

How Math is Infused in Fashion and Technology

Kyla Byam-Ramsay

Math is a versatile subject that can be applied to every aspect of life and is very much applicable in the world of fashion design and technology. Fashion and math complement each other because of symmetry and geometry. Symmetry occurs when exact parts correspond to each other on opposite sides of a plane, and geometry is the branch of mathematics concerned with the properties and relations of points, lines, surfaces, solids, and higher dimensional analogs (Merriam-Webster, 1828). When considering a design, it is important to look at the proportion, pattern, and lines because a designer can be delivering a message to the viewer using those same mathematical segments. Math is a crucial element of fashion design. Rei Kawakubo, one of the most inspirational fashion designers of the 20th and 21st centuries, shows us math throughout her collection “Comme des Garçons: Art of the In-Between,” including in her design “Self/Others.”

Rei Kawakubo is a Japanese designer who entered the industry taking a job at a textiles factory. In 1967, the designer then became a freelance stylist (Smith). After two years, Kawakubo started creating her own clothes with the name Comme des Garçons. Interestingly, Kawakubo never trained to become a designer; in fact, she studied art and literature at Keio University (Kawakubo). Her background in art and literature may have influenced the creativity within her designs. The designer is now “known for her avant-garde designs and ability to challenge conventional notions of beauty, good taste, and fashionability” (Kawakubo). “Rei Kawakubo/Comme des Garçons: Art of the In-Between”—which was featured in The Metropolitan Museum of Art’s Costume Institute Spring 2017 exhibition—examines nine expressions of “in-betweenness” in her collection. “Self/Other” is one of the nine collections where math is discreetly designed inside of the clothing.

“Self/Other” is among the favorite collections because it clouds the conventional thoughts of culture, gender, and age. The symmetrical balance of the blue and pink color in dress 7.3.1 aids in the representation of the male and female illustration, where blue represents the male and pink represents the female. Without the balance of color with the use of math, this collection could have gone a completely different route. If the colors had no symmetry and the blue had the dominant look, the dress could have implied the male is superior to the female, which would destroy the statement “blur the boundaries of conventional definitions of [gender]” (Rei Kawakubo/Comme des Garçons: Art of the In-Between, 2017).

Also, regarding the culture and age inspiration, dress 7.3.1 was a blue dress with a pink silhouette sewn on top of it. The pink dress was designed with a shorter and tighter fit, which I feel is intended to attract and be worn by the younger, modern generation. The blue dress was clearly designed with the same outline of the pink dress; however, it was longer and wider. The blue dress was designed and intended for a more mature generation. Although the two dresses have a completely different fit, Kawakubo designed them as one to create a statement of equality in culture and age. The proportion of measurements with fabric in this design is extremely important, especially since there are two generations of dresses on one figure—fitting them together is a task that can only be done with the use of math.

Math is a versatile subject that is critical to fashion design. The talented and brilliant fashion designer Rei Kawakubo proves that math can enhance the look of any piece of clothing; she infuses math in her designs as clearly evident in her collection “Self/Other.” Kawakubo’s work stands as testimony that math knowledge is critical to fashion design; without it, many designers would not know where to put certain patterns or items on a piece of their collection. The symmetry would be off. Fashion and math complement each other.

References

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Nominating Faculty: Professor Alyssa Dana Adomaitis, Business & Technology of Fashion 2255, Department of Business, School of Professional Studies, New York City College of Technology, CUNY.

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