

SHAPESHIFT

Mai Truong

The human body is an amazing structure. It can be pushed, pinned, and pulled into almost any form desired. For centuries the Egyptians and Greeks have based their architectural wonders off the proportions of the human body. Roman architect Vitruvius's¹ *De architectura*² payed homage to the human proportions in relation to the structure and form of architecture. In Book 3 (out of 10), Chapter 1, paragraph 2, Vitruvius writes:

“2..... Nature has so planned the human body that the face from the chin to the top of the forehead and the roots of the hair is a tenth part; also the palm of the hand from the wrist to the top of the middle finger is as much; the head from the chin to the crown, an eighth part; from the top of the breast with the bottom of the neck to the roots of the hair, a sixth part; from the middle of the breast to the crown, a fourth part; a third part of the height of the face is from the bottom of the chin to the bottom of the nostrils; the nose from the bottom of the nostrils to the line between the brows, as much; from that line to the roots of the hair, the forehead is given as the third part. The foot is a sixth of the height of the body; the cubit a quarter, the breast also a quarter. The other limbs also have their own proportionate measurements. And by using these, ancient painters and famous sculptors have attained great and unbounded distinction”.

Vitruvius' idea regarding architecture and the human form was most famously illustrated by Leonardo di Vinci³ in his drawing of the *Vitruvian Man* (Figure 1), which depicts a male figure in two superimposed positions with his arms and legs apart, inscribed in a circle and square. This idea of the perfect human being has led me to create a body of work called **SHAPESHIFT**.

SHAPESHIFT is a collection of five wearable designs that investigates the relationship between the structure and form of the human body through the use of architectural and excessive references. By using the façade of the human body as a canvas and manipulating its form and structure, the body *shape* begins to *shift*

¹ Marcus Vitruvius Pollio (born c. 80–70 BC, died after c. 15 BC) was a Roman writer, architect and engineer, active in the 1st century BC. He is best known as the author of the multi-volume work *De Architectura*.

² *De architectura* (English: *On architecture*, published as *Ten Books on Architecture*) is a treatise on architecture written by the Roman architect Vitruvius. The work is one of the most important sources of modern knowledge of Roman building methods as well as the planning and design of structures, both large and small.

³ Leonardo di ser Piero da Vinci (April 15, 1452 – May 2, 1519) was an Italian Renaissance polymath: painter, sculptor, architect, musician, scientist, mathematician, engineer, inventor, anatomist, geologist, cartographer, botanist, and writer whose genius, perhaps more than that of any other figure, epitomized the Renaissance humanist ideal.

into abstract structures. The end results in the human body not only becoming abstract structures, but also causing the body to become unproportional. Instead of aiming to create the “perfect, proportional” body, these wearables do the opposite. This collection also serves as an experiment with the visible layer of the human body and how it occupies space on the body and in the environment.

(Figures 2-6)

The inspiration for this body of work first came from my fascination with the human form and how easily it can be manipulated, transformed, and exaggerated. In the past and present, both men and women have manipulated the form of their bodies with the help of undergarments and other body coverings, to not only achieve a standard of beauty set forth by their peers, but also to break the limitations of the ordinary human. In doing so, the human body begins to transform into somewhat alien forms. One can see this through the use of corsets, armor worn during battle in the Middle Ages, lifejackets, and bulletproof vests.

The use of the corsets can be dated back to 2000BC, to The Minoans⁴ of the island of Crete⁵, where both men and women wore these body-altering garments. In the 1800s after the French Revolution, the corset was used to accentuate, rather than hide, the woman’s natural form, producing the corset shape that most of us recognize—an hourglass figure, with tight compression of the waist. Throughout the 1800s, corset forms became more and more exaggerated. Women’s clothing increasingly hugged the torso, and the corset squeezed in more and more of the body to create an “ideal” female shape from shoulder to thigh (Figure 7). During this time, an increase number of women wore them, and young children were also placed in them.

During the Middle Ages, armor provided the essential body protection from the various weapons that knights would encounter during battle (Figure 8). Padded

⁴ A Bronze Age civilization that arose on the island of Crete that came to dominate the shores and islands of the Aegean Sea. They flourished as a maritime power from approximately the 27th century BC to the 15th century BC.

⁵ The largest and most populous of the Greek islands, it is the fifth-largest island in the Mediterranean Sea, and one of the thirteen administrative regions of Greece. Crete was the centre of the Minoan civilization (c. 2700–1420 BC), the earliest "high culture" civilization in Europe, which built the first palaces in Europe.[]

garments and chainmail were used prior to the development of suits of armor and subsequently worn in conjunction with the armor suits. By wearing these coverings, men in battle were able to break the limitations of their ordinary bodies.

Architecture played a huge part in the creation of these wearables. I wanted to create pieces that consisted of geometric shapes as well as repetition. In all five pieces I incorporated the use of the triangle in one-way or another. This goes back to Leonard di Vinci's *Vitruvian Man* drawing (Figure 1). The figure in the drawing stands with his arms out and legs apart in one position, creating triangles. It is said that the human body is consisted of two inverted triangles placed together.

I looked at both architecture of the past and present as reference; the major one being the pyramids of Egypt (Figure 9). Others included the arches of ancient Greek buildings (Figure 10), Bjarke Ingels's⁶ VM Houses, with its "Leonardo DiCaprio balconies"(Figure 11)," Design Act's⁷ 2010 winning concept of the Singapore Pavilion (Figure 12), and the Esplanade Theatre and Concert Hall in Singapore (Figure 13). I chose these structures due to their simple yet complex nature of repetition.

Other inspirations came from designers who play with sculptural elements and repetition in their designs. One of these designers is Guo Pei⁸ of Hong Kong. In Pei's "The Arabian 1002th Night" Haute Couture Collection, she created 16 sculptural pieces that played a lot on form and structure. In one piece she incorporated 3-dimensional triangles to a jacket that mimicked the triangular shape of the bottom (Figure 14). In doing so, she draws attention to the shoulders, wrists, and ankles, creating a pyramid-like form. By using these geometric forms

⁶ Bjarke Ingels (born 2 October 1974) is a Danish architect. He heads the architectural practice Bjarke Ingels Group (BIG) which he founded in 2006. In 2009 he co-founded the design consultancy KiBiSi. In his designs, Bjarke Ingels often tries to achieve a balance between playful and practical approaches to architecture.

⁷ Singapore based design firm.

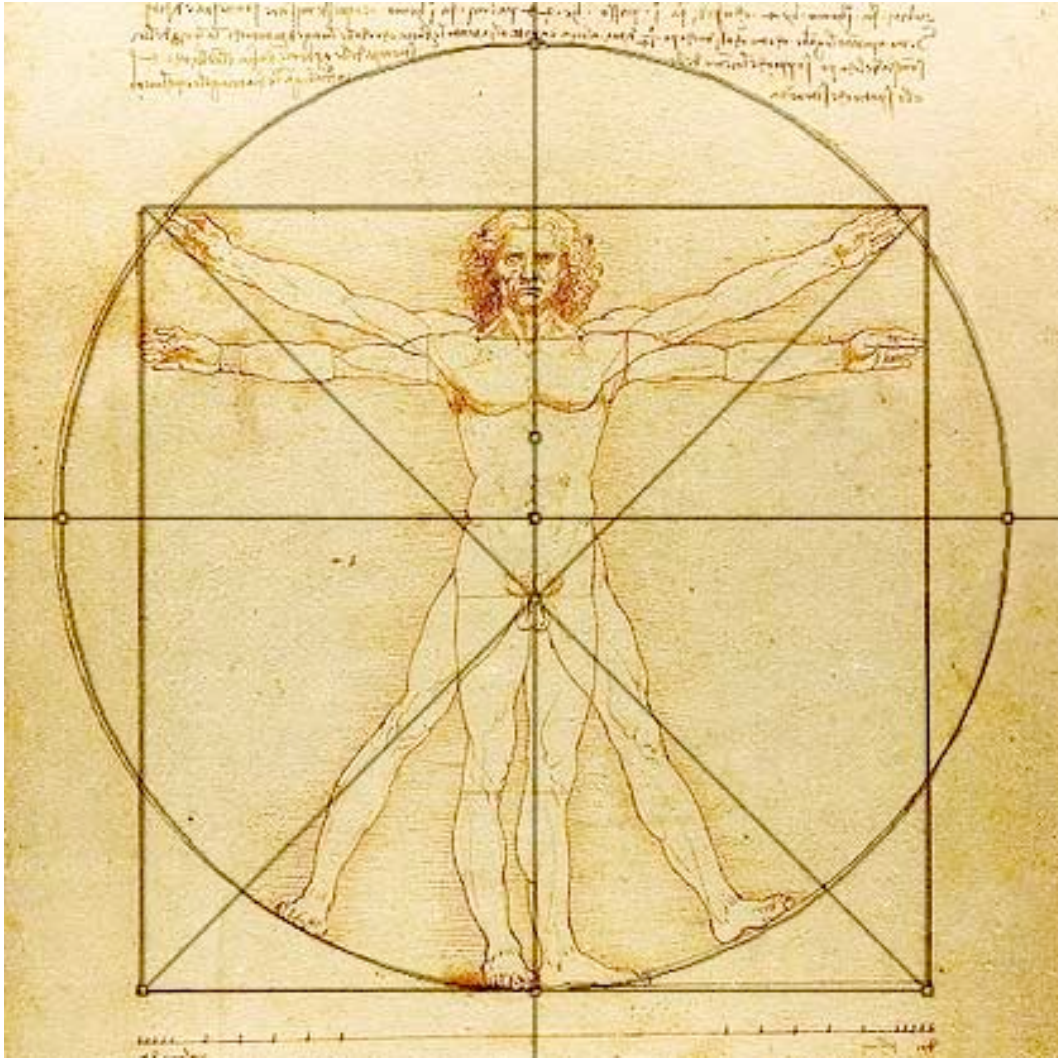
⁸ Guo Pei (born 1967) is a Chinese fashion designer. Pei worked for a number of fashion companies before becoming chief designer for the newly established Tianma (Heavenly Horse) Clothing Company, Peking, in 1989, which quickly became one of China's most popular womens labels.

in her design, she begins to sculpt the human body into an architectural structure. This is what was the aim of my own body of work. I want to merge architecture into the human form. Instead of using the extravagant and luxurious fabrics that Pei used, I used simple flesh-tone upholstery fabrics. Using flesh-tone fabrics, I was able to blend the pieces onto the human body more; in doing so, I was able to play with the visible layer of the human body and experiment with how it could structured and morphed.

Another designer whose work I admire and inspired my collection is Iris van Herpen⁹. Van Herpen's work pushes the boundaries of the female form using unconventional materials to sculpt futuristic designs. She takes the female body and transforms it into a creature from a new generation. The forms bring to the figure a powerful and barbaric quality, altering the viewer's perception of the female body. Van Herpen's pieces look like humans fuse together with the architecture of the apocalyptic world. Her use of unconventional materials, such as acrylic, umbrella skeletons, wire mesh, and elastic bands to create her pieces really intrigue me. Looking at her pieces, I what to deconstruct them to figure out how they were constructed.

SHAPESHIFT is a collection of wearables that not only seeks to manipulate the façade of the body, but to also bring forth discussion about our own perception of our own bodies and how we ourselves manipulate it.

⁹ Iris van Herpen is a Dutch fashion designer and couturier. She has been written about as "fashion's most exciting young designer" and called the "Alexander McQueen of tech geeks". One year after graduating, Van Herpen started her own fashion label in 2007.



Figures 1. Leonardo di Vinci's *Vitruvian Man* with triangles; 1487. www.blog.world-mysteries.com



Figures 2-5. SHAPESHIFT #1-4.



Figure 6. SHAPESHIFT #5



Figure 7. Women wearing a corset during the Victorian ages.
www.isittrue.msn.com



Figure 8. Armor Knight during the Middle ages in preparation for battle.
www.chivalloot.weebly.com/knight-armour.html



Figure 9. Egyptian pyramids. www.sciencedaily.com

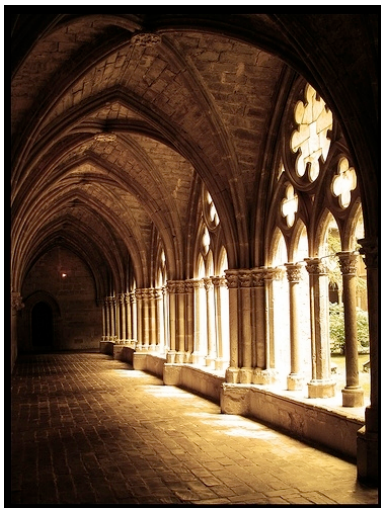


Figure 10. Greek arches. www.favim.com



Figure 11. Bjarke Ingels's VM House with Leonardo diCaprio balconies. www.azuremagazine.com



Figure 12. Design Act's 2010 Proposal for Singapore World Expo Pavilion. www.bustler.net



Figure 13. Singapore's Esplanade; theatres and the arts center. leonitp.wordpress.com



Figure 14. One of Guo Pei's pieces from her "The Arabian 1002th Night" Haute Couture Collection. www.efc.com.cn



Figure 15. One of Iris van Herpen pieces from her "Synesthesia" Collection. www.irisvanherpen.com