Fashion and Technology
Ariele Elia and Emma McClendon, Curators, FIT
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Summary by Kara Guarino

The Museum at the Fashion Institute of Technology (FIT) in New York displays multiple exhibitions including exemplary fashions and advancements from throughout the years. *Fashion and Technology*, running from December 4, 2012 to May 8, 2013 in the Fashion & Textile History Gallery, "examines how, throughout history, fashion has engaged with technological advancement and been altered by it" (fitnyc.edu). Co-curators Emma McClendon and Ariele Elia presented the four themes that were associated with the exhibit and how technology has impacted each of them, the fashion industry as a whole, and our every day lives.

Right off the bat, a video of Hussein Chalayan's Spring 2007 Paris runway show was shown. This video is also presented outside of the Fashion & Textile History Gallery to show the exhibit's viewers how advanced the implication of technological hardware into fashion garments has become. Chalayan's line included robotic elements that transfused each garment from having one use to a completely different use in minutes without the models moving or pressing a button to begin the change. This segued into the first theme of the exhibit, production. The Industrial Revolution changed the entire outlook of the textile and fashion industries. Two of the most important inventions during this time were the jacquard loom, invented in 1801, which was able to use up to 10,000 punch cards at once, and the sewing machine, invented in 1846, which sped up the sewing process. Displayed in *Fashion and Technology* is the oldest men's waistcoat and jacket from England, dating back to 1780-1800. They are knit textiles, which allowed for a closer fit, the first of its kind. Also shown in the exhibit was a sweater and culottes made by a raschel machine from 1978, a Dynel Cardin from 1968, a 3D printed dress and bag from 2003 created by laser sintering, and an Iris van Herpen dress from January 2013, which is the first flexible dress made from nylon powder. Another video was then shown to explain the process of 3D printing. Materialise, a company that creates prototypes using CAD software, created the Iris van Herpen dress by first bringing up the file into the CAD software, then printing by allowing the nylon powder to bond to the digital design of the dress. The dress was made in pieces because there is not a 3D printer big enough to create a full garment, so the pieces were then taken out of the machine, sandblasted to get the remaining particles off, and sewn together.

Materials is the second theme in this exhibit. Ariele took us through the different materials used from the start of the Industrial Revolution to today. One example was Suzanne Lee, a London-based fashion designer who has developed an eco-friendly alternative to leather. It is created from a green tea solution, sugar, yeast, and bacteria. The bacterium feed off of the sugar and spin a thread of cellulose fibers, which in turn creates a natural leather-like textile. Aesthetics is the third theme from Fashion and Technology, which is not necessarily technologically advanced, but has created a drastic shift and acted as an inspiration for fashion motifs. Some examples of this were Harry Gordon's paper dress from 1968 which was inspired by the International Space Race, Simon Thorogood's Dam Dress from 1997, inspired by drones or pointless aircrafts, and Louise Gray's Quick Response Code-inspired dress from 2012 which included not only QR code motifs, but an actual QR code that included an invitation to her Fall 2012 runway presentation. Finally, function is the last theme associated with this exhibit. The examples shown ranged from a bicycle ensemble from 1888 that included wide-leg trousers masked as a divided full-length skirt, making it easier for women to ride bicycles, to the LilyPad Arduino. The LilyPad Arduino is a microcontroller board created by MIT professor Dr. Leah Buechley in 2012, which connects to a computer and is coded to complete various functions. Many companies today use it for different end uses, including DIFFUS, a design company from Denmark that created The Climate Dress that tracks the CO_2 levels of nearby surroundings, visualized through LED lights embroidered into the dress.

The *Fashion and Technology* exhibit at the Museum at FIT has taught its viewers that not only does technology influence fashion, but fashion also influences technology. With the fast pace of both the

technological and fashion worlds, it is very plausible that new crazes will continue to pop up in the future. With that said, both industries are ever evolving and whether we realize it or not, our every day lives are impacted by the new creations made by engineers and designers.