

**Fashion design adapted from the parametric architecture for contemporary Egyptian women
Prof. Abir Swidan**

Professor of Interior Design - Department of Interior Design - Damietta University

Assist.Prof.Dr. Nashwa Elshafay

Assistant Professor, Department of Ready Made Clothes - Damietta University

Researcher. Esraa eldesoky

Master Researcher, Faculty of Applied Arts, Damietta University

esraa lost a@yahoo.com

The summary

Architecture can be used as an inspiration for a fashion design. It may seem a little surprising to use an architectural building as an inspiration for fashion design, but all examples of architecture, whether traditional or contemporary, can cause a creative spark to the designer. The advent of the industrial revolution, mass production and large-scale manufacturing industries during the last two centuries has had a revolutionary effect on architecture. The fathers of modern architecture, such as Le Corbusier, Mies Van der Rohe and Walter Gropius were inspired by the automobile factories and methods of the era; this gave birth to the computer as a design tool.

As a result, one of the new materials which have found its way on fashion catwalks and architecture is the ‘parametric’ Parametric design is a method of intelligently designing architectural objects based on relationships and rules using the computer. These are defined in parametric software and are easily manipulated to quickly generate multiple iterations of the design in 3D.

Some may suggest that fashion is as old as human culture, beginning with the introduction of clothing for Adam and Eve. However, others believe that fashion is an invention of the late middle ages. “Humans live inside clothes. Since time immemorial, clothes have been our second defense – the first being our own skin – against the elements. Buildings have been our third.” Since the beginning of time there has been this need for protection in the form of another layer, be it a building or clothing.

Architecture & Fashion Design Architecture can be an inspiration for a fashion design. It may seem a little surprising to use an architectural building as an inspiration for fashion design, but all examples of architecture, whether traditional or contemporary, can cause a creative spark to the designer

The inspiration for garment silhouettes and details can be found in almost any architectural source. The inspiring architecture may be a very familiar traditional building as well as an artifact somewhere in the world which may be very far away. Here interactive media is very important for the designer in getting to know the architecture as well as its different aspects. When the architecture is investigated by the designer an unexpected detail of a building may become one of the magnificent features of the garment design

Research goals

Reaching the concept of parametric through its applications and its impact on fashion design.

Research aims

-Developing and activating intellectual aspects of designers by using modern technology.

Making high light of parametric theory and benefit from it in architecture.

Confirm relationship between architecture and fashion design

Research limits

-Time limits: century (20) until now

-Area Limits: Egypt

Research tools

Previous studies of references, books and practical studies

-Published scientific researchs and the international research sites

Research plan

Theoretical frame

2-Studying the characteristics of parametric design in architecture

3-Studying the role of parametric in architecture in designing clothes

4-Collecting, registration and studying the theory of parametric in architecture of designing clothes in Egypt

Applied frame

Identifying the forms of parametric architecture

1- Knowing the advantages of the theory of parametric in designing clothes in Egypt

2-Using the theory of parametric to make new designing clothes to go with the times

Research problem

- Influenced fashion design architecture

- The influence of parametric architecture in fashion design

- The ability to highlight the aesthetics of parametric architecture in fashion design

Research methodology

The research used the following:

The descriptive and analytical methodology

Experimental method

References:

- حسين تحية كامل: "الأزياء لغة كل عصر", الفصل الأول، دار المعرفة ، 2002 ، ص 126 .
- husayn tahiat kaml: "al'azya' lughat kl esr", alfasl al'awal, dar almaearif, 2002, s 126.
- سويدان عبير: "مفهوم البارامترى وتطبيقاته فى التصميم الداخلى والاثاث", بحث، كلية هندسة، جامعة الدلتا، 2017.
- suayadan ebyr:"mfihum albaramtri watatbiqatih fi altasmim alddakhili walathath", bahath, kliat handasat, jamieat aldilta, 2017

- شوقي اسماعيل: "الفن والتصميم"، مطبعة العمرانية، الطبعة الثانية ، 1998 ، ص43.
- shawqi 'iismaeil: "alfan waltasmim" , mutbaeat aleumraniat, altubeat alththaniat, 1998, sa43.
- نبيل الشافعي نشوي: "الإستفادة من بعض مدارس الفن الحديث في تصميم الأزياء", رسالة دكتوراه، كلية تربية نوعية، جامعة المنصورة، جمهورية مصر العربية ،2002 م , ص 34 .
- nabil alshshafiei nshwy: "al'iistifadat min bed madaris alfini alhadith fi tasnim alazya" , risalat dukturat, kuliyat tarbiat naweiat, Jamieat almansurat, jumhuriat misr alearabiat, 2002m, s 34.
- هداية عباس: "العلاقة بين الهندسة المعمارية وتصميم الأزياء " ، رسالة ماجستير ، كلية هندسة ، جامعة شرق البحرين المتوسط ،2012 ، ص 13 .
- hidayat ebas:"alealaqat bayn alhandasat almuemariat watasmim al'azya' " , risalat majstir, kuliyat handasat, Jamieat shrq albahr almutawasit ,2012, s 13
- AGU. 2008. Advanced geometry unit at arup. Pages 34–67 of: Sakamoto, T., Ferre, A., & Kubo, M(eds), Fromcontrol to design. parametric / algorithmic architecture. Actar.
- McNeel. 2007. Modelling tools for designers. <http://www.rhino3d.com/>. [Accessed March 2009].
- Norberg Schulz, C. (2000). Architecture: Presence, Language, Place. Milan: Skira
- Roland Hudson: Strategies for parametric design in architecture, an application of practice led research, for degree of doctor of Philosophy University of bath department of architecture and civil engineering, 2010.
- Wang, J., Li, J., & Chen, X... Parametric design based on building information modeling for sustainable buildings, presented at the IEEE 2010 International Conference on Challenges in Environmental Science and Computer Engineering, 236-239.
- <http://www.arab-eng.org/vb/engr74086-2.html>
- <https://architectureandfashion.wordpress.com/2011/05/15/architecture-and-fashion/>
- <https://www.ukessays.com/essays/architecture/fashion-and-architecture.php>