Master's Thesis

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Jewelry inspired by flowers

Creating jewelry with a modern flower image





Telemark University College

Faculty of Art, Folk Culture and Teacher Education

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Abstract

Recently, the popularity of floral motives in jewelry is rapidly emerging.

The vast quantity of contemporary floral jewelries depicts a natural flower and repeats compositions from the preceding centuries. Certainly, there are artists whose jewelries are outstanding and original.

In this work, I attempt to make one-step further advancing flowery jewelries with a modern design and innovative ideas. Thus, I analyze the flowery design in jewelries from the past centuries. This gives me the overview of produced jewelries and help to find a better design and technical solutions for the practical part of this work.

In this thesis, I present my vision of the modern and contemporary approach to the flowery design, and demonstrate this idea through making a jewelry collection with flowers as the QR shapes.

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1. Introduction

During the last years, the jewelry designers often use naturalistic flowers as a source of inspiration. Jewelry depicts countless variants of a flower image. Their designs are often similar to each other since jewelry makers take their inspiration from the natural flower shape or previous works. Technological embodiments, stylistic solutions, customer's wishes and many others can restrict the design as well. However, the amount of jewelries with the flowery design is continuously increasing.

Today, there is another spin of history when the flowery jewelry is in fashion as it is used to in times of the Rococo style, and later with the Art Nouveau style.

There are two major approaches today to depict a flower in jewelries. The first approach takes its roots from the classical design. A main characteristic is a large number of stones that defines the design. Such jewelries are mostly produced by international brand companies, for instance One Cleef & Arpels, Sybarite, Dior etc. (*Fig.1*)

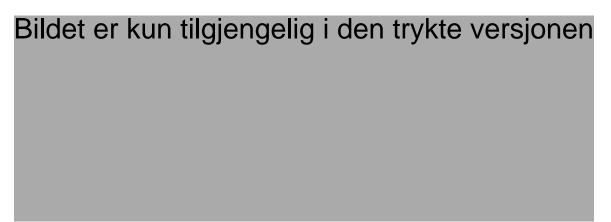


Fig.1: Flower jewelry of different producers, from the left to the right: One Cleef & Arpels, Sybarite, Dior

The second direction has abstract shapes, but still one can recognize flower shapes in their design. Such jewelries are usually created by artists or craftsmen. (Fig. 2)

Bildet er kun tilgjengelig i den trykte versjonen

Fig. 2: Examples of flowery jewelry, from left to right: Nora Rochel (Germany), Helen Shirk (USA), Ingjerd Hanevold (Norway)

Observing the number of jewelries with flower today the question of being original arises if one decides to produce yet another flowery inspired design. Thus, I am wondering how a jewelry artist can stand out among all jewelries with an individual design and style that is competitive, original and modern.

Analysis of various flowery designs in the jewelry art from the preceding centuries should improve my knowledge and understanding of the most important solutions for flowery motives. However, as my specialization in jewelry making is stone setting, many examples are jewelries with stones.

One of the tasks in this project is to find how flower shapes are used as a source of inspiration. I aim to explore different perceptions of a flower in jewelries. A focus is to trace changes in design of flowery jewelries during the last three centuries. Some of nowadays jewelries are very traditional and classical, while others are very modern. By saying modern, I mean contemporary jewelries designed as abstract minimalistic shapes.

I use flowers as a source of inspiration to create a collection of modern jewelries and find out how today's jewelry art can use a flower image.

This thesis aims to answer the following question:

What is a contemporary image of a flower in the jewelry design? How can the analysis of flower jewelry influence the individual contemporary jewelry design?

To approach the questions I analyze jewelry examples, made by different artists from European countries during the last three centuries. I find particularities of the flowery design in the past. Further, I try to find out how I can benefit from these particularities and modern technologies to improve my vision of the contemporary flowery jewelry.

Methodology

I use several approaches and methods in the research. They include collecting data, comparative analysis and experimentations.

The comparative analysis aims to find the similarities and differences of the flower compositions in jewelries, to see the possibilities of making various forms of flower and apply acquired knowledge to the creative process. I summarize general observations, characteristics and conclusions in the end of each chapter. I experiment with materials and techniques to develop my ideas in order to come up with better solutions and design.

The thesis consists of four chapters. I introduce the topic in Chapter 1. Chapter 2 covers the usage of a flower in the art in general. Chapter 3 presents the theoretical part of the project giving the retrospective of the flower forms in jewelries in the past and present. Each paragraph explains historical factors that influenced the jewelry design. The chapter includes information about the particularities of the flower shaped jewelry for each style. I summarize main characteristics in the table. Chapter 4 shows and illustrates how I use the result of the analysis in Chapter 3 to emerge the design. Subsequently, I describe the practical part of the thesis and present my collection of jewelries and sketches inspired by flowers. Finally, I conclude the thesis outlining results and discussing future works.

2. Flowers as a source of inspiration

The interest in flowers came to me from the childhood. Born and grown up in Ukraine, I often waved flowery wreathes when I was small. (Fig. 3)

The wreath as a head ornament plays an important role in Ukrainian culture. People have used them as amulets and fortunetellers. It is a part of traditional Ukrainian costume. (Fig. 4) Particular types of flowers in the wreath identify this head ornament as an information-intensive object.

Now, the interest in flowers appears in my profession as a jewelry maker. That is why I decided to make the research in this thesis in a topic of flowery jewelry particularities. One of the goals is to acquire deeper knowledge in my professional sphere.





Fig. 3: Me (Vira Bublyk) in a flower wreath;

Fig. 4: The wreath together with Ukrainian national costume

All form of art depicts the use of flowers as a source of inspiration. Many examples of using flowers coming from the paintings and pictures produced by artists during the 17th-19th centuries, in which the flowers were depict. (*Fig.* 5, *Fig.* 6)



Fig. 5: Jan Brueghel the Elder, Bouquet (1599)

Fig. 6: Jan van Huysum, 18th century

Several types of flowers are standing out above all others. They are used in art the most. Their symbolical meanings take a part in different cultures. This concerns the rose, the lily and the lotus.

Many cultures define the rose as the queen of flowers. Christians consider the rose as a symbol of Madonna. In the Islamic religion, the white rose is a symbol of God's wisdom and eternal verity. Buddhists also perceive the rose as the God's flower. The Jewish perceive the rose as a unity symbol with God. The red rose is one of the most universal of all symbols that is perceived and understood by the majority of people as a symbol of love and romance. The roses have been a source of inspiration for artists. Many works of art shows it. (Green, 2012)

During Medieval times, the lily in the Christian religion replaced the rose. The history of lilies is rich and dates back to centuries ago. Lily is a symbol of purity, virtue, chastity and the holiness of Saint Mary. Three lilies on one stem are symbolizing the Holy Trinity with her three virtues: faith, hope and sympathy. Lilies also hold importance in Christian and Pagan traditions as they symbolize fertility.

Lotus in its turn is an important flower in the Buddhist's religion. It is a symbol of awakening to the spiritual reality of life in Hinduism and Buddhism. The flower became the symbol of immortality and resurrection.

The allegoric use of flowers is uncountable. We can perceive flowers as attributes for springtime, the youth, the sunrise, the rhetoric, the virtue, etc. Sometimes a flower became a national symbol of a country or city. For instance, the lily is a symbol of Florence, the tulip represents Holland, Scotland has a symbol of the thistle and Ireland has a shamrock leave. Many cultures and nations have different use of flowers.

The fashion of flowers in Europe started in the beginning of the 17th century with the beginning of the «tulipomania» in Holland. From the early 18th century, the flower language (also called floriography) occurred in Europe. Floriography is a cryptologic communication through the use or arrangement of flowers. Mary Wortley Montagu (1689–1762), who was the wife of the British ambassador to Constantinople, wrote a letter expounding on the "Secret Language of Flowers" and introduced the flower language to England. She had discovered the language in Turkey while travelling. Concubine women used this language, as they could not read and write.

At the same time Aubry de La Mottraye (1674–1743), who was a writer and traveler, introduced the floriography to the Swedish court in 1727. After this, the Europeans quickly picked up the concept, and the flower language became popular for several decades in the 18th century. People started to know the flower language better when the book of Charlotte de Latour, "The Language of Flowers", was published in 1819. In 1884 the same titled book was published by Jean Marsh and illustrated by Kate Greenaway. It became a standard source for flower meanings during the era. With the help of floriography people expressed their feelings, enhanced their surroundings and commemorated important rituals and observances.

People use flowers in everyday life. The flowery ornaments appear in a clothes design. Different flowery paintings decorate furniture and walls in houses, etc. These show that flowers play role of a starting point and a reservoir of inspiration for many artists.

Forms, colors and structure of the flowers are inspiring. Natural elements often have strict geometrical structure and golden ratio proportions that studied by specialists and applied into different designs (*Fig.* 7). I am planning to use the proportions of golden ratio in the practical part of the project.

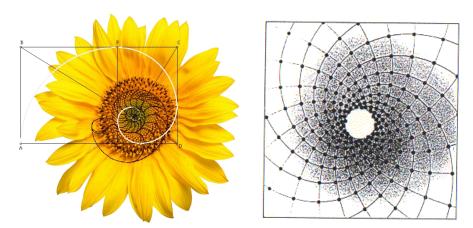


Fig. 7: The golden ratio proportions in flowers.

3. Analysis of flowery motifs in jewelry design

Traditionally, people use jewelry to ornament themselves. Whether put, pierced through, or hung on a body, their function is to show one's individuality, style and taste. Floral jewelry covers a range of periods from the Egyptian culture and ancient Greece, through the Baroque flower brooches sumptuously set with precious stones and, in art, from the extravagant flower motifs of Art Nouveau to current trends in contemporary art jewelry. There is big variety among flowery compositions in jewelry during each historical period.

The historical background of the project is aiming to consider a range of jewelries with flower design during the period 18th – beginning of the 21st centuries. The goal of analyze is to define the main characteristics and particularities of jewelry with flower design and then to apply this knowledge to my design.

3.1 Floral jewelry in the time Rococo

The prettiness of nature is reflected in the jewelry of the 18th century. Until 1780, the asymmetry in the style was prevalent. In the first half of the 18th century, Rococo's asymmetry had been developing with the use of shells, scroll and volutes. The lines became voluptuous and elegant.

The main characteristic of the style is natural shapes and naturalistic detailed ornaments. It is explained by the study of botany and exotic flowers, which were introduced to Europe. The reason for Europe's taste for flowers was the result of more peaceful and prosperous times during the 18th century. (Hughes, 1972, p. 92)

Different types of flowers (tulips, lilies, roses, fritillaries, etc.) were presented in jewelries and could be engraved or painted in multi-colored enamels. Little by little the design moved away from cluster setting (*Fig. 10*) and became more naturalistic and exuberant (*Fig. 13 - Fig. 15*). Ribbon bows and asymmetrical flower bouquets confected of gold and diamonds remained important until the 1780s.

The flower jewels included the bodice's stomachers (Fig. 8,

Fig. 9) and the hairpins (aigrette). Such jewelries were in the form of a bunch of flowers, ears of wheat or a feather. Birds and butterflies on wires or springs, which shimmered and glittered in the light as the wearer moved, often augmented them.

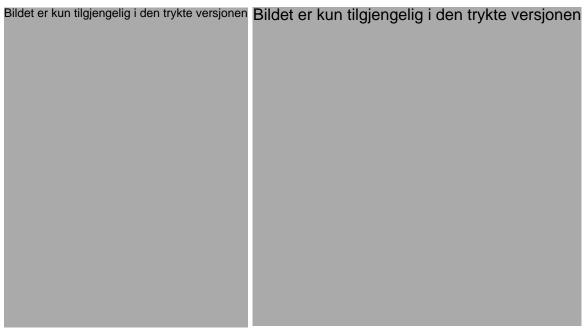


Fig. 8: Stomacher, ca.18th, diamonds, pearls, precious metals

Fig. 9: 18th century rose-cut diamond stomacher

During the 18th century the bodice developed in proportion and richness together with the floral compositions. According to Gregoretti it was placed under the neckline in the form of a large upturned triangle and its lower point reached to the waist. Usually it was decorated with a large bow of ribbons with floral motives.

Most of the stomachers in Rococo style are symmetrical (Fig. 8,

Fig. 9), made in one color gamut, usually white (color of diamonds) or in a gamma approximate to white (yellow diamonds, chrysoberyls, etc.) It was caused by the popularity of diamonds. Usually stomachers had an openwork silhouette, created by stones set in different variations.

Bodice's jewelry could be dismantled. Tait wrote: "Large stomachers or ornaments for the front of the bodice, from the bust to the waist, comprised a series of brooches of decreasing sizes each of which could be worn individually". (Tait, 1987, p. 183)

The possibility to dismantle the jewelry makes it transformable. The jewelry gets new functions. Multi-functional objects get more attention from the public than mono-functional ones.



Fig. 10: Stomacher brooch in the form of flowers and leaves, Portugal -1726-1775

Fig. 11: Stomacher brooch, back side

The stomacher brooch above is made from silver and set with yellow chrysoberyls. Fig. 11 displays the backside. It is closed and solid. It has dished settings for the stone clusters with a central ridge. There are no holes in metal and the stones are invisible from the backside. The brooch's construction has an oval in the base. The oval is the main part of object and three drop-shaped pendants are supplemental parts. There are four elements in the brooch: the oval main part, the middle drop-shaped pendant and two drop-shaped pendants on sides. The sizes of the three last elements are noticeably smaller than the big oval element. Such contrast and correlation of forms make a compositional accent more evident. The contrasts of the forms make the composition more impressive and memorable for the eye. The rhythm in the composition is almost not visible. That explained by the static character and the symmetry of the jewelry.

Some elements on the brooch have a nuanced relationship (*Fig. 12*). There are six flower elements (three pairs) in the oval part of the brooch. Each pair has the same dimension that creates a well balance between the details in the brooch. The flower plays the role of a constructing element in the composition. The proportions of this brooch are corresponding to the golden ratio proportion and the diameters of the circles corresponding to Fibonacci's numbers. Thus, D1/D2=1.618, or D1/D2=D2/D3=D3/D4=1.618. This explains that proportions of the brooch were not random.

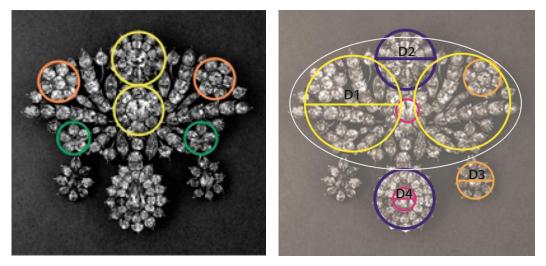


Fig. 12: Golden ratio proportions on the stomacher brooch.

Small detailed composition, quantity of stones and a color pallet express the characteristics of Rococo style.

Other types of jewelry also reflect similar characteristics during the period. The brooch from *Fig. 13* is made from gold and silver, with enamel and diamonds. The jewel shows the bright and natural colors of plants, which give a feeling that this is a real flower. The brooch was used on bodices that required big ornamentation.



Fig. 13: Bouquet brooch

Fig. 14: Aigrette, from the collection of Dame Joan Evans, 1750-60

Fig. 15: Aigrette made in the form of crescent with a trembler spray of flowers

Fig. 14 shows an aigrette that has a form of a spray with a single flower on a feathered scrolling stem. The aigrette is set with chrysoberyls. This shows how jewelry makers used cheaper materials to create an image of more expensive ones, for example diamonds.

Fig. 15 shows an aigrette made in the form of crescent with a trembler spray of flowers, made in 1770 in Europe. It is made of silver and gold with a closed-back and set with diamonds.

The composition of the aigrette (*Fig. 15*) gives an organic and natural image. However, the aigrette has a geometrical construction. The flower sprays are built from the same details of different size. The placement of the petals was calculated and created in a circle-base (*Fig. 15*). Diameters of the main circle-bases in this brooch are in the ratio with the golden ratio proportions.

The aigrette is made from one solid piece, but the crescent (the round detail underneath) is a separate part, which can be worn as a brooch or pendant. The flower from the right is fastened on small rings, so it will move and tremble when the wearer is moving. (*Fig. 16*)

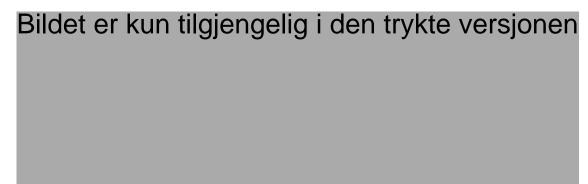


Fig. 16: Aigrette made in the form of crescent with a trembler spray of flowers, fragments

The rhythm is created by repeated details in each leave or petal. The big forms are constructed by the use of smaller details, which give a dynamic rhythm to the composition. There are two types of rhythm and movement in this aigrette. First is the size of the leaves. The size of each leaf becomes bigger from the left to the right. The biggest one is placed in the central part of the composition and then, to the right, the size is decreasing. From the other side, the rhythm appears in each separate leave, created by different sizes of stones. (*Fig. 15*)

The image of the aigrette consists of three parts, a bigger flower (from the left), a crescent and the small flower (from the right). A tremble flower from the right plays a supplemental role, as its size is considerably smaller than sizes of other details. The contrast between the sizes of the big flower and crescent is not big, so it is difficult to decide which of them is supposed to be the center of composition.

The other way to depict flower was the tendency of using stones. The big stone could be used as a central part of a flower, while smaller stones as petals. Quite often, other colored stones could border the outline of flower. The good examples of such flowers are used in *Riviera* necklaces (*Fig.17*), which were usually composed of a row of large single stones

with a pendant in the center or at each side. The necklace with brilliants, pink diamonds and topazes has a large flower from which two other flowers are hanging. The composition of the necklace has a geometrical structure. It is symmetrical. The flower image is built from stones.

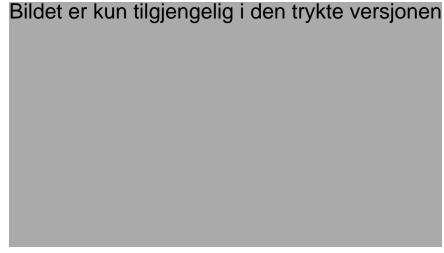


Fig.17: Riviera necklace; fragment

The fashion of flower design was also captured in miniature by the *giardinetti*, 'little garden'- rings, in the middle of the 18th century. It has tiny baskets of flowers made from colored gemstones and rose-cut diamonds in delicate open-work settings. The type was popular throughout Western Europe in the 1740s and 1750s.

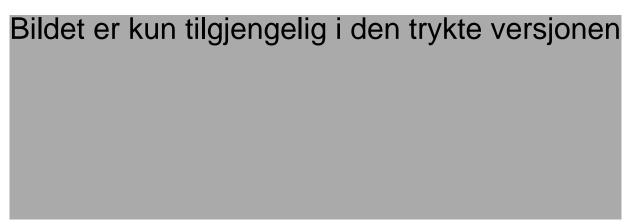


Fig. 18: The giardinetti rings, (Jewels and Jewellery, Clare Philips, 2000, p.58)

Historical developments, social changes, technological progress, industrial and educational policies played a decisive role in the art movements. According to new trends, close to the end of the 18th century, the design line switched from florid ornamental lines to grater simplicity and more disciplined compositions. (Gregoretti, 1979)

The usage of stones with various sizes, shapes and colors characterizes jewelry compositions of the 18th century. Topazes, amethysts, white and blue sapphires, opals and peridots, rubies and emeralds were used as often as diamonds in jewelries.

From the aspect of design, it was important to make the stone in the jewelry more visible and to keep metal as an invisible background, which had to fix the stone. It was common to use large or valuable stones in several jewelries and to make jewelry of separate elements, which could be dismantled for use in different combinations.

Summary

Table 1, Main characteristics of jewelries from the Rococo style

Example	Characteristics of jewelry, which corresponds to style and period
Bildet er kun tilgjengelig i k	The stomacher ornament consists of several parts of floral jewelry that can be worn separately. Drop-shaped pearls hung up in a way so they will tremble when the wearer moves. (Fig. 8)
Bildet er kun tilgjengelig i den trykt	This broch presents the particularities of Rococo's flowery jewelry. It is symetrical. This example shows how flower images were created with the help of stone combinations and how the golden ratio was used in compositions (Fig. 10)
Bildet er kun tilgjengelig i den tryk	The brooch shows the variety of materials during Rococo style and the connection of materials (enamel used as a background for diamonds). The colorfulness of the jewelry expresses the taste for the natural image of flowers. Richness and fluidity characterize the brooch, what corresponds with the entire character of Rococo's jewelry. (Fig. 13)
Blidet er kun tilgjengelig i den t	This aigrette shows the variation of dismantled jewelry during the Rococo style. In addition, it shows the use of trembling details. (Fig. 15)
Bildet er kun tilgjengelig i den tr	This Riviera necklace shows the creation of a flower shape with a big stone in the middle and small all the way round. (Fig.17)
Bildet er kun tilgjengelig i den tryk	This example shows how delicate flowery compositions could be, with holes between leaves and petals. (Fig. 18)
Observations from the analyze	 The use of the golden rate proportions. The possibility to transform and dismantle jewelry that makes the jewelry more interesting. Trembling connections of details make them move, what
	catches more attention to the jewelry.

3.2 Characteristics of the flowery jewelry in the 19th century

A stylistic eclecticism characterizes the 19th century. It derived inspiration from all possible sources. In the beginning of the century, the clarity and purity of classical antiquity replaced the asymmetry in design because of the excavations that took place. Comparing to the Rococo's jewelry, precious floral jewels of the 19th century became larger. Plenty of details with flowers and leaves, depicted as accurate as in nature, fulfilled the compositions.

Many different factors influenced on the jewelry design during the 19th century. Several fashion magazines appeared, like *Ladies' Magazine and Illustrated London News* in England, *L'Observateur des Modes, Art et Decoration* in France, *Art Moderne* in Belgium etc. (Hughes, 1972, p. 100) Simplification of travelling brought some results in design too, as artists had the chance to discover new cultures.

In the 1820s-30s, jewelry, which was recognizable with flowers and fruits, were typically small and tender, but closer to the end of the century they started to develop. Their construction became more and more complicated and at the same time more extravagant and original (*Fig. 19-Fig. 20*). The flowers that were the most popular garden plants became the most used in jewelries as well, such as roses, fuchsias, chrysanthemums etc.

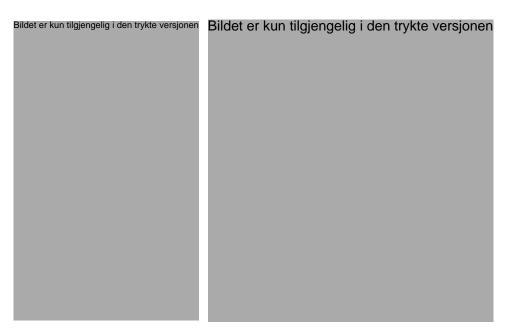


Fig. 19: Diamond corsage's jewelry, mid. 19th century

Fig. 20: Sapphire and diamond corsage's jewel, late 19th century

As a parallel to the Rococo's bodices the corsages appeared in the 1850s (*Fig. 19-Fig. 20*). They were made of diamonds and decorated with flowers. Some of the blossoms were made on small springs so they could tremble and glitter with the slightest movements. Precious stones were used on a corsage's jewelry. The stone were placed in the center of the flowers and accented the center of the composition. The use of colored stones made the jewels polychromatic. (*Fig. 19-Fig. 20*)

The flower shape was also popular in different types of jeweled head ornaments: tiara, bandeaux and strings of pearls (*Fig. 21*). Different types of flowers such as ears of wheat, butterflies and vines established a popularity that was to remain current for much of the second half of the century. Baroque and Rococo motifs were revived.(Phillips, 2012, p. 138)

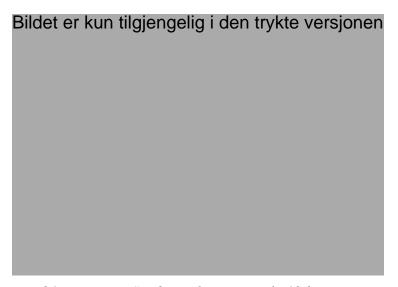


Fig. 21: Victorian Seed Pearl Tiara, early 19th century

Floral jewelries were made with sentimental meanings conventionally attached to different flowers. For instance, lilies of the valley symbolized the return of happiness, and forget-me-not signified true love. According to Phillips, such jewelries were the most popular in the 1830s-1840s and were made in gold set with colored stones. (Phillips, 2012, p. 147)

Naturalistic shapes depicted nature as it is. The stylization of a flower form can be visible in the compositions where stones played the main role. However, in this case jewelry makers also tried to approximate as close to nature as possible, if the size of jewelry allowed to do so (*Fig. 22*).

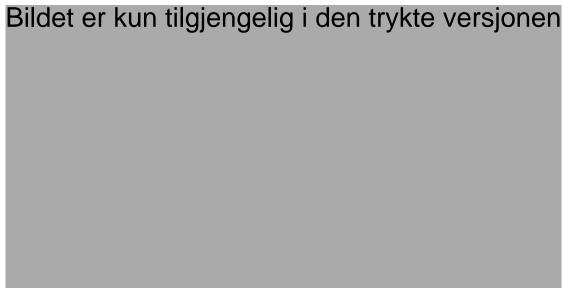


Fig. 22: Habsburg Sapphire Parure of Empress Marie-Louise of France.

During the first three quarters of the 19th century, jewelries were not often specially designed. Each producer had their own designers, but commotional demands probably did not give as much freedom. Floral jewelry was generally used all over the Europe and flower motives were depicted mostly as additional elements. Even though, one can determine several types of flowery jewelry with its characteristics in jewelry art during the period.

Summary

Table 2, Characteristics of jewelry of the 19th century

Example	Characteristics of jewelry, which corresponds to style and period
Bildet er kun tilgjengelig i den trykte versjonen	The corsage's jewelry presens fashion in the 19 th century for a naturalistic style. It also shows the incredible popularity of using a quantity of diamonds. The jewelry can be dismantled. (<i>Fig. 19</i>)
Bildet er kun tilgjengelig i den trykte versj	This corsage's jewelry shows the use of different sized stones. It presents a part of a jewel that can be dismantled in several separate jewels. The use of sapphire as a center of the flower put accents in the composition. Use of diamonds as a white background for sapphire makes the contrasting pallet in the jewelry. (Fig. 20)
Bildet er kun tilgjengelig i den trykte versj	The flower attempt to point up a naturalistic character of the composition which is displayed by the delicate details on the edges of the petals (Fig. 22)
Bildet er kun tilgjengelig i den trykte versjon	The head ornament presents floral jewelry that had a sentimental meaning attached to different type of flowers. The flower indicates the use of natural materials as well, such as pearl, ivory, wood, coral. The head ornament is asymmetrical, but the volumes of flowers create a symmetrical appearance of the jewelry. (Fig. 21)
Observations from the analyze	 Dismantled jewelry - good and enthralling idea of making big jewelry, which can be split in parts. The use of contrasting colors and sizes plays a significant role in jewel's appearance The combination of geometrical structure together with asymmetry as a design principle The role of flowers in jewelry; the flower can construct the entire jewelry, or the flower can be an additional ornamental detail that is not the center of composition.

3.3 Flower image in jewelry art during the Art Nouveau Style

The influence of nature had fundamental importance in the Art Nouveau period. (Phillips, 2012, p. 160)

The inspiration was coming from the new awareness of Japan. European artists were impressed and inspired by the Japanese perception of the world, their cult of nature and their ability to observe and appreciate beauty of simple things. Among all favorite motives in Japanese art there were also pictures of chrysanthemums and orchids, which found their depiction in jewelry of Art Nouveau (*Fig. 26, Fig. 29*), (Hughes, 1972, p. 104).

According to Markowitz and Karling, the most popular flowers during the Art Nouveau style were poppies, carnations, morning glories, sweet peas, bleeding hearts, cherry blossoms and irises (*Fig. 23- Fig. 25*).(Yvonne J. Markowitz, 2008, p. 33)

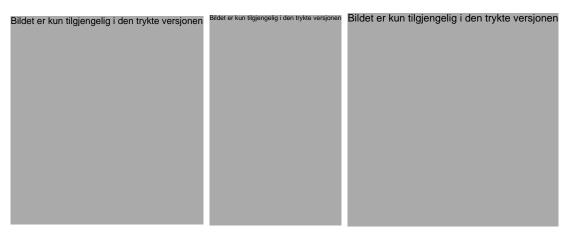


Fig. 23: Sweet-pea flowers brooch

Fig. 24: Poppy Blossoms' Pendant, Rene Lalique

Fig. 25: Iris Pendant

Considering the general characteristics of the flower design during Art Nouveau, I can define three groups of floral design. The first group includes jewelries mostly designed with plaque-a-jour enameling (*Fig. 26-Fig. 28*). The second group displays jewelry in which flowers are made from natural materials, such as pearl, ivory, coral, wood, etc (*Fig. 29-Fig. 31*). The third group presents flowers that were modelled with a help of different materials and technics (*Fig. 32-Fig. 33*)

Different types of enameling were often used. The most impressive one is *plaque-a-jour*, which is a delicate stained glass without a metal back plate. The Art Nouveau flowers

with such enamel exhibit a lightness and openness with its characteristic undulating line (Fig. 26-Fig. 28).

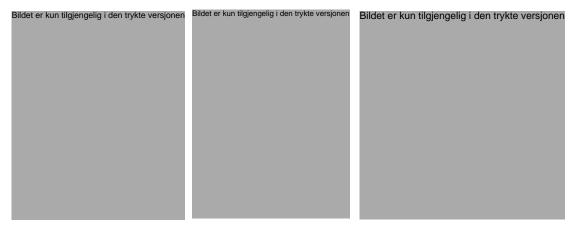


Fig. 26: Hair band, designed and made by Wolfers, ca. 1900

Fig. 27: Hair band, c.1900, designed and made by Wolfers.

Fig. 28: Hair pin, poppy, by Rene Lalique

The flowers presented above show the use of transparent enamel in jewelry flowers. Each jewel is characterized by a rich color pallet and grate color shades. The enamel gave a possibility to use a variety of colors. It gives the effects of reflection and glare. The glance surface reflects things and colors from the surroundings and through this, the colors of the jewel became even richer. This technic of plaque-a-jour enameling requires a structural surface, because there is no back metal plate.

According to Phillips, non-precious materials, such as horn and glass, were often used instead of gold. (Fig. 29- Fig. 31)

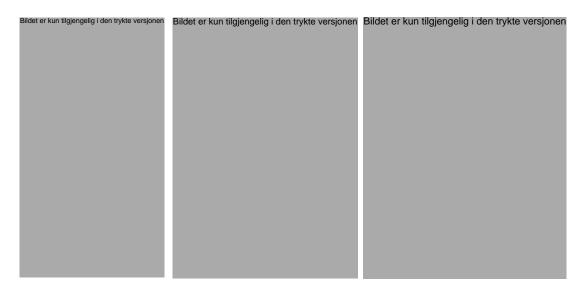


Fig. 29: The Chrysanthemum brooch by G. Paulding Farnham for Tiffany & Co. c. 1904.

Fig. 30: Painted horn comb by Georges Pierre

Fig. 31: Carved Horn French Art Nouveau Flower Pin

Every material has characteristics, which define the jewelry design. Different jewelry makers tried to emphasize features and values of each material. For instance, the flower in Fig. 29 incorporates natural freshwater pearls from the tributaries of the Mississippi River. The flower bud is the center of the composition with milky color of pearls and natural shapes. The design accentuates the natural material's particularities and puts the gold and diamonds on a second additional place.

On Fig. 30 and Fig. 31 the flowers are carved from horn. The flower on the comb looks as a mother of pearl, but it is from painted horn. Usually, the size and the shape of the horn restricted the designs of such flowers. Volumes of such flowers are not big. The horn jewelry is usually banded in a base. The material is transparent It gives a warm feeling when you touch the horn jewelry.

Thus, natural materials create different images of flowery jewelries because of their characteristics.



Fig. 32: Brooch, Rene Laligue, ca 1903-1904, glass, enamel, gold and diamonds Fig. 33: Floral brooch made of horn and metal, Louise-Laure Beauferey

It was also common to combine different materials in jewelry to create a flower image and for reaching the best design solutions (Fig. 32). The leaves on a brooch from the are Fig. 32 are made in a technique of plaque-a-jour enameling. The flowers are modelled from two parts: the metal part with stones and the glass part. The materials give the feeling of lightness and tenderness. The transparency of the glass petals infiltrates the reflection of the stones and gives to the petals a unique feeling of the nature of anemone. The color pallet is light with pastel shades of beige, orange, yellow, light green and brown colors. The banded leaves and flowers create the volume of this jewelry. The small details construct the entire composition.

Another example of such jewelry is presented in *Fig. 33*. It shows the contrast between the transparent horn and the metal central part. The horn petals play the role of a background for metal stamens of the flower. The materials matches well to each other in colors while the color of the horn petals corresponds to the color of the metal.

The floral jewelry from the Art Nouveau style have many characteristics and particularities. Many compositions are asymmetric, but there are some symmetrical compositions as well.

In general, compositions with rich line ornamentations and a colorful pallet characterize the design of flowery jewelry in the time of Art Nouveau style.

Summary

Table 3, Characteristics of jewelry of the Art Nouveau style

Exampl.	Characteristics of jewelry, which corresponds to style and period
Bildet er kun tilgjengelig i den trykti	This flower presents plaque-a-jour enamel. Because of this technique, the flower has a structural facture. The use of such facture was common for many enameled flowers in the jewelry during the Art Nouveau style. (Fig. 26)
Bildet er kun tilgjengelig i den tryl	This example shows the rich ornamentation in flowery jewelry during the style. Such ornamentation, with its twisting and splashing lines, brings ones attention into the details.
	The symmetrical composition have an assymetrical ending. (Fig. 27)
Bildet er kun tilgjengelig i der	This example of flower shows the use of natural materials (natural freshwater pearls) and how they can be used in jewelry combined with metal. (Fig. 29)
Bildet er kun tilgjengelig i den tryl	The flower presents another variant of using natural materials – horn. The material gives the flower warmness, transparency and a pleasant feeling of touch. The flower form is restricted by the qualities and the characteristics of horn. (Fig. 30)
Bildet er kun tilgjengelig i den tryk	Combination of different materials and technics also explain the design of flowery jewelry. The lightness of flowers can be expressed through glass petals. The transparency and glance surface of glass give the flower good reflections and patch of light. (Fig. 32)
—Bildet er kun tilgjengelig i den trykte	This example shows how contrast can be used as a building material for jewelry. Here are contrasting materials, colors, factures and forms of details. (Fig. 33)
Observations from the analyze	* The use and advantages of natural materials can be interesting today
	(Like wood, shells, ivory, mother of pearl, horn etc.)
	❖ Transparent details in jewelry, created by enameling
	The Enamel gives a rich color pallet to the jewelry, not often used today.

3.4 Characteristics of flowery jewelry of Art Deco

Flowery motives in the Art Deco style is primarily characterized by prismatic surfaces, geometrical forms and general stylization of decorative motifs borrowed from nature. According to Gabardi: "Art Deco preferred roses (the famous cubist rose of Iribes), camellias, baskets of flowers and fruit, all highly stylized and highly colored." (Gabardi, 1989, p. 9)

The technological progress was one of the main sources of inspiration for artists and jewelry makers. The starting point of geometric movement (1924) was Cubism. Its new aesthetic was based on scientific principles of reason and mathematics. (Laurence Mouillefarine, 2009, p. 10)

Jewelry makers managed to achieve increasingly naturalistic and organic images of flowers by using squared-cut rubies or other geometric-shaped gemstones, what made a peculiar contrast within organic nature and strictly geometric forms.

Changes in fashion that came after the First World War played an important role in the jewelry design. Much jewelry had floral motives in design that accompanied to fashion. For instance, long necklaces with elaborate flowery pendants (*Fig. 34*) and drop earrings (*Fig. 35*) were suitable for the new shorter hairstyles. Brooches became smaller, with simple and stylized motifs. Many of them appeared in the form of flower bouquets – with stems of polished gold and each petal made from a single large colored stone (*Fig. 36*). The semi-rigid strap bracelet, or *bracelet laniere*, became the most popular model of hand ornaments during the Art Deco style (*Fig. 37*)

Bildet er kun tilgjengelig i den trykte versjonen

Fig. 34: Pendant-watch, Maubossin, France, ca 1930;

Fig. 35: Raymond C. Yard Art Deco style earrings;

Fig. 36: A multi gem flower brooch, English, circa 1935

Fig. 37: Art Deco bracelet by Mauboussin, ca 1925

One Cleef & Arples presented the new invisible stone-setting technic in 1935. 'It was an intricate technique requiring lapidaries of the highest skill. Rubies and sapphires were caliber-cut – each one individually shaped according to its exact place in the design – and held edge to edge invisible by fine metal rods beneath the surface.' (Phillips, 2012, p. 187)

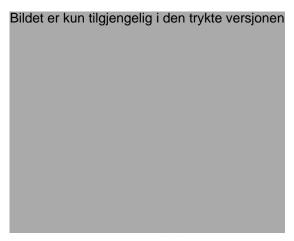


Fig. 38, One Cleef & Arpel jewelry with invisible setting

One of the main characteristic of all the flowery jewelries of the Art Deco style is the use of stones and gems. It is possible to single out three types of floral jewelries that are defined by different ways of using stones.

The first is the flowery jewelry with a flower made from a single cabochon-catted stone (Fig. 39). The second is the type of jewelry where flowers are combined from many stones (each stone is a petal or center of a flower) (Fig. 40). The third type includes jewelries in which stones are used as a decorative surface. They do not construct the flower, but only decorate it (Fig. 41)

. The brooch from *Fig. 41* is designed as two bellflowers, the petals pavé-set with brilliant-cut diamonds, the stems and stamen set with baguette-cut diamonds and the leaves with caliber-cut emeralds. The interesting thing here is the leaves that are constructed from square shaped stones. It shows how the geometry of the style becomes apparent in some of the floral jewelry.

Bildet er kun tilgjengelig i den trykte versjonen

Fig. 39: Art Deco Tutti Frutti Sterling Brooch - The Three Graces

Fig. 40: Art Deco Floral Giardinetti Brooch

Fig. 41: One Cleef and Arpels floral brooch

In general, the flowers have the original shape and can be recognized according to their types. The compositions often have geometrical forms in the base, so the flowers fulfil the elements of the jewelries. The color pallet is mostly restricted by colors of rubies, emeralds and sapphires.

The general characteristics of the Art Deco style are the quantity of small flowers used inn bouquet brooches, pendants, head ornaments, etc.; the flowers were mostly made of diamonds, rubies, emeralds, sapphires. The floral design kept its organic forms and lines even though the geometrical motives characterize the style.

Summary

Table 4, Characteristics of the Art Deco jewelry

Example of jewelry	Characteristics of jewelry, which corresponds to style and period
Bildet er kun tilgjengelig i den trykte versjonen	This example shows the use of invisible stone setting. Such technique looks very interesting and unusual, although it requires a particularly cut and calibrated stones. (Fig. 38)
Bildet er kun tilgjengelig i den trykte vers	Each flower is made from one single stone. Usually the cabochon cut stones were used as a separate flower. The image of flower is very stylyzed and generalized. (Fig. 39)
Bildet er kun tilgjengelig i den trykte versjonen	The interest in this example is that flower is made from different shaped stones-petals that are combined together and create an image of flower. (Fig. 40)
Bildet er kun tilgjengelig i den trykte versjonen	The brooch presents the use of squared forms in an organic composition. The connection of geometrical and organic forms appears in the brooch. (Fig. 41)
Bildet er kun tilgjengelig i den trykte versjoner	The flowers have geometrical forms in the base. They are made from different gems and set on a white-stone background. (Fig. 36)
Observations from the analyze	 Connection of geometrical and organic elements in the compositions Generalization and simplification in the composition Different character of the elements (strict geometrical and amorphous) in the same jewelry;

3.5 The image of flowery jewelries in the present times

After the Art deco style many directions in jewelry making appeared. Usually they lasted for a decade and in general they did not have names but they are mentioned as jewelry of the 60s, the 70s or the80s. Directions, in which jewelry makers worked, changed very slightly. The design motives started to repeat. Of course there were distinguishes in jewelry, and there were jewelries that passed ahead of their time but they did not define the general characteristics during the period. Thus, I let through considering the second part of the 20th century in the thesis and considering the end of the 20th -the beginning of the 21st century when the jewelry acquired new character.

One of the main characteristics of today's jewelry is that from the beginning of the 21st century producers started to use 3D modelling, 3D printing and 3D cutting. (*Fig. 42-Fig. 43*)



Fig. 42: 3D printing jewelry

Fig. 43: 3D printed necklace, designed and modelled by Alex Down

Such jewelries are usually very geometrical and precise, as made by machine compositions are straight and symmetrical. It explained by particularities of 3D programs that allowed designer to build geometrical models easier than by hands. That is why design of flowery jewelry of this type follows such rules. Most of flowers one can find among this group will have geometrical structure. Usually it is easy to divide flower images on several parts like on a *Fig. 42*. Although, the advanced users of 3D programs can create very complicated models, compound from many details, like on a *Fig. 43*. Rich design characterizes such models.

The jewelry from *Fig. 43* evokes particular attention by its detailed structure. The flower in jewelry creates the entire necklace by its petals. The petals are made from a structural

grade that gives the necklace lightness. From one side it looks like a not finished facture, from the other side the facture gives the necklace a nice open work silhouette. Such facture reminds us of a plaque-a-jour enamel jewelry of Art Nouveau. It corresponds to a natural structure of flower.

3D modelling gives many possibilities. This comparably new technology makes the process of producing jewelry easier. The materials of end objects in this technology are metal, plastic and jewelry wax. The tendency of using 3D modelling became more and more popular.

As it says in the Introduction, one can define to ways in contemporary jewelry art. First includes the works created in a classical style (explained in the Introduction). Each company has its individual style. Their design is often dependent on the leading artists of the company. For instance, Victoire de Castellane is a leading artists for the Dior, or Anna-Hu is a main designer for the Anna Hu Haute Joaillerie. Their work presents brightness and freshness.

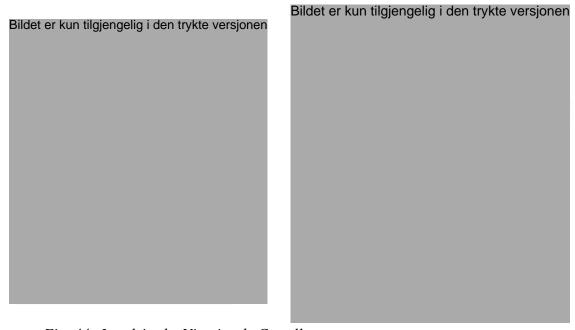


Fig. 44: Jewelries by Victoire de Castellan

Fig. 45: Anna-Hu jewelry

Big companies, such as Dior, organize the production of such jewelries by group of artisans. That is why they have many possibilities in technological solutions and financing the projects. The jewelry is made of expensive materials, precious stones and metals. The usage of big amount of stones gives to such jewelry feelings of classics.

The second type of flowery jewelry is jewelry that depict flowers in more abstract forms. Artists usually make it. Since the 1960s the boundaries of jewelry have been continually redefined. Conventions have been challenged by successive generations of independent jewelers, often educated at art colleges and immersed in radical ideas. New technologies and non-precious materials, including plastics, paper and textiles have overturned the notions of status traditionally implicit in jewelry.



Fig. 46: Tina Lazarrine - Pink Cluster Brooch

Fig. 47: Ring by Elisabeth L Due

The designs of such flowers are very individual and original. It can impress with its unusual solutions of forms and materials.

Sometimes artists want to show the new sides of the materials. For instance, on a *Fig. 46* the surface on the brooch is very unusual for the enamel. We are used to see enamel very straight, even and shiny like on a *Fig. 44*. By making different enamel surface, Tina Lazarrineis shows the other vision on making jewelry and using traditional techniques. The shape of flowers are stylized and transformed into a minimalistic image of flower.

The jewelry from *Fig. 47* also presents the stylized image of flower. The flower is recognized by a silhouette of the object and by layers of colored plastic that reminds us of petals.

Avant-garde artist-jewelers have explored the interaction of jewelry with the body, pushing the boundaries of scale and wearability to the limits. Jewelry has developed into wearable art.

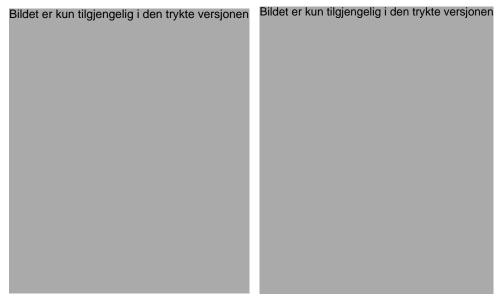


Fig. 48: Elizabeth Galtonher jewelry, orchid necklace

Fig. 49: Sandra Backlund body jewelry

Flowery body jewelries are characterized by quite big sizes that have to correspond to a human body. The direction of design is chosen by the artists. We can find examples of flowery body jewelry that are very abstract, like on Fig. 49, where the flower can only be guessed. From the other hand, the jewelry can have a natural stylized shape (*Fig. 48*).

Designers do not stop just on necklaces and rings. Different modelers have created flowery clothes that can be perceived as body jewelry as well. (Fig. 50: Marga Weimans dress

Fig. 51-Fig. 50)

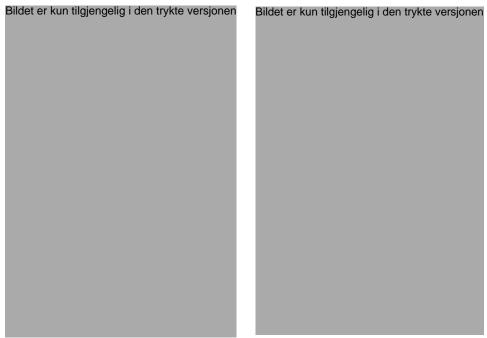


Fig. 50: Marga Weimans dress

Fig. 51: Dress from Runway - Fall 2012 Mercedes-Benz Fashion Week

It can be from different materials, with different sizes and with very original and unusual compositions.

There is one more type in today's jewelry directions. It is the mass produced jewelry. Compositions are usually restricted by suggested prices and simple ways of making the jewelry that allows fast production. In most cases, the technology of casting is preferable.



Fig. 52: Examples of mass produced jewelry. Made by Kyiv Jewelry Factory

Today modern jewels are being up-graded, gaining a place in galleries and museums all over the world. The number of designers is increasing today. The main thing is that designers are aiming to lead, not to follow public demand. (Hughes, 1978)

Summary

Table 5, Particularities of contemporary flowery jewelries

Example	Characteristics of jewelry, which corresponds to style and period				
Bildet er kun tilgjengelig i den trykte versj	3D modelling gives new opportunities in design and makes the work of jewelers easier at some point. It gives the possibility to have a quantity of stones, what makes the jewelry colorful and bright. (<i>Fig. 43</i>)				
Bildet er kun tilgjengelig i den trykte versje	The jewelries have a rich detailed design, combined with different materials. (Fig. 45)				
Bildet er kun tilgjengelig i den tryk	Contemporary jewelry made out of non-precious materials. The jewelry expresses individuality and stylized flower shapes. (<i>Fig. 47</i>)				
Bildet er kun tilgjengelig ti	Body jewelry. This dress is a good example of the transformation of jewelry into art. (Fig. 50)				
Observations from the analyze	 3D modelling as a basis for future jewelry making. Expressing emotions trough colors is a good concept for jewelries The use of non-precious materials; the combinations of precious-and non-preciousness materials Jewelry as art, body jewelry today. Rejections and changes in the rules of traditional jewelry making 				

3.6 Overall observations

Going through the analysis of flower jewelry from different styles, I pick out my observations and can determine general characteristics for jewelries during each period.

Some influential factors define the characteristics of jewelries in every style. The main are historical situation during the period (regime, authority, peacetime or not etc.), geographical discoveries, technological progress and possibilities, people's tastes, fashion etc.

In times of each style, some of the factors were more prevalent. For instance, in the time of Rococo style, flowery jewelries had sentimental meanings according to the flowery language. The excavation brought classic forms in flower jewelry of the 19th century. The 20th century begins with rich naturalistic flowers in jewelry inspired by Japanese culture. The industrial revolution brought its geometry in flowers of Art Deco style etc. Closer to today's time jewelry design became more abstract and minimalistic. The important thing is that with the beginning of the 20th century people started to consider jewelry as art.

However going through the analysis, I discovered that the flower forms have not changed a lot in jewelry design. The flower remains to be a flower. The technology and fashion are changing, but the design does not show big differences. That is why the summaries from each style mostly contain observation about technological ideas.

The most interesting examples I found in the contemporary jewelry art. The flower design in it is the most extravagant and outstanding. It might be because this is a period where I belong or because the jewelry making is now considering as art. There are jewelry artist whose goal is to point up on particular questions with the help of their art. Thus, the jewelry acquires the identity and authenticity.

4. Practical part

The main task of my project is to create a modern image of flower in jewelry art. To complete the task I found the answers on the questions "what is a contemporary image of a flower in the jewelry design? How can the analysis of flower jewelry influence the individual contemporary jewelry design?" I sorted out the ranges of compositional and technological observations during the research of earlier works. These observations can help me to create a modern flower image in my jewelry design.

As I have chosen many examples with stone setting (it is my professional interest) the majority of observations consists of information about technological ways of making flowery jewelry and about stone setting. By studying flowery jewelry from these aspects, I extend my knowledge in the sphere. I also picked out some important observations for flower design, such as the usage of the golden ratio etc. However, as I explained in Chapter 3.6 the design of the flower jewelries were not changing a lot until the end of the 20th century.

The observations I picked out are:

- Dismantled jewelry, which one can split into several new jewelries.
- The usage of the golden ratio proportion in compositions, how do the golden ratio proportions appears in asymmetrical compositions.
- Trembling connections of details.
- The role of contrasting colors and sizes in jewel's appearance.
- The connection of geometrical structure together with asymmetry, the connection of geometrical and organic elements in compositions
- Flowers as an ornamental and decorative part in jewelry.
- Advantages of natural materials like wood, shells, ivory, mother of pearl etc.
- The usage of non-precious materials, the combination of precious and non-precious materials
- Transparent details in jewelry,
- The enameled color pallet, the advantages of enamel

- Expressing emotions trough colors
- The usage of formless shapes as a building material for clear-cut and defined objects,
- The usage of new technology, 3D modelling,
- The body jewelry
- Rejections and changes in the rules of traditional jewelry making

I think that many of these points can make the jewelry better from the aspect of composition and technological embodiment. That is why I wanted to use some of them in my practical work. One of the main observations for me is the usage of the golden ratio. Today, different types of design, such as graphic, industrial, landscape etc., use the golden ratio proportions. It occurs in our everyday life, so I wanted to build my jewelries according to these proportions.

The observations about colors also seem important to me, however instead of enamel I use stones that also allows me to use a range of colors. For the practical work in this project, I choose contrasting colors of black and white.

The observation about the connection of geometrical and organic forms in the composition became significant in my jewelries. In the practical part of the work, I am connecting the clear-cut squared shapes together with float-rounded elements. Neither of the forms (geometrical or organic) have a prevalent role in jewelries.

The idea of creating dismantled jewelry fascinated me a lot, but after some experimentation, I came to a point that it will be difficult to use the idea in this project. From one side I had trouble in the technological embodiment of connecting the details. It is important to make the right solution for the connecting parts and to make them workable, as such details subject to much more movements and tension then usual details. From the other side, the fact of using dismantled details would not make the main point for the flower design in my jewelries. That is why I decided to develop this idea in my further works.

From the range of other observations, I certainly define the use of the modern technologies as one of the most important. Technologies play one of the main influential roles in jewelry design.

In the practical part of this project, I used new technologies in two different ways. First is in the making process. A special machine, the 'U-MARQ engraving4', engraved and prepared details for the stone setting. Second, is that the new technologies lay in the base of the compositional idea for my jewelry. I wanted to change the usual image of flower in jewelry art, so I create a new depiction of it with the help of modern technologies such as the QR code shapes.

4.1 First ideas for the practical work

In the beginning of my work, I had different ideas for the jewelry design. I started the creative process with drawing sketches for flower jewelry. My aim was to stylize a flower and to combine several different flowers in jewelry. As the Ukrainian wreath was one of the main sources of inspiration for me, I worked with flowers such as poppy or mallow, as they were traditionally used in the wreath. At the same time, I composed flowers together as in the wreath. (*Fig. 53*)





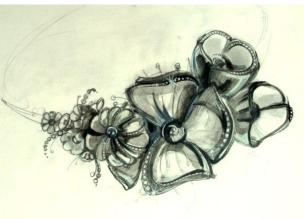




Fig. 53: Sketches of flowers

I wanted to find better solutions for flower shape from the aesthetic point of view, although the practical embodiment requires detailed sketches that will give understanding of further execution of the jewelry. *Fig. 54* shows the examples of stylized poppy flowers. The sketches give an understanding of the material and the techniques that one can use in making such flowery jewelry. From one side these flowers can be made from plates of metal soldered together. From the other side one can see how to decorate the jewelry with stones as sketches provide places for stone setting.

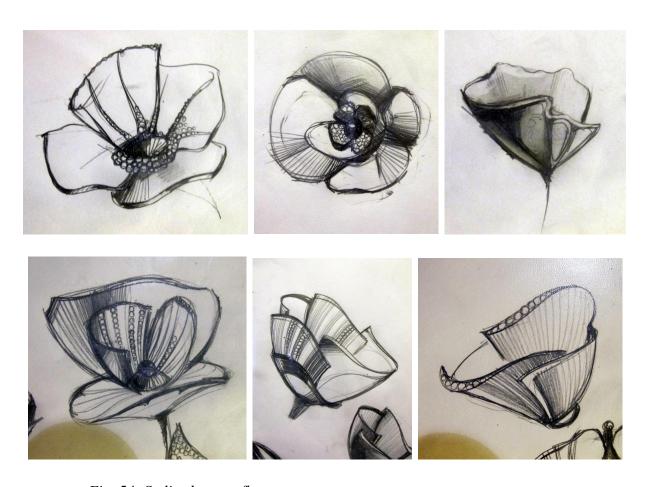


Fig. 54: Stylized poppy flower

I built the work on design by using several approaches: drawing sketches, making paper and plastic models and directly working with metal. After some time of experimentations, I determined the way to make my jewelry collection in metal.

Being fascinated with the wreath, I chose five types of flowers: poppy, mallow, periwinkle, apple blossom and cherry blossom for my first works. Thus, I made flowers by casting and combined them into jewelry collection. (*Fig.* 55 - *Fig.* 57)



Fig. 55: The wreath, my first flowery jewelry

I combined the particular types of flowers because of their historical meanings in my culture. As I said in Chapter 2, the flowers give the jewelry the significant identity and authenticity. For instance, the mallow has a symbolical meaning of faith, love and hope. The poppy is a symbol of fertility, beauty and youth. (Kosmenko, 1984)

Together with a flowery wreath, I created the ring and bracelets for the collection. (*Fig.* 56, *Fig.* 57)

I used different types of stone setting in these jewelries, such as bezel setting on stamens of flowers, and raw pave setting on the petals and edges of flowers. There were some difficulties to set stones on petals because of their bended forms. During the work, in spite of stone setting techniques, I have learnt which thickness of the metal I can use for stone setting.



Fig. 56: The organic flower ring



Fig. 57: The flower bracelet

Illustrations above present my first jewelries with flower image. After the analysis of the floral jewelry, I can see that the flowers I made are stylized, but they do not have original forms. I concluded that it is very difficult to go out of the usual flower form. Moreover, the analysis from Chapter 3 approved my thoughts, as I figured out that flower image in jewelry art has not been changing very much since the end of the 20th century.

The problem became clearer to me. I had to develop my individual jewelry style for making it more significant and original.

I started to think more systematically. I became interested in more simple and abstract forms in jewelry art. The flower image from the modern time (Chapter 3.5) inspired me. For changing my way of thinking, I made several experimentations working in a more abstract direction. (*Fig.* 58)

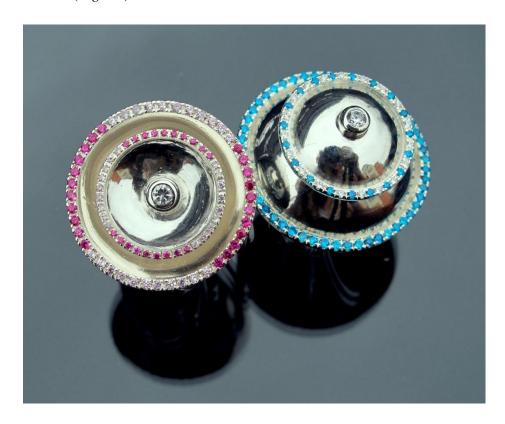


Fig. 58: Experimentations with more abstract forms

After comprehensive thoughts about the image of flower in jewelry art, I decided to continue my work in a direction of abstract forms and contemporary design ideas.

4.2 Stylizations

To build the further development of the flower image I used the method of stylization.

Stylization is a decorative generalization of the objects with a help of range relative methods of simplification of the image, form, volume and color correlations. (Matveeva, 2004)

As a starting point, I used a systematic stylization. The picture of J.O. Heron shows it (Fig. 59). The systematic stylization is the way of transforming and stylizing the object, when it can be rendered to another object by using small changes in every next picture. It gives possibilities to create new forms from old ones.

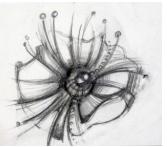
Bildet er kun tilgjengelig i den trykte versjonen

Fig. 59: Transformation, Jean Olivier Heron

I applied the method to the flower shape and drew a stylization line for a poppy flower first. (Fig. 60)







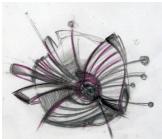


Fig. 60: Systematic stylization of a poppy flower

I started with a picture of natural flower and made the first stylization of it. Next, I made a new stylization from the previous picture one. My goal was to stylize the flower till it will be rendered to a new form. However, I experienced troubles with this. The image of a poppy flower stick in my mind, so every next sketch had only slight differences from the previous one. From the other hand, redrawing the same flower repeatedly made my vision accustomed to the picture.



Fig.61: Systematic stylization of a periwinkle

However, the problem repeated. After analyzing, I figure out that in my stylizations I do not simplify forms but decorate it. I make them more complicated by adding new details, such as stamens or petals (*Fig.61*). That is why, while stylizing the periwinkle flower, I stopped on the fourth sketch. I realized that I have to make bigger steps in transforming the flower. I have to jump over two or three sketches to approach the task of creating an abstract object from the flower.

Thus, I drew one more line of stylization for general flower images. (*Fig.* 62,)

This time I tried to have more freedom in my way of thinking and to make the lines floating out of the flower edges.

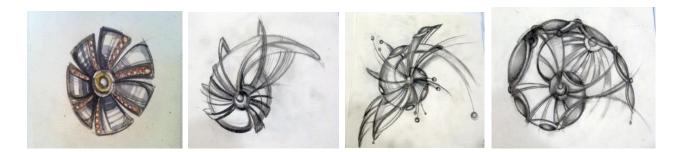


Fig. 62: Flower stylization

The image of flower changed a lot more than on the previous sketches, but the composition did not become simple. During the process of stylization new details occurs on the first image. It is possible to see their multiplication on the second image, afterwards they are transforming into another details. The same process occurs in every line of stylization.

While stylizing one more flower (*Fig. 63*) I had another trouble. I lost the idea of making jewelry. You can see that the last picture reminds more of a graphic work than a sketch for jewelry.

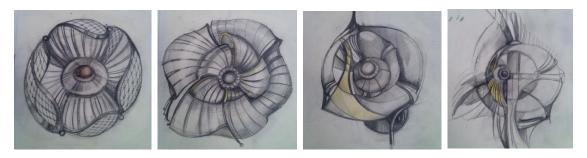


Fig. 63: Stylization of a flower

After experimenting with stylizations I concluded that to approach the task of stylizing one object into another I should have the image of the result in front of me. Then while drawing I will have a form to which I want to transform the flower. Otherwise, the process of drawing is endless.

The concept of stylization can be discussed, but I use this word to describe the process. The concept of transformation can also describe the development of my sketches.

4.3 The idea of the collection

The experimentations with transforming a flower image gave me the vision of a structure of the further flower image development. As it was difficult for me to escape the usual flower form, I choose to make a big turn in a direction of abstract.

The idea was to transform the flower as much as possible for creating a new object. I came to the point that the last step of stylizing should be a square. I choose the square because its shape lies far from the natural flower. One can perceive square as opposite form of a flower, because of its straightness and geometry. The square and the flower have contrasting characters of their structure. Thus, the idea is to show the process of transformation on the ring by making systematic stylizations of flower image. (*Fig. 64*)

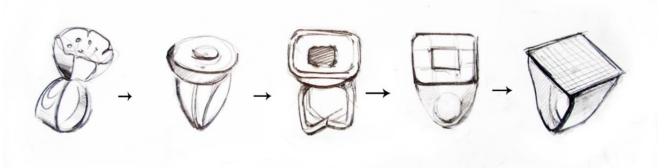


Fig. 64: Systematic transformation of flower image of a ring

The transformation in *Fig.* 64 shows that the squared ring is actually a highly stylized flowery ring.

While I was working on the research, I understood that jewelry acquire identity when it is in a process of making, so the influential factors such as fashion and technological possibilities play a significant role in it. The Ukrainian wreath, as the initial source of inspiration in this project, acquires identity through different types of flowers. This explains my interest to make jewelry that will be informational-intensive.

To fulfill my jewelry design with meaning, I used the modern technologies. As the sketches resulted into a squared form of the flower, I decided to create a jewelry ring, which will present a flower with the help of QR code (*Fig.* 65).

The QR code is an abbreviated form of quick response code. It is a machine-readable code consisting of an array of black and white squares, typically used for storing URLs or other information for reading by the camera on a smartphone.



Fig. 65: example of QR code

By using the QR code, it is possible to create the image of a flower or any other object.

One can scan the code with the mobile phone and it will lead the person to the Internet page. In the case of this project, the code will lead to the online picture of flower and a webpage with information about the project.

In such way, I show the original way of using modern technologies for creating the contemporary image of a flower. The idea of depicting flower through the QR code shapes gave me a possibility to avoid natural forms of flower and to make an original contemporary jewelry.

4.4 The flowery ring

After determining the idea about the squared shapes of QR codes, I drew sketches of a jewelry ring, which consists of QR-codes. (Fig. 66)



Fig. 66: QR code ring sketches

The squared form of the QR code restricted the process of designing the ring. The QR-code defined the top surface of the ring as a square. That is why a task was to create additional parts for the object, which will make the ring wearable and which will give the composition a complete shape. I used the connection of geometrical and organic elements in the composition to create the entire image of the ring.

Next, I made a model in paper for better understanding of the shapes and the volumes. (Fig. 67)

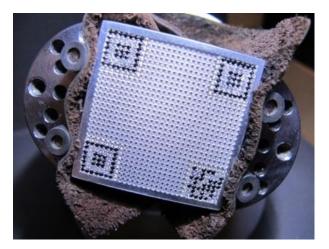


Fig. 67: Paper model of the ring

One of the most difficult parts in making the ring became the stone setting.

There are possibilities to create different sizes of QR codes. In a case of the URL of webpages, the code consists of 29 or 25 modules. Actual sizes of the metal QR codes in the ring are explained by the sizes of the stones (zirconium) which were used -1 mm diameters.

For setting the stones, the silver plate was engraved by the machine 'U-MARQ engraving4'. One can see the engraved surface on the *Fig.* 68. By such engraving, I optimized the process of making the jewelry.



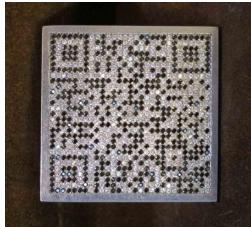


Fig. 68: Engraved silver plate for the stone setting

The colors of stones are white and black. Even though the colors are explained by the QR code, it was chosen to keep them black and white instead of using different colors. In addition, the idea is that one can scan the black and white square, and it will lead to a webpage full of colors. This should increase the emotional saturation of the jewelry. The idea of keeping the colors in contrast also came from the historical research (the role of contrasting colors and sizes in jewel's appearance)

From the technological side, the QR –code set with stones works when there is no reflections from the stones. I checked the QR code on the ring on more than 10 different scan apps for mobile phones. The highest percentage of scanning is in the Scan Life app.

The final image of the ring presents possible form of flower in jewelry of the 21st century. (*Fig. 69*) The idea is to escape the usual and recognizable forms and to create modern and contemporary design. This idea presents an interesting variant of flower image in today's jewelry.



Fig. 69: Picture of the finished ring

The surfaces of the ring have contrasted structures. The outside surface is mat, the inside surface is shiny. The top side has a glittery surface created by stones. The fact of contrasting elements that are used in the ring (colors and surfaces), responds to one of the observations from the historical background.

The design consists of geometrical and organic forms that, joined together, make a particular harmony in the ring.

The form of the ring reminds of a signet ring. That is why, on the emotional level, the ring creates a feeling of power because of its concrete forms. From my opinion, this observation is significant because together with changing the image of a flower, I changed the entire perception of the flowery jewelry in this case.

4.5 The flowery necklace

Until this point, I was working with different types of floral jewelry. I made the flower ring, the bracelet and the wreath. Even though I consider the wreath as a good idea for a jewelry, I assumed that made in metal, the flowery wreath would become too heavy. That is why I decided to make the flower necklace.

Before I came to the idea of making flowers with the QR shapes, I was working on different flowery necklaces. (*Fig.* 70)





Fig. 70: First flowery necklaces

The sketches contained many details. They did not respond to my wishes to create a modern jewelry.

When I decided to make flower jewelry with the QR codes, I was trying to find the better design for the necklace that would consist of the QR code shapes. (*Fig. 71*)

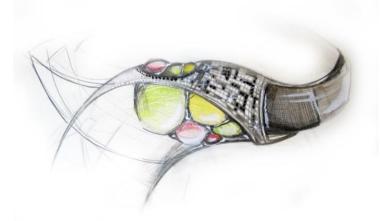




Fig. 71: Necklaces with QR shapes

As I already had a QR shape in the ring, I chose to build the necklace from the squared shapes. I created a range of sketches of necklaces with squares. (*Fig.* 72) The fact of squared QR shapes restricts and narrows the variants in the design from one side. From the other side, it became a challenge to find a good composition of the necklace in the frame of squared shapes.



Fig. 72: Sketches for the necklace A, B, C

I made three sketches A, B, C (*Fig.* 72). All of them have QR codes patterns in the design. In all of them, there is a connection of geometric and organic forms.

The necklace A presents the most organic design. Only one detail of it approximates to a square. The forms and volumes are correlation and created with nuances in the proportions of the details' sizes. Each detail corresponds to each other. Together with the asymmetry of the composition, this gives the feeling of an organic character of the composition.

The necklace B presents a more geometrical composition. In general, it has a symmetrical structure, only small additional details are placed in random positions. The squared forms are combined with the rounded ones.

The necklace C shows the asymmetrical design. Because of the biggest square that is placed almost in the center, the general composition seems to be symmetrical. However, the other squared details have different sizes and are placed asymmetrically.

The sizes of the squares in the necklace C are created according to the golden ratio proportions. Thus, the squares that are used correlate to each other with proportion coordinated by the Fibonacci number, which is 1.618. (*Fig. 73*) Two diameters (A and B) from the golden ration proportions are used as main diameters in the necklace structure (inside and outside)

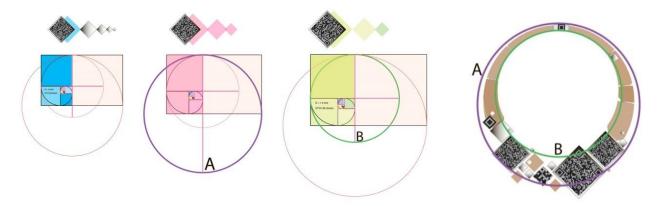


Fig. 73: Golden ration proportions in the necklace

As a final version for the necklace, I choose to make an asymmetrical composition with many squares. (Fig. 74) The random positions of the squares are explained by the way how flowers grow in nature.



Fig. 74: The sketch of the necklace

The design of the necklace is notable for its composition. The rounded basis is smoothly changing into geometrical line created by squares.

The small distinguishes in the correlation of the sizes' details and adds the feeling of unity in the composition and softness of the necklace's silhouette, even though it is partly created from squares.

The center of the composition lays in the biggest QR code, which is placed a bit to the right from the actual center.

The color pallet remains to be black and white as on the ring. (*Fig.* 69) However, the glanced surfaces of the details reflect the surrounding, so the necklace acquires new colors.

The creative process demands a variety of solutions for the design. Sometimes design evokes problematic questions when it comes to an embodiment of the object. The jewelry maker should think about such problems like the heaviness of the jewelry (necklace) or the movable connections between the details etc. I made the necklace from the silver plate details with thickness of 1.5 mm. The details are joint on hinges. This gives the necklace flexibility.



Fig. 75: Picture of the finished necklace

The squares for the stone setting were engraved by the engraving machine U-MARQ engraving4, as on the ring (*Fig.* 68) and then stone set with black and white cubic zirconia.

Three QR codes on the necklace contain links to a flower images and information about the project in the Internet sources.



Fig. 76: The QR necklace

Going through the way of transformation and stylization of a flower image, I ended up with a today's image of the flower in jewelry art. The jewelry can be perceived as a flower jewelry without having an actual flower pictures in it. By using the QR codes, it became possible to create squared-form designs of the ring and the necklace that keep the information about flowers. The squares on the necklace present the new possible vision of flowery image in jewelry art.

I applied knowledge from the past and present into the jewelry design and, as a result, I created a contemporary jewelry that refers to flower image in present times.

Conclusion

A flower is a great source of inspiration for many artists. Artists and jewelry makers of different centuries often used floral motives in their works. Some jewelry styles are notable by their flowery compositions. Today, one can see the increasing popularity of flower compositions in jewelry art again.

The interest in flowers comes from my cultural background. In the childhood, I used to wave traditional Ukrainian flowery wreathes; these nice and tender plants always fascinate me. Now, working in the jewelry sphere, I have decided to study the floral motives in jewelries of different centuries. In this thesis, I studied the popularity of flower images in the jewelry art in $18^{th} - 21^{st}$ centuries. I analyzed the use and development of the floral motives in jewelry. I found out how history and technological breakouts influenced the flowery jewelries.

I used two main approaches to study jewelries. In the first approach, I evaluate the flowery design analyzing compositions, lines, color gammas, balances and correlations of shapes, etc. The second one touches upon technologies used in different centuries. I studied how the technology bounds or breaks through the flowery design in jewelries. I heavily used the stone setting techniques for analysis due to my specialization.

The detailed analysis of the jewelry gave me the better understanding of the important solutions in flower jewelry. As my aim was to apply the observations from the analysis into embodiment of modern flower jewelry, I summarized the observations from the analysis. The summary gave me a clear picture of methods and technological solutions, which one can apply in contemporary design. Thus, I used some of them in the development of the individual flower design.

One can find floral jewelries in every style and century. Jewelry makers tried to keep up with the technological progress and development as well as society trends in their works. They manufactured objects to reflect tendencies. The same process occurs today. Artists are trying to catch up today's life in their art.

I concluded that despite of development and progress of the flowery design, the flower image in jewelry has not changed much. There are changes though due to technological breakouts, but conceptually the image of the flower is quite similar from century to century. Looking through all the examples of the research, one can see the repetition of compositions in flower jewelries.

I noticed the differences in design of flowery jewelry occurred during recent 30 - 40 years, when people started to consider jewelry as art works. Contemporary jewelries are characterized by the abstract design, highly stylized flower forms, and the use of modern technologies. Today's jewelries played a significant role in this project influencing my perception of the contemporary flower image in jewelry. One can divide nowadays jewelries in two groups according to their stylistics.

The first group contains of jewelry with a classical design, using precious materials. The word 'luxury' describes such jewelry due to the amount of diamonds, gems and precious materials used in them. The second group encompasses jewelries with abstract forms and compositions. It mostly includes works of artists. The flowery jewelry in this group is characterized by their originality and minimalism in designs. Both groups are present today. Both show good examples of the flowery design in jewelry. The number of jewelries with flower makes me think about one's originality. To approach my main question I went through the historical analysis, and found a picture of flower in today's jewelry art. Finally, I used the results of the analysis to create a contemporary flowery collection. The collection presents my vision of the flower image in the jewelry art with the help of QR codes.

The practical work consists of the flower ring and flower necklace. The jewelries are made from silver. The flowers, which made in the shapes of QR codes, are set with cubic zirconia stones. My experiments showed that QR codes made of stones are readable when there are no reflections on the stones.

As a part of the future work, we can consider creating QR codes of smaller sizes (smaller amount of modules in each QR code) so it is easier to make them in material. At the same time, it is possible to make the code in different ways, for example by engraving to avoid reflections and increase readability of QR-codes. One can also consider extending the presented collection and using the theoretical and practical results for further research.

Bibliography

- Adams, M. (2010). Fashion jewellery: catwalk and couture. London: Laurence King Publ.
- Bodalev, A. A. (2011). Psychology of comunication *Psychology of comunication*. *Encyclopeduc dictionary*. Moscow: Kogito-Centr.
- Cappellieri, A. (2010). Twentieth-century Jewellery: From Art Nouveau to

 Contemporary Design in Europe and the United States: Skira; First Edition edition

 (October 12, 2010).
- Chambers R., Lady Mary Wortley Montagu. In Cyclopaedia of English Literature (1844; 1850) Rretrieved from http://spenserians.cath.vt.edu/BiographyRecord.php?action=GET&bioid=4591
- Cherry, N. (2013). *Jewellery Design and Development: international Concepts*: A & C Black Publishers.
- David Bennet, D. M. (2007). *Understanding jewellery* (I. D. Golybina, Trans.). Moskow: Art-Rodnik.
- Davis, T. (1973). Rococo: a style of fantacy. London.
- Dougherty, C. K. (2008). Jewelry design. Cologne: Daab.
- Duncan, A. (1978). Art nouveau and art deco lighting. London: Thames and Hudson.
- Duncan, A. (1994). Art nouveau. London: Thames and Hudson.
- Evans, J. (1970). A history of jewellery 1100-1870. London: Faber and Faber.
- Gabardi, M. (1989). Art Deco Jewellery 1920-1949. England: Antique Collectors' Club.
- Green, S. (2012). History and Meaning Behind Red Roses.
 http://www.proflowers.com/guide/history-and-meaning-behind-red-roses
- Greenaway, K. (1846-1901). Flower language; Flowers London; New York: F. Warne.
- Gregoretti, G. (1979). *Jewelry. History and technique from the Egyptians to the present.*: Chartwell Books Inc.
- Gregorietti, G. (1971). *Italian gold, silver and jewelry: their history and centres*. Milan: Alfieri & Lacroix.
- Howard, J. (1996). *Art nouveau: international and national styles in Europe*. Manchester: Manchester Univ. Press.
- Hughes, G. (1972). The art of jewelry: a survey of craft and creation. London: Studio Vista.
- Hughes, G. (1978). Gems and jewellery: a pictorial history. Oxford: Phaidon.

- Jivan Astfalck, (2005). New directions in jewellery. London: Black Dog Publ.
- Karakova T.V., N. I. S. (2009). Principles of the structural forming of suit design. http://www.ssc.smr.ru/media/journals/izvestia/2009/2009_4_272_276.pdf
- Karen L. Cohen. (Fine art od enameling Retrieved from http://www.kcEnamels.com
- Karl, A. (2006). The design process: Fairchild Publications, Inc.
- Kosmeno A.P., (1984). Decorative folk art, Leningrad, "Nauka".
- Laurence Mouillefarine, E. P. (2009). *Art Deco Jewelry. Modernists Masterworks and their Makers*. London: Thames & Hadson Ltd.
- Le Van, M. (2005). The Penland book of jewelry: master classes in jewelry techniques. New York: Lark Books.
- Mansell, A. (2008). Adorn: new jewellery. London: Laurence King.
- Matveeva, T. V. (2004). Stilization as an artistic method of figurative thinking of future designers. Retrieved from www.rae.ru/use/?section=content&op=show_article&article_id=7781304
- Morris, R. L. (2004). *Robert Lee Morris: the power of jewelry*. New York: H.N. Abrams.
- Munsterberg, M. (2008-2009). Retrieved from http://writingaboutart.org/pages/periodstyle.html
- Nechutailo, T. The styles and movements in figurative art. from http://www.art-katalog.com/russian/103/30
- Oliver, E. (2002). *The art of jewellery design: from idea to reality*. London: A & C Black.
- Peltason, R. (2010). Jewelry from nature. United Kingdom: Thames & Hudson
- Phillips, C. (1996). Jewelry: from antiquity to the present. London: Thames & Hudson.
- Phillips, C. (2008). Jewels and Jewellery V & A Publishing (May 1, 2008)
- Phillips, C. (2012). *Jewelry. From Antiquity to the Present*: Thames & Hudson world of art.
- Pointon, M. (2009). Brilliant effects: a cultural history of gem stones and jewellery.
 New Haven, Conn.: Published for the Paul Mellon Centre for Studies in British Art by Yale University Press.
- Rober, B. (2005). Transformations: the language of craft. National Gallery of Australia.: "Published on the occasion of the exhibition ... National Gallery of Australia, Canberra, 11 November 2005-29 January-2006"--T.p. verso.

- Sachs, A., Bergdoll, B., Gamboni, D., & Ursprung, P. (2007). *Nature design: from inspiration to innovation*. Baden: Lars Müller Publishers.
- Scarisbrick, D. (1989). *Jewellery: makers, motifs, history, techniques*. London: Thames and Hudson.
- Schadt, H. (1996). *Goldsmiths' Art. 5000 Years of Jewellery and Hollowware* (A. P. Schadt, Trans.). Stuttgart, New York: Arnoldsche.
- Snowden, J., & Ambrus, V. (1979). The folk dress of Europe. London: Mills & Boon ltd.
- Tait, H. (1987). Jewelry 7000 years: an international history and illustrated survey from the collections of the British Museum. New York: Harry N. Abrams.
- Van, M. L. (2011). 500 silver jewelry designs: the powerful allure of a precious metal. New York, NY: Lark Crafts.
- Van, M. L. (2012). *Push Jewelry: 30 Artists Explore the Boundaries of Jewelry*: Lark Crafts; 1 edition (September 4, 2012).
- Worsley, H. (2011). 100 ideas that changed fashion. London: Laurence king.
- Yvonne J. Markowitz, E. z. K., Susan Ward. (2008). *Imerishable Beauty. Art nouveau jewelry*: Lund Humphries.
- Casting. (2013) Retrieved from http://www.wisegeek.com/what-is-metal-casting.htm
- Flower Language. (2013) Retrieved from http://www.answers.com/topic/language-of-flowers#ixzz2hIuxchOR
- History of floral design. (2013) Retrieved from http://www.gradinamea.ro/History_of_Floral_Design_4721_589_1.html
- Types of stone setting. (2013) Retrieved from http://www.krikawa.com/jewelry/education/default.aspx?filter=134
- Flower anatomy. (2000-2010). from EnchantedLearning.com
- Flowering plants. (2010). from http://www.countrysideinfo.co.uk/flower.htm
- Jewellery 2013 catalog. (2012-2013). Moscow: Baltoprint.

List of References

- 1) Flower anatomy. (2000-2010). from EnchantedLearning.com
- 2) Flowering plants. (2010). from http://www.countrysideinfo.co.uk/flower.htm
- 3) History of floral design.). from http://www.gradinamea.ro/History_of_Floral_Design_4721_589_1.html
- 4) Phillips, Clare. (1996). Jewelry: from antiquity to the present. London: Thames & Hudson.
 - 5) Phillips, Clare. (2008). Jewels and Jewellery, V & A Publishing (May 1, 2008)
 - 6) Styles and Periods). from http://www.topsieraden.nl/front/learnmore/styles.htm
- 7) Cappellieri, Alba. (2010). Twentieth-century Jewellery: From Art Nouveau to Contemporary
- 8) Design in Europe and the United States: Skira; First Edition edition (October 12, 2010).
- 9) Gabardi, Melissa. (1989). Art Deco Jewellery 1920-1949. England: Antique Collectors' Club.
- 10) Gregoretti, Goido. (1979). Jewelry. History and technique from the Egyptians to the present.: Chartwell Books Inc.
- 11) Hughes, Graham. (1972). The art of jewelry: a survey of craft and creation. London: Studio Vista.
- 12) Hughes, Graham. (1978). Gems and jewellery: a pictorial history. Oxford: Phaidon.
- 13) Laurence Mouillefarine, Evelyne Posseme. (2009). Art Deco Jewelry. Modernists Masterworks and their Makers. London: Thames & Hadson Ltd.
 - 14) Peltason, Ruth. (2010). Jewelry from nature. United Kingdom: Thames & Hudson
- 15) Phillips, Clare. (2012). Jewelry. From Antiquity to the Present: Thames & Hudson world of art.
- 16) Schadt, Hermann. (1996). Goldsmiths' Art. 5000 Years of Jewellery and Hollowware (A. P. Schadt, Trans.). Stuttgart, New York: Arnoldsche.

- 17) Tait, Hugh. (1987). Jewelry 7000 years: an international history and illustrated survey from the collections of the British Museum. New York: Harry N. Abrams.
- 18) Yvonne J. Markowitz, Elyse zorn Karlin, Susan Ward. (2008). Imerishable Beauty. Art nouveau jewelry: Lund Humphries.
- 19) David Bennet, D. M. (2007). *Understanding jewellery* (I. D. Golybina, Trans.). Moskow: Art-Rodnik.
- 20) Gabardi, M. (1989). *Art Deco Jewellery 1920-1949*. England: Antique Collectors' Club.
- 21) Gregoretti, G. (1979). *Jewelry. History and technique from the Egyptians to the present.*: Chartwell Books Inc.
- 26) Sachs, A., Bergdoll, B., Gamboni, D., & Ursprung, P. (2007). *Nature design: from inspiration to innovation*. Baden: Lars Müller Publishers.
- 27) Schadt, H. (1996). *Goldsmiths' Art. 5000 Years of Jewellery and Hollowware* (A. P. Schadt, Trans.). Stuttgart, New York: Arnoldsche.
- 28) Tait, H. (1987). *Jewelry 7000 years: an international history and illustrated survey from the collections of the British Museum.* New York: Harry N. Abrams.
- 30) McRae, Edward A, 1998, Lilies: A Guide for Growers and Collectors http://www.vam.ac.uk/content/articles/h/history-jewellery/

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http://www.pinterest.com/pin/427701295833798663/

Fig. 45: Anna-Hu jewelry. From: http://www.pinterest.com/pin/298996862733360120/

Fig. 46: Tina Lazarrine - Pink Cluster Brooch

Fig. 47: Ring by Elisabeth L Due

Fig. 48: Elizabeth Galtonher jewelry, orchid necklace. (New directions in jewellery, 2005, p. 86)

Fig. 49: Sandra Backlund. From: http://www.sandrabacklund.com/previous-collection.php?page=36

Fig. 50: Marga Weimans dress

Fig. 51: Dress from Runway - Fall 2012 Mercedes-Benz Fashion Week. From: http://www.pinterest.com/pin/298996862733363243/

Fig. 52: Examples of mass produced jewelry. Made by Kyiv Jewelry Factory, http://kuz.ua/

Figures 53 – 76 are made by me (Vira Bublyk) from my own sketches and jewelries:

Fig. 53: Sketches of flowers

Fig. 54: Stylized poppy flower

Fig. 55: The wreath, my first flowery jewelry

Fig. 56: The organic flower ring

Fig. 57: The flower bracelet

Fig. 58: Experimentations with more abstract forms

Fig. 59: Transformation, Jean Olivier Heron

Fig. 60: Systematic stylization of a poppy flower

Fig.61: Systematic stylization of a periwinkle

Fig. 62: Flower stylization

Fig. 63: Stylization of a flower

Fig. 64: Systematic transformation of flower image of a ring

Fig. 65: example of QR code

Fig. 66: QR code ring sketches

- Fig. 67: Paper model of the ring
- Fig. 68: Engraved silver plate for the stone setting
- Fig. 69: Picture of the finished ring
- Fig. 70: First flowery necklaces
- Fig. 71: Necklaces with QR shapes
- Fig. 72: Sketches for the necklace
- Fig. 73: Golden ration proportions in the necklace
- Fig. 74: The sketch of the necklace
- Fig. 75: Picture of the finished necklace
- Fig. 76: The QR necklace

Appendix

Table 6, Styles and their names in jewelry art, from the internet source

	art movement	France	England	Germany
ca. 1695- 1760	Rococo	Louis XVI 1774 - 1793	William III 1694- 1702 Queen Anne 1702-1714 Early-Georgian George I1714- 1727 Mid-Georgian George II 1727- 1760	Baroque 1600- 1730 Rococo 1730- 1760
	art movement	France	England	Germany
ca. 1755- 1805	<u>Neo-</u> <u>Classicism</u>	<u>Directoire</u>	<u>Late Georgian</u> George III <i>1760-</i> <i>1811</i>	Neo-Classicism
	art movement	France	England	Germany
ca. 1799- 1815	<u>Empire</u>	Napoleon Empire 1799- 1815	Romanticism1795- 1880	Empire 1800- 1815
	art movement	France	England	Germany
ca. 1812- 1830	<u>Regency</u>	Restauration Louis XVIII1815- 1824 Charles X1824-1830	Romanticism 1795- 1880 Regency Prince Regent 1811-1820 George IV 1820- 1830	<u>Biedermeier</u> 1815- 1848
	art movement	France	England	Germany
ca. 1830- 1880	Historicism Eclecticism	Louis- Philippe 1830- 1848 Second Empire 1848- 1870	Romanticism1795- 1880 William IV1830- 1837 Victorian Victoria1837-1901	Revival <i>1830-</i> <i>1880</i>

	art movement	France	England	Germany
1880- 1900	Arts and Crafts	3th Republic		Jugendstil 1880- 1920
	art movement	France	England	Germany
ca 1880- 1914	<u>Art</u> <u>Nouveau</u>		Edwardian Edward VII1901- 1910 George V1910- 1936	
	art movement	France	England	Germany
ca. 1910- 1920	Art Deco	Art Deco	Art Deco	Art Deco
	art movement	France	England	Germany
ca. 1920- 1940	<u>Interbellum</u>	<u>Interbellum</u>	Edward VIII <i>1936</i> Interbellum	Interbellum Bauhaus 1920-1933
	art movement	France	England	Germany
ca. 1940- 1950	<u>Retro</u>	<u>Retro</u>	George VI 1936- 1952 <u>Retro</u>	<u>Retro</u>
	art movement	France	England	Germany
ca. 1950- 1960	<u>Fifties</u>	<u>Fifties</u>	<u>Fifties</u>	<u>Fifties</u>
	art movement	France	England	Germany
ca. 1960- 1970	Sixties	Sixties	Sixties	Sixties