

时尚对话2012 BIFT-ITAA 国际联合研讨会论文集

Proceedings of
Fashion Dialogue 2012
BIFT-ITAA Joint Symposium

刘元风 (美)拉托尔 (Littrell, M.) 主编

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Preface: The BIFT-ITAA Joint Symposium, "Fashion Dialogue 2012"

"Fashion Dialogue 2012"-The BIFT-ITAA Joint Symposium was successfully held in Beijing this March, in conjunction with the China Fashion Week. The symposium was organized by the Beijing Institute of Fashion Technology (BIFT) and the International Textile and Apparel Association (ITAA), co-sponsored by the China National Apparel Association, China Association for Fashion Designers, and China Textile & Apparel Press.

During the symposium, one hundred and twenty eight scholars from 9 countries and regions, such as China, the U.S., and Canada, presented a total of nearly 200 research papers and designs. The themes included Consumer Behavior, Design and Aesthetics, History and Culture of Costume, Fashion Buying and Merchandising, Visual Merchandising, Fashion Education, Socio-psychological Aspects of Dress, Sustainability and Social Responsibility, Textile and Apparel Industries, Textile and Clothing Science and Technology. Symposium participants also visited a fashion company and a designer studio and attended a couple of fashion shows held during the China Fashion Week.

The symposium represented the first collaborative effort between BIFT and ITAA, and we were honored to be the host. Beijing Institute of Fashion Technology is one of China's leading universities specialized in apparel education. Our philosophy is "discovery, innovation, and application". We strive to achieve a balance between art and science. For three consecutive years, BIFT has won the Second Place in National Science and Technology Award. BIFT has been involved in a series of high-profile design projects, including uniform designs for the 2008 Olympic Games and Paralympic Games, clothing design for the 60th anniversary of National Day Celebration, and development of inner-shuttle uniforms and accessories for the Chinese Astronauts of the Shenzhou 7 Task and Shenzhou 9 Task. As the premier clothing and textile professional organization, ITAA is committed to the core values of "discovery, dissemination, application, and leadership". We are very pleased that the BIFT-ITAA 2012 joint symposium was able to build a platform for scholarship exchanges, cultural interactions between the East and the West, as well as global networking.

Since October 2010, the "Fashion Dialogue 2012" BIFT-ITAA joint symposium planning committee has worked diligently on every step of the process from planning, implementation, to coordinating details on publishing the Research Paper and Design book series. Today, we are very proud to announce successful completion of this project with the books. Sincere appreciations go to Prof. Mary Littrell, Prof. Yu Hong, Prof. J.R. Campbell, and Prof. Kim K.P. Johnson for their hard work at initiating and implementing the symposium; a special "thank you" goes to Prof. Mary Littrell and Prof. J.R. Campbell for their contributions as the books' editors; heartfelt "thanks" also go to the BIFT team for their dedication to the project.

I hope that as the political, cultural and economic center of China, Beijing and its culture and beauty has left you with great memories to cherish. We look forward to once again collaborating with ITAA and meeting all of you in the near future.

Prof. Liu Yuanfeng
Chairman of BIFT-ITAA 2012 Organizing Committee
President of Beijing Institute of Fashion Technology
Beijing, China

前言：时尚对话 2012, BIFT-ITAA 国际联合研讨会

今春 3 月，北京国际时装周期间，“时尚对话 2012”国际联合研讨会在北京服装学院圆满举行。此次研讨会由北京服装学院和国际纺织与服装协会共同组织，由中国服装协会、中国服装设计师协会、中国纺织出版社等机构协办。

会议期间，来自中国、美国、加拿大等 9 个国家和地区的 128 位作者就消费者行为、设计与美学、历史文化、采购及营销、视觉营销、教育学、社会心理学、持续性与社会责任、纺织与服装行业、纺织与服装科学与技术设计等议题展开研讨与陈述，共发表论文和作品近 200 篇（幅）。同时，时装周期间的企业、行业参观及时装秀场观摩，为与会者提供了了解中国文化与现代服装产业的机会，促进了东西方服饰文化与技术的交流。

此次会议是我校与国际纺织与服装协会的首次合作，很荣幸研讨会在我校举行。北京服装学院是全国唯一以服装命名的高等学校，一直秉承“求是创新、学以致用”的办学理念，坚持“艺工融合”的特色办学。学校连续三年获得国家科技进步二等奖；承担了 2008 年奥运会残奥会和国庆 60 周年系列服饰设计、神七、神九舱内服饰设计等重大设计任务。ITAA 作为重要的纺织服装专业组织，强调“发现、传播、应用和引领”等核心价值观。很高兴此次国际联合研讨会为新老朋友搭建了相聚的平台、学术交流的平台、东西方文化碰撞的平台。

从 2011 年 10 月到今秋，整整 2 年的时间，“时尚对话 2012”BIFT-ITAA 国际联合研讨会从策划、实施、举行、到此次论文集与作品集的出版，终于可以画上完美句号。在此，我们真诚地感谢 Mary Littrell、俞红、J.R. Campbell 和 Kim K. P. Johnson 四位教授在促成和完成此次研讨会期间所付出的努力；诚挚地感谢 Mary Littrell、J.R. Campbell 在论文集、作品集编辑环节付出的辛勤；衷心地感谢北服团队在整个项目实施过程中付出的辛苦。

希望北京作为中国政治、文化、经济中心，以源远流长的文化、海纳百川的胸怀、国际大都市的魅力，给您留下美好的记忆。期待再次的合作与相聚！

刘元风，教授
BIFT-ITAA 2012 组织委员会主席
北京服装学院院长
中国 北京

Preface: Research and Teaching Papers from the ITAA/ BIFT Symposium, Fashion Dialogue 2012

Jana M. Hawley

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The journey from the original concept of a joint conference to this set of books was a long, arduous, but very stimulating one. The first idea was to hold a joint conference between members of the International Textile and Apparel Association (ITAA) and the Beijing Institute of Fashion Technology (BIFT). As scholars from across the globe came together for the conference, it became clear that it would be important to capture the event through a printed collection of the scholarship and designs. The result is this set of books, including an expanded set of papers from the research symposium and presentations from both the design research and fashion gallery.

ITAA is the premier clothing and textiles professional organization committed to discovery, dissemination, application, and leadership. BIFT is renowned as the unparalleled fashion school in China and offers top-ranked education in fashion technology and business. In March 2012, the two groups convened in Beijing, China for a three day conference called Fashion Dialogue 2012. As the capital of China, Beijing provided a political, cultural, and economical backdrop for the symposium with her time-honored history and distinct cultural nuances. Not only is Beijing renowned for its opulent palaces, temples, and stone gates, but the city is a reflection of both century-old art and contemporary design. Cultural events included tours of the Forbidden City, The Birds' Nest at the Olympic Village, traditional tea ceremonies, and an excursion to the Great Wall. In addition, attendees toured the corporate offices of Aimer, a leading lingerie company. The conference was organized alongside the 2012 Mercedes-Benz China Fashion week. Conference attendees were able to attend three Mercedes fashion events including a peer-reviewed show featuring the work of BIFT/ITAA scholars, a student show, a solo design show, and pre-show galas.

The purpose of the joint symposium was to provide a venue for peer-reviewed scholarship and juried presentations of designs in the context of textiles and fashion. Several key features of the symposium included the Designer Educator Exhibition which showcased exceptional design work and allowed for design educators to present the purpose, context, and insights of their work in live galleries, mounted research, or oral presentations. Key themes for the research included sustainability, design, marketing, consumer behavior, history, and sociology of dress. This broad spectrum of sessions provided opportunity for scholars to share their work and connect with others with similar interests. There were nearly 200 scholarship presentations, including more than 100 oral papers, 60 design presentations, and research posters. It was during the well-rounded conference that the idea for these books germinated because of the enthusiasm created from sharing research findings, fresh teaching practices, and inspiring designs. Without long hours and dedicated efforts by Mary Littrell, J.R. Campbell, Kim Johnson, Yu Hong, and Zheng Rong the project would not have come to fruition. We also thank the leading fashion publisher in China, the China Textile & Apparel Press, for their support in this endeavor.

On behalf of the International Textile and Apparel Association and the Beijing Institute of Fashion Technology, we trust you will appreciate and enjoy this edited collection of research, teaching, and design scholarship.

Jana M. Hawley, Ph.D.
Counselor
ITAA

前言：时尚对话 2012，BIFT-ITAA 国际联合研讨会

从研讨会的组织举办至本套书籍的最终出版是一段虽漫长艰巨却又令人振奋的过程。我们最初的想法是组织一次由国际纺织与服装协会（ITAA）的成员及北京服装学院（BIFT）共同参与的研讨会议，但随着全球学者逐渐聚集到本次研讨会中，我们愈发清晰地意识到通过出版论文集与作品集来纪念此次盛会的重要性。由此，催生了本套书籍的最终出版：包括研讨会的论文全文及设计作品。

ITAA 作为首要的纺织品和服装的专业组织，我们的核心价值观是“发现、传播、应用和引领”。北服是中国顶级的时装学校，提供一流的时尚技术和商务高等教育。2012 年 3 月，北京服装学院和国际纺织与服装协会在北京共同组织了“时尚对话 2012”国际联合研讨会。作为首都，北京是中国政治、文化和经济的中心，具有悠久的历史 and 独特的文化品位。北京之所以著名，不仅仅因为其拥有华丽的宫殿、寺庙和牌坊，更因这座城市印证了百年艺术传统和当代设计的交融。会议期间，与会者参与了一系列文化活动，包括参观故宫、鸟巢、茶道和长城，同时，参观了中国著名内衣企业—爱慕内衣有限公司。恰逢 2012 梅赛德斯—奔驰中国时装周，与会者观摩了三场时装秀，包括一场 BIFT-ITAA 设计作品评审秀、一场学生作品秀、一场独立设计师作品秀和一场开幕酒会。

此次研讨会的目的是提供纺织服装领域学术与设计方面的交流。设计展览体现了本次研讨会的诸多特色，该环节不仅展现了设计师杰出的设计作品，同时为设计师搭建了互动交流平台，通过展览和口头发表等形式表达其设计目的、设计内容和设计领悟。此外，会议就服装产业的可持续性、设计、营销、消费者行为、历史和社会性等广泛主题展开讨论，为学者提供了分享作品和交流心得的机会。此次会议共发表学术作品近 200 篇（幅），包括 100 余篇口头发表的论文、60 余幅设计作品及数篇海报形式发表的研究论文。与会者交流与分享研究成果、教学体验和创新设计的热情最终推动了本套书籍的出版。在此，我们诚挚地感谢 Mary Littrell、J.R. Campbell、Kim Johnson、俞红等教授和北服团队为此次会议顺利召开付出的长期努力和无私奉献。衷心地感谢中国纺织出版社为此系列书籍出版给予的重要支持。

在此，谨代表国际纺织与服装协会和北京服装学院预祝各位阅读论文集与作品集愉快、开卷有益。

亚娜·霍利，博士
顾问
ITAA

Introduction: Research and Teaching Papers from the Symposium Fashion Dialogue 2012

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Fashion Dialogue 2012 brought together scholars from seven countries to share their latest research findings and to showcase innovative approaches for teaching of textile and apparel design, production, retailing, consumption, and use. In three days, from March 27 to 29, 2012, over 110 papers were presented. The symposium, hosted by the Beijing Institute of Fashion Technology and the International Textile and Apparel Association, was designed to initiate and sustain cross-cultural dialogue in looking to the future of the discipline. This book presents 49 expanded papers from the symposium. Scholars addressed textiles and apparel from a variety of perspectives and interests.

This book is divided into six sections. In each section, topics for the papers are briefly introduced and the methodological approaches employed by the authors are highlighted. Papers in Part 1 look to the past for historical and cultural insights on apparel and textiles. In the next two sections, Parts 2 and 3, authors analyze the essential elements of fibers and fabrics, and then address a variety of perspectives on design and production of apparel. Considerations for designing functional apparel for health, safety, comfort, and performance are offered in Part 4. Part 5 includes issues for conducting business from design, managerial, and consumer viewpoints. In the final group of papers (Part 6), authors challenge educators to consider innovative teaching approaches as they prepare the next generation of textile and apparel professionals. Together the 49 papers illustrate the rich array of approaches, methodologies, and topics around which the discipline of textiles and apparel can be explored, understood, and advanced.

Part 1 Looking to the Past

In looking to the past for understanding textiles and apparel, authors have drawn upon resources ranging from tomb murals and extant garments, to paintings, written documents, interviews, and surveys. Together the papers illustrate the vast resources and research methodologies at hand for scholars intending to illuminate how historical artifacts were designed and used.

Some papers focus on the origins and evolution of specific designs and motifs (1, 6). Others provide insight on historical garments such as the wearing of pants (3) and the shape and function of the Manchu shortage-fly-robe (4), as an early form of functional clothing for retaining body warmth and facilitating the hunting of game. Authors note the impact of trade and inter-cultural exchange as it led to stability and change in attire. Several authors describe the clothing of specific groups, including how the Khitan (5), Miao (6, 7), and Dong (7) peoples designed, wore, and used clothing. Insights on how embroiderers integrated basic elements for design composition, and how wearers followed taboos, expressed beauty and exhibited affiliation through clothing are offered. Details of a Black female traveler's clothing tell of how she created private and public identities (8). Finally, the definition of a languishing craft is provided as a means to encourage potential craft rejuvenation and income generation in India (9).

Part 2 Analyzing Textiles

Papers in Part 2 present research that considers fiber, fabric, and dye characteristics. Methodologies for analyzing textiles center on laboratory instrumentation, testing techniques, and exacting protocols.

Using the TRIZ approach, authors assess a device for processing yarns (11); also at the fiber and yarn level, researcher provide results on fabric performance from fibers with varying absorption and quick-drying qualities (12). Testing methods for colorfastness assessment of fabrics are compared with eyeballing (12). Penetration force of sewing machine needles on fabric is described as related to such factors as type of needle, needle angle, and fabric layers, with implications for apparel production (13). Several authors address use of natural plant dyes to counteract the growing global concern about environment effects from chemical dyes (14,15). In one case the rind of mangosteen fruit is analyzed as a natural dye and in the other a variety of plant dyes are assessed as they relate to hand dyeing practices. In a final paper in this section, the author utilizes textile science methodologies to analyze a historical gold mounting textile for textile conservation purposes (16).

Part 3 Designing Apparel

Part 3 brings together seven papers that progress from pattern design methods, to garment prototypes, and end with design applications for various end uses. Authors apply a variety of methodological approaches including pattern analysis and comparison, statistical analysis for assessing fit, field research, and creative scholarship.

In the first group of papers (17, 18), authors assess the impacts of various fabric manipulations on garment fit and aesthetics, and compare ratio and prototype pattern design methods. Next, problems associated with different pattern blocks are discussed, along with how to modify and improve them (19). In focusing specifically on knitted structures (20), authors explore various issues related to designing integral knit sweaters. Designers work from a variety of sources for design inspiration. In Papers 21 and 22, authors describe how Dunhuang arts and Chinese character patterns are used in apparel. In the final paper in this section (24), ideas are offered for how designers might develop fashion souvenirs for museums.

Part 4 Integrating Form and Function

Clothing comfort, performance, and safety emerge as critical parameters for individuals as they perform a variety of roles. In Part 4, the authors discuss functional clothing issues such as moisture absorption, sweat expulsion, steam and hot water exposure, fabric odor, chemical contact, and radioactive contamination. Data for these papers is derived from laboratory testing, using a variety of materials, fabric treatments, testing instruments, and wearer evaluations.

Results are presented related to comfort for low cut back vests as assessed through heat and body temperature adjustments (24), physical and physiological characteristics of various styles of volleyball sportswear (25), and odor intensity of fabrics with different antimicrobial treatments (26). Methodology for application of the functional apparel design process is described for outer layer clothing that is worn by workers exposed to steam and hot water during hazardous work in the oil industry (27). In two papers (28, 29), uniforms for school children and railway workers are examined for their safety, comfort and aesthetic features, with recommendations offered for improvements in design. Comparative assessment of Chinese and overseas standards for safety requirements and testing methods for hearing protectors, protection against radioactive contamination, and chemical clothing comprise the final three papers in this section (30, 31, 32).

Part 5 Conducting Business

Business owners, managers, consumers, and community residents provide insights for conducting business. Their attention is directed at change in the fashion industry, retailing revitalization, and business social responsibility and sustainability. Both quantitative and qualitative methodologies, including narrative analysis, are employed, with interviews and online and mails surveys as the primary data collection methods.

In the first two papers (33, 34), authors discuss the importance of product innovation and fashion shows to apparel industry development in the past and for the future. Retailing receives attention in the next two papers. The importance of retail revitalization for community satisfaction in rural areas (35) and features of window displays as an attraction tool or selective barrier in the luxury fashion market are assessed (36). Paper 37 is directed at micro-enterprises with a focus on strategies used for business organization from a cultural perspective. The final two papers (38, 39) address the increased attention given to corporate social responsibility and business sustainability in the apparel industry. Authors provide insight on psychological determinants of consumers' intention to purchase sustainable apparel and describe how industry leaders conceptualize social responsibility in the promotion and advertising of apparel.

Part 6 Teaching Future Professionals

Symposium participants encouraged participants to consider a variety of innovative teaching strategies and described successful teaching projects. In addition, they offered ideas for systemic transformation of an educational system. Among the teaching strategies discussed, authors share perspectives on an experimentation-driven studio course (41), integration of surface design courses into a curriculum (42), and use of digital techniques (43). Other authors describe experiences in teaching a bilingual fashion design course (44) and a NYC-based study tour (40), and in application of layered learning (45). In two papers, authors report results from a program to cultivate global entrepreneurs through international internships (46) and from a case study where teaching is integrated with research and funding in support of faculty advancement (47). In the culminating section, authors provide suggestions for improving the competitiveness of Chinese fashion students for employment (48). In the final paper (49), an example is offered of how one university has implemented curricular reform through strengthening industry and international university collaboration and diversifying their teaching approaches and curriculum.

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Part 1

Looking to the Past

Fashion Dialogue 2012
BIFT-ITAA Joint Symposium



THE VALUE OF BOND-PEARL LINE IN THE EXCHANGE ON THE SILK ROAD

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ABSTRACT

The Silk Road was a significant connecting of economy, culture, and technology between China and the West. During trading on the ancient Silk Road, the introduction of foreign patterns brought new vitality to traditional Chinese brocade art. Through research of the Bond-Pearl Line evolution and development, forms, performance methods, and decorative themes, we can analyze the Chinese human spirit that was reflected in the evolution of traditional patterns, and the profound impact on the society that was brought by Chinese-Western cultural exchange on the Silk Road. The Bond-Pearl Line gradually integrated with Chinese traditional patterns, and finally formed a new feature after development and change in several dynasties. This article, through sorting out the origin and development of the Bond-Pearl Line, summarizes its historical, cultural, and artistic value, thus helping to expand the modern value of this pattern.

Key Words: Silk Road, Bond-Pearl Line, Value

In the Xihan dynasty, Zhang Qian explored the route lead to West, which started from China Chang'an (now Xi'an), passed by Gansu, Xinjiang, central Asia, and some other west Asian countries, and finally reaches Europe. This ancient trade route, the Silk Road, was a significant link allowing exchange of economy, culture, and technology between China and the West. During trading across the ancient Silk Road, the introduction of foreign patterns brought new vitality to traditional Chinese brocade art. The Bond-Pearl Line pattern which was widely used in silk fabric is a typical style that emerged from this interchange, and has significant value for research.

The Bond-Pearl Line consisted of numerous circles. It originally prevailed in Persia in West Asia, and was introduced into the area of the Yellow River and the Yangtze River of China in the Southern and Northern dynasty periods. These kinds of decorations were found in the unearthed brocade of the Turpan tombs in Xinjiang, the murals of Mogao Grottoes of Dunhuang in Gansu, and the silk fabric of the Tubo tombs in Dulan, Qinghai. The Bond-Pearl Line was gradually integrated with Chinese traditional patterns, and finally formed a new feature after development and change in several dynasties. Based on the special historical period of its existence and the unique form it represents, this article attempts to analyze in three areas: historical value, cultural value, and artistic value.

1. HISTORICAL VALUE

The Bond-Pearl Line, originally used in Persia, was formed by circles. In Persia, it was often used in the relief decoration of palace buildings, and later was also promoted to adornment of fabric, pottery, and gold and silver articles. In China, the society was not very stable during the Southern and Northern dynasties period; the war diffused and caused migration of all kinds of minorities. During this period, the Bond-Pearl Line was introduced into the area of the Yellow River and the Yangtze River. The once extremely popular traditional patterns, such as floating clouds and animal patterns, gradually declined as a large number of patterns were influenced by Western themes. The Bond Pearl Line's full composition and symbolism of good fortune received people's widespread appeal and became a very popular decoration pattern in the Sui and Tang dynasties. The Bond Pearl Line embedded the following kinds of historical value.

1.1 The Emergence of New Knitting Structure

Since the Pre-Qin dynasty, the silk pattern of China was mostly in a horizontal strip arrangement. However, in the unearthed brocade of the Southern and Northern dynasties, there were textures with some new arrangements. The Bond Pearl Line appeared as a new knitting structure, including the circular, polygonal, arc, and a variety of other forms. It was formed in skeleton pattern with small circles. Together with cross combination with its theme pattern, the designer is able to present various new