

n Paul Gaultier, jumpsuit, nylon and Prada, ensemble, green silk twi index with cyber graphic print, 1996, multicolor print, spring 2008, ince.

S U P P O R T T H E M U S E U M

## **COUTURE COUNCIL**

An elite membership group, the Couture Council helps to support the exhibitions and programs of The Museum at FIT. Members receive invitations to exclusive events and private viewings. Annual membership is \$1,000 for an individual or couple and \$350 for a young associate (under the age of 35).

For more information, write to couturecouncil@fitnyc.edu or call 212 217.4532.

## **DESIGN MEMBERSHIP**

Through the Design Membership program, designers and other industry professionals gain unique access to the museum's holdings for the purposes of research and inspiration. Current members include fashion and home furnishing designers, manufacturers, merchandisers, and forecasters. The benefits of Design Membership include: assisted appointments to view objects from the costume, textile, and accessory collections; access to view and photograph approximately 100,000 textile swatches; and access to the Françoise de la Renta Color Room. Individual and corporate memberships are available at \$425 and \$1,250, respectively.

For more information, call 212 217.4578.

### **TOURS AND DONATIONS**

Every six months, a changing selection of garments, accessories, and textiles from the museum's permanent collection is put on display in the Fashion and Textile History Gallery, located on the museum's ground floor. Tours of the Fashion and Textile History Gallery and of the Special Exhibitions Gallery may be arranged for a sliding fee of approximately \$350. Donations of museum-quality fashions, accessories, and textiles are welcomed.

For more information about tours, call 212 217.4550; about donations, call 212 217.4570.

## The Museum at FIT

Seventh Avenue at 27th Street New York City 10001–5992 fitnyc.edu/museum

Museum information line: 212 217.4558.

Hours: Tuesday–Friday, noon–8 pm Saturday, 10 am–5 pm Closed Sunday, Monday, and legal holidays Fashion and Technology
December 4, 2012–May 8, 2013

Fashion and Technology was organized by Ariele Elia and Emma McClendon, along with Colleen Hill and Lynn Weidner.

The exhibition has been made possible thanks to the generosity of members of the Couture Council.

All photographs MFIT unless otherwise indicated.

Cover: Gareth Pugh, dress, silver finished polyurethane, spring 2011, England. Photograph by Scott Trindle.

Inside, left to right: Afternoon dress, silk taffeta using synthetic aniline dye, c. 1860, England; LilyPad Arduino, microprocessor, 2007, USA; Jacket (designer unknown), black silk crepe, 1926-1929, USA; Pierre Cardin, dress, "Cardine" with molded 3D shapes, 1968, USA; Yoshiki Hishinuma, dress, sheer polyester/polyurethane, fall 1999-2000, Japan; Thierry Mugler, evening dress, metallic lamé, c. 1979, France.

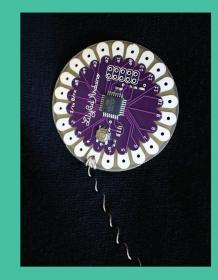
# FASHION AND TECHNOLOGY



THE FASHION AND TEXTILE HISTORY GALLERY
DECEMBER 4, 2012–MAY 8, 2013







Technology expands the aesthetic vocabulary of fashion even as it streamlines the process of clothing production. Today, the term "techno-fashion" is used to refer to a predominantly twenty-first-century phenomenon, but technological advancements were shaping fashion design and fabrication as early as the mid-eighteenth century. As fashion writer Bradley Quinn observes, "Technology has always been the essence of fashion . . . The fast-paced progress of technology complements fashion's ever-evolving aesthetic, and each gives the other a wider frame of reference and more scope to explore new horizons."

This exhibition investigates the impact of emerging technologies on the nature of fashion design and production over the past 250 years. *Fashion and Technology* focuses on innovations that have influenced the production, materials, aesthetics, and function of fashion. Objects on view range from garments that were made when certain, now familiar technologies were new—the sewing machine, for example—to clothes constructed from rayon and other man-made fibers. The exhibition also includes garments aesthetically inspired by technological developments, as well as clothes that were themselves created to function technologically, such as a jacket wired with an MP3 player.

The Industrial Revolution of the eighteenth and nineteenth centuries brought about innovations in textile manufacturing that included the introduction of the Spinning Jenny, the Jacquard loom, and the sewing machine. Design historian Penny Sparke points out that "the Spinning Jenny and Jacquard loom revolutionized the way textiles were both conceived and made." The Jacquard alone was ten times faster than hand weaving, and the Spinning Jenny mechanized the manufacture of cotton thread, thus enabling the mass production of cotton textiles. In addition, the introduction of synthetic dyes in the mid-nineteenth century allowed dressmakers to achieve the brilliant, fade-resistant colors that have become synonymous with fashions of that period.





In the first decades of the twentieth century, technology rapidly transformed the urban landscape. The most striking symbols of this change were the new buildings that were taller than anyone had ever seen, nicknamed "skyscrapers." As a way to express technological change, the Art Deco movement introduced a heavily geometric aesthetic to art and design. This futuristic style crossed over into fashion in the form of decorative motifs that appeared on a myriad of objects, from jackets to bathing caps. Innovations in rubber and plastic also found a variety of applications in fashionable items that included athletic shoes and evening wear.

Following World War II, fashion's engagement with technology surged again. Breakthrough developments as disparate as the washing machine and space travel had a profound impact on fashion. American designer Claire McCardell revolutionized the fashion industry by creating washing machine—safe sportswear engineered to meet the needs of the suburban housewife; across the Atlantic, Parisian couturiers Pierre Cardin and André Courrèges cited the space race as a primary inspiration for their new, youthful fashions. With the first man orbiting Earth in 1961, it seemed apparent to these designers that an era of recreational space travel was just around the corner. Therefore, they created looks that the fashionable woman could wear on a jaunt to outer space.

When Japanese designer Issey Miyake began collaborating with textile designer Junichi Arai in the 1980s, he introduced the fashion industry to a new generation of fabrics. These included unique blends of metallic threads and synthetic textiles. At the same time, Parisian designer Marc Audibet collaborated with DuPont to combine Lycra with cotton or linen to create a "bi-stretch" material that would revolutionize high-end sportswear.





In the late twentieth century, the rapid spread of personal computers and the introduction of the internet transformed culture. The impact of this transformation on fashion was felt when designers such as Jean Paul Gaultier turned to "cyberspace" for aesthetic inspiration, and computer aided design (CAD) programs, as well as computer-operated Jacquard looms, began to alter the ways garments were produced. In 1998, Helmut Lang became the first designer to debut his collection on the internet, making the high fashion runway show available to not only the fashion industry "elite," but also a larger, more internationally and demographically diverse audience than ever before.

Digital technology continues to transform the promotion, fabrication, and basic design of fashion. Companies like the Dutch design studio Freedom of Creation are taking advantage of developments in 3D printing to fabricate entire ensembles using a computer. Software-guided lasers cut and bond nylon powder within a 3D printer to create a finished product. At the micro level, advancements in sewable electronics (such as conductive threads and microprocessors that are integrated into fabrics) have enabled designers to create garments that can play music, answer telephone calls, and even monitor the wearer's heartbeat. In recent years, social media websites like Facebook and Twitter have been redefining the limits of fashion branding. For example, Burberry unveiled each of its spring 2012 looks on Twitter minutes before it appeared on the runway.

The interplay of digital technology and fashion has only just begun. As fashion designer Hussein Chalayan has said, fashion "will renew itself through technology, new fibers, new ways of making clothes. Without risk, nothing changes the world."

Ariele Elia and Emma McClendon, curators



## AND TECHNOLOGY