

Textile Printing  
Richard Malachowski & Dr. Susan Hannel, URI  
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Summary by Amy Ferullo

As a former employee of Cranston Printworks and a current professor at the University of Rhode Island, Richard Malachowski provided a detailed history and overview of textile printing. Printing dates back 2000 years to the Chinese culture. Printings during early times were created manually, by stencils, or by blocks. The dyes used in this time period were derived from natural resources, such as roots or bark. “Industrial Printing” did not develop until 1690, when Richmond on Thames, the first printing company, opened in England. The revolution of machine printing began when engraved copper rollers were created in 1783. This technology lasted for about one hundred and eighty years. The dyes, however, did evolve over time. There were synthetic dyes created during this industrial revolution. Richard Malachowski included a photo of copper rollers in use at Cranston Printworks. It wasn’t until 1963 that copper rollers became outdated technology. Taking over in copper rollers place was rotary screen-printing, which is now the dominant method that is used.

Printing has greater depth than just technological techniques. Art is what drives the design of patterns and popular prints. Richard Malachowski stated, “color sells”. The best designs created are those that can appeal to the widest variety of markets, such as home décor, accessories, and apparel. There are trends in prints just as there are trends in silhouettes. Recent trends in prints have been skins, roses, retro colors, and stripes. With the rapid pace of fashion and trends being “in” for only a short amount of time, new prints need to be developed quickly. This is where the newest technology of Ink Jet Printing is useful.

Ink Jet Printing is a newer technology that still needs improvements to make the process smoother. However, there are advantages to ink jet printing over copper roller or rotary screen. Richard Malachowski made an excellent point that ink jet printing does not require screens to be engraved with the print, since everything is done digitally. This method also has no color waste, reduces the wastewater, and can produce samples and ideas immediately. The drawbacks to this new method of printing are the cost of ink, color saturation, and color limitations. There are current designers that are using ink jet printing in clothing lines.

Dr. Hannel, another professor at the University of Rhode Island, has experience with the ink jet printer owned by the school. She presented current lines created by designers who use the method. The designers are now creating their brands through prints. Designer Mary Katranzou is known as “queen of prints”. Her clothes are distinguished by the engineered prints on the apparel. Designer Dries Van Noten has created a line of clothing that features landscape photos digitally printed onto the apparel. Dr. Hannel also mentioned the drawbacks to the technology. Fabric and dyes age if they are not used right away, and this will cause damage to the printing heads on the ink jet printer.

Textile printing is more than just a pattern or design on a fabric. Richard Malachowski provided the different printing methods used to create the best selling fabrics we see today. Dr. Hannel provided examples of the newest printing methods being used on the runways today. Textile printing methods are constantly evolving, and even changing fashion trends.