

# KNOTTING, A TRADITIONAL HANDMADE TECHNIQUE, HISTORY AND CONTINUITY

**YUXIN YANG 798049** 

RELATORE: ARTURO DELL'ACQUA BELLAVITIS

POLITECNICO DI MILANO SCUOLA DEL DESIGN LAURA MAGISTRALE IN DESIGN PER IL SISTEMA MODA A.A 2014-2015

# **CONTENTS**

INTRODUCTION	5
1. THE EVOLVEMENT OF FASHION	7
1.1 Haute Couture	9
- 1.1.1 The technique of Haute Couture	12
- 1.1.2 The case of Christian Dior	
1.2 Mass produced and fast fashion	15
-1.2.1 The crisis caused by fashion	17
1.3 Sustainable and Hi-Technology fashion	
-1.3.1 Sustainable fashion	
-1.3.2 Biocouture	21
-1.3.3 Hi-Technology fashion	23
-1.3.4 3-D printing the fashion future	
-1.3.5 The case of Janne Kyttanen	
Bibliography	
2. TRADITIONAL CRAFTSMANSHIP	33
2.1 Traditional craftsmanship's current situation	
-2.1.1 The decadence of crafts	
2.2 How to continue traditional handicrafts	39
-2.2.1 The protection of handicrafts	
-2.2.2 Innovate and promote traditional handicrafts	
2.3 Luxuries and traditional crafsmanship	
-2.3.1 The meaning of luxury	
-2.3.2 How luxury brands continue traditional handicrafts	

-2.3.3 The case of Bottega Veneta 4	9
Bibliography 5	3
3. KNOTTING 5	5
3.1 The history of knot 5	
3.2 Knot Categories 5	
-3.2.1 Terminology 5	
-3.2.2 Functionable knot 6	
-3.2.3 Decorative knot 6	
3.3 A decorative handicraft art Chinese knotting 6	
-3.3.1 The history of Chinese knotting 6	
-3.3.2 The characteristics and types 6	
3.4 Fashion and knotting 7	
· · · · · · · · · · · · · · · · · · ·	
-3.4.1 Knotting as the details of clothing 7	
-3.4.2 Knotting as a craft in accessories 7	
Bibliography 8	J
4. KNOTTING ACCESSORY DESIGN 8	7
4.1 Philosophy 8	
4.2 Market 9	
4.3 Target 9	
4.4 Pan Chang knot collection 9.	
-4.4.1 Mood 9	
-4.4.2 Technique 9	
-4.4.3 Meaning 9	

-4.4.4 Structure 3D model	101
-4.4.5 Colour inspiration	103
-4.4.6 Materials	105
-4.4.7 Technique drawing	107
-4.4.8 Experiment	109
-4.4.9 Product series 1	111
-4.4.10 Product series 2	115
-4.4.11 Product series 3	125
4.5 Branches collection	133
-4.5.1 Mood	133
-4.5.2 Technique	135
-4.5.3 Material	136
-4.5.4 Product series 1	137
-4.5.5 Product series 2	145
4.6 Possibility in fashion	153
4.7 Possibility in 3D print	155
4.8 VI design	157
-4.8.1 LOGO concept	157
-4.8.2 Colour	158
-4.8.3 Inspiration	159
-4.8.4 Construction	160
-4.8.5 Packaging	161
-4.8.6 Website	163
-4.8.7 Phone APP	165

## INTRODUCTION

Two year ago, when I come to Italy studying fashion in Milan, I was shocked by these Italian luxury brand such as Bottega Veneta and Dolce&Gabbana. I found that every luxury brand has a traditional craftsmanship supporting it as a luxury brand. But why there isn't any international luxury brand in China which has a long history of traditional craftsmanship?

The decline of traditional skills is a worldwide problem. Not only the traditional handicrafts neglected in China, but also in the industrial production environment it's hard to bring people's attention to the value of traditional crafts. With this issue, I start from a traditional handicraft technique, knotting, discussing about how to continue this kind of traditional technique nowadays.

I study this subject except the reason of my Chinese background with the famous Chinese knot and personal interest, I found that is a common almost everyone could get confused with weaving, knitting and crochet. To talk about how to continue this traditional technique, we should know the basic knotting knowledge and the way of how to innovating it.

Knotting is the general term of this kind of technique. There is a large scale of knotting technique in the world. Such as the knots used by the sailors and the decorative knots known in China. With such a functionable and decoratable traditional technique, it is necessary to figure out how to innovative it and how to adapt to the current technology.

In the following thesis, I will dissert how to continue the traditional knotting technique and put into practice.

Key words: traditional craftsmanship, protection and continuity, innovative idea and hi-technology

# 1. THE EVOLVEMENT OF FASHION

Fashion--especially haute couture, which is handmade and not mass-produced--is sometimes regarded as art. <sup>1</sup>

## 1.1 Haute Couture

Thanks to the inspiration of Charles Worth, the turn-of-the-century was known as the rise of haute couture, translated literally as "high sewing," in Paris. New haute couture garments in the early 1900's were custom-made and hand-sewn with a remarkably high price tag, as remains the custom today.

Before the twelfth century, clothing was usually made in convents or within the family, meaning that the tailor's profession did not evolve until the middle of the twelfth century. In France at that time, a distinction was made between the work of the tailor and that of the sewer. Then, later, the appearance of clothing was separated between religious (much to the annoyance of the Church) and statepolitical contexts of meaning and function. This division is documented by repeated attempts at containment (bans on luxury) or binding regulations in the shape of socalled clothing orders. The development of fashion as an individual form of clothing is documented from this time onwards. The preacher Berthold von Regensburg wrote at the end of the thirteenth century: 'And wenches, ve exceed all manner of decency with dresses and fine skirts, sewn with such frills and folly, ye fain be ashamed. Both iconography and literary sources make clear that the reasons for differences in fashion were not only political and social, but mainly individual erotic demands; clothing emphasized the relevant intentions. In contrast to the artist personality developing at the beginning of the sixteenth century, however, the producers of clothing, the

tailors, enjoyed little to no prestige. Artists like Albrecht Durer also functioned as fashion advisors and designers. Their influence on the development of style was irrelevant, however, with the exception of JacquesLouis David at the end of the eighteenth century and the artists of the Reform Movement at the beginning of the twentieth century.<sup>2</sup> As opposed to the sewers, but also to the cobblers and later the corset makers, the tailors were not organised into a guild. For this reason, the profession was often practised by Jews, to whom access to the guilds was denied anyway. This state of affairs continued until the French Revolution in 1789, when the guilds were abolished. The tailor had little influence on the design of fashion; as a rule, the client received any recognition for the clothing that he wore. The criteria of one's being fashionable were based on the contrast between being noticed and not being noticed (binary code) as a resource of individual aesthetic and/or erotic attention. In the course of the eighteenth century, the milliners--who were responsible for updating the embellishments of clothing and for accessories--appeared as 'fashion advisors' more frequently, especially in Paris.

2.Yvonne Schutze, 'Kleidung als und im Kunstwerk des 20', Ingrid Loschek, Berlin, 2001 It was not until the mid-nineteenth century that autonomous forms of fashion with a designated signature emerged in Paris known as haute creation or haute couture apart from a very few tailors known by name in the European metropolises of the eighteenth and early nineteenth centuries.

For more than a century the couture has been emblem of the triumph of costume and fashion, it represents the fusion of fashion-the modern entity composed of novelty and synergy with personal and social needs-and costumethe consummate arts of dressmaking, tailoring, and constituent crafts to apparel and accessories. Founded in the crucible of modernism's invention in the middle years of the nineteenth century in Paris, with the expanded patronage cultivated by the House of Worth, but still dependent upon the considerable support of Empress Eugenie, the couture has long stood as the modem equilibrium between the garment as exquisite aggregate and the burgeoning notions of fashion as a system.

The history of the haute couture begins with two extraordinary circumstances. Its founder is Charles Frederick Worth, an Englishman, though its city of destiny always is Paris. The haute couture was founded in the same epoch in which the sewing machine was invented, in the face of a growing technology, an art of handsewn techniques arose in order to establish

a distinction affiliated with an old order. What had been the particular skills of dressmaking and tailoring in the service of individual clients, and in a few instances to some partially assembled or ready-to-wear garments, became an independent enterprise, one that answered to clients but took its initiative from the concepts of the fashion designer, now no artisan to the state or patron, but a viably independent creator.

Further, that the haute couture arose in the same place and time as modern art in the context of Manet and Baudelaire cannot be mere coincidence. The spectatorship and new public that mandated a transfigured art also required a new fashion intended not for court minglings, but for the visible exchanges of boulevards, opera houses, even cafes. The history of the haute couture is, from inception, closely aligned to the history of modern art. The expressive opulence of nineteenth-century dress, familiar in paintings of the period by such fashion-acute observers as Manet, Degas, and Seurat, rendered the visual spectacle that captivated the modern movement in its interest in urban life and the emotional life of individuals. The shapes that evolved from Worth's original crinoline bubbles were perhaps always structures seeking the effortless lightness of modernity that Worth had seized so instinctively in the 1850s and 1860s 4

<sup>3.</sup> Ingrid Loschek, 'When Clothes Become Fashion: Design and Innovation Systems', Berg, New York. 2009.

<sup>4.</sup> Richard Harrison Martin and Harold Koda, '*Haute Couture*', John P.O'Neill, New York, 1995



Graph 1: 'Le drapage du corsage chez Worth, Paris', 1907 http://peinturesetpoesies.blog 50. com/archive/2014/12/26/mode-belle-epoque-les-worth-179326.

## 1.1.1 The technique of Haute Couture

Paris has remained the epicenter of the couture since the time of Worth, nut because of an obdurate nationalism but because of an abiding tradition of creative resources, human and physical. Designers from elsewhere in the world have entered the couture as a practice and profession, respecting Paris as its heart. Even as the couture changes in sensibilities from flamboyance to elegant restraint, as in our time, or from using the familiar materials to new technical experiments, the practice of luxury remains sustained by the hand skills that speak, in themselves, of mastery,

subtlety and etiquette.

What distinguishes the couture garment from a ready-to-wear piece is the handwork. functioning nut as luxe augmentation, but as a capability intrinsic to the garment. Thus, the embroidery, lace, and feathers of the following pages are not after-the-fact decorations that finish the garments but their enabling principles, the elements of creation that are the matrix of the design process. Even though practiced outside the maisons de couture, the work of Diderot's old metiers is inherent in the designs of the haute couture.<sup>5</sup>

5. Richard Harrison Martin and Harold Koda, '*Haute Couture*', John P.O'Neill, New York, 1995



Graph 2: Evening Ensemble (Detail)

Arnold Scaasi, 1958

Arnold Scaasi, the designer of this evening ensemble, is best known for his evening wear designs.

This example shows Scaasi's use of beadwork embroidery, applied braid and fur trim to enliven the surface of an otherwise conventional ensemble. Different materials all of the same color creates a play of textures as each element reflects light in a different way. This combination of trim ensuring this ensemble, although black, is anything but somber.

#### 1.1.2 The case of Christian Dior

Rebè embroidery, more than that of any other embroidery hause, evinced a fine eighteenth'century sensibility compatible with Dior's profound longing for the past. Only four years after World War II, the artisanal trades had fully recovered, rendering to the couture materials and applications as rich as before. As Dior restored a grand silhouette, he also reinstated artisanal luxury. Even the most subtle molded nacreous paillettes and graduated sequins wew available and were used by Dior.<sup>6</sup>

Lefr: 'Junon', or Juno to the Romans, was more vividly conceived. The Magnificent skirt of forty-five petals, like abstractions of peacock feathers without their 'eyes,' obliquely references the bird associated with the gueen of the gods.

Each petal on the 'Junon' dress sparkles with iridescent sequins in varying shades of pale greens and blues to emerald green and navy blue, with sprinklings of rust.

Right: The extraordinary ball gown by Christian Dior, of foggy gray silk tulle, arrayed with an overlay of scallop-shaped petals, is called "Venus." The bodice and shell forms of its skirt are embellished with nacreous paillettes and sequins, iridescent seed beads, aurora-borealis crystals, and pearls. The glittering overskirt and train adumbrate both the seashell motif and the crescent wave patterns of Botticelli's Venus.<sup>7</sup>

6. Richard Harrison Martin and Harold Koda, '*Haute Couture*', John P.O'Neill, New York, 1995

7: http://http://fashioninhistory.





Graph3: Christian Dior
"Junon" ball gown, fall 1949 (left)
Pale blue silk net embroidered
with iridescent sequins
Gift of Mrs. Byron C. Foy, 1953

Graph4: "Venus" ball gown, fall 1949 (right) Gray silk net embroidered with feather-shaped opalescent sequins Gift of Mrs. Byron C. Foy, 1953



Graph5: Christian Dior ball gown, 1949

## 1.2 Mass produced and fast fashion

"As you know, the moda in the world became fast, fast, fast; cheap, cheap; sexy, sexy, sexy. This is too far from it."

---Yohji Yamamoto, interviewed by V&A

The first garments "tout fairs" are said to have been present in 1770. The sewing machine was invented in France by Thimonier in 1830; in the 1850s and 1860s, the department stores of Paris opened and began to show their ready-to-wear collections. Ready-made clothes did not gain their decisive advantage over haute couture for privileged French women until the second half of the 1950s.

After that, the haute couture system could no longer serve as the basis of the Paris fashion industry, and a series of designers took initial steps directly into ready-towear: Cacharel and Hechter opened their own lines, independent of the department stores, in 1956 and 1957; and when Cardin launched his own prêt-à-porter boutique in 1962, it signaled the beginning of the end for true haute couture. There was effectively no longer any reason for most women to pay for true haute couture when it could be bought directly at one-tenth the price with the same label in the prêt-à-porter boutique.<sup>1</sup>

As the technology developing, mass produced was becoming a trend.

1. Michael Storper, 'Worlds of Production: The Action Frameworks of the Economy', Harvard University Press, USA, 1997



Graph6: '5 verdades que la industria de la moda no quiere que sepas',

http://www.upsocl.com/mujer/5-verdades-que-la-industria-de-la-moda-no-quiere-que-sepas/

In the past decade, a relatively new phenomenon catted fast fashion has commanded the attention of the consumers, managers and investors. Fast fashion retail pioneers like ZARA and H&M, with their super-responsive supply chains and efficient decision-making processes, are able to produce and distribute affordable high-end fashion at breakneck speeds. They relentlessly offer customers the cheapchic products they want, where they want, avoiding any unnecessary faux pas. As a result, they enjoy higher profit margins than their competitors an average of 16plus percent versus a modest 7 percent for typical apparel or specialty-apparel retailers. And in European countries, where the concept began, this business represents anywhere from 5 to 18 percent of the total apparel market.<sup>2</sup>

In every step in the production of clothing there is harm caused to the environment in aquatic, terrestrial and atmospheric ecosystems. This harm is in the form of the release of toxic or greenhouse gases into the atmosphere or pollution and destruction of aquatic habitats. These problems are only exacerbated by fast fashion in developed countries, particularly the United States, which imports more than 1 billion garments annually from China alone. The United Kingdom, where the amount of clothes purchased surged by 37% from 2001 to 2005, is also a major contributor to pollution caused by fast

fashion.

The insatiable need for new clothing pushed by clothing companies as well as our own conspicuous consumption has led to exponentially more environmental damage caused by the fabric and garment industry compared to just a few decades ago. The majority of the atmospheric pollution from fabric production is because of the need for constant transportation all over the globe, which leads to greater carbon dioxide release from transportation vehicles. Additionally, the amount of carbon dioxide released from the heavy machinery used to produce textiles and garments has increased with the greater demand for new clothing. Increased demand for clothing also leads to more effluent release from textile factories, which contains dve or caustic solutions. This is caused by fast fashion instilling a notion in people that clothes should be cheap, and the only way to make this happen is to have the fabric and clothes made in countries where wages and regulations can be kept to a minimum. Fast fashion has caused a dramatic increase in the environmental damage caused by the textile industry during the recent past, and this problem will certainly continue into the future unless an enormous change is made in the minds and attitudes of consumers.3

<sup>2.</sup> Stefano Turconi, 'Achieving Strategic Agility - On the Fast Track to Superior Performance in Fashion Retail', GRIN Verlag, 2010

<sup>3. &#</sup>x27;Fast fashion', http://en.wikipedia.org/wiki/Fast\_fashion#Environmental\_Impact

### 1.2.1 The crisis caused by fashion

The global textile and fashion industry bring a lot of problems.

The textile and fashion industry is one of the biggest and oldest industrial sectors in the world. It uses more water in its processes than any other industry except agriculture, and it releases huge amounts of toxic chemicals into the environment. The total volume of textile and fashion production at the global level is estimated to be more than 30 million tons annually, and therefore the environmental impacts of this industry are remarkable (Chen & Burns 2006).

The textile and clothing industry has moved with increasing speed and volume into lowcost Asian and Far East countries during the last 25 years. For example in Finland the watershed year was 1987, when textiles and clothing export figures were bigger than import rates for the last time; in the following year these figures reversed (Moilala 2013). Today it is estimated that in Finland, for example, about 95% of sold garments are imported; this figure is by and large the same in all Western countries (mostly between 90-95%). And production has not only moved into long logistic chains, but it also has grown and is still growing. It is estimated that the global textile industry grew 25% between 2002 and 2010 (Economy Watch 29.6.2010). Yet this tendency started already in the 1980s: industry growth at the global level stood at 143% between the years 1979-1990 and

the Far East had the highest textile export growth of 430% during that period CLim 2003).

On the consumption side rapid growth is also evident. For example in the UK the consumption of fashion has increased by 37% between 2001 and 2005 (the amount of clothes purchased per capita) (Allwood et al.2006). In Sweden the amount of clothes and home textiles released on the market rose by 40% between the years 2000 and 2009 (Carlsson et al. 2011 in Tojo et al. 2012). In Finland the total volume of clothes sold in 2010 was 70,212 tons (Tojo et al. 2012), which, for a population of

5,426,674, equals an average of 13 kg of textiles per person. This Western overconsumption causes environmental and social problems on the other side of the globe, where the fibres are cultivated, fabrics are woven, dyed and finished with chemicals, and sewn into garments in poor working conditions.

Efficient mass manufacturing in lower cost countries has brought about low endprices of garments. Cheap product prices lead consumers to impulse purchases and unsustainable consumption behaviour: overconsumption, very short use time of products and premature disposal of the product. Growing consumption also leads to increasing textile waste streams. The American consumer disposes of 31 kilograms of textiles and clothing each year, most of which ends up in landfill, and it is estimated that in the UK over 900 000 million items of clothing are disposed of each year (Brown 2010). Finnish consumers discard nearly 17 kilograms of textiles and clothing a year, 75% of which ends up in landfill

Fashion markets are oversaturated and because of the extremely effective mass manufacturing system, the world is full of not only new fashion items and fashion shops but also unsold clothing. Discount sales in fashion shops seem to be a permanent phenomenon. In addition not all new garments even enter the market some go to landfill directly from

the factory, because of imperfect quality. Furthermore some garments are never sold to consumers from the shop because there are too many offerings on the market, which is oversaturated. No one actually seems to know the amounts of these unsold garments, which end up in landfill. It is estimated that these unsold garments may account for even 5-10% of the whole fashion production. Fashion companies try to maintain their brands' reputations in this risky business and would rather destroy the unsold garments than discount them and release them onto the market in too big quantities.<sup>4</sup>

4. Kirsi Niinimäki edit, 'Sustainable Fashion: New Approaches', Aalto University publish, 2008

# 1.3 Sustainable and Hi-Technology fashion

The power of clothing in our lives gives a context to the other two themes, making them exponentially important. If economic, social, and personal issues regarding clothing were not so pervasive, then fast fashion and environmental problems related to clothing would never have reached today's great crescendo, in our daily relationship with clothes, we have unwittingly let massive problems---fast fashion's manic cycle, inhumane workplace conditions, chemical toxicity, a desiccated sea, dead zones, dead silkworms, and the craze for polyester---overtake us. As we try to solve such problems, it is helpful to recognize the power of clothing in our lives.<sup>1</sup>

<sup>1.</sup> Jing Lin and Rebecca L. Oxford edit, 'Transformative Eco-education for Human and Planetary Survival', USA. 2012

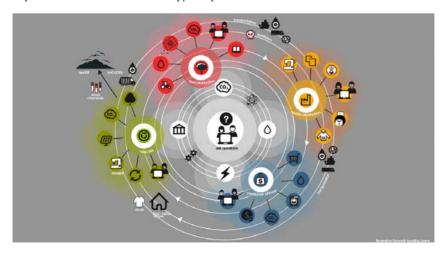
#### 1.3.1 Sustainable fashion

Sustainable fashion is the antithesis of fast fashion. It does not focus on being the fastest and the cheapest. Standards, labeling, and certification are part of the eco-fashion approach (Fletcher, 2008). Sustainable fashion involves any and all of the following: extending product life through classic design and durability, eliminating or reducing manmade-fiber use, reducing waste, using recycled and biodegradable materials, employing new design and manufacturing processes (e.g., 3-D knitting and weaving), making less but smarter clothing (reversibles and designables), encouraging sustainable agriculture, and influencing the ethics of the fashion industry (Black, 2008).

Sustainable fashion is filled with paradoxes. The very phrase could be considered an oxymoron, because fashion is typically

concerned with trends, while sustainable is by definition long-lasting. Moreover, sustainable fashion has been notably unfashionable, in the sense of being considered unattractive much of the time. Eco-fashion has often consisted of "shapeless hemp dresses and garish batik frocks" (Keet, 2008), plain cot, ton T-shirts, baggy blouses and shorts, and accessories made of recycled pop bottles. As of a few years ago it was still safe to say that "Environmentalism is still associated with the 'new age' look of the early 1990s. with natural hemp and wooden love beads, or with the traveller trends of dreadlocks. combat gear and Peruvian sweaters" (Black, 2008, p. 21). However, no longer is this simplistic style the only avenue for the environmentally conscious community.<sup>2</sup>

2. Jing Lin and Rebecca L. Oxford edit, 'Transformative Eco-education for Human and Planetary Survival', Eco-Fashion part 6, USA, 2012



Gragh7: 'Applying whole system thinking to sustainable design is a challenge', http://buddhajeans.com/2014/11/05/applying-systemthinking-as-an-approach-tosustainable-design-part-one/

#### 1.3.2 Biocouture

Biocouture is the world's first biocreative design consultancy.

The work in the now, near and far future to help brands to imagine their biodesigned future. From microorganisms like bacteria, fungi and algae to cellulose, chitin and protein fibres like silk, It is exploring Nature's sustainable materials for future consumer products.<sup>3</sup>

Suzanne Lee, Founder of Biocouture Ltd, is heading the world's first biodesign consultancy firm, which brings knowledge from scientists' labs into fashion production. Biocouture offers a completely new perspective on how we could manufacture clothing, accessories and sportswear in the future.

Suzanne Lee in her London studio, where she's using cellulose-producing microbes

to grow garments in a vat of fermenting liquid. Through research and working with scientists, she developed a process of growing microbial material in a mixture of green tea, sugar and yeast to create a completely natural, 100% compostable product. The material can be dried, cut and sewn together to make clothes.

Biofabrication could revolutionise the design and manufacture of clothing, footwear and accessories. Moving away from the demands on energy and water of current textile manufacturing to an engineered and optimised bio process. By creating materials from living organisms clothes could be produced without toxic waste, enabling a truly sustainable future for fashion.<sup>4</sup>

3. 'Mission', http://www.biocouture.co.uk/

4. 'Biocouture', http://www.aeg.co.uk/Plan--Design/thenextblack/Biocouture/



Graph8: http://www.aeg.co.uk/ Plan--Design/thenextblack/ Biocouture/



Grow your own



"This is a method of producing fashio which is closer to brewing beer."
--- Suzanne Lee, Founder, Biocouture



Completely organic



Zero waste

Graph9: http://www.aeg.co.uk/ Plan--Design/thenextblack/ Biocouture/

## 1.3.3 Hi-technology fashion

Fashion and technology are not usually mentioned in the same breath. However, two different innovators in the world of fashion have blurred the boundaries between performance, art, environment, and technology with their avant-garde endeavors.

While with most pieces of clothing we have the ability to choose from different colors and designs, modern day retailers are now offering individuals a way to combine their technological devices and pieces of apparel into one practical item. From thermal running shirts that visually displays your body heat to jackets that cleverly integrate your smartphone or computer devices, these high-tech styles are sure to attract any modern day tech enthusiast looking to stay

in touch with fashion and technology.<sup>5</sup> Such as designer Hussein Chalayan who has made these realms collide. A forwardthinking individual well beyond the prototypical fashion designer, his use of zany materials normally considered exclusive to non-fashion realms, is unrivaled. He's made a metamorphosing dress that serves as a lightning-fast chronicle of the evolution of fashion, condensing history in minutes with rising hemlines and varied silhouettes from prudish long Victorian to modern mini. Such shape-shifting feats have to be engineered by serious technicians: for his shows, he has employed no less than the peeps who did animatronics in a Harry Potter movie.6

5. 'From Thermal Image Athletic Apparel to High-Tech Fashion Gear', http://www.trendhunter.com/ slideshow/hightech-fashion-styles

6. 'SCIENCE IN FASHION', http://www.popsci.com/entertainment-amp-gaming/article/2009-03/science-fashion



Graph10: https://coufme.wordpress.com/2012/05/22/pure-design-hussein-chalayan-20/



Technology is growing fast. It change the way we think and the way we see. Such as Apple company create the iwatch which combine technology and fashion. And if you've see the Windows 10 event, you'll be shocked and imagine how Windows Holographic will change the world of design.



Graph 11: (left) 'Windows Holographic Revealed', http://www.gamespot.com/ articles/windows-holographicrevealed/1100-6424791/

Graph12: (right) 'Apple Watch will last "about a day" on a charge, be water-resistant', http://arstechnica.com/apple/2014/09/apple-watch-will-last-about-a-day-be-water-resistant/

## 1.3.4 3-D printing the fashion future

3D printing is any of various processes to make a three-dimensional object. In 3D printing, additive processes are used, in which successive layers of material are laid down under computer control. These objects can be of almost any shape or geometry, and are produced from a 3D model or other electronic data source. A 3D printer is a type of industrial robot.<sup>7</sup>

3D printers are becoming more and more mainstream and available for personal use. And while 3D Printing will most likely influence fashion through homemade gadgets-like-items that will pop up in the streets and on streetstyle-blogs, the real revolutionary stuff is happening in Haute Couture.

An example of Iris van Herpen, who was already a rising star in the fashion world when she presented her first 3D printed clothing piece during the Amsterdam Fashion Week in July 2010.

Launching her first Ready-to-Wear line last season Iris van Herpen is also excited about how 3D printing could possibly fill up the gap between Haute Couture, which is costume made and perfectly tailored for one single person, and the mass produced and limited sizing within Ready-to-Wear. Van Herpen could image scanning bodies and making costum-made garments for RTW like the Haute Couture items "people have been wearing the wrong sizes of clothes for far to long. Everybody could have their owns body scanned and just

order clothes that fit perfectly." she explains in an interiew with Dezeen Magazine. If this would become reality 3D scanners and printers could revolutionise the way we order out clothes in the future.

Not only would this revolutionise fashion for the consumer but also for the manufacturer. At the moment production cost are based on the amount of items a designer produces, but with 3D printing this will no longer be the case in the future. The manufacturer cost are zero until a costumer orders a garment. Which also leaves room for customisation, for instance in sizing, colour and materials. Maybe in the future instead of saying a garment was custom-made we'll say it was costumprinted.

Although 3D printing materials have evolved from simple plastics to a wide range of materials like nylons, wood, salt, cement and even printing food. The true future of 3D printing lies in Bio Printing. The medical field has a lot of progress in this field, for instance the first human blood vessels and organs have already been printed. These new developments within the medical field might also be applied onto the fashion industry. If it is possible to print human cells, printing silks, cottons and other natural fibers would be the next step in 3d printing for the fashion industry.<sup>8</sup>

7. '3D printing', http://en.wikipedia.org/wiki/3D\_printing

8. '3D Printing: The face of future fashion?',

http://www.tedxamsterdam.com/2013/07/3d-printing-the-face-of-future-fashion/

Graph13: (left) Iris Van Herpen, F/W 2015-16 ready-to-wear collection, 'HACKING INFINITY', Paris, 2015 http://www.irisvanherpen.com/womenswear#hacking-infinity



## 1.3.5 The case of Janne Kyttanen

When Janne saw a 3D printer for the first time he immediately saw every object around him in wireframe. He envisioned a future in which products would be scaled down into digital files, their distribution becoming as simple as downloading music from the internet. Janne's vision for the future of 3D printing was so clear that he decided to focus solely on creating products using digital technologies.

In the year 2000, Janne founded Freedom of Creation, a pioneering agency specializing in design for 3D printing. Leading a team of design and innovation experts, Janne created a portfolio of acclaimed and awarded designs for the Freedom of Creation brand.

Janne's work has been extensively exhibited and integrated into permanent design collections at leading galleries and museums around the world. Such museum collections include MOMA, FIT, MAD and the Vitra Design Museum.

A pioneer in design for 3D printing, Janne has created award-winning collaborations with brands including Hyundai, Asics, Nivea, NIKE, Philips and L'Oreal.

In 2011 Freedom of Creation was acquired by 3D Systems, providing Janne with access to the world's most innovative, cutting edge software, materials and technology. Janne is now Creative Director for 3D Systems, the largest specialized 3D printing company in the world.<sup>9</sup>

9. 'BIOGRAPHY', http://www.jannekyttanen. com/?category=him



Graph14: '3D Printed Janne Heads', 2013, http://www.jannekyttanen.com/?category=him#modal8789396804







Graph15: 'Deceptor', paddles and ball, 2014, http://www.jannekyttanen.com/?category=him#modal15051471025

Graph16: 'Binary Furniture Collection by Cohda Design', 2010, Cohda Design & Janne Kyttanen, http://www.jannekyttanen.com/?ca tegory=him#modal12305301616

Graph17: 'Leaf Wedges', 2013 http://www.jannekyttanen.com/?ca tegory=him#modal9414338745 Designer Janne Kyttanen using 3D printing technology in production design, interior design and also fashion design.

Last year he had designed a kit of clothes and accessories that can be printed in one go from a single computer file, removing the need for travellers to pack a bag for their holiday.

"We already have 3D printers in hotels and airports," said Janne Kyttanen, creative director for American company 3D Systems, who believes these machines could be utilised to produce luggage on demand. His Lost Luggage kit combines 3D-print

files for bags, clothes and accessories

that "represent an entire outfit from head to toe", which can be downloaded and reproduced at any location.

The set includes a version of the Le69 Handbag by fashion brand Paco Rabanne and a dress that can be worn in four different ways.

It also contains a pair of platform shoes, a cuff bracelet, driving gloves, a pair of sunglasses, a digital watch and a knuckleduster.

The garments are made from sections of material that is woven from strands of flexible plastic filament. 10

10. 'Janne Kyttanen 3D-prints essential travel items with Lost Luggage kit', Dezeen magezine http://www.dezeen.com/2014/05/ 07/janne-kyttanen-3d-printed-lostluggage-kit/



Graph18: 'Lost luggage', 2014, http://www.jannekyttanen.com/?ca tegory=him#modal13707801404

Graph19: (right) 'Lost luggage', 2014, http://www.jannekyttanen. com/?category = him#mod al13707348203



# Bibliography

#### 1.1 Haute couture

- 1. Valerie Steele, 'Fashion and art', Adam Geczy and Vicki Karaminas, Berg, 2013
- 2. Yvonne Schutze, 'Kleidung als und im Kunstwerk des 20', Ingrid Loschek, Berlin, 2001
- 3. Ingrid Loschek, 'When Clothes Become Fashion: Design and Innovation Systems', Berg, New York, 2009.
- 4. Richard Harrison Martin and Harold Koda, 'Haute Couture', John P.O'Neill, New York, 1995
- 5. Richard Harrison Martin and Harold Koda, 'Haute Couture', John P.O'Neill, New York, 1995
- 6. Richard Harrison Martin and Harold Koda, 'Haute Couture', John P.O'Neill, New York, 1995
- 7: http://http://fashioninhistory.tumblr.com/

#### 1.2 Mass produced and fast fashion

- 1. Michael Storper, 'Worlds of Production: The Action Frameworks of the Economy', Harvard University Press. USA. 1997
- 2. Stefano Turconi, 'Achieving Strategic Agility On the Fast Track to Superior Performance in Fashion Retail', GRIN Verlag, 2010
- 3. 'Fast fashion', http://en.wikipedia.org/wiki/Fast\_fashion#Environmental\_Impact
- 4. Kirsi Niinimäki edit, 'Sustainable Fashion: New Approaches', Aalto University publish, 2008

#### 1.3 Sustainable and Hi-Technology fashion

- 1. Jing Lin and Rebecca L. Oxford edit, 'Transformative Eco-education for Human and Planetary Survival', USA, 2012
- 2. Jing Lin and Rebecca L. Oxford edit, 'Transformative Eco-education for Human and Planetary Survival', Eco-Fashion part 6, USA, 2012
- 3. 'Mission', http://www.biocouture.co.uk/
- 4. 'Biocouture', http://www.aeg.co.uk/Plan--Design/thenextblack/Biocouture/
- 5. 'From Thermal Image Athletic Apparel to High-Tech Fashion Gear', http://www.trendhunter.com/slideshow/hightech-fashion-styles
- 6. 'SCIENCE IN FASHION', http://www.popsci.com/entertainment-amp-gaming/article/2009-03/science-fashion
- 7. '3D printing', http://en.wikipedia.org/wiki/3D\_printing
- 8. '3D Printing: The face of future fashion?', http://www.tedxamsterdam.com/2013/07/3d-printing-the-face-of-future-fashion/
- 9. 'BIOGRAPHY', http://www.jannekyttanen.com/?category=him
- 10. 'Janne Kyttanen 3D-prints essential travel items with Lost Luggage kit', Dezeen magezine, http://www.dezeen.com/2014/05/07/janne-kyttanen-3d-printed-lost-luggage-kit/

#### Graph

- 1: 'Le drapage du corsage chez Worth', Paris, 1907 http://peinturesetpoesies.blog50.com/archive/2014/12/26/mode-belle-epoque-les-worth-179326.html
- 2: Evening Ensemble (Detail), Arnold Scaasi, 1958
- 3: Christian Dior, "Junon" ball gown, fall 1949, Gift of Mrs. Byron C. Foy, 1953
- 4: "Venus" ball gown, fall 1949, Gift of Mrs. Byron C. Foy, 1953
- 5: Christian Dior ball gown, 1949
- 6: '5 verdades que la industria de la moda no quiere que sepas', http://www.upsocl.com/mujer/5-verdades-que-la-industria-de-la-moda-no-quiere-que-sepas/
- 7: Applying whole system thinking to sustainable design is a challenge, http://buddhajeans.com/2014/11/05/applying-system-thinking-as-an-approach-to-sustainable-design-part-one/
- 8: http://www.aeg.co.uk/Plan--Design/thenextblack/Biocouture/
- 9: http://www.aeg.co.uk/Plan--Design/thenextblack/Biocouture/
- 10: https://coufme.wordpress.com/2012/05/22/pure-design-hussein-chalayan-20/
- 11: Windows Holographic Revealed, http://www.gamespot.com/articles/windows-holographic-revealed/1100-6424791/
- 12: Apple Watch will last "about a day" on a charge, be water-resistant, http://arstechnica.com/apple/2014/09/apple-watch-will-last-about-a-day-be-water-resistant/
- 13: Iris Van Herpen, F/W 2015-16 ready-to-wear collection, 'HACKING INFINITY', Paris, 2015, http://www.irisvanherpen.com/womenswear#hacking-infinity
- 14: '3D Printed Janne Heads', 2013, http://www.jannekyttanen.com/?category=him#mod al8789396804
- 15: 'Deceptor', paddles and ball, 2014, http://www.jannekyttanen.com/?category=him#mod al15051471025
- 16: 'Binary Furniture Collection by Cohda Design', 2010, http://www.jannekyttanen.com/?category=him#modal12305301616
- 17: 'Leaf Wedges', 2013, http://www.jannekyttanen.com/?category=him#modal9414338745
- 18: 'Lost luggage', 2014, http://www.jannekyttanen.com/?category=him#modal13707801404
- 19: 'Lost luggage', 2014, http://www.jannekyttanen.com/?category=him#modal13707348203

# 2. TRADITIONAL CRAFTSMANSHIP

"I love tradition but I'm not traditional. I translate tradition into something new. I searched, gathered and re-invented in my own way the Baroque heritage. It makes my fantasy fly until everything becomes movement, human and animal spirit".

----- Giacomo Alessi

# 2.1 Traditional craftsmanship's current situation

To craft is to create with a specific form, objective, or goal in mind. Crafting is a quintessential human activity, involving premeditative thought and deliberate, design directed action. If we accept the notion that regular tool use made us "human" in a metaphysical if not biobehavioral sense, then we acknowledge that crafting makes us human. Crafting is undoubtedly an ancient human behavior, as it is necessary to make tools used in food procurement, transport, processing, and storage; and to fashion protective clothing and shelter. <sup>1</sup>

With the advance of the industrial age and the subsequent emergence of the knowledge economy, the crafts got marginalized in the economy. Traditional crafts were just that, traditional, therefore history and only interesting as part of (cultural) heritage. Utilitarian crafts (think of plumbers, house painters, roof workers, dental technicians and so on) continued to do their thing, but such work, at least that was the reigning impression, was intended for those who cannot do the intellectual work that a knowledge economy calls for. The educational systems in developed countries sanctified intellectual intelligence and looked down on manual skills. In the arts conceptual innovation had overtaken craftsmanship as the core competence.

All this is about to change. The creative economy increasingly calls for skills that are characteristic for craftsmanship. This shows in a trend in consumer culture that stresses authenticity and quality. Craftsmanship is to meet such preferences. Craftsmanship furthermore satisfies the need for meaningful work. Mastery provides a

sense of self-worth. Politicians, therefore, are speaking about the importance of craftsmanship, and artists are reevaluating the craft in their work.<sup>2</sup>

It is important to understand why traditional craftsmanship's skills and knowledge are important today.

1. Traditional craftsmanship contributes to economic development. Firstly, as cultural industries, "industries that combine the creation, production and commercialization of creative content that is tangible and intangible in nature", crafts are strongly concerned with the phenomenon of creativity. Traditional craftsmanship can give new input to the production process of goods, and thus have an impact on creativity. Therefore, creativity has an impact on the aesthetic and symbolic dimension of goods, on innovation, productivity and on the quality of products, as well as on demand and competitiveness. Moreover, the crafts industry is linked to job creation, exports and revenues at the local, national and international level.

<sup>1.</sup> Cathy Lynne Costin, 'Introduction :Craft and Social Identity', edited by C. Costin and R. Wright, California State University, Northridge, 1998

<sup>2.</sup> Arjo Klamer, 'Craftsculture: an international comparison', Erasmus University Rotterdam, 2012

- 2. Traditional craftsmanship contributes to cultural and social development. In general, heritage is recognized as a factor for creating identity, social cohesion, and reinforcement of cultural capital. From this perspective, traditional craftsmanship is generally seen as the result of a long process of an accumulation of ideas. knowledge, identities and symbols in a specific territory. This cultural capital is built up and shared within the community and transmitted from one generation to the other. It is therefore a strong factor for building cultural identity, allowing social cohesion, and developing creativity, besides being a component of economic growth.
- 3. Traditional craftsmanship contributes to sustainable development. In 1987 the report of the World Commission on Environment and Development defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Such early ideas were predominantly linked to environmental and ecological sustainability. The role of culture in this scenario has only much later been pointed out, in the report of the World Commission on Culture and Development. Therein, culture and cultural policy begin to be considered as central factors for sustainable development. In particular, traditional craftsmanship is a key component for this idea of growth since

its practice contributes not only to "human capability expansion", reinforcing cultural and human capital and social cohesion, but also to environmental sustainability. Indeed, crafts activities are based on skills and knowledge rooted in a territory that have had time to evolve throughout the centuries using local and natural resources, without exploiting and threatening them, over a long period of time.

4. Traditional craftsmanship contributes to cultural diversity. As specified by the Convention on the Protection and Promotion of the Diversity of Cultural Expressions "cultural diversity is a rich asset for individuals and societies. The protection, promotion and maintenance of cultural diversity are an essential requirement for sustainable development for the benefit of present and future generations". The protection of crafts practices responds to this objective by reason of the richness and multiplicity of skills and knowledge mobilized by crafts activities and of the variety of products created. Furthermore, those goods usually reflect the specific needs and aesthetic values of a community, and thus its cultural diversity.

All of these different perspectives state the importance of traditional craftsmanship and the necessity of safeguarding the traditional craftsmanship that is at risk of disappearing.<sup>3</sup>

<sup>3.</sup> Francesca Cominelli, 'Governing Cultural Commons: The Case of Traditional Craftsmanship in France', Université Paris, 2011

### 2.1.1 The decadence of crafts

These days most of traditional craftsmanship has declined to the brink of extinction, mainly due to shrinking number of successors and aging experts. Even though there are urgent needs for preservation of declining traditional craftsmanship, it takes quite a long time to transfer skills from experts to learners with conventional methods.

Traditionally, these skill-transfers have been carried out by word-of-mouth between a master and apprentices, relying heavily on the existence of the master as a teacher.

Within this teaching framework, only limited number of apprentices can learn the craftsmanship.<sup>4</sup>

Traditional craftsmanship is perhaps the most tangible manifestation of intangible cultural heritage. However, the 2003 Convention is mainly concerned with the skills and knowledge involved in craftsmanship rather than the craft products themselves. Rather than focusing on preserving craft objects, safeguarding attempts should instead concentrate on encouraging artisans to continue to produce craft and to pass their skills and knowledge onto others, particularly within their own communities.

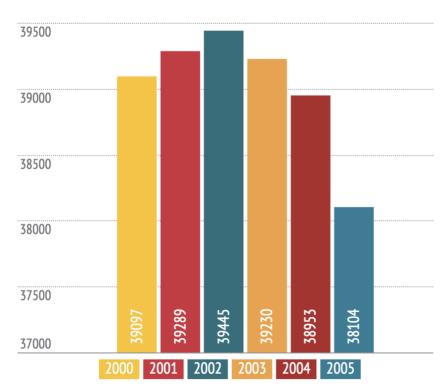
Like other forms of intangible cultural heritage, globalization poses significant challenges to the survival of traditional forms of craftsmanship. Mass production, whether on the level of large multinational corporations or local cottage industries, can often supply goods needed for daily life at a lower cost, both in terms of currency and time, than hand production. Many craftspeople struggle to adapt to this competition. Environmental and climatic pressures impact on traditional craftsmanship too, with deforestation and land clearing reducing the availability of key natural resources. Even in cases where traditional artisanship develops into a cottage industry, the increased scale of production may result in damage to the environment.

As social conditions or cultural tastes change, festivals and celebrations that once required elaborate craft production may become more austere, resulting in fewer opportunities for artisans to express themselves. Young people in communities may find the sometimes lengthy apprenticeship necessary to learn many traditional forms of craft too demanding and instead seek work in factories or service industry where the work is less exacting and the pay often better. Many craft traditions involve 'trade secrets' that should not be taught to outsiders but if family members or community members are not interested in learning it, the knowledge may disappear because sharing it with strangers violates tradition.5

<sup>4.</sup> Randall Shumaker edit, 'Virtual and Mixed Reality - Systems and Applications', Orlando, FL, USA, July 9-14, 2011

<sup>5.</sup> UNESCO (The United Nations Organization for Education, Science and Culture), 'Traditional craftsmanship', http://www.unesco.org/culture/ich/?pq=57

## Craft Enterprises in Decline Since 2003



Graph1: Source from Insee-SIRENE, Insee-DGI, DCASPL 2008

# 2.2 How to continue traditional handicrafts

As an intangible cultural heritage, protection and innovation are the two most important measures to continue traditional craftsmanship.

The goal of safeguarding, as with other forms of intangible cultural heritage, is to ensure that the knowledge and skills associated with traditional artisanry are passed on to future generations so that crafts can continue to be produced within their communities, providing livelihoods to their makers and reflecting creativity.

Many craft traditions have age-old systems of instruction and apprenticeship. One proven way of reinforcing and strengthening these systems is to offer financial incentives to students and teachers to make knowledge transfer more attractive to both.

Local, traditional markets for craft products can also be reinforced, while at the same time creating new ones. In response to urbanization and industrialization, many people around the world enjoy handmade objects that are imbued with the accumulated knowledge and cultural values of the craftspeople and which offer a softer alternative to the numerous 'high tech' items that dominate global consumer culture.<sup>6</sup>

6. UNESCO (The United Nations Organization for Education, Science and Culture), 'Traditional craftsmanship', http://www.unesco.org/culture/ich/?pq=57

Graph2: 'Icheon Master Hand: Choi in Gyu', public by The American Museum of Ceramic Art on YouTobe, 2014, https://www. youtube.com/watch?v=Xdw-sG3ShFw





### 2.2.1 The protection of handicrafts

From UNESCO, National Foundation to local

measures, social public start focusing on how to protect traditional craftsmanship. The scenario of existing protection measures is very rich and complex. We have already underlined that the system of intellectual property rights, copyright, patents, trademarks and trade secrets is not always appropriate for the protection of traditional craftsmanship. In fact, an excessive system of protection risks making people under utilize their knowhow, and consider their craftsmanship as proprietary and secret. The consequence is that craftsmanship is not passed on to others, and worst, it risks dying with its rights holder. Thus, other measures like the Controlled Designation of Origin (Appellation d'Origine Contrôlée) which is a French certification stating and guaranteeing the existence of a link between the product, a specific territory and a particular local know-how, seem to better fit the

In Italy, some regions (Tuscany, Trentino, Friuli Venezia Giulia, Marche) introduced the title of master craftsman with specific laws. In these cases the title is not automatically granted; some requisites are necessary to obtain it (in general: age, experience, prizes in the sector, capacity of teaching the skills to others). The Lazio regions introduced a specific educational path to get the title of 'craft master'. In Sicily,

necessity of both protecting and sharing

craftsmanship.7

the region established the figure of 'living human treasures' and since 2006 eighteen people have obtained this recognition. All of them (except one) are craftsmen specialized in traditional creative crafts such as pottery making, goldsmith, lace making, book binding, etc.

In China, the emphasis of policy is on 'core technology', which means that the Chinese do not only want to rely on their traditional culture but also want to import advanced knowledge and modern equipment in the development of creative crafts. Thus, in 1997, Regulations for the protection of the traditional arts and handicrafts was published, which define what traditional crafts culture is and formulate how to protect craftsmanship. Subsequently, Beijing (2002), Shanghai (2001), Jiangsu (1997), Guangdong (2004), Hebei (2005), Zhejiang (2000), Anhui (2011), Sichuan (2004), Chongging (2005) also issued relevant management rules. Furthermore, Chinese government published The 11th Five Year Plans for the development of cultural program in 2006 to start to pay attention to the creative industry, try to add new fresh blood ('creativity') into crafts. In the same time, they build related political mechanisms to develop and organize the innovation system and dynamic clusters by attracting and retaining talent in creative crafts.

<sup>7.</sup> Francesca Cominelli, 'Governing Cultural Commons: The Case of Traditional Craftsmanship in France', Université Paris, 2011

The 11th Five Year Plans for the development of cultural program(China)
Protecting Traditional Arts and Crafts(Beijing)

Law for the Protection of Cultural Properties(Japan)

The project "CreAzioni Giovani" (Toscana)

Heritage Crafts Association(Uk)

The 2005 Convention(UNESCO)

# Intangible cultural heritage(UNESCO)

Cultural exception(WTO)
Five Year plans(India)

Culture Heritage Foundation(Korea)
Crafts & Arts Association(China)

The project of continuity traditional folk art(Taiwan)

## 2.2.2 Innovate and promote traditional handicrafts

Innovation is the most important way to continue these traditional craftsmanships. First of all, traditional crafters adapting to different needs, social habits, ways of living, and new technologies is neccessary in contemporary era.

Secondly, the contemporary full time crafter has to be a businessperson, an editor, an educator, and a publicist all in one. They need to be essential in exploring new forms of decoration, valorizing craft products, increasing their aesthetic value, and contributing to their reputation.

Thirdly, young genaration always has more imagination than the elder genaration who already adapting traditional way of crafts, so, education, awareness-raising and capacity-building are also the way to promote and innovate traditional craftsmanship technique. For example, in Italy, in Tuscany, the project "CreAzioni Giovani" is an interesting attempt to promote young craftsmen capable of using innovation and research for their production. A study about craft in Florence emphasizes the potential of artistic crafts and the need to mix traditional craft skills with new technologies. In Lombardy, the regional office for Industry, Craft, Construction and Cooperation foresees a specific "Excellence recognition" for those craft enterprises "capable of preserving and transmitting traditional craft combining it with technological skills" (Regine Lombardia, 2012).

In China, the educational system is divided into two distinct educational systems (school-based vocational education; preemployment training and on the job training education). As to the education of creative crafts three principles apply: the training of craftsmen has take place by way of multi-channel and multi-level methods, by combining academic education and practice; by keeping 'creativity' at the core of the development of creative crafts.<sup>8</sup>

In Japan, in understanding of these traditional culture must be instilled in children to enrich their lives. For this reason, classes on traditional culture and the use of Japanese musical instruments in music classes has been started in school education from April 2002. 9

Critical for a creative craft culture is the presence of strong intermediaries and intensive discussions of the works of creative crafts people. Intermediaries include modern guilds, special shops, experts, journalists, news papers, websites, scholarship, labs, fairs, capital cities (like Arnhem as fashion city and Eindhoven as creative design city) and so forth.

In UK organizations for creative and cultural skills identified in 2009 the need to map the creative craft sector in the UK and submitted a plan for its future in a report titled The Craft Blueprint<sup>10</sup> They observe that the ambition of the craft sector is growing with an increasing need for support at various levels as a consequence.

- 8. Arjo Klamer, 'Craftsculture: an international comparison', Erasmus University Rotterdam, 2012
- 9. SAITO Hirotsugu, '2004 Workshop on Inventory-Making for Intangible Cultural Heritage Management', Tokyo, 2004
- 10. The Craft Blue Print, A work force development Plan, for craft in the U.K, Creative& Cultural Skills (2009)

They plead for an expansion of the entry points, enhancement of leadership, professional development and business support within the sector. The report also signals the need to reinvigorate craft education at schools to produce a generation of Britons who know their crafts and are more sensitive towards their wellbeing.

In China, creative crafts have tended to cluster (such as 798 Art Zone), build geographic concentrations of interconnected in large cities and regions for satisfy varied needs of people. Creative crafts are intended to sustain the special qualities of Chinese traditional culture, which include humanity, harmony and symbolization. At the same time, 'core technology' and 'culture-based creativity' also play important roles in the development and innovation of creative crafts.

In Italy, sustenance of creative craft is threatened because of decreasing number of apprentices. The recognition of human living treasures in Sicily might be a best practice to follow in the other regions to ensure the survival of traditional creative craft that risk to be forgotten. The Lombardy region organizes "Artigianoinfiera", one of the biggest craft fair in the world. The participation of the region is a clear sign of its effort in sustaining craft and its development.

In Dutch, Victoria Albert museum make the

strategic plan 2011-2015 for promoting knowledge to help people best appreciate crafts culture in creative economy.<sup>11</sup>

11. Arjo Klamer, 'Craftsculture: an international comparison', Erasmus University Rotterdam, 2012

# 2.3 Luxuries and traditional crafsmanship

## 2.3.1 The meaning of luxury

"Luxury is not easy to define. The high-quality and creative Haute-Couture is identified as a luxury symbol. And it is, of course, from a business and brand placement point of view, addressed to a high consumer range.

I think this term has been changing its exclusive 'richness symbol' meaning in time.

Luxury is research, the chance to experience new routes, to find new and not predictable or already seen solutions. Experimentations are luxury. And it's a fortune finding them and being able to have them. There are for example dresses which really give you the feeling of luxury for the way they have been made, for the quality of manufacturing, whilst some other expensive and intricate work are just opulent. Same for jewelry, shoes, accessories.

Craftsmanship is luxury. A product is luxe when it is handmade, tailored for few. Luxury meaning exclusiveness."

----- FRANCA SOZZANI 12



12. Franca sozzani, 'What is the meaning of luxury?', 2011, http://www.vogue.it/en/magazine/editor-s-blog/2011/03/march-5th#sthash.5sSSIKhO.dpuf

A brand would have to be creative and. every season, come up with new ideas, new concepts, and new products to attract the interest of the consumer. As its status moved from fashion to luxury, it would develop classic models that would sell, year in and year out, and would be able to impose a style, and create permanent bestsellers. This distinction is, of course, interesting intellectually, but it is at the same time misleading and dangerous. It is misleading because, even if it belongs to the luxury field, a fashion brand, for example, Chanel or Dior, must come up with new dresses or new accessories every, season, presented in new ways to make sure that customers remain interested. It is also dangerous because it implies that a luxury brand does not have to innovate as often as nonluxury ones, which is obviously not the case.

Definition of luxury is that of different levels. Danielle Alleres distinguishes three levels of luxury:

- 1. Inaccessible luxury, which corresponds to exclusive models, sometimes made by hand in single units, as m the case of very expensive unique combination watches or the Rolls Royce we mentioned.
- 2. intermediary luxury, which corresponds to objects that are in fact expensive replicas of individual models. In the fashion field, haute couture would be the inaccessible luxury, but specially made dresses,

duplicating all or part of a couture model, would fall into this intermediary category. For cars, Rolls Royce and Ferrari single special models would be the inaccessible, and the catalogue Ferrari or Maserati would be the intermediary luxury, as would the Porsche 911.

3. Accessible luxury would represent all products made in factories or workshops and in larger series, for example, Dior ladies' ready-to wear, Ferragamo shoes, perfumes, or a bottle of whisky.

This analysis is interesting, but in a way it misses the point that, today, 98 percent of luxury business is accessible luxury and, therefore, if the classification is very, useful to describe the origin and the specificities of the field, it is not a very operational one. The question today is to see to what extent we can still label luxury products, such as a bottle of wine or a pair of canvas shoes. And, unless one invents new subdivisions in the accessible category, this distribution in three categories explains very, well the source of the business, but does not help in distinguishing between an Yves Saint Laurent perfume and a Nivea moisturizing cream.

As we must give our own preliminary definition, for us, a luxury product must meet three criteria: It must have a strong artistic content, it must be the result of craftsmanship, and it must be international.<sup>13</sup>

13. Michel Chevalier and Gerald Mazzalovo, 'Luxury Brand Management: A World of Privilege', John Wiley & Sons edit, Singapore, 2012

## 2.3.2 How luxury brands continue traditional handicrafts

To support traditional handicrafts, helping maintain them as real, thriving, evolving businesses is more important than just objects in a museum.

A traditional handicraft may be the spark point for a luxury brands.

If we singled out a traditional handicraft for each brand to make it a luxury icon, we would have "intrecciato" for Bottega Veneta, knitting for Missoni, leather goods for Hermes, men's suits for Brioni, and jewelry make for Bylgari.

Graph3: 'CRAFTSMANSHIP CABAT', http://www.bottegaveneta.com/ experience/us/hand-of-the-artisan/ cabat/

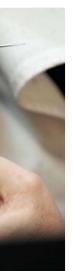
Graph4: 'HERMÈS AND LEICA LIMITED EDITION', http:// designyoutrust.com/2012/09/ hermes-and-leica-limitededition/1347904662000/

Graph5: 'È morto Ottavio Missoni', http://www.huffingtonpost.it/2013/05/09/e-morto-ottavio-missoni\_n\_3242984.html

Graph6: 'The art of jewelry making', http://www.bulgari.com/zh-it/about-bulgari-the-art-of-jewellery-making











## 2.3.3 The case of Bottega Veneta

"When your own initials are enough." ------ Tomas Maier

Creative director of Bottega Veneta

Bottega Veneta creates luxury goods based on its core values of quality, craftsmanship, exclusivity and discreet luxury. The brand began, as a leather goods house made famous through its signature "intrecciato", a unique leather weaving pattern created by the Bottega Veneta craftsmen, and it now has a full product range of leather goods (handbags, luggage and small leather goods), women's and men's ready-to-wear, shoes, jewellery, accessories, furniture and home decorations.

Bottega Veneta has always been synony- mous with the highest craftsmanship, the choice of finest materials, and a design style that is innovative yet – understated. The brand led the way in introducing soft, deconstructed handbags – as opposed to the usual rigid structure that originated with the French school – and quickly became well recognised and warmly appreciated in the market. <sup>14</sup>

The very technique is the quintessence of Bottega Veneta, providing her with an original identity and a style statement for the fashion forward crowd, albeit a small sophisticated niche one. But they haven't stop devoloping new way of weaving on leather good, it has also presented the notion of art in fashion where every bag is beyond its common purpose, but rather an artistic masterpiece.

14. 'Bottega Veneta', http://www. kering.com/en/brands/luxury/ bottega-veneta

Graph7: Bottega veneta Intrecciato small leather tote (198259)', http://www.matchesfashion.com/ product/198259 In Italian, "Corda" refers to rope. For the Cruise 2010/2011 collection, Bottega Veneta gets down to labour intensive work. Putting the bag together through cabat weaving, the bag artisans cut small slits in the middle of the fettuce where the cord is inserted and thread through for added texture.



Graph8: 'La Corda', http://cosmone.com/bottegaveneta/bottega-veneta

The Bombe is originally a frozen dome-shaped dessert. Inspired by it, Bottega Veneta heightens one's palate by introducing the Bombe in their bags. A padded weave, the Bombe is created by placing soft foam between the two layers of leather in order to achieve a rounded look.



Graph9: 'The Bombe', http://cosmone.com/bottegaveneta/bottega-veneta

Her SS2011 Collection consists of various twists and braids and presented to us is another variant of weave pattern. As in the Chene Intreccio Twist Polonaise Python Cross Body Cubo bag, python and polonaise (calf) are meticulously weaved together with the intrecciato method but adding a twist to it, hence enhancing details of the bag.



Graph10: 'The Twist', http://cosmone.com/bottegaveneta/bottega-veneta

Incorporating the traditional Japanese art of paper folding, Bottega Veneta applied the similar concept to their bags. Who would have thought we could use leather in handicraft? The Origami is created by actually folding the leather into pyramids and then hand sewn together.



Graph11: 'The Origami', http://cosmone.com/bottegaveneta/bottega-veneta

BOTTEGA VENETA PRESENTS 'WHEN YOUR OWN INITIALS ARE ENOUGH: THE KNOT'

The Knot is one of Bottega Veneta's most recognizable and beloved handbags. When Tomas Maier took the reins as Creative Director in 2001, he saw the special quality of the company's small, rounded box clutch. Maier created a new closure in the shape of a small leather knot and gave the bag its now iconic name. Since then, the Knot has been reinterpreted many times, always making an appearance in seasonal collections.

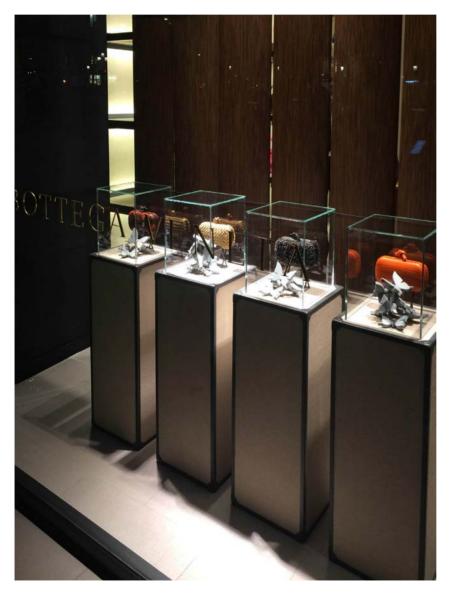
"The Knot is a one of Bottega Veneta's signature pieces, offered each season in limited editions and quantities that make it a collector's item, while always maintaining

its iconic shape. Recognized and collected for its unique design, unrivaled quality and individual style, the Knot is a symbol of the company's past as well as its future. For me personally, it is a continuous opportunity for a special kind of creative exploration.", says Maier. The Maison's website now hosts a tribute to the house through a special capsule offering the chance to actively discover the DNA of the Knot, while social media platforms further engage the digital sphere. Furthermore, the Knot Retrospective will transform the two-storey St. Tropez boutique into a museum exhibiting about 300 Knots from archival to more recent seasons. The exhibit will open to the public from August 1 – 3.15

15. 'BOTTEGA VENETA PRESENTS' WHEN YOUR OWN INITIALS ARE ENOUGH: THE KNOT', by Staff Writer, 30 July 2014 http://www.luxury-insider.com/luxury-news/2014/07/bottega-veneta-presents-when-your-own-initials-are-enough-the-knot



Graph12: 'BOTTEGA VENETA PRESENTS 'WHEN YOUR OWN INITIALS ARE ENOUGH: THE KNOT', by Staff Writer, 30 July 2014 http://www.luxury-insider.com/luxury-news/2014/07/bottegaveneta-presents-when-your-own-initials-are-enough-the-knot



Graph13: 'THE KNOT RETROSPEC-TIVE', 2014, http://fashionated.net/2014/10/02/the-knot-retrospective/comment-page-1/

# Bibliography

#### 2.1 Traditional craftsmanship's current situation

- 1. Cathy Lynne Costin, 'Introduction :Craft and Social Identity', edited by C. Costin and R. Wright, California State University, Northridge, 1998
- 2. Arjo Klamer, 'Craftsculture: an international comparison', Erasmus University Rotterdam, 2012
- 3. Francesca Cominelli, 'Governing Cultural Commons: The Case of Traditional Craftsmanship in France', Université Paris, 2011
- 4. Randall Shumaker edit, 'Virtual and Mixed Reality Systems and Applications', Orlando, FL, USA, July 9-14, 2011
- 5. UNESCO (The United Nations Organization for Education, Science and Culture), 'Traditional craftsmanship', http://www.unesco.org/culture/ich/?pg=57

#### 2.2 How to continue traditional handicrafts

- 6. UNESCO (The United Nations Organization for Education, Science and Culture), 'Traditional craftsmanship', http://www.unesco.org/culture/ich/?pq=57
- 7. Francesca Cominelli, 'Governing Cultural Commons: The Case of Traditional Craftsmanship in France', Université Paris, 2011
- 8. Arjo Klamer, 'Craftsculture: an international comparison', Erasmus University Rotterdam, 2012
- 9. SAITO Hirotsugu, '2004 Workshop on Inventory-Making for Intangible Cultural Heritage Management', Tokyo, 2004
- 10. The Craft Blue Print, A work force development Plan, for craft in the U.K, Creative& Cultural Skills (2009)
- 11. Arjo Klamer, 'Craftsculture: an international comparison', Erasmus University Rotterdam, 2012

#### 2.3 Luxuries and traditional crafsmanship

- 12. Franca sozzani, 'What is the meaning of luxury?', 2011, http://www.vogue.it/en/magazine/editors-blog/2011/03/march-5th#sthash.5sS5lKh0.dpuf
- 13. Michel Chevalier and Gerald Mazzalovo, 'Luxury Brand Management: A World of Privilege', John Wiley & Sons edit, Singapore, 2012
- 14. 'Bottega Veneta', http://www.kering.com/en/brands/luxury/bottega-veneta
- 15. 'BOTTEGA VENETA PRESENTS 'WHEN YOUR OWN INITIALS ARE ENOUGH: THE KNOT', by Staff Writer, 30 July 2014, http://www.luxury-insider.com/luxury-news/2014/07/bottega-veneta-presents-when-your-own-initials-are-enough-the-knot

#### Graph

- 1: Source from Insee-SIRENE, Insee-DGI, DCASPL 2008
- 2: 'Icheon Master Hand: Choi in Gyu', public by The American Museum of Ceramic Art on YouTobe, 2014, https://www.youtube.com/watch?v=Xdw-sG3ShFw
- 3: 'CRAFTSMANSHIP CABAT', http://www.bottegaveneta.com/experience/us/hand-of-the-artisan/cabat/
- 4: 'HERMÈS AND LEICA LIMITED EDITION', http://designyoutrust.com/2012/09/hermes-and-leica-limited-edition/1347904662000/
- 5: 'È morto Ottavio Missoni', http://www.huffingtonpost.it/2013/05/09/e-morto-ottavio-missoni\_ n 3242984.html
- 6: 'The art of jewelry making', http://www.bulgari.com/zh-it/about-bulgari-the-art-of-jewellery-making
- 7: 'Bottega veneta Intrecciato small leather tote (198259)', http://www.matchesfashion.com/product/198259
- 8: 'La Corda', http://cosmone.com/bottega-veneta/bottega-veneta
- 9: 'The Bombe', http://cosmone.com/bottega-veneta/bottega-veneta
- 10: 'The Twist', http://cosmone.com/bottega-veneta/bottega-veneta
- 11: 'The Origami', http://cosmone.com/bottega-veneta/bottega-veneta
- 12: 'BOTTEGA VENETA PRESENTS 'WHEN YOUR OWN INITIALS ARE ENOUGH: THE KNOT', by Staff Writer, 30 July 2014, http://www.luxury-insider.com/luxury-news/2014/07/bottega-veneta-presents-when-your-own-initials-are-enough-the-knot
- 13: 'THE KNOT RETROSPEC-TIVE', 2014, http://fashionated.net/2014/10/02/the-knot-retrospective/comment-page-1/

# 3. KNOTTING

Knot is the joining of two cords.

# 3.1 The history of knot

Few realize the importance that knots and cordage have played in the world's history, but if it had not been for these simple and every-day things, which as a rule are given far too little consideration, the human race could never have developed beyond savages. No cloth could be woven, no net or seine knitted, no bow strung and no craft sailed on lake or sea without numerous knots and proper lines or ropes; and Columbus himself would have been far more handicapped without knots than without a compass.

History abounds with mention of knots, and in the eighth book of "Odyssey" Ulysses is represented as securing various articles of raiment by a rope fastened in a "knot closed with Circean art"; and as further proof of the prominence the ancients gave to knots the famous Gordian Knot may be mentioned. Probably no one will ever learn just how this fabulous knot was tied, and like many modern knots it was doubtless far easier for Alexander to cut it than to untie it. In heraldry many knots have been used as symbols and badges and many old Coats of Arms bear intricate and handsome knots, or entwined ropes, emblazoned upon them. As to the utility of knots and rope work there can be no question. A little knowledge of knots has saved many a life in storm and wreck, and if every one knew how to quickly and securely tie a knot there would be far fewer casualities in hotel and similar fires. In a thousand ways and times a

knowledge of rope and knots is useful and many times necessary. Many an accident has occurred through a knot or splice being improperly formed, and even in tying an ordinary bundle or "roping" a trunk or box few people tie a knot that is secure and yet readily undone and quickly made. In a life of travel and adventure in out-of-the way places, in yachting or boating, in hunting or fishing, and even in motoring, to command a number of good knots and splices is to make life safer, easier, and more enjoyable, aside from the real pleasure one may find in learning the interesting art of knot-tying. Through countless ages the various forms of knots and fastenings for rope, cable, or cord have been developed; the best kinds being steadily improved and handed down from generation to generation, while the poor or inferior fastenings have been discarded by those whose callings required the use of cordage.

Gradually, too, each profession or trade has adopted the knots best suited to its requirements, and thus we find the Sailor's Knot; the Weaver's Knot; Fishermen's knots; Builders' knots; Butchers' knots; and many others which have taken their names from the use to which they are especially adapted.<sup>1</sup>

<sup>1.</sup>A. Hyatt Verrill, 'Knots, Splices and Rope Work: An Illustrated Handbook', introduction part, New York, 1912



Graph1: 'Knotboard', by William Gomez, it was done by his grandfather in the 1930's or 40's. http://www.igkt.net/knotgallery/ main.php?g2\_itemId=740

# 3.2 Knot Categories

### 3.2.1 Terminology

#### **Bend**

A bend is a knot used to join two lengths of rope.

#### **Bight**

A bight has two meanings in knotting. It can mean either any central part of a rope (between the standing end and the working end) or an arc in a rope that is at least as wide as a semicircle. In either case, a bight is a length of rope that does not cross itself. Knots that can be tied without use of the working end are called knots on the bight.

#### **Binding knot**

Binding knots are knots that either constrict a single object or hold two objects snugly together. Whippings, seizings and lashings serve a similar purpose to binding knots, but contain too many wraps to be properly called a knot. In binding knots, the ends of rope are either joined together or tucked under the turns of the knot.

#### Capsizing

A knot that has capsized has deformed into a different structure. Although capsizing is sometimes the result of incorrect tying or misuse, it can also be done purposefully in certain cases to strengthen the knot (see the carrick bend).

#### **Decorative knot**

A decorative knot is any aesthetically pleasing knot. Although it is not necessarily the case, most decorative knots also have practical applications or were derived from other well-known knots. Decorative knotting is one of the oldest and most

widely distributed folk art.

#### **Dressing**

Knot dressing is the process of arranging a knot in such a way as to improve its performance. Crossing or uncrossing the rope in a specific way, depending on the knot, can increase the knot's strength as well as reduce its jamming potential.

#### **Elbow**

An elbow refers to any two nearby crossings of a rope. An elbow is created when an additional twist is made in a loop.

#### Flake

A flake refers to any number of turns in a coiled rope. Likewise, to flake a rope means to coil it.

#### Friction hitch

A friction hitch is a knot that attaches one rope to another in a way that allows the knot's position to easily be adjusted. Sometimes friction hitches are called slideand-grip knots. They are often used in climbing applications.

#### Hitch

A hitch is a knot that attaches a rope to some object, often a ring, rail, spar, or post.

#### Lashing

A lashing is an arrangement of rope used to secure two or more items together in a rigid manner. Common uses include the joining scaffolding poles and the securing of sailing masts. The square lashing, diagonal lashing, and shear lashing are well-known lashings used to bind poles perpendicularly, diagonally, and in parallel,

respectively.

#### Loop

A loop is one of the fundamental structures used to tie knots. It is a full circle formed by passing the working end of a rope over itself. When the legs of a closed loop are crossed to form a loop, the rope has taken a turn.

#### Loop knot.

A loop knot is the type of knot that forms a fixed loop. It is created either when the end of a rope is fastened to its own standing part or when a loop in the bight of a rope is knotted. Unlike a hitch, a loop knot creates a fixed loop in a rope that maintains its structure regardless of whether or not it is fastened to an object. In other words, a loop knot can be removed from an object without losing its shape.

#### Noose

A noose can refer to any sliding loop in which the loop tightens when pulled.

#### Open loop

An open loop is a curve in a rope that resembles a semicircle in which the legs are not touching or crossed. The legs of an open loop are brought together narrower than they are in a bight.

#### Seizing

A seizing is a knot that binds two pieces of rope together side by side, normally in order to create a loop. The structure of seizings are similar to that of lashings.

#### Setting

Setting a knot is the process of tightening

it. Improper setting can cause certain knots to underperform.

#### Slipped knot

A slipped knot is any knot that unties when an end is pulled. Thus, tying the slipped form of a knot makes it easier to untie, especially when the knot is prone to jamming.

#### **Solid Braid**

A tightly woven single-braid rope which cannot be spliced using a Brummel or a Long Bury technique.

#### **Splice**

Splicing is a method of joining two ropes done by untwisting and then re-weaving the rope's strands.

#### Standing end

The standing end (or standing part) of a rope is the part not active in knot tying. It is the part opposite of the working end.

#### Stopper knot

A stopper knot is the type of knot tied to prevent a rope slipping through a grommet. The overhand knot is the simplest single-strand stopper knot.

#### Whipping

A whipping is a binding knot tied around the end of a rope to prevent the rope from unraveling.

#### Working end

The working end (or working part) of a rope is the part active in knot tying. It is the part opposite of the standing end.<sup>2</sup>

2. 'Knots Terminology', http://www.animatedknots.com/terminology.php

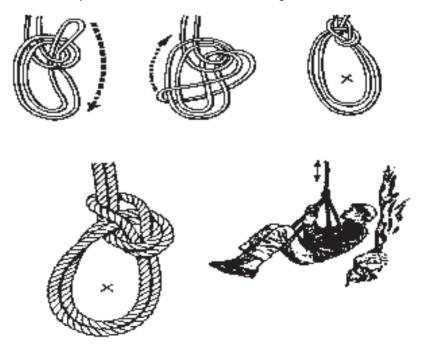
### 3.2.2 Functionable knot

As humankind's use of symbolism and communication developed, knots took on new meaning by way of representation. As people learned to count days, they counted them with knots on a string.

Did you ever wonder how people kept track of meetings before appointment books and PDAs? For some, a bit of string was all that was needed to keep an appointment. Often an invitation to a meeting consisted of a string with a number of knots tied in it to represent the number of days until the event. They would be untied one per day until time was up.

By far the most elaborate record keeping ever done was on knotted strings, or quipus, by the Inca of Peru. Each quipu was a system of many strands branching off a central cord. The knots on these strands represented all the data needed to administer an empire, including mathematics, census figures, taxes, crops, herds, and many other things. Using knots allowed the Inca to record and calculate data without having a written language.<sup>3</sup>
Nowadays there are still fuctional knots for general purpose, fishing, camping, sailing and climbing.

3.Randy Penn, 'The Everything Knots Book', Chapter 1, Beyond basic fuction, the USA, 2004



Graph2: Clifford Warren Ashley, 'The Ashley book of Knots', edit by The Yankee Whaler, London, 1944

#### 3.2.3 Decorative knot

Knots can be attractive and decorative in addition to being useful. I choose three knot examples to explain why they called decorative knots and what's the defferent between functional knot.



Graph3: 'Celtic Love Knot Meaning', http://www.buzzle.com/articles/celtic-love-knot-meaning.html

#### Celtic knot

The first one is Celtic knot (see above graph3), which is a variety of knots and stylized graphical representations of knots used for decoration, used extensively in the Celtic style of Insular art. The use of interlace patterns had its origins in the artwork of the late Roman Empire. Knot patterns first appeared in the third and fourth centuries AD and can be seen in Roman floor mosaics of that time. Interesting developments in

the artistic use of interlaced knot patterns are found in Byzantine architecture and book illumination, Coptic art, Celtic art, Islamic art, Medieval Russian book illumination, Ethiopian art, and European architecture and book illumination.<sup>4</sup>

<sup>4. &#</sup>x27;Celtic knot', http://en.wikipedia. org/wiki/Celtic knot

#### Macramé

The second one is Macramé. It may be the most widely used knot technology in fashion aera. It's hard to define where or when this knot appear in our life.

Some records saids it start from 13th-century Arab weavers. Another school of thought thinks that it comes from Turkish "makrama". It also appear in ancient China when embroiderer use this kind of knot to stitch around thread. Now, in China, we call it Rao Xian knot or Xie Juan knot which means 'wind the rope'.

But with no doubt that Macramé is also an useful knot when you end your weaving project. It could be used on accessories such as belts or bracelets, it could also be the detail of fabrics.

Many Macramé masters had useing this technology to create fancy work. Such as Marion Hunziker-Larsen, she's making fancinating fiber work with Macramé (see following graph4 and 5). Or as you see, with Elena Gabrici's work, Macramé could be also minimalist, pure and concise (see following graph6 and 7).



http://r2arts.org/2012/03/07/cavandoli-knotting-workshop-withmarion-hunziker-larsen/

Graph5: 'The Latin America Version', http://jewelsinfiber.blogspot.it/2013\_01\_01\_archive.html

Graph6: 'cerchio-con-argento', http://www.flickr.com/photos/annodareconstile/3870359786/

Graph7: 'cerchio-con-argento-particolare',

http://www.flickr.com/photos/annodareconstile/3869577125/









### Pan Chang knot

The last one I have to talk about is Pan Chang knot, a tipical Chinese knot symble. This is the knot that when you say 'Chinese knot' everyone will figure out. But actually, there're many type of knot called Chinese knot which I'll analysis in the following pages.

It is lanyard type arrangements where two cords enter from the top of the knot and two cords leave from the bottom. The knots are usually double-layered and symmetrical. In other country it also be called Endless knot

or Chrysanthemum knot (in korea).

The knot technique has specific sequence that can make the knot as an nxn square or an nxm rectangle.

In China, some Chinese knot masters had invented new way and new technology to make it more complex in logic.

The technique has been propagated in Japan and Korea long time ago, and these two country had developed new materials. It has been 'played' better also in Hong Kong and Taiwan. It's becomeing more like an oriental symble.



Graph8: 'Maedeup: The art of Korean knotting', http://rheeandrhee.blogspot.it/2011\_02\_01\_archive.html

# 3.3 A decorative handicraft art --- Chinese knotting

The Shuowen liezi, the first comprehensive Chinese character dictionary, compiled around CE 100, defines the word knot as the joining of two cords. Knotting is an ancient and highly regarded art form in China and an integral part of Chinese life.

### 3.3.1 The history of Chinese knotting

Because such knotwork appeared in ancient times, was developed in the Tang and Song dynasties in China and was popularized during the Ming and Qing dynasties, the knots are naturally enough referred to as Chinese knots. Moreover, knotting in China spawned a tradition of decorative knotting in other East Asian countries, especially Korea and Japan.

Archaeological studies in China indicate that the art of tving knots dates back to prehistoric times. Recent discoveries include 100,000-year-old bone needles used for sewing and bodkins used for untying knots, proof that knotting existed. Baskets for carrying a multifarious array of goods, ropes for making hunting and fishing snares, lacing for pulling together garments and cords for wrapping and tying items were as crucial to the development of human civilization as spear heads made of flint, boats made of wood and ploughs made of bronze. But, because of the delicate and perishable nature of the materials used to tie knots - mostly fibers from plants and strips of animal hide - few examples of prehistoric Chinese knots exist today. Moreover, the art is generally very poorly documented.

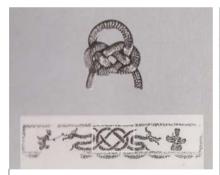
Over the centuries, Chinese knots began to take on a life of their own, eventually being appreciated for their intrinsic beauty in addition to their functional use. Wherever utilitarian knots appeared, decorative knots were not far behind, and

nowhere was the art of decorative knotting as highly developed as in Imperial China. A magnificent array of complex knots ornamented everything from wind chimes to palace lanterns, sword hilts to teapots, fan tassels to hairpins, and peasant coats to empress's hair. In effect, they were decorations of decorations, imbuing elegance in everything they embellished, including commonplace, everyday items. Some of the best and earliest evidence of these knots has been preserved on bronze vessels of the Warring States Period (475-221 BCE), on silk paintings during the Western Han Period (206 BCE-CE 8) and on Buddhist carvings of the Northern Dynasties Period (CE 316-581). Further references to knotting have also been found in literature. poetry and the private letters of some of the most infamous rulers of China. The phenomenon of knot tying continued to steadily evolve over the course of thousands of years with the development of more sophisticated techniques and increasingly intricate woven patterns. During the Qing Dynasty (1644-1911), knotting finally broke away from its pure folklore status, becoming an acceptable art form in Chinese society and reaching the pinnacle of its success. Knotting also became an important form of communication, whereby people could express blessings, best wishes, and amorous sentiments. The Chinese pursued knotting ornamentation as a serious art form and devoted enormous amounts of

time and effort to perfecting the art. What remains of their work is not only a marvel of technical ingenuity and perfection but a reflection of their creative spirit searching for aesthetic expression.

Knotting continued to flourish up until about 1911 CE, the start of the Republican Era, when China began its modernization process, although some knotting continued into the 1930s, especially in items made for festive occasions and important rites of passage. Due to the

effects of industrialization and the Cultural Revolution in China, the art of Chinese knotting, along with many other arts and irreplacable cultural treasures, was almost lost. However, in the late 1970s, a resurgence of interest occurred in Taiwan, largely due to the efforts of Lydia Chen of the National Palace Museum who founded the Chinese Knotting Promotion Center, as well as the publishers of Echo magazine who sought out the few remaining keepers of the knotting tradition and recorded their







HAN DYNASTY (206 BCE---CE 220)
Button knot
Button knot on a rubbing taken off a stone carving
from an ancient tomb in Shangdong Province.



TANG DYNASTY (CE Round brocade kno Round brocade kno prancing horse deco silver pot from He V Shanxi Province.

work in a series of articles published in the magazine. When the art of Macramé became popular in the West in the 1970s, there was a simultaneous revival of interest in Chinese knots. In the 1980s, Lydia Chen focused her energies on researching the knots embellishing artifacts preserved during the Qing Dynasty, which had been uncovered in archaeological finds, and on historical texts, piecing together scraps of information about the evolution of knots, and then assembling practical manuals to

disseminate the art of Chinese knotting to a wider audience. Once an oral tradition, handed down from one generation to another, Chinese knotting became almost overnight - accessible to millions worldwide, which is testified today by its widespread popularity. Chinese knotting has now become a type of elegant and colorful craft, removed from its original practical use.<sup>5</sup>

5. Lydia Chen, 'The complete book of Chinese Knotting', published by Tuttle publishing, USA, 2007



TANG DYNASTY (CE 608--906)
Tassel knot
Tassel knots in a circle of birds,
symbolic of good luck, on an
octafoil linghua mirror. Photo
courtesy Shanghai Art Museum.

608---906)

t on a

rating a

illage, Xi'an,



SONG DYNASTY (CE 690---1279)
Pan chang knot
Pan chang knot hanging from a screen
in a portrait of the Emperor Xiaozhong.
Photo courtesy Palace Museum, Beijing.



MING DYNASTY (CE 1368--1644)
Cloverleaf knot
Cloverleaf knot decorating the
top of a white porcelain box.
Private collection.

Graph9-14: Lydia Chen, 'The complete book of Chinese Knotting', published by Tuttle publishing, USA, 2007

### 3.3.2 The characteristics and types

In the realm of knotting, Chinese knots are considered to have the most outstanding decorative value. Even the Japanese and Koreans- themselves masters at tying knots - are fascinated by the knotting techniques and applications of the Chinese for the simple reason that the structure of Chinese knots is highly varied and their applications limitless.

Chinese knots are not only exceptionally graceful but are also practical: they can tie objects tightly. A major characteristic of Chinese knotwork is that all the knots can be tied using one cord, usually about a meter in length. Another is that every basic knot is named according to its distinctive shape, meaning or pronunciation. A Chinese knot body is made up of two layers of cords sandwiching an empty space, hence the three-dimensional, symmetrical body is tough enough to stay in shape when suspended. Redundant cord ends can be hidden inside a knot body and ornamental beads, precious stones or other embellishments can be incorporated for additional aesthetic effect. Since all Chinese knots are identical on both sides, they are pleasing to the eye.

Chinese knots also have unlimited variations due to their complicated weaves and weave sequences, the number of outer loops employed, the tightness of the knot body, etc. Furthermore, the basic knots can be randomly recombined to form many more patterns. All Chinese knots can be used to decorate and tie objects. The scope of ingenuity in Chinese knotting is thus without boundaries.

Unlike Chinese knots, Western knots, the best known ones being the twodimensional fiat knot and curled knot, are very simple and repetitive - almost monotonous. Not a great deal of skill is needed to tie them. Moreover, they are neither particularly decorative nor useful for tying objects. Since there is little skill involved in Western knotting, any outstanding example that is produced must have a unique theme and an intricate blend of colors and materials.

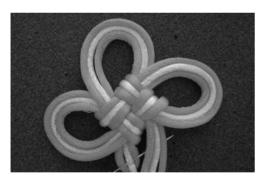


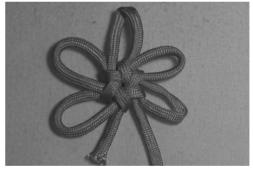
Pan Chang knot 盘长结 (Coil knot, temple knot, Chrysanthemum knot (Korean), 2x2 mystic knot)

In this very stable knot, the cord is woven into a double-thickness pattern. It is always tied with the outer loops on all four sides vertically down and wrapped and pulled around each other. When an ear loop of the right cord end meets another loop, it will always go through it, whereas that of the left cord end will always wrap around another loop. The last side to be completed is formed using the pull one, wrap one technique.

Cloverleaf knot 四耳团锦结 (Four-flower knot, dragonfly knot, ginger knot)

Regardless of the number of outer loops involved, the tying technique of the cloverleaf knot always involves pulling an outer loop through the outer loop immediately in front of it until the last outer loop is reached, when that is pulled through the one immediately in front of it and then hooked up with the first outer loop. Different types of modified cloverleaf knots are shown below.





Round brocade knot 六耳团锦结 (Six-flower knot)

The round brocade knot was developed to rectify the shortcomings of the cloverleaf knot with multiple outer loops, which has a loose body knot and a lack of variety in its modifications. As with the pan chang knot, the basic round brocade knot uses the pull and wrap technique. Though the pan chang knot is squarish and the round brocade knot round, as its name suggests, both knots are highly versatile and variable. The different types of modified round brocade knots are shown below.

Button knot 纽扣结 (Knife Lanyard knot, Bosur

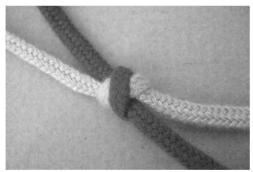
The fascinating little but Chinese clothing, especial blouses, and dresses, are knots. This knot is form opposing outer loops, m knot (page 106). Here, the cord end beneath it is placed loop. The right cord end around the overlapped blend itself to many variation.



Nhistle knot)

tons found on traditional ly the openings of jackets, made from simple button ned by overlapping two uch like the double coin e right outer loop with the ned on top of the left outer is then woven clockwise ayers. This knot does not has





Double connection knot 双联结 (Matthew Walker knot)

The double connection knot is exactly what its name suggests - two knots tied into one another and then pulled together. Half of one flat knot forms half of the other.

The result is a knot with a tight body but no outer loops. Different double connection knots can be achieved by varying the number of flat knots that are included and the method of hooking them up. The different types of double connection knots are shown below.

Double coin knot 双钱结 (Carrick Bend, Josephine knot)

The double coin knot represents two antique Chinese coins overlapping one another, which connotes both prosperity and longevity. It is a flat knot without outer loops, made by overlapping and stringing a series of ear loops together. Some of the different types of modified double coin knots are shown below. Others are taught in the author's Chinese Knotting: Creative Designs That Are Easy and Fun! and Fun with Chinese Knotting: Making Your Own Fashion Accessories and Accents.



Cross knot 十字结 (Friendship knot, Japanese crown knot)

The Chinese and Japanese versions of the name for this knot are based on the shape, so is the shape, although the character means "ten" (shí, + ). On Ruri-Ishikawa's page, it talks about the character(word) side, and the (mouth, kuchi) character side, which ends up giving us the knot. But it's all based on using the pictographic qualities of the ideograms in a more graphical context. So a better translation of the Japanese would probably be "cross-square knot".



Buddha Knot 卍字结 (Sauvastika knot)

The Buddha knot is a primitive religious symbol or ornament in the shape of a Greek cross, usually with the ends of the arms bent at right angles in either a clockwise or anticlockwise direction. In Chinese Buddhist symbolism, the arms of the symbol are bent anticlockwise. The Buddha knot represents the Buddha's heart and has come to stand for the accumulation of good fortune and complete virtue, a symbol of Buddhahood and of the Buddha himself.



Constellation Knot 星结 (The stellar knot)

This knot, tied using t technique, resembles a varying the number of ear a seines of modified co produced, although fairly Plafond knot 藻井结 (Spectacle/glasses knot (Korean), caisson ceiling knot)

The plafond knot, with its spiral-like center and rectangular border, was inspired by the decorations found on the dome-like central sections of ceilings in Chinese temples and palaces. The ceilings, which are divided into nine rectangular sections, three across and three deep, each have a domed apex composed of a circular design filled with auspicious motifs surrounded by a complementary motif which radiates out to the rectangular border. This effect is echoed in the plafond knot, which is made by hooking up and tightening a number of flat knots.







Good luck knot 好运结

This knot is made by wrapping three, four, five, six or more outer loops clockwise or anticlockwise and pulling them firmly to secure them. If careful attention is paid to ~ne tightening process, the knot can also be tied with compound petals- a small circle of loops in between the large outer ones - by pressing loops in the same direction and inserting them into another loop. A great variety of elegant modified good luck knots can thus be obtained by changing the method and number of overlapped and pulled cords. The various types of modified good luck knots are shown below.

he wrap one, pull one star, hence its name. By loops and their sequence, nstellation knots can be similar m appearance.



knotting, start as a point, link as a line, continue turning as a surface and a volume, it can have variety of possibility by using on fashion. Not like other traditional craftsmanship such as embroidery, knotting is more popular in oriental countries but less in weatern countries. As fashion brand start focucing on Asian market, knotting element becoming an important detail on garments and accessories.

ethnical element, but it could also be contemporary.

Graph15: 'Eleanor Amoroso AW12 http://undresser.tistory.com/182

### 3.4.1 Knotting as the details of clothing

Knotting is an interesting technique if you useing it to make a part of texture or a piece of fabric. To be a detail on garments many designer had trying Macramé which truly has many diversifications. Since Qing

dynesty, there's a famous costume in China called Qi Pao (Cheongsam) useing Button knots as buttons. Some designer also tryed Pan Chang knot or other kinds of complex knot to make samples on closthing.



Graph16: 'KNOT ENOUGH', https://www.notjustalabel.com/designer/orlamg?collection=158829

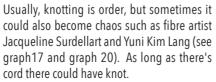




Graph 17: Jacqueline Surdellart, 'Installation II', Braided cotton cord, raw cotton rope, Steel rods/ armatures, H5'xW6', 2014, http://jacquelinesurdellart.squarespace.com/fiber-work-index/#/installation-2/

Graph18: 'Fashion Crafts: \*Aude Tahon\*', https://designonyou.wordpress.com/2011/09/22/fashion-crafts-aude-tahon/

Graph19. 'Chanel', http://forestwalkingguitartalking. blogspot.it/2013/09/your-houseisnt-haunted-youre-just.html











Graph20: Yuni Kim Lang, 'BIG RED KNOTS', http://www.yunikimlang.com/wearbigredknots

Graph21: Shanghai Tang, 'Silk Cotton Colour Block Qipao Dress', https://www.shanghaitang.com/en-eu/women/springsummer-2015/silk-cotton-colour-block-qipao-dress-black-1F310M30MAN.html

Graph22. 'Vilsbøl De Arce AW/09', http://news.vilsboldearce.com/ category/exhibition/

# 3.4.2 Knotting as a craft in accessories Knots on garments are kinds of detail elements, but when they are themselves, they became overall objects. Different beteewn weaving or knitting, products are build by each technique cells, but a knot can be a complete product. That's why knotting technique is easily using on accessories or homedecors. Graph23: 'KNOTTY FLOOR CUSHION', http://www.kumeko. com/knotty-floor-cushion/



# BOTTEGA VENETA

THE KNOT

Graph24: 'Bottega Veneta Debuts "When Your Own Initials are Enough: The Knot"',

http://www.bagaddictsanonymous.com/2014/07/bottega-veneta-debuts-when-your-own.html

Graph25: 'The knot',

http://www.bottegaveneta.com/ mc/femme/onlineboutique/sacs/ pochettes-et-sacs-du-soir

Graph26: 'TWO-TONE INTRECCIATO LEATHER WRAP BRACELET',

http://www.mrporter.com/enca/mens/bottega\_veneta/twotone-intrecciato-leather-wrapbracelet/493247

Graph27: 'Knot perfume', http://saudibeautyblog.com/ introducing-the-bottega-vonettaknot/

Graph28: 'INTRECCIATO ANTIQUE SILVER RING',

http://www.bottegaveneta.com/ Item/Index?cod10=50146290dh& siteCode=BOTTEGAVENETA IE











Graph29-31: 'Large Knot Pendant Lamp - Orange', http://store.vitaminliving.com/ collections/featured/products/ large-knot-pendant-lamp-orange



Graph32: (Left) Marcel Wanders, 'Knotted Chair', 1996 http://www.marcelwanders.com/ products/seating/knotted-chair/

Graph33: (Right)'KENNETH COBONPUE', http://vocedi.com/collection/ furniture/kenneth-cobonpue/



## **Bibliography**

- 3.1 The history of knot
- 1.A. Hyatt Verrill, 'Knots, Splices and Rope Work: An Illustrated Handbook', introduction part, New York, 1912
- 3.2 Knot Categories
- 2. 'Knots Terminology', http://www.animatedknots.com/terminology.php
- 3. Randy Penn, 'The Everything Knots Book', Chapter 1, Beyond basic fuction, the USA, 2004
- 4. 'Celtic knot', http://en.wikipedia.org/wiki/Celtic\_knot
- 3.3 A decorative handicraft art --- Chinese knotting
- 5. Lydia Chen, 'The complete book of Chinese Knotting', published by Tuttle publishing, USA, 2007

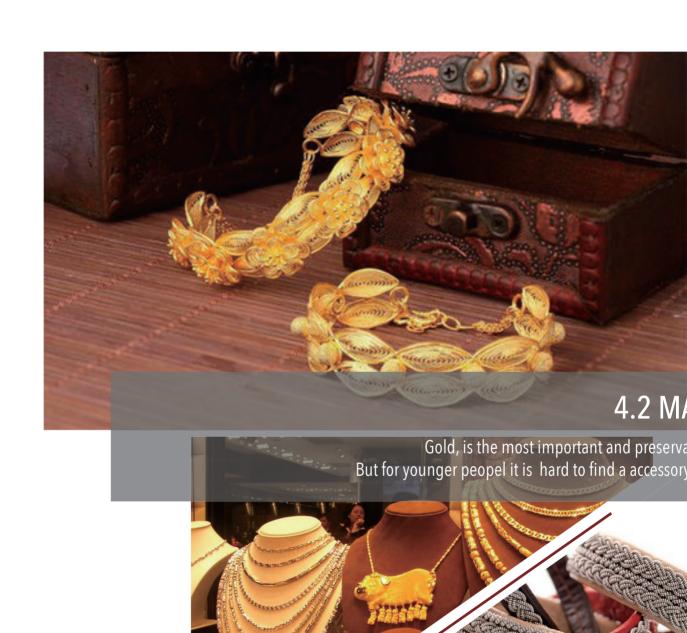
#### Graph

- 1: 'Knotboard', by William Gomez, it was done by his grandfather in the 1930's or 40's. http://www.igkt.net/knotgallery/main.php?q2\_itemId=740
- 2: Clifford Warren Ashley, 'The Ashley book of Knots', edit by The Yankee Whaler, London, 1944
- 3: 'Celtic Love Knot Meaning', http://www.buzzle.com/articles/celtic-love-knot-meaning.html
- 4: 'Cavandoli Knotting Workshop with Marion Hunziker-Larsen', http://r2arts.org/2012/03/07/cavandoli-knotting-workshop-with-marion-hunziker-larsen/
- 5: 'The Latin America Version', http://jewelsinfiber.blogspot.it/2013\_01\_01\_archive.html
- 6: 'cerchio-con-argento', http://www.flickr.com/photos/annodareconstile/3870359786/
- 7: 'cerchio-con-argento-particolare', http://www.flickr.com/photos/annodareconstile/3869577125/
- $8: 'Maedeup: The \ art \ of \ Korean \ knotting', \ http://rhee and rhee.blogspot.it/2011\_02\_01\_archive.html$
- 9-14: Lydia Chen, 'The complete book of Chinese Knotting', published by Tuttle publishing, USA, 2007
- 15: 'Eleanor Amoroso AW12', http://undresser.tistory.com/182
- 16: 'KNOT ENOUGH', https://www.notjustalabel.com/designer/orlamg?collection=158829
- 17: Jacqueline Surdellart, 'Installation II', Braided cotton cord, raw cotton rope, Steel rods/armatures,
- H5'xW6', 2014, http://jacquelinesurdellart.squarespace.com/fiber-work-index/#/installation-2/
- 18: 'Fashion Crafts: \*Aude Tahon\*', https://designonyou.wordpress.com/2011/09/22/fashion-crafts-aude-tahon/
- 19. 'Chanel', http://forestwalkingguitartalking.blogspot.it/2013/09/your-house-isnt-haunted-youre-just.html
- 20: Yuni Kim Lang, 'BIG RED KNOTS', http://www.yunikimlang.com/wearbigredknots
- 21: Shanghai Tang, 'Silk Cotton Colour Block Qipao Dress', https://www.shanghaitang.com/en-eu/women/spring-summer-2015/silk-cotton-colour-block-qipao-dress-black-1F310M30MAN.html
- 22. 'Vilsbøl De Arce AW/09', http://news.vilsboldearce.com/category/exhibition/
- 23: 'KNOTTY FLOOR CUSHION', http://www.kumeko.com/knotty-floor-cushion/
- 24: 'Bottega Veneta Debuts "When Your Own Initials are Enough: The Knot",
- http://www.bagaddictsanonymous.com/2014/07/bottega-veneta-debuts-when-your-own.html
- 25: 'The knot', http://www.bottegaveneta.com/mc/femme/onlineboutique/sacs/pochettes-et-sacs-du-soir
- 26: 'TWO-TONE INTRECCIATO LEATHER WRAP BRACELET', http://www.mrporter.com/en-ca/mens/bottega\_veneta/two-tone-intrecciato-leather-wrap-bracelet/493247
- 28: 'INTRECCIATO ANTIQUE SILVER RING', http://www.bottegaveneta.com/ltem/Index?cod10=50146 290dh&siteCode=BOTTEGAVENETA\_IE
- 29-31: 'Large Knot Pendant Lamp Orange', http://store.vitaminliving.com/collections/featured/products/large-knot-pendant-lamp-orange
- 32: (Left) Marcel Wanders, 'Knotted Chair', 1996, http://www.marcelwanders.com/products/seating/knotted-chair/
- 33: (Right)'KENNETH COBONPUE', http://vocedi.com/collection/furniture/kenneth-cobonpue/

# 4. KNOTTING ACCESSORY DESIGN









## 4.3 TARGET

AGE RANGE: 20-35 years

INCOME: Who have a fixed financial resources 6.000,00RMB-25.000,00RMB/month

STYLE: Concise dress style Personality accessories Emphasis on life quality Prefer entry lux







## 4.4.2 TECHNIQUE

KNOTTING TECNIQUE:
Pan Chang knot
Button knot

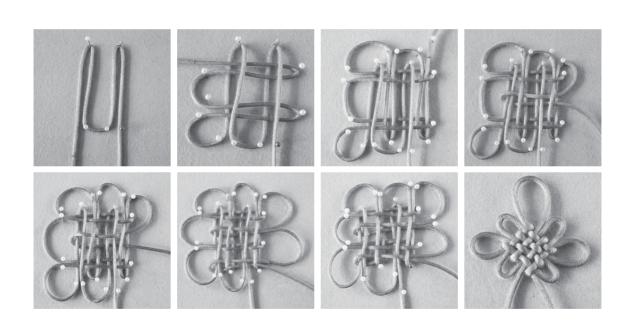
FEATURE: Stable structure Complex but orderly with sequence Durable Meaningful

TECHNOLOGY POSSIBILITIES:

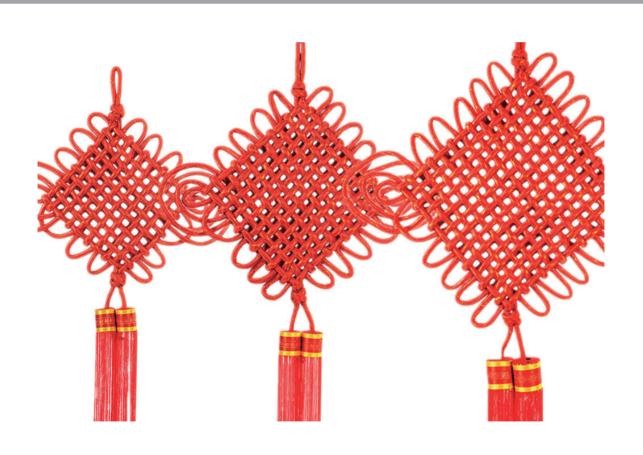
By hand

3D modeling

Wax wire modeling



# 4.4.3 MEANING

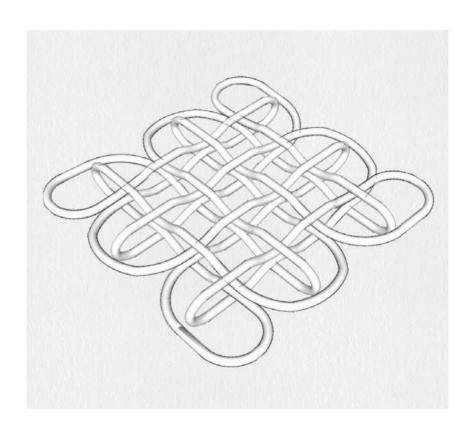


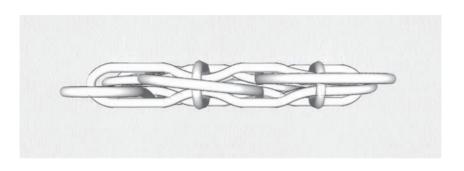
#### PAN CHANG KNOT:

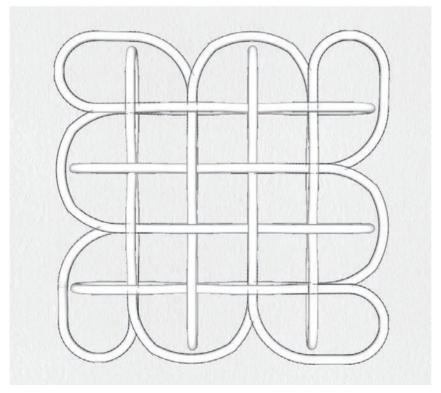
Also known as the mystic knot, the pan The seemingly endless pattern of this knot chang knot is considered one of the is considered a symbol of good luck. It is eight Buddhist treasures. Its endless also used to represent the Buddist concept pattern represents the cyclical nature of of the cyclical nature of all existence. all existence, symbolizing birth and death while indicating that life can exist foreverone of the basic beliefs of Buddhism. This intricate design is also used to represent the mysteries of the universe, and it is thought to bring good fortune to the wearer as well as those who view it. In addition, the Chinese word for this knot shares the sound of the Chinese word for happiness, and as such, it is thought to mean happiness without end.

#### **BUTTON KNOT:**

## 4.4.4 STRUCTURE 3D MODEL









Inspiration from the color blocks of the Italian Key words for colour: Minimalist, Colour





# 4.4.6 MATERIAL





Korea velvet
Diameter: 3.0mm
Characteristic: Sustainable and durable



Gold thread Diameter: 3.5mm Characteristic: 14k goldfilled



Recycle leather Diameter: 3.0mm Characteristic: Sustainable and durable



Pewter thread 10% silver Diameter: 2.5mm, 3.5mm, 5.0mm Characteristic: Shiny and high quality

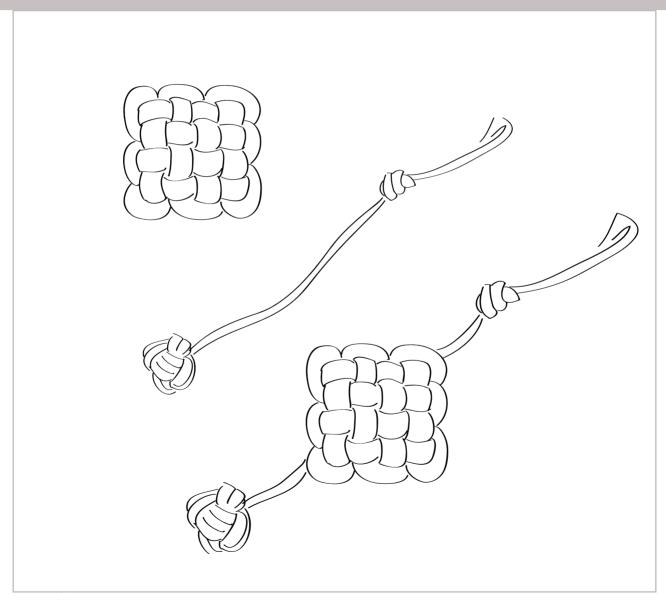


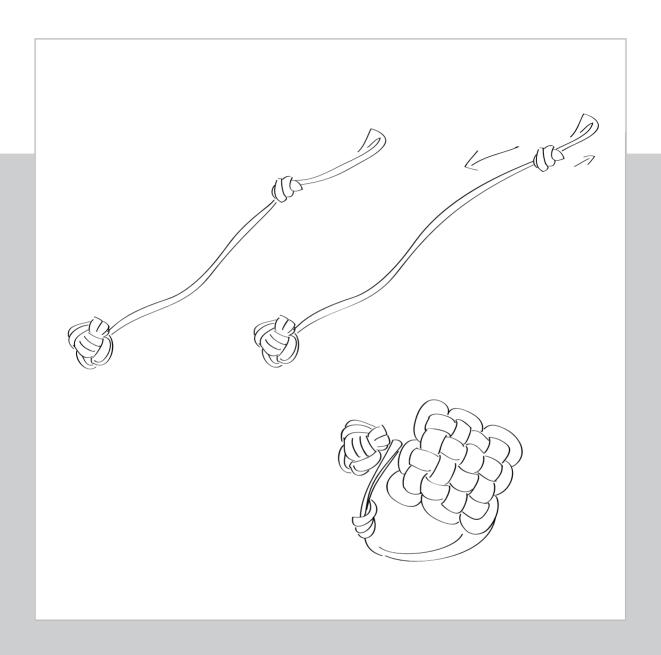
Polyamide
Diameter: 0.4mm
Characteristic: Meticulous and durable



Silk
Diameter: 1.0mm
Characteristic: Shiny and traditional

# 4.4.7 TECHNIQUE DRAWING





The main part is the Pan Chang knot, the finishing part is the Button knot with an adjustable rope. When you change the size in your appropriate position, you can lock the loop into the button knot as a ring, bracelate or necklace.

# 4.4.8 EXPERIMENT









# 4.4.9 PRODUCT SERIES 1



Fabric Necklace Material: Korea velvet, polyamide and recycle leather





Fabric Ring Material: Korea velvet, polyamide and cupper wire





Fabric and Metal thread Bracelet Material: Polyamide and gold thread



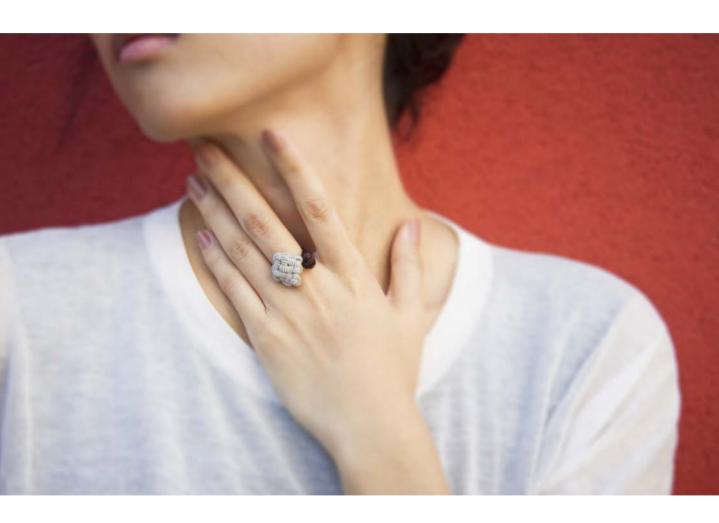


Fabric and Metal thread Necklace Material: Korea velvet, silk and pewter thread



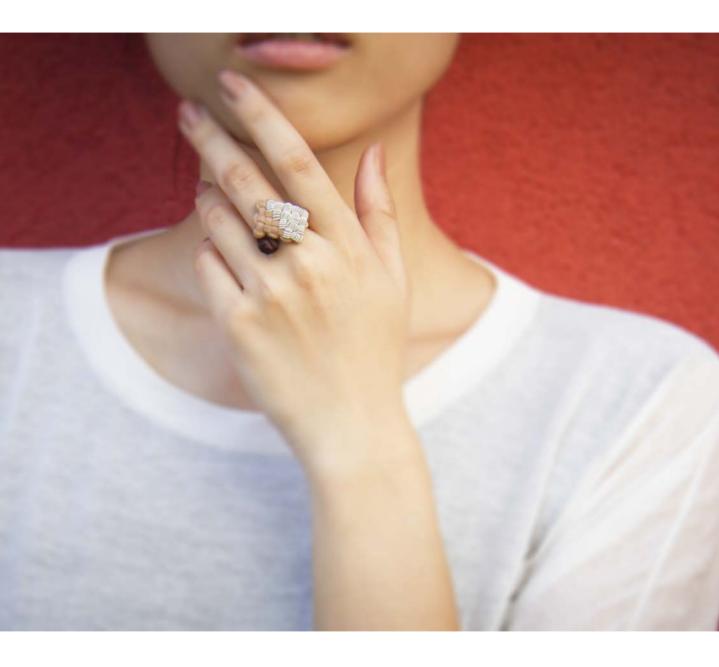


Fabric and Metal thread Ring Material: Korea velvet, silk and Gold thread



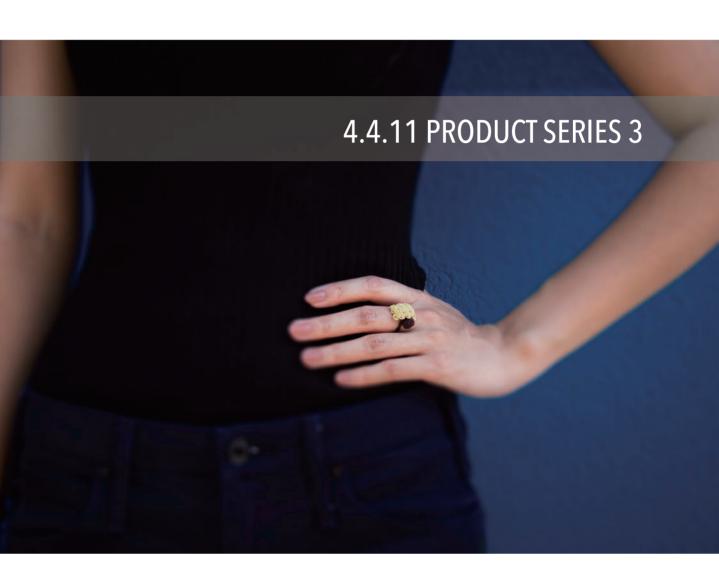


Fabric and Metal thread Ring Material: Korea velvet, silk and pewter thread



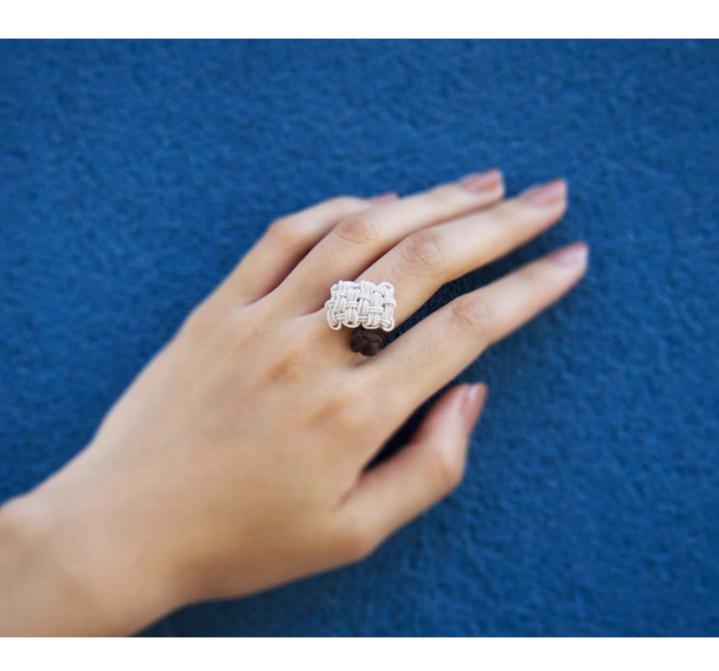


Fabric and Metal thread Ring Material: Korea velvet, silk and pewter thread





Metal thread Ring Material:Gold thread and silk





Metal thread Ring Material: Pewter thread and silk



Metal thread Bracelet
Material: Gold thread and silk





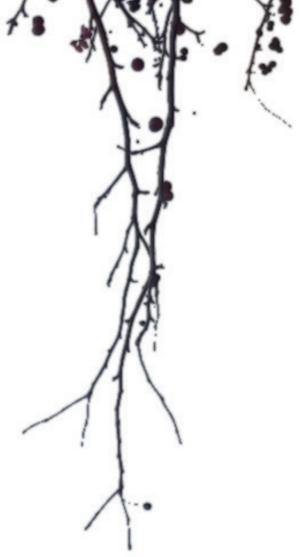
Metal thread Necklace Material: Pewter thread and silk

#### 4.5 Branches collection

### 4.5.1 MOOD

The Branches
The branches show the life and death
Life as plum flower, red and tender
Death like dry twigs, black and wither





## 4.5.2 TECHNIQUE







> FEATURE: Extensibility Easy work Useful

TECHNOLOGY POSSIBILITIES:

By hand

Wax wire modeling

## 4.5.3 MATERIAL



Polyamide Diameter: 0.4mm Characteristic: Meticulous and

 $\, durable \,$ 



Recycle leather Diameter: 3.0mm Characteristic: Sustainable and durable



Silver wire Diameter: 0.3mm Characteristic: Flexable and easy to shape









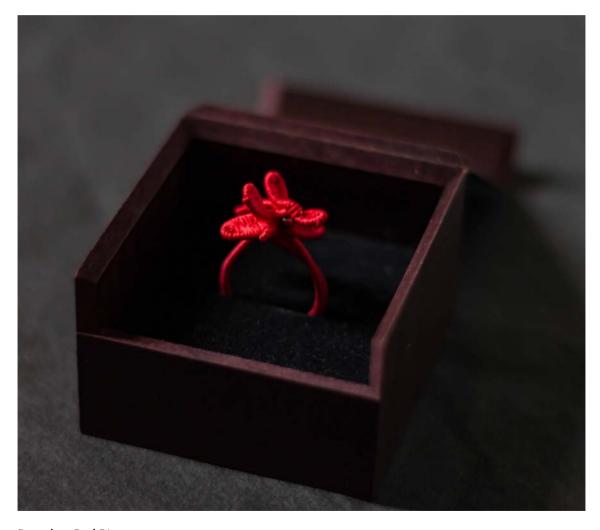
Branches Red Necklace Material: Polyamide, silver wire and recycle leather





Branches Red Bracelet Material: Polyamide, silver wire and recycle leather



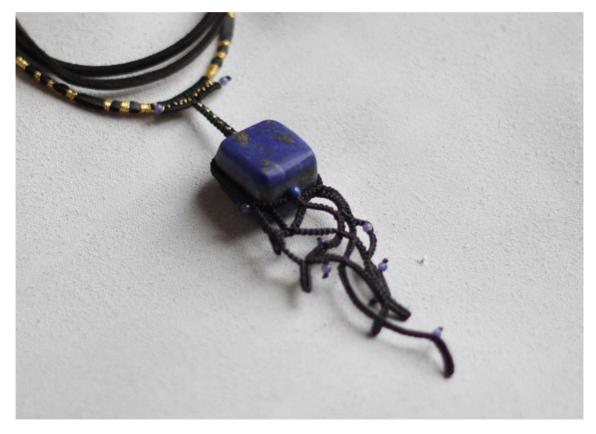


Branches Red Ring Material: Polyamide, silver wire and recycle leather

### 4.5.5 PRODUCT SERIES 2

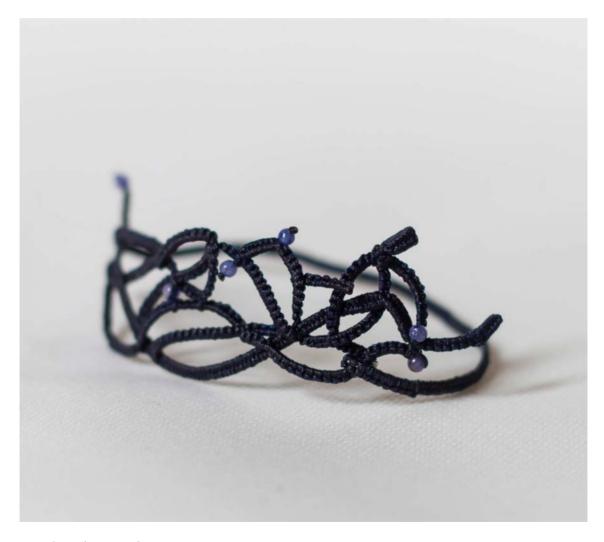






Branches Blue Necklace Material: Polyamide, silver wire and recycle leather





Branches Blue Bracelet Material: Polyamide, silver wire and recycle leather

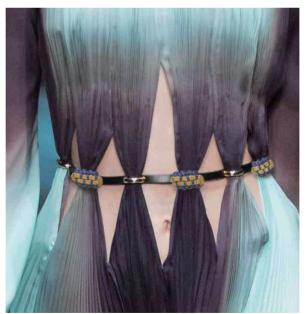




Branches Blue Ring Material: Polyamide, silver wire and recycle leather

# 4.6 POSSIBILITY IN FASHION





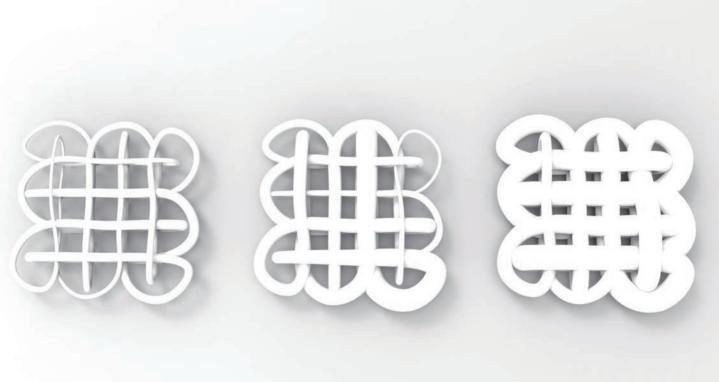








# 4.7 POSSIBILITY IN 3D PRINT









Wood



Rose Gold



Plastic



Leather

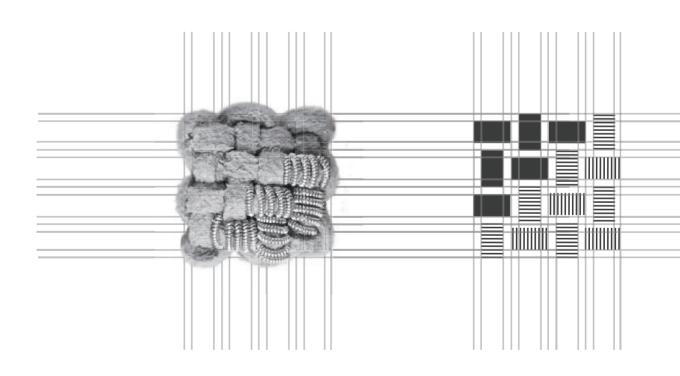


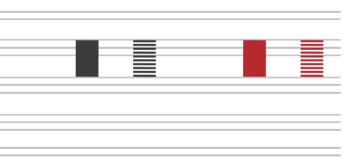
Silver

# 4.8 VI design

### 4.8.1 LOGO Concept

Base on the Pan Chang knot elemennt.





### 4.8.2 Colour

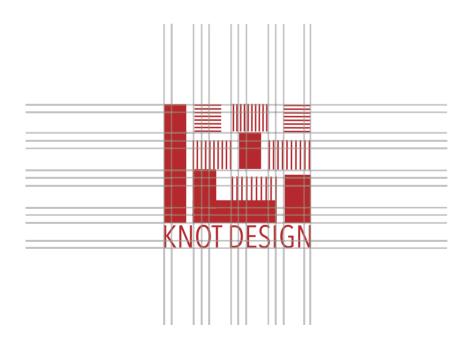
Red is a colour with special meaningful in Chinese culture.

#### 4.8.3 Inspiration

In Chinese, "心" Xin, is my nick name which also has a concise shape in writting. Addition the elemennt from knot and the Chinese word from my name together.



### 4.8.4 Construction



### 4.8.5 Packaging

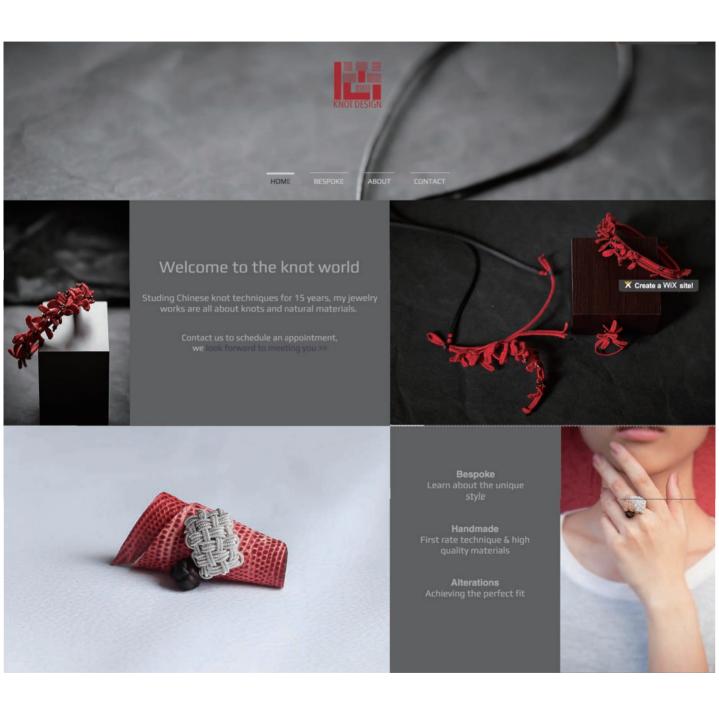
White accessory box made by recycle paper and eco-leather cover to introduce also the sustainable and contemporary idea. The square shape box is made for ring and pendant. The rectangle shape box is made for bracelet and necklace.





#### 4.8.6 Website

Base on Wix.com, the layout is concise and contemporary to compare with the complex knotting design.



#### 4.8.7 Phone APP





