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CREATING UNIQUE PATTERN DESIGNS
WITH CULTURAL INSPIRATION

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Title

Creating unique pattern designs with cultural inspiration

Abstract

The topic of the present thesis is about creating unique pattern designs. The idea was to present the final pattern designs on kitchen-ware textiles. The patterns are designed with inspiration from Japan, for instance Japanese cultural elements, nature and symbols.

The thesis consisted of the following stages; theory, design experimentation, quantitative research, final product samples and discussion. Before the design process, theoretical knowledge of textile design was gained, and pattern categorizations, Japanese inspirational sources, elements and principals of design were considered. The next step was an experimental design process to design several pattern samples. In the end five of the patterns were selected for further research. An online survey as a quantitative research method was designed to investigate the market demand and find which pattern was the most popular one.

The outcome of the project is a range of kitchen-ware textiles designed with the pattern which was selected through the questionnaire. The results of the survey proved the pattern Nordic butterflies was the most popular. Therefore, a range of kitchen-ware textile products were designed to present the layout and appearance of this pattern on certain products. Later several 3D samples of the products were displayed in a kitchen model.

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1 INTRODUCTION

With a primeval history-, textile manufacturing is one of the major global industries. Today textile production is visible in almost all countries in the world. A wide range of products are made from textiles or have textile components. Therefore, nowadays many companies worldwide are involved with manufacturing textiles which are sold as apparel, furnishing, or household textiles. (Wilson 2001, 1_2.) The constant growth of textile industry and the large investments in it annually clearly proves an unquestionable market demand for textile products. Many famous textile design companies are looking for unique, exotic, and original patterns for their products to defer them from their competitors. At the same time many plagiarism cases are revealing every year due to designer's lack of ideas or creativeness. This certainly shows unique designs are one of the main factors for a textile design company's success.

The purpose of this thesis is to create unique pattern designs. The project has not been carried out under commission. Therefore, there was no third party as a client involved. The subject was chosen due to several reasons. First, a plan to learn the process of pattern designing and creating unique patterns for my print design products. Second, a good chance to learn more about textile and pattern design since in my major only product, service and graphic design has been subjects of instruction. Third, a good opportunity to apply my knowledge in design from theory to practice in a same project

The idea is to create the unique patterns with inspiration from Japan such as Japanese culture, nature and traditional elements and items. The method is to go through an experimental process to create different pattern samples. Later samples will be evaluated with my instructors' help and a few of them will be

selected for further development. Next, research in a quantitative method is conducted to investigate the market demand.

As it was pointed out Japan is chosen to be the inspirational source for creating the patterns. The main reason for choosing Japan as an inspirational source was my personal connection with this country. Since I was a child my dad was sending me souvenirs from Japan, where he used to work for several years. I grew up with Japanese cartoons and the interest in their rich and exotic culture, nature and art have grown in me over the years. The thesis project gave me a good chance for studying and going more in depth on Japanese symbols, important design and cultural elements. The aim is only to borrow from the Japanese elements. Therefore, the final designs will not symbolize the same meanings as in Japanese culture.

Creating kitchen textile products, or creating patterns specifically for kitchen products are not the aims of the thesis. The focus is on learning the process of creating patterns which are unique and original. Kitchen is chosen for final product samples for different reasons. Out of all areas, kitchen textile products assumed to have more variety of products which could have smaller surfaces and there was a good chance to make collection set of products. At the same time looking at the market there is not so many kitchen textiles with unique and interesting cultural background.

The results of the thesis are expected to be a range of kitchen-ware textile designs with unique patterns. The patterns are selected according to the results of the surveys. The most popular patterns will be applied to create a range of kitchen textiles, for instance; apron, pot holder, oven mitt, kitchen towel, table runner.

Studying Graphic and Industrial Design for several years has given me a satisfactory background knowledge in design aesthetics and merchandise production process. A further research and study would be needed to cover both theoretical and practical part of the project. Therefore, a number of literary sources, articles, and other trustworthy sources will be used in order to accomplish the goal of creating a range of kitchen textile products with unique pattern designs.

2 THESIS FRAMEWORK

2.1 Thesis framework

A framework is a supporting structure which is needed in any project plan and research. It helps the reader find the relationships between theory, practice and research. It describes the concepts which have been introduced and studied and how they are defined. (Liehr & Smith, 2003.)

Figure 1 displays a visual image of the thesis framework. As seen, the thesis framework consists of the three main areas of Design, Textile and Pattern design. Each of these subjects goes deeper into another field in order to approach the target of the thesis. Each of the fields offers fundamental knowledge in order to understand the purpose and process of the thesis subject. Therefore, each field should be studied and explored to support the theoretical and practical knowledge of the project. However, going through the details and covering the whole area of Design, Textile and Pattern design in this thesis is not possible due to the broadness of each of these subjects. Instead each area is studied

briefly in order to cover the main necessary points of each. This study helps reaching the goal which is the creation of the unique pattern designs.

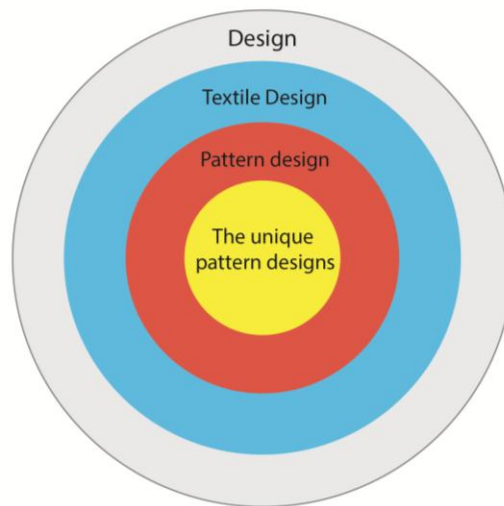


Figure 1. Thesis framework.

To figure out which areas are important to be studied drawing a mind map was suggested by my thesis supervisor. After preparing a draft of the mind map (Appendix 1) a meeting was held with the thesis supervisor and instructor. During the meeting there were discussions to clear out the main points and areas that have to be covered. At the end there were several areas which should be defined and studied. In the beginning Design, Textile, and Pattern Design should be briefly defined and later to approach the practical aim of the thesis pattern categorization, inspiration from ethnic designs and their role in contemporary design should be studied. A study of elements and principals which have been compiled as the literature review is as well necessary for designing a unique pattern with balanced color, shape, and layout. These studies will provide good knowledge to start the design process of the thesis.

As illustrated in Figure 1 the outcome of the thesis is the mid-point of the three fields. The expected results are going to be a range of kitchen-ware textile products with the unique patterns. When it comes to designing patterns for kitchen textile products there are a large variety of product options such as oven mitts, table runners, cutting boards, cushions, curtains etc. The target group and chosen products will be defined later in Chapter 4.1 of the thesis.

The unique patterns are created by inspiration from Japan. These inspirations are from various sources such as Japan's nature, art and culture. In order to create unique pattern designs not only pattern and its categorization but also ethical points in pattern designing and copyright have to be studied and followed. Inspirational materials are gathered from well-known and trustworthy literary sources, books and journals which are presented in the reference section.

After the inspirational stage is an experimental design process, in which a large variety of patterns and motifs are created. The initial sketches are either hand-made or computer based. During the design process different colors and layout designs are examined to discover the best and most balanced ones. Almost all of the design process is made by computer aid design software such as Adobe Illustrator, Adobe Photoshop, and Rhinoceros. These software are used for designing the patterns, products and 3d environment models.

Later the designed patterns are evaluated and a few of them are selected with Martha Ballerina-the thesis instructors-help. Next, a quantitative research on the pattern samples is carried out. A questionnaire is designed to discover target groups ideas, and comments on the selected patterns.

According to the results of the questionnaire the most popular patterns are applied to create a range of kitchen-ware textiles. The products designed with the selected patterns are presented in a 3d model of a kitchen. The plan is to find out if there is any possibilities to have few prototypes printed for the presentation day.

2.2 The process timeline

Figure 2 depicts the visualized research process of the thesis. The process model displays how the thesis work approaches the beginning of the agenda preparation and gathering data to the final results and product range. However, at any step of the process there is the possibility to go to the previous steps as well. The process could be repeated as many times as needed to get satisfactory results.



Figure 2. Action plan.

In the beginning of the process there should be an understanding of the subjects, and in order to fulfill the knowledge base of the thesis in the fields of design, textile and pattern design, reliable books, literatures, articles, electronic resources will be reviewed. Meanwhile inspirational materials are gathered and after understanding each field the data gathered is implemented in practice with further experimentations simultaneously. Then the results of the experiments are evaluated.

Later a questionnaire is created in order to get feedback and comments on the designs from the target group. A market research is conducted although it does not go in depth in this thesis since the focus is on the design. However, to have an overview of the market group a quantitative research method is applied at the end. In order to conduct a market research a questionnaire will be created to identify the target market's interest and comments on those selected pattern samples. According to the results of the market research the most popular pattern design will be applied to create a range of kitchen-ware textiles (e.g. table runner, dish towel etc.) designed with unique patterns. These products will be displayed as 2D and 3D computer based designs.

3 WHAT IS TEXTILE AND PATTERN DESIGN?

In order to understand textile design, one of the fundamental fields of the framework, Design, should be defined. What is Design? Design could be everything! Design has various disciplines in which it has different meanings. Paul Ralph has described design as characteristics of an object which are displayed by a factor and has been planned to reach some goals in a specific environment by using group of basic elements to pleasing some demands and subject to restrictions (Ralph & Wand 2009).

Design is the method of putting form and content together. Design, just as art, has multiple definitions, there is no single definition. Design can be art. Design can be aesthetics. Design is so simple, that's why it is so complicated (Rand, 2001.)

The basic process of making textiles is processing fibers into yarns, yarn into fabrics, the processes applied to fabrics, and at the end fabrics being used as products. In every stage there are several processes applied. When fabric is processed into a product it can be sold for different purposes. Textiles can be categorized by their end-use, target market, or production company. For instance products categorized by their end-use can be industrial textiles, furnishing and household textiles, apparel, furnishing fabrics and interior textiles, and consumer textiles. (Wilson 2001, 2-8.)

“The story of textiles begins before the recording of human culture,” (Gale & Kaur 2002, 7). In all societies in the world textiles had a place and it is strongly believed that textiles were one of the first tradable merchandises. Textiles provide warmth and protection, gives us identification. It can indicate one’s social status. Throughout history billions of people have been involved with textiles. It has touched millions of people’s lives, formed their experience, hearts and minds. (Gale & Kaur 2002, 3-7.)

Textiles are often made to be decorative and are used as a means of covering and decorating both human and objects. According to researches the colors and appearance of products are the two most important factors for people when selecting a certain product. Surprisingly price and functionality comes after. Therefore, a textile designer’s knowledge on color and aesthetics plays an important role on how successful a product is in the market. (Wilson 2001, 32.)

The importance of the textile industry has been explained briefly; however the role of design and designers in this industry has not been clarified. Wilson points out textile products are all designed and designers are involved in every stage of manufacturing textiles. The textile industry as a large and diverse global industry that involves many designers, and designers are needed in a wide

variety of positions. There are different designers needed in the textile and clothing industry such as colorists, yarn, carpet, print, embroidery, accessory, pattern designers etc. This gives a great career opportunity for designers with different responsibilities. (Wilson 2002, 1-9.)

All textile designers should have an understanding of how their final design will look on a fabric. One design sample can be altered to many different final designs. Therefore, it is important that a designer understands the repeating structures and considers one in the beginning of design to follow. Different repeating structures should however be tried out in order to see different results. Some of the basic repeat structures are straight repeat, half drop, borders, mirroring, and tile or brick repeat. (Wilson 2002, 38-39.) By repeating design elements in different structures various patterns will be created.

Pattern comes from the French word *patron*, which means template. There are different types of patterns for instance patterns in art and nature are visual patterns on which we are focused. According to Airey patterns in nature show the presents of life, like the waves in the ocean, spirals, and snowflake crystals (Airey, 2011). "Pattern and repetition are an integral part of most textile designs..." (Wilson 2002, 42). More explanation on patterns and their categorizations is provided briefly in the next sub-chapter.

3.1 Pattern categorization

Textile pattern designs have a huge variety under the influence of different cultures, periods, and art movements, but all patterns belong to specific categorizations due to their characteristics. According to Wilson printed textiles and pat-

terns can be categorized by their motifs, layout or direction. A print design is formed by these three principals associated with color combination technique. Patterns in each categorization are named and briefly introduced in the following paragraphs. (Wilson 2001, 112-114.)

Patterns can be categorized by the layout and arrangement of their motifs in a design frame work. These groups are tossed patterns, all over designs, foulards, ogees, stripes, borders, and engineered designs. Tossed patterns are those in which motifs are places on the fabric randomly. All over designs means motifs have been placed all over the fabric only with a little of background visible. In foulards motifs have been repeated across and under each other. Ogees are the symmetrical layouts that often have been used in William Morris' designs. In strip patterns they can be horizontal (which are called bayaderes), vertical which in flatbed screen printing are not possible to use, or in angle of usually 40 for easier placing the motifs. The border patterns are those that motifs are focused only on one or sometimes two selvedges. In engineered designs where usually towels, rugs and such are made, one screen creates the whole pattern. (Wilson 2001, 113-114.) Picture 1 shows contains few examples of patterns in this category.



Picture 1. From left to right foulards, allover and stripe patterns. Source: Textile designs: 200 years of patterns for printed fabrics arranged by motif, colour, period and design by Susan Meller, 2002. 28, 168 and 229.

Patterns can be categorized also by the direction of the motifs. When preparing a design for print the direction of motifs is important. Patterns are either directional or non-directional. Directional patterns can be one-way, two-way or multi-directional patterns. In one-way-patterns all motifs point at one direction; therefore in apparel they might cause in fabric wastage. One-way patterns are mostly used for upholstery or curtain fabrics. Two way patterns have motifs in two directions usually opposing one another. Non-directional patterns have motifs pointing in all directions so the design does not have a top or bottom. (Wilson 2001, 114). Picture 2 contains three examples of two-directional, one-directional and non-directional patterns.



Picture 2. From left to right two-directional, one-directional and non-directional patterns. Source: Textile designs: 200 years of patterns for printed fabrics arranged by motif, colour, period and design by Susan Meller, 2002. 35, 31 and 29.

Patterns categorized by their motifs are named as follow: Floral, Pictorial and figurative, Paisleys, Geometrics, Abstract, and Ethnic. (Wilson 2001, 112_114.) More description on each pattern type is given in the upcoming paragraphs.

As the name describes the **floral patterns** have flower motifs in them. According to Meller all the flowers in the garden, even grasses, are considered floral. However agricultural products such as fruits, and vegetables are not in this category. Meller points out that trees or the actual picture of a flower are as well not in the category of floral. During the 18th century and earlier, men used to

wear decorated cloths but in last centuries only women continued to wear ornamented cloths. It is as well women who generally wear more floral patterns and chose them for home decorations. Therefore Meller considered floral patterns to be feminine. (Meller 2002, 27.) According to Paine flowers and leaves have influenced textile design more than any other symbols. During the 19th and 20th centuries, when the manufacturing process developed, floral figures were in a group of popular and leading pattern designs. (Paine 1990, 137.) As stated by Wilson floral patterns have been the most common and best-selling patterns for the past several centuries. William Morris has represented the floral designs of the arts and crafts movement from which design has been nearly straightly taken with little change from Persian designs. (Wilson 2001, 113.) Picture 3 displays a few examples of floral patterns.



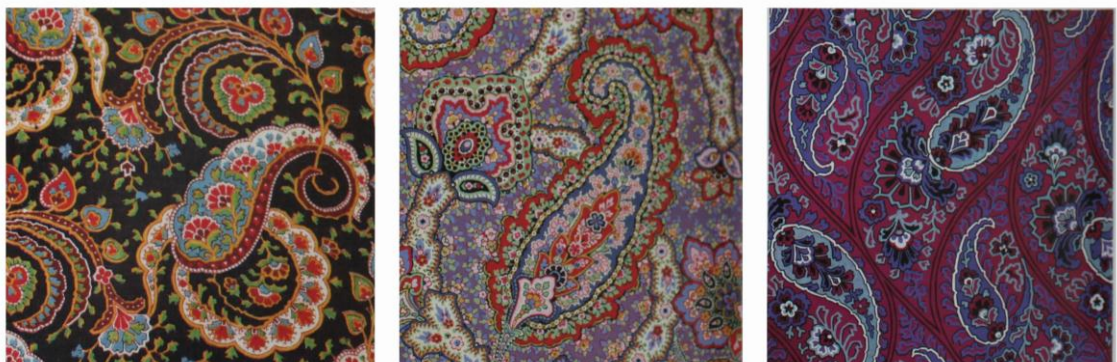
Picture 3. Floral patterns. Source: Textile designs: 200 years of patterns for printed fabrics arranged by motif, colour, period and design by Susan Meller, 2002. 29, 33 and 108.

In the category of **Pictorial and figurative** the printed designs mostly include complete scenes and human activities or are inspired by artifacts such as plates and coins. Many scenic patterns were printed in 1770 at Jouy Factory in France; these later were known as '*toiles de Jouy*'. The patterns were usually printed in pink or blue on white background with copper-plate printing technique. Modern pictorial designs are best used flat. The most suitable ways for presenting them are as bedspreads, wallpaper and etc. (Paine 1990, 127-128.) Some examples for this category can be seen in Picture 4.



Picture 4. Pictorial and figurative patterns. Source: Textile designs: 200 years of patterns for printed fabrics arranged by motif, colour, period and design by Susan Meller, 2002. 335, 345 and 342.

Paisleys are the originally Indian patterns which are mostly taken from tree of life (Wilson 2001, 113). The term Paisleys comes from a name of a town in Scotland where shawls and scarfs with paisleys motifs were woven. Kashmiri Shawls with paisleys motifs were produced from the 15th century. Later they gained popularity in European countries and were exported from India to Europe in the 18th century. According to Paine these shawls were influenced by illustrations of European herbals sent east. Since these shawls were expensive European manufactures started to make similar but cheaper versions of them. Later in India that Kashmiri shawls were only woven. In Europe they started to have print versions of the shawls as well. (Paine 1990, 162-163.) A few examples of this pattern is presented in Picture 5.



Picture 5. Paisley patterns. Source: Textile designs: 200 years of patterns for printed fabrics arranged by motif, colour, period and design by Susan Meller, 2002. 390.

In this thesis **geometric** and abstract patterns have been introduced separately. However, in some sources these patterns have been categorized in the same group. For instance Meller believes geometric shapes including polka dots, pin-wheel, and plaids belong to the same category of geometric patterns. Geometric figures have been used in textiles for a long time. (Meller 2002, 139.) Popular geometric patterns in the 1950s and 1960s come from American and mostly European designers. East as well had a great influence on geometric patterns, which peaked during the middle ages. In the 19th century a great interest for Islamic architecture lead Western authorities to carry out detailed studies on Islamic architecture with complicated drawings which then influenced textile design and decorative works. At the same time China, Japan, and India had their great influence from the East. Paine mentions Dufy, who made influential geometric designs. Dufy was a painter influenced by cubism. During the 1910s and 1920s he made influential textile designs that were mostly derived from geometric shapes and some were floral. (Paine 1990, 169-173.) Picture 6 has three examples of geometric patterns.



Picture 6. Geometric patterns. Source: Textile designs: 200 years of patterns for printed fabrics arranged by motif, colour, period and design by Susan Meller, 2002. 142 and 143.

According to Paine any non-figurative pattern is widely **abstract**. Some abstract patterns are simplified to some marks from circles, dots or lines on a surface which look like an impression of a paintbrush. (Paine 1990, 175-177.) Picture 7 displays a few examples of this pattern. According to Paine abstract patterns had

a short history and few woven types. Abstract prints started in the early 20th century when textile industry gained interest in modernism. Abstract prints fashion reached its peak in the 1950s. (Paine 1990, 175-177.)



Picture 7. Abstract patterns. Source: Textile designs: 200 years of patterns for printed fabrics arranged by motif, colour, period and design by Susan Meller, 2002, 140.

Designs inspired by traditional designs of different cultures such as African or Indian are called **ethnic designs** (Wilson 2001, 113). It is already known that there is a large variety of ethnicities and lifestyles around the world. Some of these ethnicities vary from one another and some might have similarities to each other. To comprehend these varieties one could look through art or design works such as textile designs from different cultures. Meller, according to textile vocabulary, defines ethnic fashion as, "any pattern or style with a foreign or exotic feeling – come and go in Western design." (Meller 2002, 359.) A few examples of ethnic patterns are presented in Picture 8. Since the subject of the thesis is partly related to ethnic designs and inspiration from Japan, more explanation on these topics is given in the next sub-chapters.



Picture 8. Ethnic patterns. Source: Textile designs: 200 years of patterns for printed fabrics arranged by motif, colour, period and design by Susan Meller, 2002. 361, 367 and 368.

Some designers believe that ethnic patterns should not be in a separate category. The reason is that other pattern groups such as floral or geometric could be also ethnic. To explain more, any pattern groups could be also inspired by other countries and cultures. However, since many sources referred to ethnic pattern as an independent group also in this thesis they have been introduced in a separate category.

3.2 Inspiration from Asian ethnicities

“Whether or not the popularity of ethnic styles disappears in the normal fashion cycle, it is probable that with an unprecedented trend in cultural interaction as a result of globalization, creative and experimental blending of different ethnic styles will continue” (Yu, Kim, Lee & Hong 2001, 310).

Ethnic and traditional designs have been a source of inspiration for designers (Gale and Kaur 2004; Delong, Wu and Bao 2005; Yu et al 2001). Gale & Kaur

pointed out that there has been an international influence in fashion and textiles for a long time (Gale & Kaur 2004, 67). Roberta Smith also commented (The New York Times 1999) that in many of the excellent designs of this century there is a combination of western and eastern elements, by which they are in step with today's multicultural globalization (Smith 1999.) Furthermore, Gale & Kaur explain that Asian clothing and fabrics have often been a source of inspiration. In fact since the 18th century Europeans were commonly borrowing elements from Asian cultures such as Japanese, Chinese and Indian. Fashion designers have been always seeking different cultures' fabric and clothing. Yves Saint Laurent, Zandra Rhodes, Rifat Ozbek and Christian Dior are few of the many fashion designers who have been inspired by ethnicity and global culture for their collections. (Gale & Kaur 2004, 67.)

"What may be new in our time is the intention on the part of many designers to integrate Asian design elements, shapes, fabrics, and iconography into Western fashion not simply as another resurgence of exotism, but as a genuine expression of broadening cultural horizons around the world" (Steele and Major 1999, 98).

Yu et al. (2001) have analyzed contemporary fashion designs inspired by Asian traditional dress. The focus of the study was on five countries: China, Indonesia, Japan, Korea, and Vietnam. The designs were examined by different aspects such as color, shape, surface pattern, garment type. The results showed that surface pattern and the features of the fabric itself were the two aspects which had the most remarkable influence on modern fashion. In fact surface patterns inspired by ethnic designs were used extensively in modern fashion textiles even though they did not include the primary ethnic meaning which was attached to them in past. Yu et al. recognized as well that Japanese and Chinese cultures were the most applied Asian cultures in the fashion world. According to the result of the studies the authors found that Chinese design had the most distinctive influence on modern fashion in contrast to other groups. Japanese and Korean styles came in second place. (Yu et al. 2001, 314-320.)

From the 17th to mid-19th century Japan remained closed to the west. However, since then Japanese art forms have been widely examined and collected by the West. (Bosomworth 1995, XI.) Delong, Wu & Bao as well pointed out that Kim and Delong have examined fashion influenced by Japanese and Chinese culture which was presented in Harper's Bazaar (1890-1927). In this period there was a great change in western dress. In the beginning Japanese features were adopted but later it surpassed by the Chinese. Some of the influential Japanese features during 1908-1915 were V-shaped necklines, kimono sleeves etc. The inspiration from Chinese culture is tangible in Women's ready-to-wear collections of fashion designers such as Yves Saint Laurent, Emanuel Ungaro, Oscar De la Renta, Christian Dior, Ghost, Kenzo, John Galliano and Valentino. (Delong, Wu & Bao 2005, 168-170.)

3.3 Japan as a source of inspiration

Japan has been a source of inspiration for many designers due to its rich culture, traditions and nature. Covering the whole wide topic of Japan as an inspirational source for design in this thesis is impossible. Therefore, a brief introduction to some Japanese motifs, traditional cultural symbols, art and design themes and elements is provided.

According to Buddhist philosophy a simple and provident life should be followed in order to attain enlightenment and abscond earthly desires (Japanese Art & Design Themes 2014). Natural shapes and decorations are often used in Japanese design. Reaching harmony with nature is as well a lesson of Buddhism. In

Japanese art the natural world as mountains, clouds, rivers and such is frequently displayed. These natural elements each has a concept: for instance, clouds in Buddhism represent 'western paradise beyond the earth or spirits of the dead in Shintoism. Mountains symbolize the unyielding or unmoving. Water and waves represent power and resilience. Since waves continually ebb and flow they signify excellent tactical skill. (Japanese Art & Design Themes 2014)

From the beginning birds and floral motifs have been popular in Japanese designs; in every period there were a large number of realistic and stylized representations of them. The popularity of birds and floral motifs were so much that sometimes they were even preferred to people, subjects and animals. This fact was not true only for design but for paintings as well which resulted in a new genre in painting called *kacho-ga* that specifically was dedicated to portraying birds and flowers. The reason for this might be the thoughtful attitude toward nature which is found in Asia. Japan has a very different climates, seasons and a variety of beautiful scenes. This might be the reason that its people have a certain attitude towards nature which will be discussed later. (Arakawa, Hasebe, Imanaga, & Okumura 1967, 11.) Furthermore Arakawa et al. (1967, 12-13) emphasize more on how important nature is to Japanese people and how this interest grow over time to make Japanese people achieve harmony with nature and be absorb into it.

The Kimono is and has been a major focus point of interest and artistic expression as well as being proof of Japan's rich textile history. Kimono means 'the thing worn', the term was first used in mid-19th century. Kimono became an important costume for men and women in all classes from the 16th century. Kimono is still today a symbol of traditional Japanese culture. Kimono is suitable for the climate in Japan. There are types of kimono: unlined and lined with several layers, for different climates humid summer or cold winter. The significance of the kimono is more on the surface patterns than the garment's cut. The color

and embellishments indicate one's social status, personal identity and cultural sensitivity (Picture 9). (Kimono: An Introduction 2014)



Picture 9. Source: © Victoria and Albert Museum. Kimono for Women, 1800-50, monochrome figured silk (rinzu) with tie-dye (shibori) and embroidery.

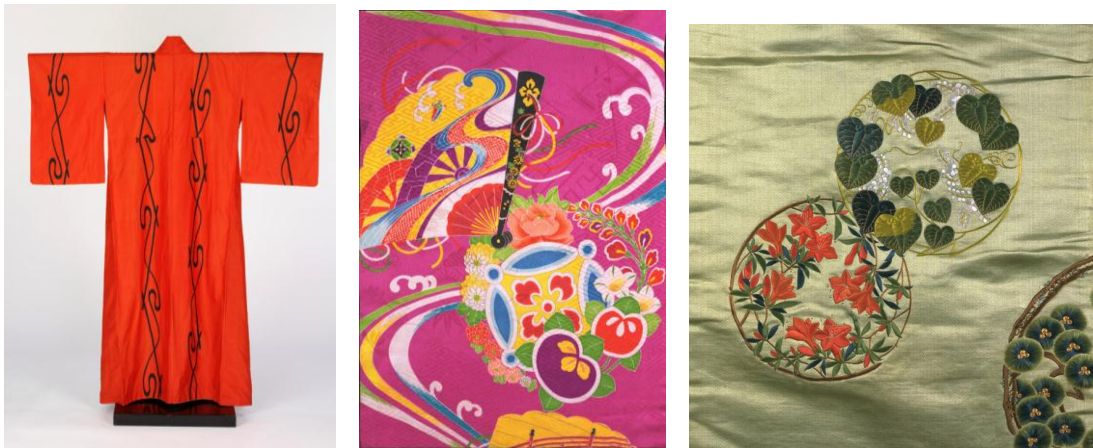
The figures on the kimono often had complicated concepts in different degrees. Many of these images have particular auspicious meanings which come from religious or popular beliefs. For instance the crane, one of the most common birds presented on the kimono, is a symbol of good fortune since it is thought to live for thousands of years in the immortal land (Picture 10). (Kimono: Decoration, symbols & Motifs 2014.)



Picture 10. Source: © Victoria and Albert Museum. Kimono, Japan, early 19th - mid 20th century.

The greatest source for kimono motifs is nature. A large variety of flowers displayed on the kimono from which many have seasonal importance. Shōchikubai, known as three friends of winter, which are pine, bamboo and plum symbolize longevity, perseverance and renewal. The pine tree is always green and lives very long, bamboo never breaks and it only might bend in the wind, and the plum each year blossoms first. For a winter kimono plum is especially popular since it reminds that the spring is approaching. (Kimono: Decoration, symbols & Motifs, 2014.)

In Japanese designs **colors** often express messages. In fact people's beliefs could sometimes be displayed by the colors they wear or use at their home. (Japanese Art & Design Themes 2014.) Colors have powerful metaphorical and cultural meanings. Medicines are thought to be transferred to the dyed fabric, for instance blue extracts from indigo, which was a cure for bites and stings. Therefore, wearing blue cloths has a role of repellent against snakes and insects. In the 6th century Japan was introduced to the Chinese theory of the five elements: fire, water, earth, wood and metal. Since then colors started to have cosmological aspects. These elements have a relation with certain directions, seasons, virtues, and colors. For instance black is associated with water, north, winter and wisdom. Colors can also have poetic meanings. For example purple is a symbol of an undying love due to the fact that the plant murasaki, from which the dye is derived, has really long roots. Red, which is derived from safflower, is probably the most popular color for kimono. Red signifies youthful allure and therefore is more convenient for young women. Red as well symbolizes passion; however, as a beni-red fades it makes the love temporary (Picture 11). (Kimono: Decoration, Symbols & Motifs 2014)



Picture 11. Japanese Kimono patterns. Source: © Victoria and Albert Museum

In Japanese design, a **line** is to make borders and all-over ornamental patterns. Items represent a large variety of patterns made by different straight lines; horizontal, vertical, or diagonal with different thicknesses and gaps of different width in between. When displaying people in prints or flower motifs on items, thin internal lines accompany the thick outlines. In this way the background and subject are separated and therefore the shape will have stability and meaning (Picture 12). (Japanese Art & Design Themes 2014)



Picture 12. Source: © Victoria and Albert Museum

Another important element in Japanese design and decoration is **shape**. The most distinctive forms are square and rectangular. The T-shaped outline of the kimono is depicted by rectangular forms which are not generally found in nature. Curved and circular arc shapes represent intuition and inspiration. Howev-

er, in many objects elements from both forms are included. For instance some objects might have a rectangular shape like the kimono or lacquer boxes although, they might be decorated with curvy motif patterns. Samurai costumes include elements from both angular and curved shapes. The reason is that the samurai are supposed to have strength and insight together. (Japanese Art & Design Themes 2014)

Another important part of Japanese decorative collections are **plain surfaces**, which are as valuable as decorated ones. The “quiet” surfaces bring balance to the “noisy” decorations. For instance there are objects to be found such as ceramics (Picture 13), prints or lacquer boxes decorated with small patterns and a large plain background. “This way of making things according to the Buddhist principle of being true to materials is called wabi-sabi,” (Japanese Art & Design Themes 2014).



Picture 13. Source: Victoria and Albert Museum ©. Lidded vase, Namikawa Yasuyuki, Japan, about 1880-1890.

As explained design elements and principals both have very significant roles in Japanese art and culture. Elements such as line, shape, space, and color as well as principals such as balance, harmony, and white space all have been elegantly and delightfully applied by Japanese craftsmen. To understand more

about this subject refer to the next Chapter 3.4, my literature review, which is a study on *elements and principals of design*.

3.4 Elements and principals of design

This literature review is based on the most common ideas on elements and principles of design. The reason I decided on writing about this subject is to make an efficient and brief description on one of the essential and basic topics which every designer should know. The literature review is based on several useful books, journals and websites which are introduced in the references section. The sources have been selected due to their acknowledgement by readers and authors.

According to Wilson elements and principals of design have been mentioned in almost any book of design. The reason is that in no work of art only one element or principal is used in solitude. Wilson has defined design as “relating and visually arranging components or elements to create effects...The elements and principles of design, can be called the language of art and design.” (Wilson 2001, 32.)

In all areas of design there are certain basic elements and principles. There are various opinions on these principles by different designers or instructors. In the book *Universal Principles of Design* the authors have selected 125 principles for design and they explain that principles of design are not only limited to that number but there are clearly even more (Lidwell, Holden & Butler 2010, 12). Therefore, in this literature review some main common ideas on basic principles and elements of design have been gathered and explained.

“The elements and principles of design are the building blocks used to create a work of art,” (Lovett 1999). These principles have been made to send the message beyond the use of the words and photos. Basically the way we place items on a page shows the structure of the whole work and affects the readability of the design work and how it conveys a certain message. These principals control the whole structure and placement of the design and help a designer to arrange the elements in the best possible layout. (Bear 2011.) Jacci Howard Bear in her article “Principles of design, best practices for arranging text and images” describes how principles of design govern different areas. For example, when painting a landscape, the placement of the mountains or the number of clouds might be governed by the design principles, or in a page layout design, choice of colors, size of fonts, number of columns might be governed by the principals of design. (Bear 2014.)

The most important and common ideas on elements and principals of design are as follows: Alignment, Balance, Contrast, Emphasis, Proportion, Proximity, Repetition (pattern), Rhythm/Movement, Unity/Harmony, White space as the **Principles** of design and Line, Shape, Direction, Size, Texture, Color, Space and Value for the **elements** of design.

The Principals of design:

Alignment is the way the elements have been lined up together, including the margins.

Balance is arranging the elements so that no part of the work would seem over weighted or over powered. There are three kinds of balance, which are symmetrical, asymmetrical, and radial.

“**Consistency** in design is about making elements uniform — having them look and behave the same way.” (Spool 2005).

Contrast is the confliction of elements to one another e.g. the opposite colors in color wheel such as red and green, blue and orange etc. Contrast in value is for example lightness against darkness. Or in direction contrast is between horizontal and vertical.

Emphasis/Dominance is giving emphasis to an element of a work in order to make it stand out compared to other elements. It can be applied to more than one element in a work.

Proportion is the relationship between the all components of a design. As well as the relative size and scale of the objects in design.

Proximity refers to how close or far the elements are to each other.

Rhythm/Movement is a combination of elements (i.e. shape, line) repeated with variation. It is easily understood in music. (Lamp 2013).

Movement is “the path the viewer’s eye takes through the artwork, often to a focal area.” (Yocum 2009). Different elements and objects such as color, line, and shape can direct eyes in different directions in a design work.

Repetition is reusing the same elements (i.e. colors, styles, shapes, etc.) throughout a design work. (Reynolds 2008, 155)

Unity/Harmony is how the elements work together in an art work.

White space or emptiness use is to give breathing room to the layout.

The elements of design:

Line is defined as a mark or a stroke which covers the path between two points. It is formed by a connection between two points.

Shape refers to the geometrical description of the area occupied by an object or element.

All lines have **direction**; horizontal, vertical or oblique and each refer to a meaning, e.g. horizontal suggests calmness, stability and tranquility.

Size is simply the area occupied by one shape.

Texture refers to the quality of a shape's surface e.g. rough, smooth, etc. It can be physical or visual.

Color refers to the use of hue in an art work. It has a large role as an element in design. There are two main color groups defined as primary colors and secondary colors.

Space use is with particular purposes. It is the area around, between and within the objects. There are two types of spaces: negative and positive.

Tone/Value is the use of lightness and darkness, shades, and highlights in an artwork.

The elements and principles of Design are one of the basic essentials to learn as a design student. How one applies them in the design determines how successful their work will be. As William Strunk pointed out, "The best designers sometimes disregard the principles of design. When they do so, however, there is usually some compensating merit attained at the cost of

the violation. Unless you are certain of doing as well, it is best to abide by the principles,” (Lidwell, Holden and Butler 2010, 13).

Some important elements and principals of design have been introduced. However, there are still more principals in design that a designer should follow. These include the ethical points and copyright that one should pay attention to. Sometimes the line between inspiration and plagiarism is not so clear and very difficult to discover. It is always necessary to know about copyright law and respecting other designers work while getting inspiration. In the next chapter more explanation about this principal is given in order to avoid plagiarism even though it is the designer who in the end would make the final decision.

3.5 Ethical points and copyright

In different parts of the world there might be different rules about copyright law. In this thesis as an example different opinions of writers and lawyers from few different countries have been stated. Though in order to protect a design piece in a certain country one has to find out the right registration and copyright rules in that specific country.

In his article *Preventing Plagiarism and Copyright and Trademark Infringement* Morales, an American attorney, states Intellectual property belongs to two separate groups of copyright and trademark. Intellectual property includes all created logos, ideas, names, designs, and writings. Trademarks as a word, sign, name, etc. are used by manufactures and businessmen to make their merchandisers recognizable from competitors. (Morales, 2012.)

Morales points out that copyrighted materials can be for instance paintings, songs, textile designs etc. Copyrighting materials is to assure they are safe from plagiarism. Taking someone else's e.g. writing, idea, or design without their permission is plagiarism. (Morales, 2012). The term plagiarism comes from the Latin word *plagiarius* (kidnapper), *plagium* (a kidnapping), and the origin is derived from the Greek word *plagion* (Oxford dictionary 2014). The term plagiarism describes adequately the act of stealing someone else's for instance ideas, thoughts and works and defining them as one's own. Morales reports that textile designs are plagiarized frequently, "According to the United States Office of Textiles and Apparel (OTEXA), the domestic textile industry has suffered a loss of 100 million dollars in total sales due to intellectual property right (IPR) infringement of textile copyrights" (Morales, 2012).

Registered copyright is an evidence of possession of intellectual property rights; therefore, if one does not have a record of registered copyright they might lose the possession of the intellectual property right to one who has a provable record. (Morales 2012.) According to Givoni, an intellectual property lawyer in Australia, the registering process for holding copyright is not needed. In fact it is a free and automatic conservation for one's original statement of idea or information. She explains that the moment an idea is written for instance on paper, recorded, or saved on computer it is automatically protected by copyright law. This is due to the fact that copyright protection in Australia is automatic and there is no official registration for it. (Givoni 2014.)

Designers such as textile designers and illustrators often work by contracts with textile design companies. This way the designer will still own the copyright of the design unless the designer has been legally and officially given the copyright to the company. Givoni reminds us that all designs included drawings and patterns on all textiles are preserved by copyright law as "artistic works". She states that designs are "those features of shape, configuration, pattern or orna-

mentation which create the visual appearance of an article.” When a design is registered it helps protecting it from plagiarism. A design can be registered by their creators if only it is unique and new. The registration period will last a maximum of ten years. (Givoni 2014.)

In order to protect works which are not registered Scaglione suggests using notice of “all rights reserved”; although it might not for sure stop anyone from stealing work, at least it could be a reminder to the viewer that in cases of stealing they might get caught. Scaglione as well mentions using watermarks for the design images displayed on the internet. Even though most designers tend to dislike making such changes over their design, still many believe it is a good disincentive. (Scaglione 2012.)

Designs can be inspired by both man-made objects and nature. When it comes to inspiration from man-made items such as architecture or other designer’s works, there comes the question if the final designs are truly original or a copy. (Wilson 2001, 38.) There is still confusion for some people as to whether or not it is plagiarism when in a textile design few elements are “borrowed” from another designer’s or painter’s work. Givoni points out that commonly people believe if they follow the “10% rule”, which is changing something by 10-20%, they will not be accused of plagiarism. However, Givoni argues that such a rule does not exist! If one has copied an important feature of a design, for instance a design signature, even if it is just a small part of it, they might be accused of plagiarism. She explains that the real test for infraction is based on the quality and quantity of the parts taken and whether or not it has been reproduced significantly. Givoni believes that the only assured option for not being accused of plagiarism is to make sure a design is totally unique and original. (Givoni 2014.)

Sadly there are many cases of design plagiarism revealed every year. For instance one of the recent cases was in Finland. The news was sad and disappointing for people who were fan or consumers of the company. One of the very famous Finnish design companies Marimekko recently has been accused of several cases of plagiarism.

There has been a claim against Marimekko that the print *Hetkiä* (Picture 14) has been copied from a photograph by Markus Lepon. According to the Helsinki Times Marimekko has confirmed that Maija Louekari has been inspired by Markus Lepon's photograph for her print design *Hetkiä*. (Seppänen, Woolley & Teivainen 2013.)



Picture 14. Source: Iltalehti, from left to right: Photograph by Markus Lepon, published in 1966 in Helsinki, Finland. Marimekko, *Hetkiä*/Moments Fabric, designer Maija Louekari.

According to Iltalehti, Professor Rainer Oesch from the University of Helsinki has pointed out that the design from Marimekko does not violate the copyright protection of the photograph since the design only includes the outlines and not the other elements of the photo. Oesch believes that this is not a case of pla-

giarism and the photograph was only a source of inspiration for Marimekko. (il-talehti 2013.) Personally I believe copyright protection is violated when certain elements for instance shape are copied. However, as seen in Picture 14 the designer Louekari only used the photograph as a source of inspiration and by making alterations to the outlines she has created a new design which has only a little resemblance to the original.

According to Helsingin Sanomt the Kristina Isola designed Metsänväki (Forest Dwellers), designed in 2007 for Marimekko, was accused of plagiarism based on a Ukrainian naivist folk painter, Maria Pryimachenko who has passed away in 1997. Her work was published in 1963 under the title "The Rat on Her Travels" (Picture 15). (Vihavainen & Markkanen, 2013.) I believe that in this case the plagiarism act is clear since the shapes, lines and generally so many elements have been directly copied from the original illustration. This is a proof of the violation of copyright protection.



Picture 15. Source: theridoureport.blogspot.com. From left to right design by Kristina Isola (Marimekko) 2007 Metsänväki, Illustration Rats on a journey by Maria Primatšenko, 1960s.

Picture 16 shows the printed Marimekko "Metsänväki" pattern designed by Kristina Isola on Finnair airbus 330 airplane. Later when the news of plagiarized pattern was revealed, Finnair took away the paint from the airplane.



Picture 16. Source: globaltravelerusa.com, Photographer: Monique Barrett, 2013

According to Italehti news there was another claim against Marimekko that the same designer Kristina Isola has copied Maria Jauhiainen's graphic (Picture 17). As seen in the pictures the pattern Ginkgo designed by Isola for Marimekko has a great resemblance to Maria Jauhiainen's Ginkgo blueprint, which was published in 2005. However Minna Kutvonen, the creative director of Marimekko, in an email assured that Marimekko is familiar with the background of this Japanese leaf and she believes that the design especially with the lay out and composition is different from Jauhiainen's. (Jokinen 2013.)

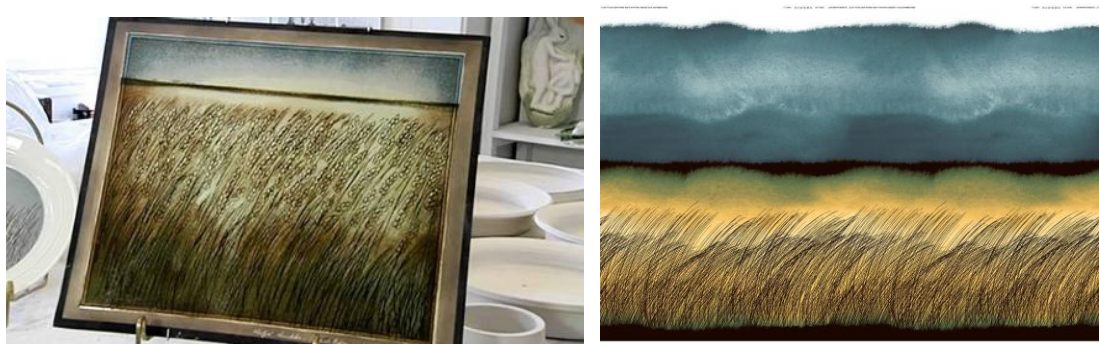
Sometimes it is difficult to determine if a design is plagiarized or unique. In this case there is the possibility that the sources of inspiration were the similar Japanese leafs. Therefore, if both designers have followed the whole typical structure of the leaf, it should not be considered plagiarism since the source of inspiration is from nature. This is so even if at one point the lines and shapes in Kristina Isola's design have a high resemblance to the design from Maria Jauhiainen. However, on the other hand the design have different composition and layout as Minna Kutvonen has as well pointed out. It is difficult to say whether or not this considered plagiarism. I believe it is always best not to use any inspira-

tional source directly but making creative alterations to differ the design from someone else's.



Picture 17. Source: Iltalehti, Designers from left to right Maria Jauhiainen, Maria Jauhiainen, Kristina Isola (Marimekko)

Iltasanomat reported another case that Marimekko was again suspected of plagiarism. Artist and professor Heljä Iiukko Sundström suspects that Marimekko's print Kuuskajaskari, illustrated by Aino-Maija Metsola, may be a copy of her work (Picture 18). Heljä Iiukko Sundström designed a ceramic tile, which presents a grain field, for a client in 1980s. (Nuutinen 2013.)



Picture 18. Sources, from left to right: Yle and Marimekko. On left Heljä Iiukko Sundström design on a ceramic tile, 1980s. On right Marimekko fabric print Kuuskajaskari part of Sääpäiväkirja collection. Design by Aino-Maija Metsola 2013.

In this case Marimekko denied the plagiarism at the end by explaining that the designer was inspired by the common Finnish landscape and has not copied

someone else's design. There is the question of where is the border of plagiarism? Is it plagiarism if a designer's work has resemblance to someone else's work? It is indeed difficult sometimes to clarify the line between inspiration and plagiarism or to know if a design has a resemblance to a designer's work on another side of the world. One should always be careful not to pass the line while getting inspiration from other people's designs. It is always recommended that one should depend mostly on his own original ideas and creativeness.

In the next chapter the design process of the thesis is introduced. The ideas, inspirational materials, design experiments, researches and final products are all explained in this chapter.

4 DESIGN PROCESS

4.1 "Design brief"

This thesis project has not been carried out under commission. Therefore, there was not any third party such as a client or a company involved. Here in the "design brief" the goals, process, results, target groups, products and other information about the project are explained.

As mentioned before the aim is to design unique patterns with inspiration from Japan. Therefore, from electronic and book sources a number of inspirational

materials are gathered. The materials which helped with the final design ideas are introduced by short descriptions in the next sub-chapter.

The patterns are designed by the computer aided programs Adobe Illustrator and Photoshop, and later are displayed on kitchen textile products in a 3D model. Since there are a large variety of kitchen products the focus of the thesis is on some of the kitchen textiles such as aprons, dish towels, oven mitts, place mats, table runners, coasters etc.

There is an option of hand printing the textiles for achieving more interesting and playful texture; however, this depends on the size of the company. When producing a small and limited amount of products hand printing could be possible although if the decision is made to grow the company then mass production systems are probably needed.

The focus of the thesis is on creating unique pattern designs. Therefore, I will not go in depth on distribution sales and marketing. However a brief description is given below.

The expected target group includes women between the ages of 27-46. The reason is that it was assumed women purchase kitchen products more than men. It was also estimated that women in the mentioned age group have incomes, and can therefore afford the designed products. It is expected that the target group would have more interest in such designs with ethnic backgrounds. The target market in the beginning is the Nordic countries. Thus in the future by developing the company an international target market can be achieved.

Even though there are companies who provide the kitchen-ware textiles there is still a place for unique designs with exotic features for different tastes. Looking at the market there are low and high-end products, high-end such as Marimekko, and low-end such as Ikea. There is obviously a gap in the mid-level market where the focus of this thesis is. However, further market research has to be performed to understand the market situation.

Since the focus of the thesis is on the design part we will not go in depth in the research parts. To have a brief overview of the market group a quantitative research method will be applied by creating a questionnaire. The reason is to conduct the market research and investigate the basic feelings and comments of the market group. However later, outside of the thesis, to conduct a broader research a qualitative research method by interviewing a target group will be applied as well. In this thesis the questionnaire as a quantitative research method is applied.

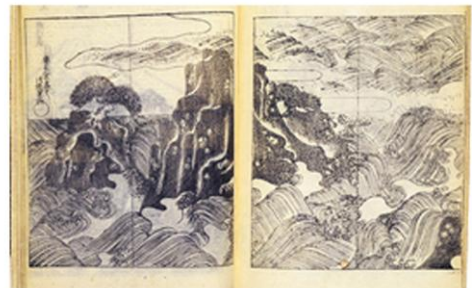
4.2 Design inspiration

Gathering inspirational materials was basically the first practical step towards designing. As sources of inspiration, a number of inspirational materials from books, magazines and electronic sources on Japanese art, culture and nature were gathered. The materials include images of Japanese flowers, fishes, symbols, paintings, drawings, textiles etc. Picture 19 displays a few of the inspirational sources, with a brief description, which helped me designing the patterns displayed in picture 20.

From the inspirational materials some of the important elements in Japanese design such as line, space, shape and color were quite sensible. As seen in Picture 19 the four images from Japanese paintings, drawings, kimono design and photograph all possess elegant and delicate lines which was the reason my linear pattern designs (Picture 21) were inspired by them. As well the photographs in Picture 20 were inspirational with their shapes.



The Great Wave also known as 'Thirty-six Views of Mount Fuji' - In the hollow of a wave off the coast at Kanagawa'. Artist: Katsushika Hokusai (1760-1849), Japan, 1858 Edo period, Color woodblock print, Image source:© Victoria and Albert Museum, London



Pages of a book of Japanese illustrated prints, Designs by Korin, Copy by Hoitsu. Japan, 1826, © Victoria and Albert Museum, London



Japanese kimono textile, costume design, Artist Unknown (Japan), 19th century Image via Minneapolis Institute of Arts



Lycoris radiata flower from Amaryllidaceous family, Osaka, Japan. Photographer: .Laitche, 2007

Picture 19. Few of the Inspirational materials

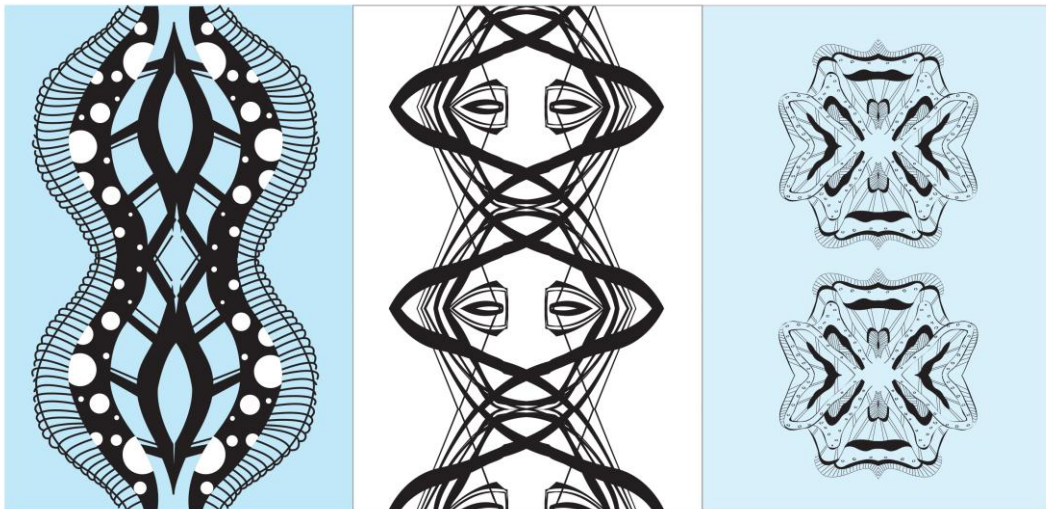


Lotus bud and blossom, Haraichi Ancient Lotus, Ageo, Saitama, Japan. Photographer: .Peter Skov, 2012



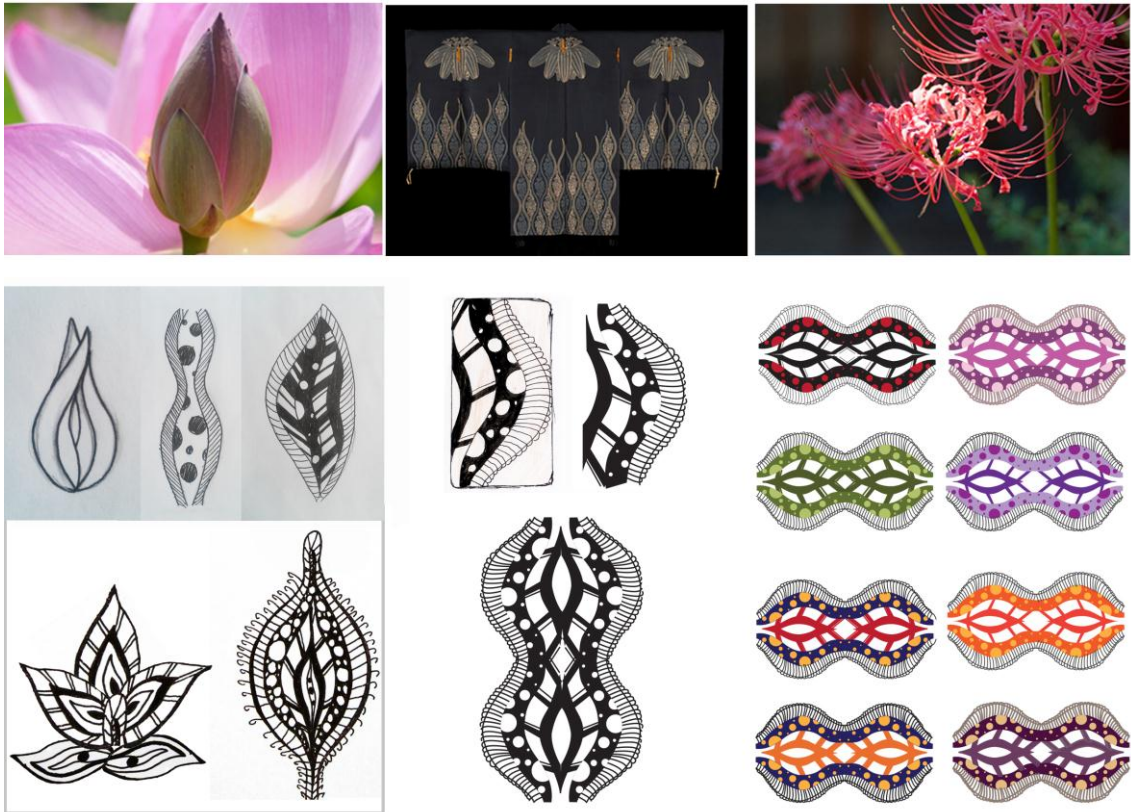
Iris Kaempferi, Japanese flower, © Mitch Fitzgerald , 2008

Picture 20. Few of the Inspirational materials



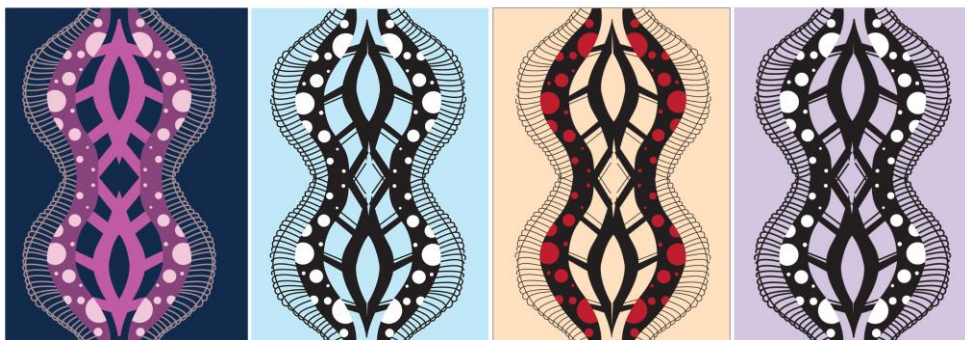
Picture 21. Few of the line-based pattern designs. © Kania Khalili

Since there are a large number of inspirational materials and pattern design samples only a few examples are displayed. One example of the inspirational process for designing one of the patterns is demonstrated in Picture 22. The three inspirational photos on top have been introduced before in Pictures 19 and 20.



Picture 22. Design process from sketching to color experimenting. © Kania Khalili

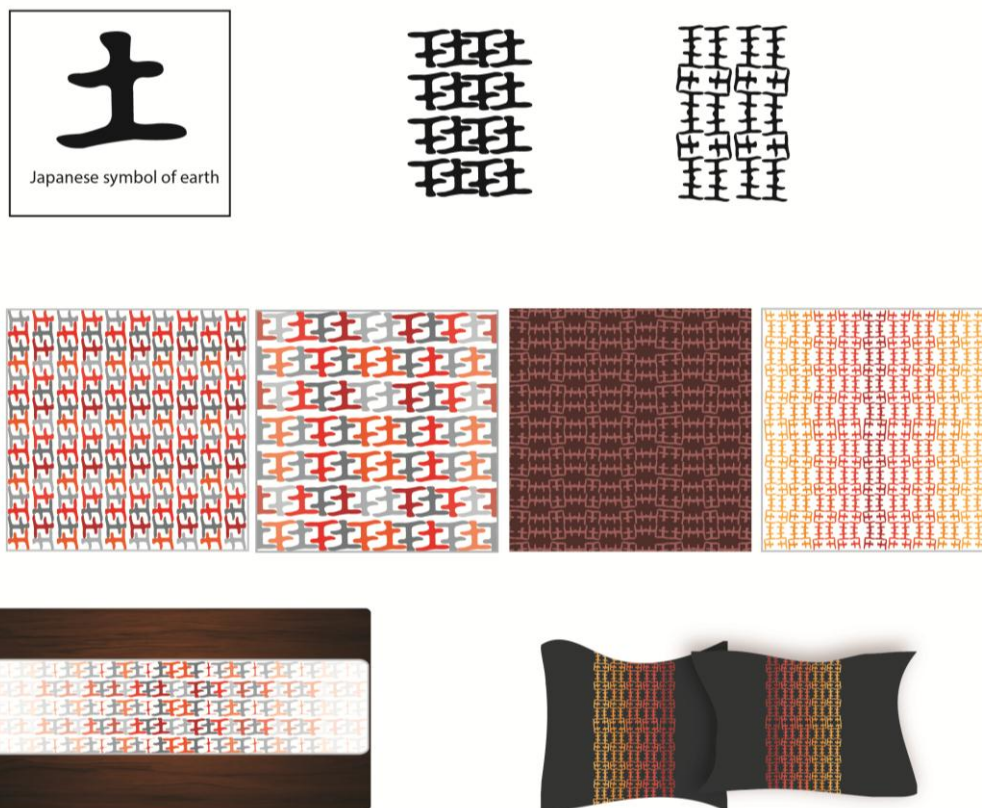
Picture 22 shows the process of designing one of the final patterns. As can be seen on left of the picture there are series of sketches which step by step with having alterations get closer to the final design. In middle there are computer made designs by Adobe Illustrator. On right side there are color experimentations on the design. More color and background experimentation was applied that few examples are displayed in Picture 23.



Picture 23. Color experiment of "line flower" pattern. © Kania Khalili

4.3 Design experiments

After getting various inspirational sources from Japan the design experiment began. In this step I started making sketches on computer and playing with the layouts and colors until a satisfactory balance was found. Later various samples were displayed on products to understand the possible outcomes. As an example some of the design experiment processes has been added below. Since there was a large number of design samples only few are displayed in this thesis as an Appendix 2. Picture 24 and 25 display how I applied a Japanese symbol to make different patterns. During the design process the layouts, directions, color, space, and other elements and principals of design have been experimented to find the best results.



Picture 24. Design experimentation with Japanese symbols. © Kania Khalili



Picture 25. Design experimentation with Japanese symbols. © Kania Khalili

One of the other examples of pattern design processes is the Origami flower design. The idea, as noticeable from the name, came from Japanese traditional paper folding (origami). This art style has grown in popularity and today there are a large variety of origami models. By making a few origami flowers (Picture 26), followed by online tutorials, an idea for making an origami rose as a motif came. Picture 27 presents the few images of the process of making an Origami flower motif from the first sketches to color and layout experiments (Picture 28).



Picture 26. Making origami flowers by following online tutorials.



Picture 27. Design experimentation on "Origami flower" pattern. © Kania Khalili



Picture 28. Layout experimentation on “Origami flower” pattern. © Kania Khalili

5 EVALUATION AND CONCLUSION

5.1 Questionnaire

After designing many pattern samples, a few had to be chosen for further research. The samples were evaluated by me and my instructors help to find the patterns which have the best balance, color combination, shape, and most present the ideas and feelings I wanted to convey. The outcome of the evaluation was choosing five samples (Picture 29), out of many others for further research.



Picture 29. The final selected samples. © Kania Khalili

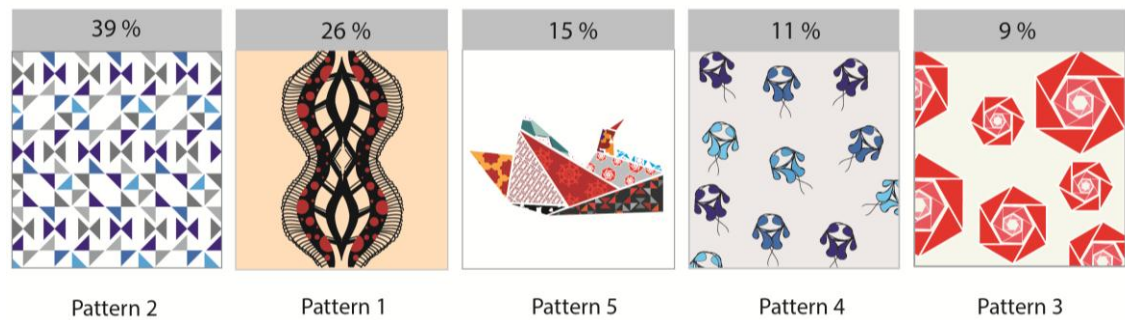
As explained in the design brief it was decided to follow a quantitative research method in order to have an overview of the market group. Therefore a questionnaire as a quantitative research method was created (refer to Appendix 3). These researches applied in this thesis might not be enough for developing the company however, it gives a good overview of the start-up.

An anonymous online-survey was conducted as a quantitative research method. The quickest and most convenient way to receive answers and conduct the results from the survey was through designing an online questionnaire. The online-survey was then shared through Facebook and email with people, mostly the target group, who as well shared the survey with others. Participants were from different genders, age groups, social classes and with occupations. The goals of the survey was to find which pattern is the most popular one, who are the target group, what percentage of people are willing to purchase products from these patterns and as well receiving feedbacks and comments on designs.

By compiling the data received from the surveys it is found that, out of all the 46 participants, 65% were females between the ages of 18-54 and 35% males between the ages of 18-39. The participants of the survey were from an international group. According to the survey's results 58% of the participants had monthly incomes between 2000€ to 4000€. 33% of the people who took part in the survey, who are assumed to be students, had incomes below 2000€ and 9% of the participants had incomes over 4000€.

The first goal of the survey was to find out which pattern design is the most popular one. Picture 30 displays the pattern designs which were presented in the survey. As illustrated in the picture it is vivid that the popular patterns are pattern 2 and pattern 1. The least popular patterns according to participant's votes were pattern 5, 4 and 3. However the most popular pattern design with

39% of participant's votes found to be pattern 2 (Nordic butterflies). Out of all 39% votes for pattern 2, 72% were females ages 18-44.



Picture 30. Patterns popularity among the survey participants. © Kania Khalili

Next, participants (whose vote was pattern 2) explained the reasons for their choice. There were several different reasons pointed out in the survey which are explained briefly here. Some voters mentioned the reason they voted for pattern 2 was due to its color combination and variation. Others mentioned the interesting lines, geometrical shapes and structure and the stylish, refreshing and interesting appearance of the patterns. Some as well pointed out that the sharp ends, simplicity and the rhythm in this pattern was the reason of their votes for it.

The second scope of the survey was to discover for which area this pattern is most suitable. As seen in Figure 3 the results demonstrate that the kitchen is the most suitable place for products with this pattern. The results show as well that pattern 2 is the least suitable for the apparel and living room products. Since the concentration of the thesis was on kitchen-ware textiles it was very important that participants as well found pattern 2 mostly suitable for kitchen products even though bathroom and bedroom also received many votes from participants.

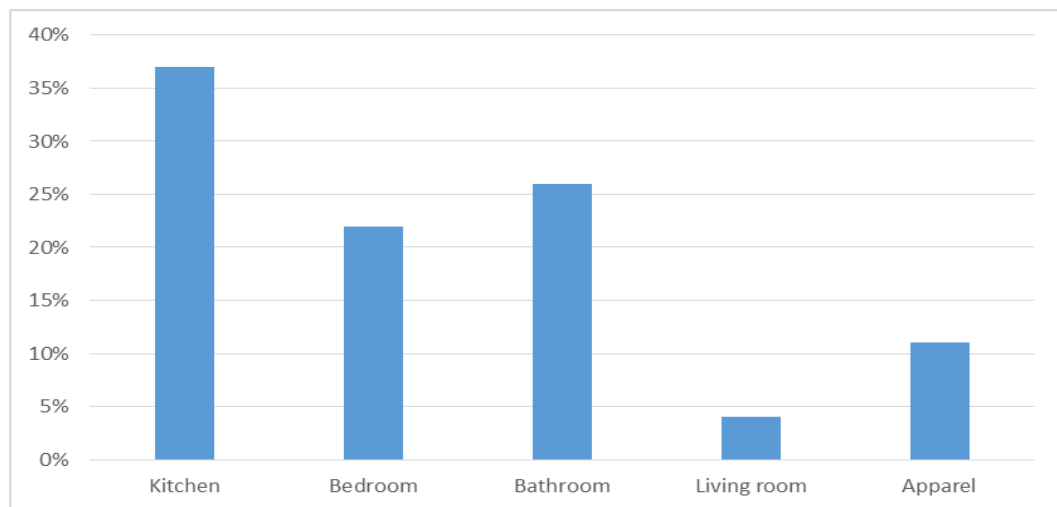


Figure 3. For which option pattern 2 is most suitable for?

Some participants left comments on why they found pattern 2 suitable for kitchen. Many mentioned that the suitable color and shape combinations were good reasons to choose this pattern for kitchen and bathroom. A few commented that the reason is that the pattern gives a relaxing feeling and is not tiresome on the eyes. Some pointed out that since the surfaces for kitchen and bathroom products are not so large this pattern would look much better on them rather than large surface objects.

The final goal of the research was to find out how likely people would purchase products with this pattern. It is understandable that it is difficult to imagine certain products with the patterns without any displayed samples. However due to the large variety of products and patterns it was not possible to have the product samples attached to the online questionnaire. Therefore only a hypothetical question was asked. The question was that if there were certain products available with the participants' popular patterns, how likely would he/she purchase them?

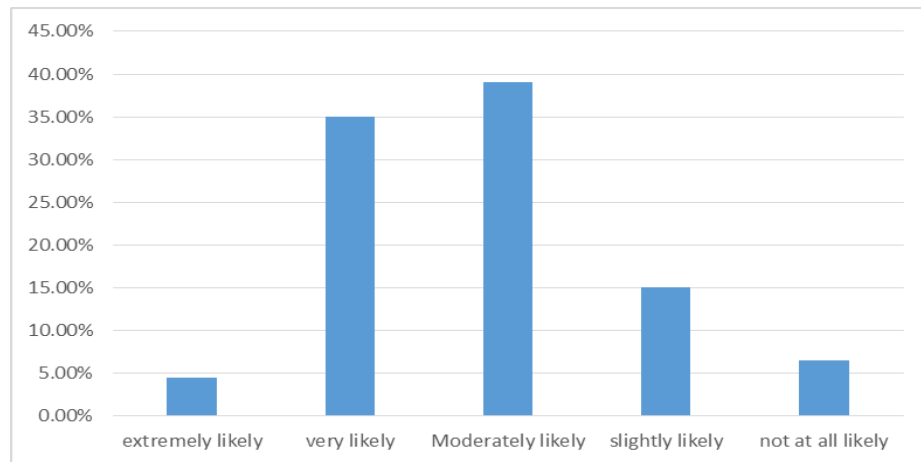


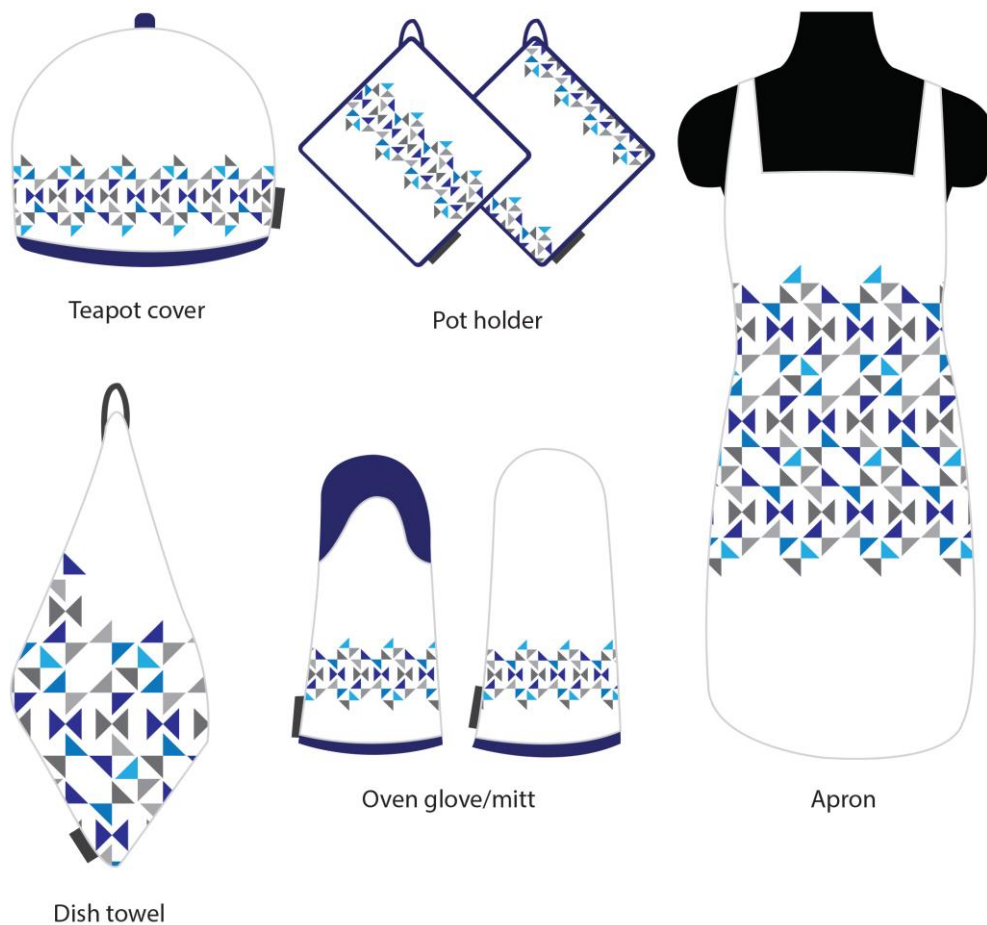
Figure 4. How likely would you purchase products with this pattern?

Figure 4 displays how likely one would purchase products with these pattern designs. Most of the participants (39%) were moderately likely to purchase products with these designs. Next are participants (35%) who are very likely to purchase the products. Few participants were extremely likely and not at all likely to purchase these products. As seen in the Figure 4 there is a market for products designed with the pattern.

5.2 Conclusion

In conclusion, with the received outcome the three main goals of the survey were reached. As the results of the survey confirmed pattern 2 was found the most popular one among the other four patterns. Most participants as well voted for the kitchen as the most suitable place for products with this pattern. Furthermore, it was made clear that most of the voters are moderately and then very likely to purchase products with this pattern. With the data received from the researches, the final step of the thesis, making the product samples, is taken next.

Picture 31 and 32 present product samples of pattern 2, Nordic butterflies. The pattern is made by two triangles attached together representing a simplified butterfly. The figure of the butterfly has been multiplied in different directions. The white space is applied vividly in product samples to follow simplicity, as one of the Buddhist principals, and giving the patterns space to breathe. The importance of white space and Buddhist philosophy in Japanese culture has been explained in Chapter 3.3. The color combination is made from grey and blue tones. The choice of the colors resulted from the relaxing feeling they conveyed. The reason this pattern is called Nordic butterflies is that these colors are applied typically in Nordic designs. These colors and shapes present my personal feeling and experiment of living in one of the beautiful Nordic countries, Finland.



Picture 31. Kitchen textile samples from “Nordic butterflies”. © Kania Khalili

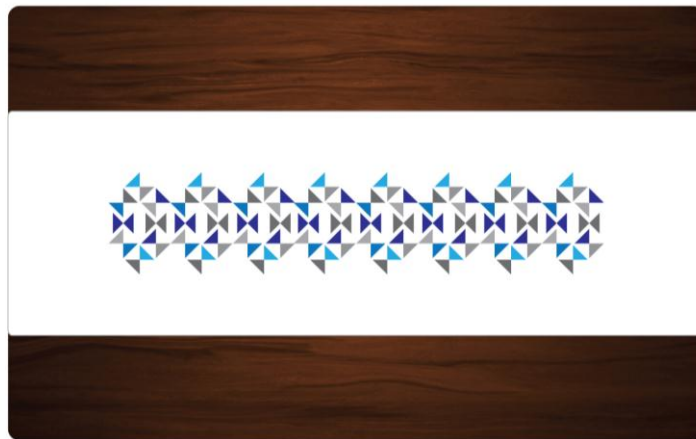


Table-runner



Cushion

Picture 32. Kitchen textile samples from “Nordic butterflies”. © Kania Khalili

A 3D model of a kitchen is designed for a better understanding how this pattern will look in reality on kitchen textiles. Pictures 34-36 present these samples in a kitchen model. As it can be seen in the product samples there is a large variety in the pattern layouts which might become problematic and/or very expensive for printing the whole product range or even few of them. Therefore, more research on printing techniques and the product layouts should be carried out.



Picture 33. Kitchen textile samples in a 3D model. © Kania Khalili



Picture 34. Kitchen textile samples in a 3D model. © Kania Khalili



Picture 35. Kitchen textile samples in a 3D model. © Kania Khalili

6 DISCUSSION

The purpose of the thesis is creating unique pattern designs. In this thesis in order to present the pattern designs on products it was decided to create the patterns for kitchen-ware textiles. Personal interest into this subject and future plans for creating my own series of designs were the main reasons for choosing

this topic for the thesis. By designing unique pattern designs and getting familiar with the process of creating them the start-up step toward creating my company is taken.

Every day we use products that often are decorated with patterns. Aesthetics is one of the important factors for people when purchasing a product. Pattern designs by decorating the surface of the products play this important role. There is perhaps a large variety of pattern designs in the market. However, not all these designs are inspired by exotic cultures or are created uniquely and originally. In this thesis I found the process of creating unique and creative pattern designs to give more varieties and originality to the patterns available in the market.

Working on this thesis, as my first-real-independent project, gave me a great opportunity to learn and gain more experience in different areas. Some of the advantages were finding very useful references and inspirational materials for future use, practicing time-management, reviewing my design program skills such as Rhinoceros and Illustrator, and improving my portfolio. Some of the other benefits were experimenting with a very useful design process, gaining theoretical knowledge in textile, pattern and Japanese design elements and principals. One of the biggest learning aspects was gained through conducting the quantitative research method.

One of the interesting aspects working on this project was the multicultural inspiration. As someone who grew up in Iran I got familiar with large variety of Persian designs as in famous carpets and handy crafts. Islamic designs as well are largely vivid in mosque tiles that are beautifully arranged together. Being familiar with Iranian art and living in one of the Nordic countries, studying design, gives a multicultural features to some of my design works. Some people as well as I have noticed that some of my pattern designs which were inspired

by Japanese origami have Islamic design features as well. Even though this happened unintentionally but the combination of different cultural characteristics in a design could make one's design more unique and interesting.

There were a few difficulties while doing this project. One was in the beginning when searching for available, trustworthy and well-known references. Reading many other relevant thesis works helped me in finding very informative books and articles from both online and offline sources. Another problem was the difficulty with finding a printing company which would print few prototype samples at reasonable prices. However, the only options available would have cost rather a lot. Although printing and having prototypes of the products were not the focus of thesis although, it would have been nice to show some real examples of the products for the presentation. Few printing experiences were done by making wood block printing to experience different textures from handmade printing but the results were not satisfactory enough to be presented in the report.

Creating the questionnaire, as a quantitative research method, was a very useful and informative method. Many ideas, comments and feedbacks were received from the participants through the questionnaire. One of the interesting aspects of doing the research was to learn that most of the participants had hard time picturing the possible products without any actual samples. As explained before due to lack of space it was not possible to add all the products samples. However, this was a good experience to keep in mind that for future researches a more convenient way to present the product samples has to be figured out. Another notable aspect of doing the questionnaire was to discover that the initial expectation of the target group was correct.

Most importantly, the survey presented what the target group thought about the patterns. It was interesting to see that most participants found Nordic butterflies

their favorite pattern and kitchen the most suitable place for products with this pattern. Even though it was a surprise to notice that some of the patterns did not become as popular as I assumed them to be. This was a good reminder that not always the designer's expectations regarding a market group will come true.

It is understood that one of the reasons of Nordic butterflies becoming the most popular pattern might be due to its color combination and triangle shape. Perhaps if there was any other color variations of this pattern available it would not become so popular. It is assumed that the international participants with different cultural backgrounds found connection with this pattern's blue and grey color combination, the layout, and the triangle motifs.

The questionnaire not only helped answering my questions but also reminded me of the different viewpoints. Designers should always keep in mind that the market might not have the same taste or interest as you have. It is important to remember the market interest and need while creating a certain design and not only depending on your personal interest. To explain more, when one create a design which is very appealing to him does not assure that the market would find it the same way. This fact was reminded to me when reading the comments from the survey. It was indeed very interesting to see people's all different viewpoints and ideas which I have not thought of at first place.

It is important to point out that the research was part of the process and the aim was only to have a brief overview of the market group while in the future more comprehensive research needs to be done before creating the company. By having an overview of the market group there is the chance of focusing the future researches. Further plans would be focusing more on understanding the business side of the project, conducting more researches and marketing. The researches that should be done in the future are on for instance the target

group. Since the target group in the thesis was only an assumption later more comprehensive research should be conducted to discover who exactly the target group are.

Another research that will be done is about printing. When it comes to the stage of printing there has to be more research carried out for instance on printing methods, techniques, and cost. It is assumed that printing for a design which has several colors and comes with several layout variations will be expensive. Therefore, by contacting printing companies or experts more information has to be found in this areas to prepare the designs with suitable sizes, layouts and limited color variations if needed.

The project started with the fresh ideas for pattern designs, design experimentations, finding useful inspirational materials and now the next steps will be about the possibilities of applying this designs and developing them toward print products. Therefore, other researches would be about pricing, delivery methods and the option of perhaps using retailers etc. One of the other important decisions that has to be made is about deciding whether offering the designs to a design company or not. This certainly highly depends on the budget level for creating my own print products.

In conclusion, with the information I gathered and the knowledge I gained by working on this project the next steps toward creating my design series would be taken. Now that I am familiar with the process of making pattern designs I could start working on creating my own design products. This process would help me if for instance a client asks me to design a series of patterns for their new product with inspiration from for example Africa. In this case basically the same design process will be conducted starting by meeting with the client to get the design brief, research, inspiration, design experiments, design evaluations, feedbacks, improvements and the final product or design.

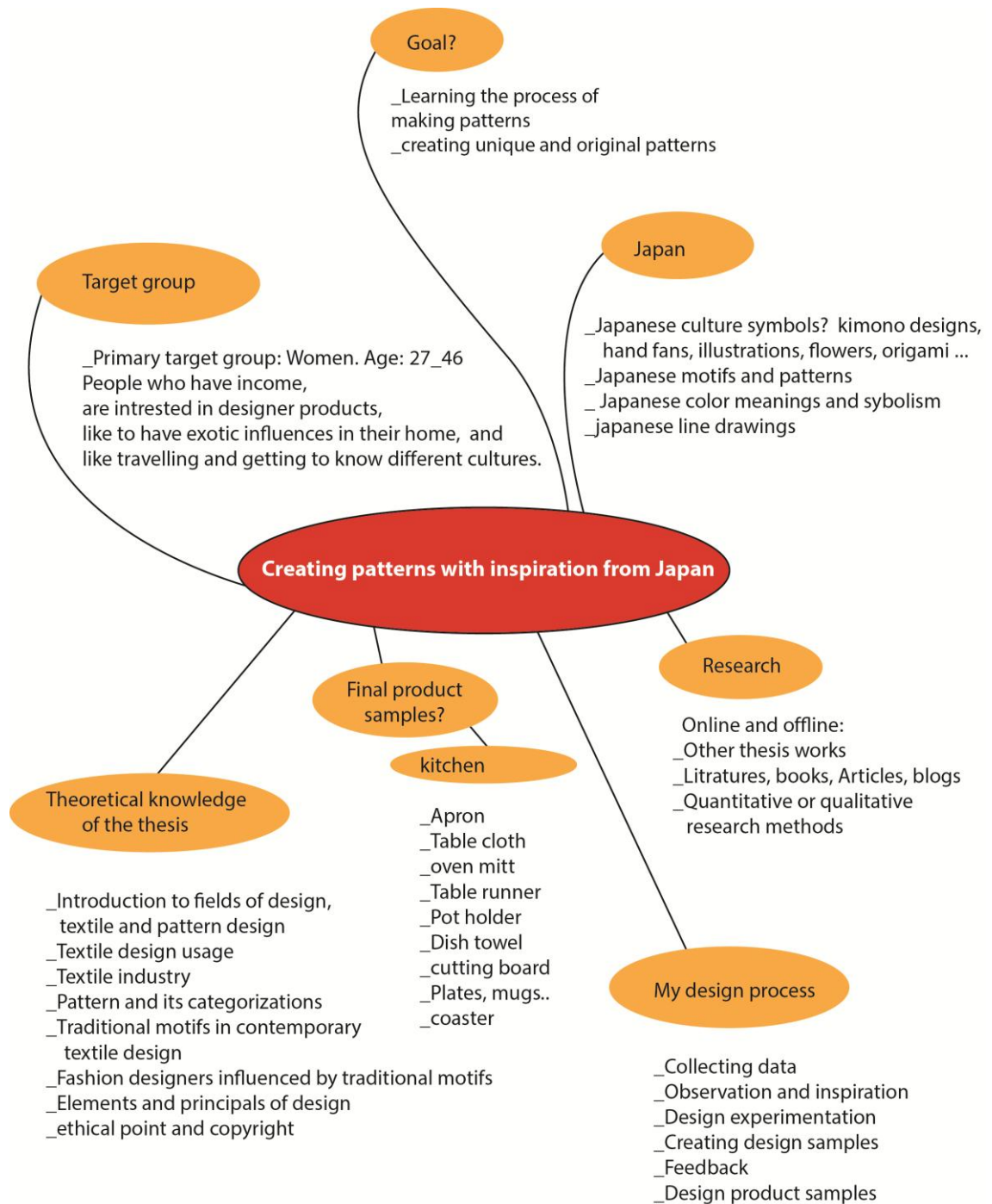
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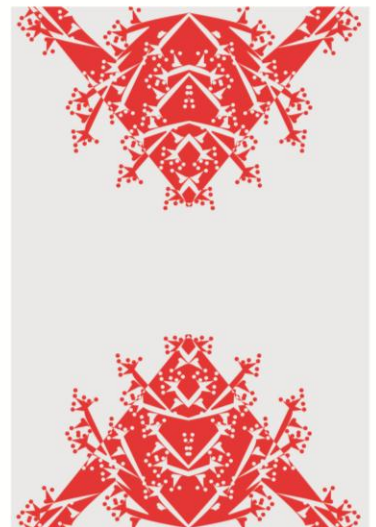
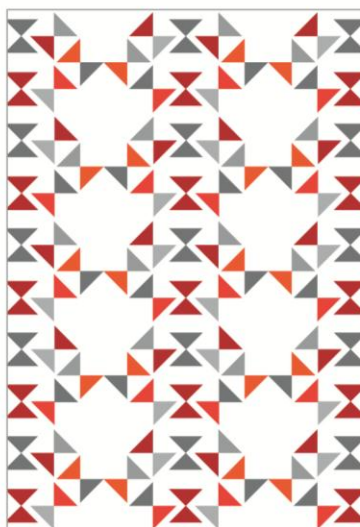
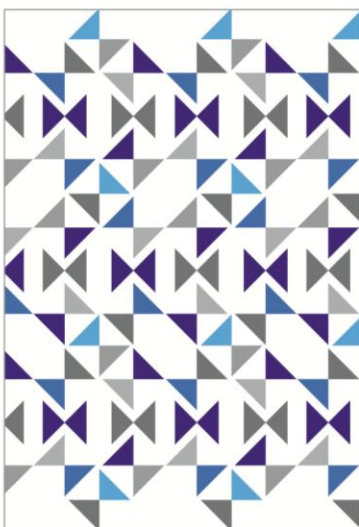
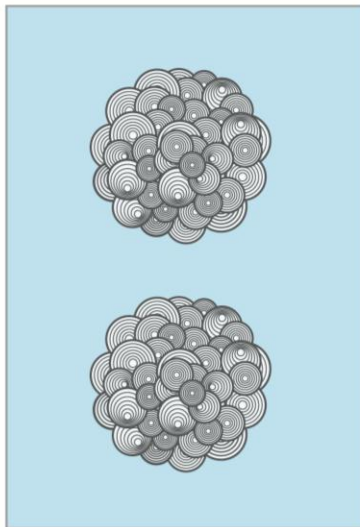
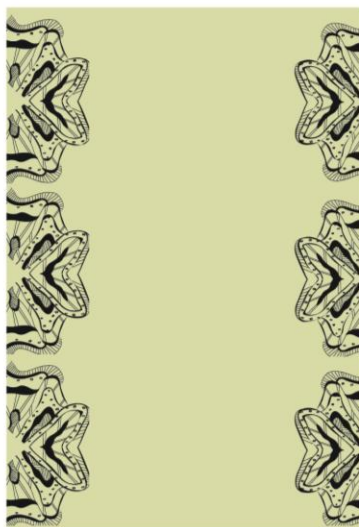
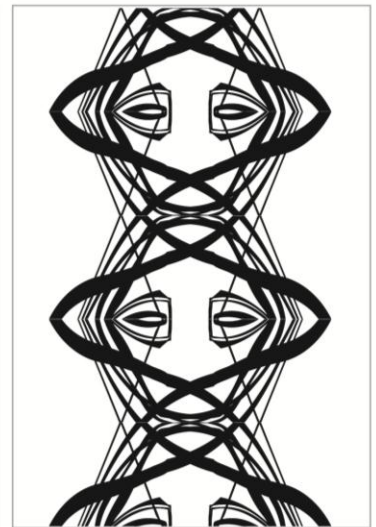
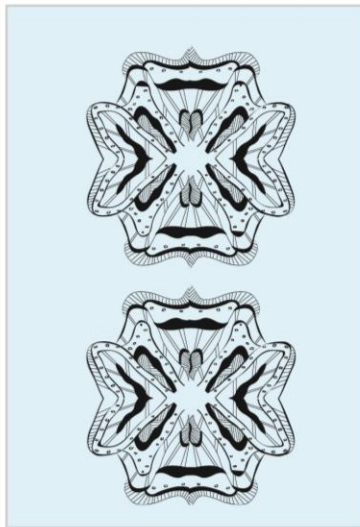
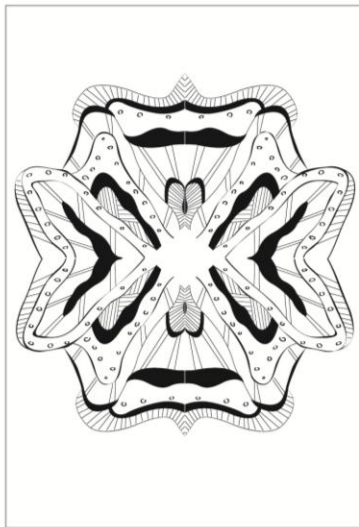
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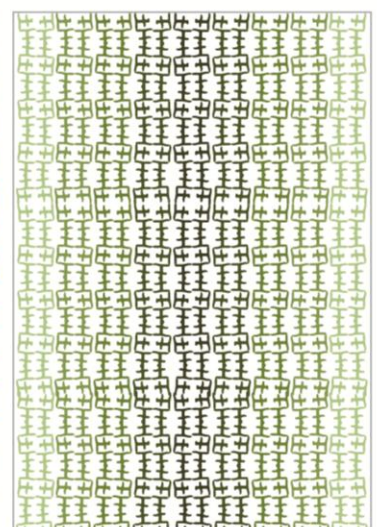
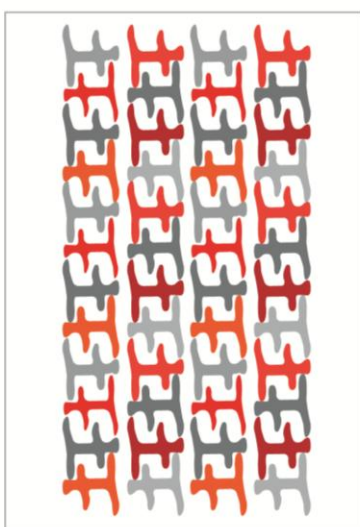
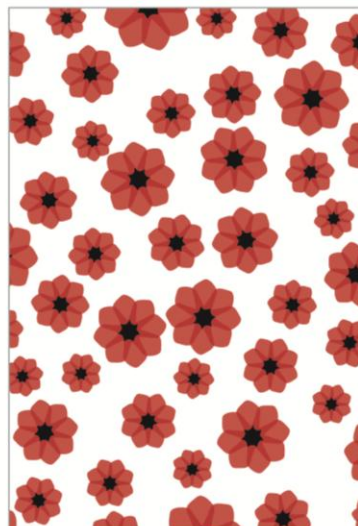
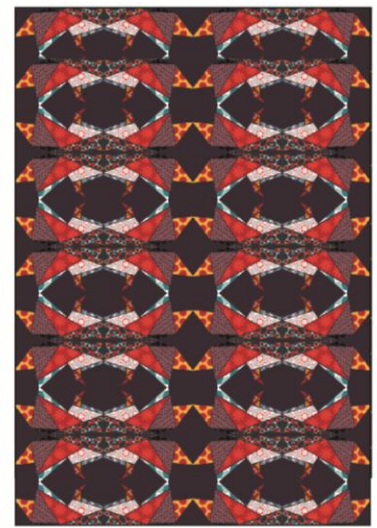
The thesis mind map



Design samples



Design samples



The questionnaire

Textile design thesis survey. (This survey is anonymous)

What is your gender? ☐ Female ☐ Male

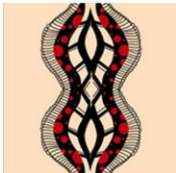
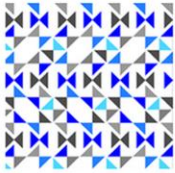

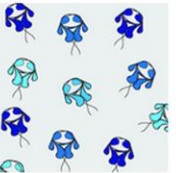

What is your age?

☐ 18-24 ☐ 25-29 ☐ 30-34 ☐ 35-39 ☐ 40-44 ☐ 45-49 ☐ 50-54 ☐ 55-60 ☐ 60+

What is your average monthly income?

Less than € 1000

Please select the pattern designs you like. (You can select more than 1)

☐ Pattern 1 ☐ Pattern 2 ☐ Pattern 3 ☐ Pattern 4 ☐ Pattern 5

Please explain why you have selected those patterns.

For which categories are the chosen patterns suitable for?

Kitchen (e.g. table runner, oven mitt)	Bedroom (e.g. bedding set)	Living room (e.g. curtains, sofa)	Bathroom (e.g. towels)	Apparel (e.g. t-shirts, bags)
<input type="checkbox"/> Pattern 1	<input type="checkbox"/> Pattern 1	<input type="checkbox"/> Pattern 1	<input type="checkbox"/> Pattern 1	<input type="checkbox"/> Pattern 1
<input type="checkbox"/> Pattern 2	<input type="checkbox"/> Pattern 2	<input type="checkbox"/> Pattern 2	<input type="checkbox"/> Pattern 2	<input type="checkbox"/> Pattern 2
<input type="checkbox"/> Pattern 3	<input type="checkbox"/> Pattern 3	<input type="checkbox"/> Pattern 3	<input type="checkbox"/> Pattern 3	<input type="checkbox"/> Pattern 3
<input type="checkbox"/> Pattern 4	<input type="checkbox"/> Pattern 4	<input type="checkbox"/> Pattern 4	<input type="checkbox"/> Pattern 4	<input type="checkbox"/> Pattern 4
<input type="checkbox"/> Pattern 5	<input type="checkbox"/> Pattern 5	<input type="checkbox"/> Pattern 5	<input type="checkbox"/> Pattern 5	<input type="checkbox"/> Pattern 5

Please explain why do you think the chosen patterns are suitable for those categories.

If the selected patterns were available as products today, how likely would you purchase them?

☐ Extremely likely ☐ Very likely ☐ Moderately likely ☐ Slightly likely ☐ Not at all likely

Why?

which options do you agree with? Imagine that the products are on the market.

☐ I like the designs because they are unique and different.
☐ I am willing to purchase these products.
☐ I am willing to pay more for handmade prints.
☐ I am willing to pay more for environmentally friendly products.
☐ I would buy the products on these prices. (Move your mouse cursor over the question mark on the right)
☐ The designs are not exciting and not my taste.

Other:

5. Do you have any comments or suggestions?

Thank you very much for your time!

Example of price ranges:
 15€ cushion, 10€ oven mitt, 60€ 2 person blanket cover, 15€ table runner, 20€ per curtain