. It then attempts to present strategies necessary for the nation's textile design to gain global competitiveness by benchmarking the textile industry of Italy, world-famous developer of high value-added materials. The purpose of the study is to contribute to gaining international competitiveness for domestic textile design by promoting the understanding of textile design and its importance in the development of high value-added materials.

II. The Present State of Korea's Textile Design Industry

1. The Concept of Textile Design

Textile consists of visual factors of aesthetic aspects relating to decorations, patterns and colors, and tactile factors of textural aspects relating to textile structure, weight and texture.²⁾ Textile design refers to the creative work of studying, creating and designing the combination and application of the visual and tactile factors, and its result. It is classified largely as weaving design, printed design, and knitting design according to production methods.

Weaving design is a method of designing

textiles by combining warp and weft components of various thicknesses, types and colors, while printed design is a process of decorating textile fabrics by application of various colors, patterns, printing techniques, pigments or dyes. Knitting design is a method of designing and studying knitted structures and design production methods relating to the choice of a needle, presser foot, and knitting machine using various kinds of threads with different colors and textures based on the basic principles of knitted fabrics.³⁾ In addition to the methods above, embroidery, lacing and felting are used to create new textiles.

Textile design is categorized largely as apparel design or interior furnishing design. Apparel design is subdivided into ladies' garment, men's wear, children's clothes and innerwear depending on uses, and various techniques and deformation factors are applied to the textiles. The cycle of textile design for apparel is characteristically shorter and more sensitive to a trend than that of interior furnishing design. Interior furnishing design has a longer cycle than apparel design, and is produced in consideration of harmony with interior space, users' taste, fashionableness, and housing types⁴⁾.

For the production of textile designs, three essential factors are to be considered : marketability, workability and artistry.⁵⁾ Marketability means that a product should be characteristically made to attract a wide range of consumers, and workability is processing possibility for a design to be produced as a good. Artistry is creativity, and aesthetic and sensuous features contained in the design. It is a good textile design when the above factors are systematically linked in har-

¹ Seon-Hwa, Lee. "A study on textile design in modern fashion". *Costume* 21. (Korean Society of Costume, 1993): 115.

² Renata, Pompas. *Textile Design*. (Editore Ulrico Hoepli Milano, 1998): 145.

³ Im-Seon, Ha. 'A study on educational plans and government policies for the globalization of textile design.' *Design Science Research* 12 (1). Korean Society of Design Science. 30.

⁴ Yeon-Sun, I.c.c. *Textile Design*. (Hyeongseol Publishing House, 1996): 13.

⁵ Seon-Hwa, Lee. *Textile Design*. (Mijisa 1995): 12.

mony with each other. Also the ability of prompt planning is required to provide new designs by swiftly responding to social and cultural changes.

2. The Importance of Textile Design

The domestic industry lacking global competitiveness and ability to develop its own designs, is forced to change confronting a crisis caused by developing countries, equipped with price competitiveness, and advanced textile countries with high value-added materials. In concrete terms, it needs technological investment for new material development, basis construction for differential material development, and the whole textile industry's shift to small batch production system. Textile design is a device to deal with such environmental changes and to promote the industry's steady growth⁶⁾. It implies the following significance for the textile industry.

First, textile design is an efficient tool of competition to create high value added. Merchandise can be differentiated with the least cost in the shortest period of time⁷⁾, and higher-quality and wide-ranged goods can be produced through the development of own designs and small batch production system.

Second, it is a means of changing into a system suited to market demand. It is a device to cope with diversified, individualized, and high-quality demands, and an adequate sector for product planning by QR system to promptly respond to the market changes.

Third, it is the best strategy to gain compe-

tiveness. Textile design is the best way to create unique materials so as to differentiate products of fashion firms, maximizing investment efficiency for business management. It provides a competition strategy to firms that want foster a global brand, since the investment on design development entails less risk than that on technical development.⁸⁾ Therefore textile design is an important tool and strategy to improve the competitiveness of both companies and products creating high value added.

3. Present State

Textile in Korea is an essential industry in the nation's economy occupying 18.7% of the manufacturing industry and 15.1% of its total employment. Especially, Korea is the world's fifth largest textile exporter, behind China, Italy, Germany and America, exporting 5.3% of the total textile exports in the world⁹⁾. The country, however, is far behind advanced countries in a qualitative aspect of the manufacturing rate of high value-added materials, unlike the great size. High value-added materials account for only 10% of the total production of materials in Korea as opposed to 65% in Italy and 40% in Japan¹⁰⁾.

Also the basis for design development is very weak with only 12, that is, 1.3% of 910 official design specialized firms¹¹⁾, engaging in textile design which creates the first high value added¹²⁾, and about 30 design studios and textile companies' own design departments using other designs by modifying them. The reason is that

⁶⁾ Eun-Oak, J.ee. "A plan to foster high added value in Korea's textile design (1)". *Fashion Business* 2 (2-4). (Korean Fashion Business Society, 1998): 40-41.

⁷⁾ Sang-Sik, Bak. *The directions and prospects of the development for Korean textile industry in the 21st century*. Home page of VerticalKorea Inc. (http://www.fatex.com/info/info_consulting36.asp), 1999-2000.

⁸⁾ *Ibid.*

⁹⁾ *The present state of the textile industry*. Home page of KOFOTI (http://www.kofoti.or.kr/textile/textile_main.htm).

¹⁰⁾ Dong-Su, Jeon. "The importance of fashion and textile raw material industries" *The Yearbook of Korean textile and fashion*. Korea Textile News. p.1265, 1997.

¹¹⁾ Korea Institute of Design Promotion. *A research on the conditions and present state of human resources in design companies*. Report of Design Census Project, 1998.

Korea has a shorter textile design history than Europe, as fabric designs, the original form of textile design, started to spread only in the late Chosun Dynasty with the development of the textile industry by machine productions¹³⁾. After the 1970s the nation gradually started to use textile design with the fast growing textile industry, and it now is considered one of the important design sectors with the growing social recognition of textiles' high value added. Textile design-related organizations in Korea are Korea Textile Design Association (KTDA), Korea Textile Converters Association, and the Federation of Korean Textile Design Studios.

4. Problems

The development of textile design is hindered by many problems although it has important value of expertise and as a strategical means for companies. Here the problems are examined in business, manpower, educational, and national aspects.

First, business-related problems are the pettiness of textile design companies, lack of industrial roles, and lack of understanding on the part of the management. It results in the firms' low investment in textile design and incapacity to develop their own designs making textiles suffer from the most serious damage of plagiarism and copy of designs¹⁴⁾.

Second, a manpower aspect reveals lack of professionals equipped with creativity, expertise, and international and managerial senses.

Third, educational problems are a shortage of educators and specialized institutions who understand the technical education and system of textile design to apply them to education, and

want of practical programs to connect education and the industry.

Fourth, in a national aspect, design-related trade policies are absent, and balanced, consistent and continuous policies to support and promote design are not found. Also people in charge or engaged in the industry lack expertise and continuation.

III. Benchmarking Italian Textile Industry

As of 1996, Italy's textile industry consisting of about 70,200 companies, records an annual sales of 84.5 trillion lire (USD 54.7 billion) with an annual surplus of 27 trillion lire (USD 17.4 billion) exporting about 50% of produced textile goods. It is an important national industry whose high value added creates 12% of the whole manufacturing industry hiring a total of 700,000 employees, 10 per firm on average¹⁵⁾. The industry shares the structural characteristics of Italian industries that account for over 99.3% of the total number of companies, 75% of employment, 75% of sales volume, and 65% of exports¹⁶⁾. Based on the structure, textiles in Italy respond to the global market flexibly, and build their own specialized fields cultivating specialized management skill. This chapter examines the elements of competitiveness in Italian textile design in industrial, social and cultural, business, educational, and policy-making aspects.

1. Industrial Aspect

The first element is the sound structure and tradition of minor firm-oriented business. The rate of smaller companies with less than 100

¹³⁾ Chun-Seob, Sim, *A study on the surroundings of textile design in Korea*. (Master's thesis in Myunggi University, 1992): 8.

¹⁴⁾ *Ibid.* pp.12-14.

¹⁵⁾ Korea Institute of Design Promotion. *A research on the conditions and present state of human resources in companies' design sector*. Report of Design Census Project, 1998.

¹⁶⁾ Korean Embassy in Italy. 2000. Italian economy. Home page of Korean Embassy in Italy (<http://www.mofat.go.kr/missions/Italy.nsf/intro3?OpenFrameSet>).

¹⁶⁾ *Ibid.*

employees in Italy's textile and fashion industries is 99.2%, higher than France with 98%, Britain 88%, Germany 81% and America 83%¹⁷⁾. The minor firms led the post-war industrialization as the foundation of Italian economy based on cooperative community spirit originated from the tradition of city-state, and contributed to the nation's growing into the world's 5th richest country relating to GDP in the mid-1980s¹⁸⁾. They have structural advantages over big companies, by which they can promptly respond to demand changes in the world market, and promote global competitiveness easily adopting high quality and small batch production. In Italy, minor businesses provide 75% of the total employment as a new source of employment which created 3 million jobs during the period of 1988-1993¹⁹⁾.

Second, a specialized design developmental system for each textile-related field by region is established by building a region-promoting foundation around a production center developing specialized regions based on traditional local industries. Silk in Como, Lombardia Province ; cotton dyeing, needlework, printing and finishing industries in Varese ; woolen fabric, weaving and spinning industries in Biella, Piemonte Province ; and apparel manufacturing industry in Vicenza, Veneto Province, and Treviso region. These are a few examples of specialized regional industries. In addition to that, knitting in Carpi, Emilia Romagna Province, and worsted fabric in Prato, Toscana Province are highly specialized, and specialized design companies based on local industries are closely related to manufactures.

Third, a horizontal system among companies

is established through the specialization and cooperation between large firms and smaller ones. Large enterprises plan marketing strategies to maximize sales, manage distribution channels, and supply investments for research and development (R & D). And minor firms take in charge of quality control for the highest product competitiveness, production, the accumulation of technology and expert training, and design development. Although textile and fashion industries mainly depend on the relationship between large firms and their subcontractors, specialized companies can improve their expertise required in manufacturing process due to the loose connection between the two²⁰⁾.

2. Social and Cultural Aspects

First factor is the establishment of a stable social security system. Workers are on welfare in case of unemployment, retirement, disability, illness and accident. Besides workers, independent small merchants and freelance workers also receive various benefits of pension, family allowance, unemployment benefits, and retirement allowance, provided that they contribute about 40.69% of their total monthly income. The rate of vocational changes is not high with a narrow employment opportunity, as employees contribute only 8.89% of their gross income and the rest 31.8% is paid by their employers²¹⁾. Moreover, many workers work for a company for a long time because they receive a pension with a working period of 35 or more years regardless of their age. As a result, professionals are cultivated in each field.

Second, it is the universal artisan spirit based on a subdivided social structure. Since the Re-

¹⁷ Japanese Industrial-educational Council for Apparel Promotion. 'Industrial-educational situations in France and Italy'. *Sumyu Journal*, (March 1997): 31.

¹⁸ *Ibid.*

¹⁹ *Ibid.*

²⁰ *Ibid.*

²¹ Korean Embassy in Italy. 2000. *Italian economy*. Home page of Korean Embassy in Italy (<http://www.mofat.go.kr/missions/Italy.nsf/intro3?OpenFrameSet>).

naissance, Italy has generalized the awareness of craftsmen by cherishing high-class sensuous industries and developing them into the tradition of a home industry and artisan spirit along with family-oriented management.

Third, they recognize the value of design as the first added value. Design, the first step of manufacturing process, is an important means to increase the value of a finished good, and the first design of textile raw material is a factor in estimating product value. Therefore the role of textile design is crucial for Italy's textile and fashion industries. Design companies are spread out nationwide including about 400 design development firms in the region of Como²².

3. Business Aspect

Firstly, it is the promotion of global business strategies through multinational market analysis. Efficient marketing is an essential basis for textile's global competitiveness, which along with distribution capacity, becomes a requisite to supply designs according to demands of a wide range of customers due to the globalized textile industry²³. Therefore Italy's textile design firms cope with market changes and consumer demands by planning designs based on accurate information and market analysis of each market obtained from local agents in target countries.

The second factor is the ability in information planning and production to present an international trend. Italian businesses lead demand changes by using the cooperative system between design and raw material companies to develop a common trend and present it to the world.

Third, hosting international design exhibitions and participating in other events. Comocrea was

held by Como Textile Design Association that promoted the industry's development to highlight Italian sense of image-making and creativity based on the nation's tradition and history. It is systematic publicity activities to introduce Italy to the world market establishing its place as the center of textile design²⁴. In addition to that, there are Ideacomo, Ideabiella, and Moda-In. Moreover international exhibitions like Heimtextil, Indigo and Interstoff are actively participated in to introduce and sell Italian textile designs.

4. Educational Aspect

First, an excellent system of design specialized education. Vocational education draw much attention in Italy with many smaller firms and less in-house training systems. National vocational colleges founded in each specialized region to suit its industrial features, foster professionals and promote local specialization through training programs on practical science.

Second, education is provided based on the cooperative system of industry-government-education. Italy's industrial-educational cooperation system runs in a way that each region studies and develops various policies based on a separate plan to cultivate human resources. Usually, a proposal is made first by the industry which then is supported by the administration (Chamber of Commerce and Industry), and later they are joined by educational institutions²⁵. Although most of the educational institutions newly founded in the 1990s were based on the cooperative system, the government rarely leads the activities. These are some examples of such institutions : Industrial laboratory (PIN) and

²² Eun-Oak, Lee. "A study on high value-added strategies of Italian textile industry". *Fashion Business* 1 (2). Korean Fashion Business Society. p.67. 1997.

²³ Federation of Korean Industries and America's DRI. "Competitiveness reestablishment strategies for Korean textile industry". *Year in Review 1997: Textile and fashion*. (Korea Textile News, 1997): 423-424.

²⁴ Eun-Oak, Lee. "A study on high value-added strategies of Italian textile industry". *Fashion Business* 1 (2). Korean Fashion Business Society. (1997): 69.

²⁵ Japanese Industrial-educational Council for Apparel Promotion. "Industrial-educational situations in France and Italy". *Sumyu Journal*. (March 1997): 31.

Vocational training center in Prato, Information center for textile (CITER) in Carpi, Research city (Citta' Studi) in Biella, and Design center in Como.

5. National Policy Aspect

First, the formulation and smooth operation of supporting policies by the government. The central government sets up and enforces a variety of policies and plans, while local governments are in charge of the execution of policies and the foundation of smaller firms in the region. Such division of works between the supporting central government and local ones prevents any possible overlap of investments in the process of policy promotion.

Second, a policy based on specialty can be set up due to the establishment of a cooperative system between related organizations. For mutual supports of smaller firms, diverse cooperative associations - co-ops, banks, mutual financing associations, business federations for craftsmen, promotion associations for science and technology, export associations, associations by sector, product and region, and information support center - are founded and run voluntarily in a small-business complex in each region. Also provincial governments, domestic and overseas offices of the Foreign Trade Corporation (ICE), and local offices of the Federation of Italian Industries (Confindustria) in cooperation, dispatch salesmen abroad, participate in overseas trade exhibitions, and promote exports based on a trade center in the chamber of commerce and industry of 20 provinces.

IV. The Globalization Strategies for Korean Textile Design

As mentioned above, the three important factors for textile design are marketability, wor-

kability and artistry. In other words, it should be possible to manufacture creative and sensuous products out of textile designs to attract consumers. The textile industry, in particular, is required to provide varied and subdivided designs according to consumer tastes and purposes, and the current of the times. Recently textile design, deviating from a simple aesthetic view, is considered managerial strategies which produce the biggest result with the least cost in the shortest time, as a re-creating work creating new value added, directly connected to commercial value of products, practicality and symbolism to satisfy consumer demands²⁶. Moreover, the development of information and communications networks such as satellite communications and the internet accelerates globalization and openness by networking the globe. Consequently, information and choices of consumers diversify, and suppliers are faced with severe competition in the global market. Therefore the globalization of textile design is crucial for the industry to improve its competitiveness, and strategies are required to combine the three factors, design, technology and marketing, systematically.

1. Design

Design refers to the result and a series of process of gathering expert knowledge from various fields to create a new concept that is concrete and visual²⁷. Especially, textile design characteristically combines art and industry, in addition to designers' originality and abilities to express and construct their experiences and creativity. On that account, it is necessary to understand the designing process thoroughly including textile raw materials and constituents, technology, trends and market analysis. Textile design should include such factors as creativity, identity and interaction to be competitive, with

²⁶ Guk-Hyeon, Jeong. *Looking for a new value of the 21st-century design*. Samsung Design Institute (2000): 94-95.

²⁷ In-Seok, Bak *Design as art, design as business*. (Lecture at Duksung Women's University, 2000): 3.

the factors harmonizing and blending with each other.

First, creativity refers to designers' creating and thinking power to solve problems arising from the demands of the times and situations, based on their individuality, and aesthetic and artistic senses.

Second, identity is the characteristics of local culture, and the appropriateness of purpose and use based on the understanding of manufacturing process and originality of design to be developed.

Third, interaction stresses that textiles should be designed to gain universality for mutual communications without limited to a particular region or culture. And it is an essential factor for us to globalize our sense and sensibility.

2. Technology

Today's information society led by the development of computers and communications rapidly reproduces information on a progressive scale. Especially in the field of design, the rapid change of designing tools by computerization and networking even more accentuates the importance of creativity. The reason is that now designers are required to have a different level of abilities to promptly respond, with information, to the changes and trends of technology, as well as the traditional requisites of the formative sense and ability to express²⁸⁾. In that sense, the use of digital and networking factors is crucial for textile design, since it will innovate both designing process and management, and therefore, create a new industrial field. In fact, besides the design development using CAD, solutions connected to a manufacturing system and a transaction system using the internet, and digital printing are now used in various ways with much potential after the developmental stages. Therefore the design sector is given a

new definition in the digital age, and investment is increased with systematic approaches.

3. Marketing

Efficient marketing is an important basis for competitiveness in the international textile market. The information age prompted globalization causing consumers' information collection and use to expand to a wide area. Consequently, the success of the textile industry depends on the supply of designs that satisfy diverse demands of consumers²⁹⁾. So it is necessary to develop designs adequate to the trend of globalization, and to formulate efficient and distinctive marketing methods to improve design competitiveness and maximize sales. The following are three definite and practical strategies : culture marketing, brand value and global agent networking.

First, culture marketing is a strategy for the identity of design, for it will fall behind the times without a tradition of unique cultural identity and innovation. Each country in the world regards design as a cultural enterprise or the knowledge industry when cultural wars among countries are expected in the 21st century. On that ground, the strategy stresses to develop designs containing both tradition and innovation in harmony and balance to be accepted by the world's universal sense.

Second, brand value is a strategy to develop design products. It is to understand sensibilities contained in textile raw materials in the design developing process, and to choose colors and motifs suited to the brand image and concept. And the nature of the brand varies depending on the emphasized factor. The strategy is used by companies and designer-brands to emphasize their brand identity and develop unique designs which can be visually and immediately distinguished from other products in the market³⁰⁾.

²⁸⁾ Guk-Hyeon, Jeong. *Looking for a new value of the 21st-century design* (Samsung Design Institute, 2000): 97-98.

²⁹⁾ Federation of Korean Industries and America's DRI. 'Competitiveness reestablishment strategies for Korean textile industry'. *Year in Review 1997: Textile and fashion* (Korea Textile News, 1997): 423-424.

Third, global agent networking is a distribution strategy of design. As designs are sold not only domestically but internationally as well, various information on each market and accurate market analysis exert a great influence on the development and sale of designs. Therefore the role of local agents, armed with know-how of local sales channels and general knowledge on design preference patterns, consumer trends and culture, is very important. It is a systematic networking strategy by which such agents are organically connected and used.

V. Summary and Conclusion

Textile design, the first step to added value in the textile industry is a prompt measure of fashion companies to cope with changing demand of the times and consumers. The industry in Korea, however, is unable to present diversity of small batch production due to its limited capacity to develop its own designs in the structure of long-lasting mass production system. The thesis examined textile design, a main player in developing high value-added materials, in terms of its concept, importance, present state and problems. It then suggested ways to revive the textile industry by studying design globalization strategies to develop designs that are internationally competitive.

Textile design refers to the creative work of studying, creating and designing the combination and application of the visual and tactile factors, and its result. It is classified largely as weaving design, printed design, and knitting design according to production methods. Textile design is important for the industry because it is : first, an efficient tool to create high value added ; second, a means of changing into a system suited to market demand ; third, the best strategy to gain competitiveness. But its development is hindered by many problems. Business-related problems are companies' pettiness, lack of roles, and lack of understanding on the management's

part. Lack of experts with creativity, and global and managerial senses in manpower aspect, and a shortage of specialized educators and institutions, and need of practical methods of industrial-educational cooperation in educational aspect are pointed out. Problems in national aspect are the absence of design-related policies, imbalance of supporting policies, and lack of consistency and continuity in promoting policies. Pointing out the problems, the paper benchmarked the textile industry of Italy, the global giant of textile development, and examined its competitiveness factors in industrial, social and cultural, business, educational, and national policy-making aspects to consider them in establishing globalization strategies of Korean textile design.

Textile design by nature accommodates both industries and art, and in the global market with diversified information collection and choices of consumers, the globalization of Korean textile design requires such strategic factors as design, technology and marketing. The balance and harmony of the three factors strengthen the competitiveness of textile design. And design among them is based on creativity, identity and interaction. Technology refers to the innovations of designing process and management by digital and network systems, while marketing consists of culture marketing, brand value and global agent networking strategies.

Textile design is an important strategic program, necessary for a designing basis to realize the globalization and development of the textile industry. Therefore promotional and supporting policies are required to be set up on the governmental level along with systematic researches on it. Moreover it is crucial to establish a cooperative educational system of the industry, the government and schools to foster professionals for the future of the design industry, a main cultural industry. On that account, researches in different angles should be continued including database building for creative development of design, models for design development,

¹⁰ Renata Pompas, *Textile Design* (Editore Ulrico Hoepli Milano, 1998): 146.

developmental methods using a digital system, and sales process and distribution strategies.

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