Fabric manipulation techniques with optical illusion as design solutions for different woman’s body types

Wafaa Abd Elradi Qurashi
Assistant Professor, Fashion and Apparel Design Department, Faculty of Applied Arts, Helwan University, e-mail: warady@hotmail.com

**Abstract:**
This research is an innovative design attempt to create a single design model that fits many different types of the human body in women by dealing with reversible fabrics with fabric manipulation techniques in light of the application of the concept of optical illusion. The research relied on comparing two innovative types of fabrics using the technique of slashed tuck and 3d origami using cutting patterns, and they were applied to 4 different patterns of the woman’s body, so that 12 designs were produced for each of them, and accordingly a statistical study was conducted to find out the most suitable of these two techniques for each type separately and the best of them in general, which is 3d origami using cutting patterns technique. The different body styles of women are one of the biggest obstacles in choosing the clothes that suit them, and if we add to the above the overwhelming desire of women to permanently change their external appearance by using clothes, then this is one of the biggest difficulties they face. The researcher noticed the tireless attempt of fashion designers to address this problem in designing women’s clothes, but this was always costing manufacturers and producers a lot of money due to the return of clothes that do not fit the different styles of a woman’s body, and if we know that the different styles of a woman’s body fall under it a lot of diversity, which is impossible with traditional methods. That it fits one size, for example (hourglass body, rectangle body, pear body, inverted triangle body and apple body. Therefore, this research is an unconventional attempt to propose a design that fits several patterns simultaneously by dealing with reversible fabrics with the technique of manipulating fabrics under the application of the concept of optical illusion. **Problem statement:** The research problem can be summarized as follows: Can we use some fabric manipulation techniques with optical illusions to create designs that suit different types of women's body? What is the best technique for all women's body types to produce different and varied designs? **Research objectives:** Creating a piece of clothing that can be modified in more than one way to suit each body type using illusion through fabric manipulation techniques.

**Delimitation:** Design and produce women’s clothes by fabric manipulation techniques (slashed tuck - 3d origami using cutting patterns) using optical illusion concept for different woman's body types (Carrot–pear – rectangular– apple) for age group (30-40).

**Methodology:** Research follows the descriptive analytical method and application study.

**References:**
5. “Make It Reversible” -retrieved from: https://www.seamwork.com/magazine/2015/03/make-it-reversible
11. https://www.affordable.pk/ detail/how-to-choose-the-perfect-dresses-according-to-your-body-type
15. Ruth.S. “Fabric manipulation .150 creative sewing techniques”- David & Charles Publisher- UK- 2013

**Citation:** Wafaa Qurashi (2021), Fabric manipulation techniques with optical illusion as design solutions for different woman’s body types, International Design Journal, Vol. 11 No. 3, (May 2021) pp 411-421
Keywords: optical illusion - reversible fabrics - fabric manipulation.