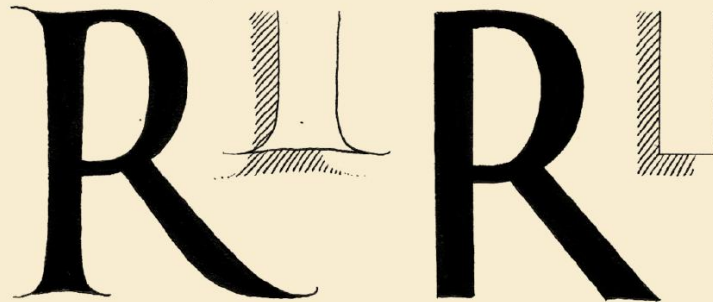


BASIC LETTERING

1

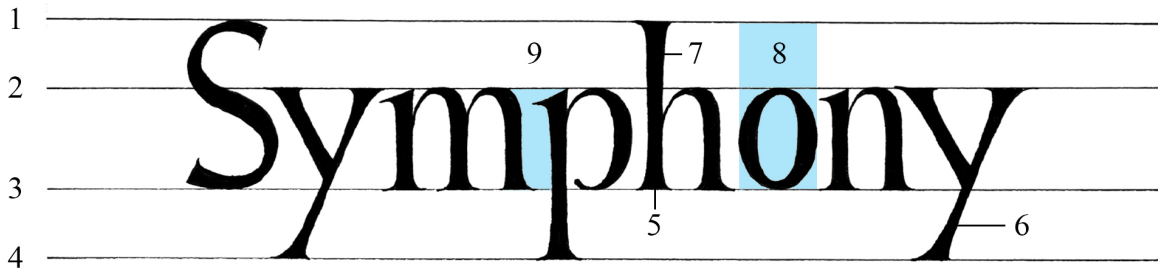
FUNDAMENTAL CONCEPTS &
BASIC ORNAMENTAL DESIGN



BASIC CONCEPTS

A. STRUCTURE, PROPORTION AND COMPOSITIONS OF LETTERS

Although each typeface has a specific property of its shape and structure, Latin letters generally have certain characteristics in common. We will briefly analyze the structure, proportion and compositions of a letter.



The space between line 2 and line 3 is called x-height

1. CAP LINE: The line that marks the top most height of the letter
2. MEAN LINE: The boundary between x-height and the first space
3. BASE LINE: The main line on which the letters sit
4. DESCENT LINE: The bottom most boundary of the letter
5. SERIF: The small decorative stroke added at the letter's terminal points
6. DESCENDER: The third space (tail of the letter)
7. ASCENDER: The first space (head of the letter)
8. SET WIDTH: The horizontal width of letters
9. KERNING: The horizontal spacing between two individual letters



*Other composition | SPUR
This is a small extension of
letter stroke, which does not
qualify as a serif*

B. KERNING, TRACKING AND LEADING

Kerning is one of the most crucial factors that evaluates letter skills. Kerning is the spacing between letters in a word; balancing to create a harmonious letter is always a challenging problem for beginners. Practicing the letter forms will help develop Kerning skills in the best way.

KERNING

Correct — P R O B L E M S
Incorrect — P . R O B L E M . S

Kerning is the balance of space between letters in a phrase to ensure seamless reading. Kerning is not the distance in length, but the total area of space between letters.

Tracking is the stretching or narrowing the width of the letters on an entire line. Tracking is used as a balance for the overview of kernings.

EVERY CLOUD HAS A SILVER LINING
EVERY CLOUD HAS A SILVER LINING

Leading is the spacing between horizontal lines of a text; Leading ensures readability and harmony with Kerning and Tracking.

AMONGST THE GREAT FIGURES OF THE ITALIAN RENAISSANCE,
LEONARDO DA VINCI REMAINS ONE OF THE MOST ENIGMATIC
OF THEM ALL. ALTHOUGH HE HAS BEQUEATHED TO US THE MOST
EXTENSIVE BODY OF WRITINGS OF ANY ARTIST OF HIS GENERATION...

C. MAJOR AND COMMON USED STYLES

In each field, letter styles are classified in many different ways. In Typography, I usually see they are divided in styles such as Serif, Sans-serif, Monospace, Script and Fantasy Decoration. In Calligraphy, they are often classified based on the periods of formation, shapes of nib and regions - For Lettering, I will divide them into 3 main groups: Group of Informative texts, group of Decorative texts and Script.



Informative: I use the Roman system as a representative because in modern time, we are using Roman-style letters. For Roman letters, I divide them into two main categories: Serif and Sans-serif. The reason why I call this group a group of Informative texts because of its easy-to-read and simple letters, which can be used in long content.

Decorative is a group consisting of letters that are used effectively for headlines with more attractive and textured structures, yet they are difficult to read if written in a large content. Letters in the era of Gothic are often used in this form. The most typical style is Blackletter.



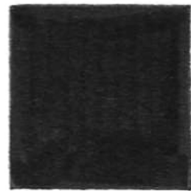
Script includes handwritings that have been formed and developed over time. However, there are some issues here since Roman words were handwritten in the past. To avoid the difficulty of using, we will use the specific types of Script in Lettering. I select Copperplate as the most typical style.

The Highwayman
The wind was a torrent of darkness among the gusty trees
The moon was a ghostly galleon tossed upon cloudy seas
The road was a ribbon of moonlight over the purple moor
And the highwayman came riding—riding—riding
The highwayman came riding, up to the old inn-door
—A. NAYLOR—

FOUNDATION TECHNIQUES

A. LETTER SHADING TECHNIQUES USING DRAWING PEN

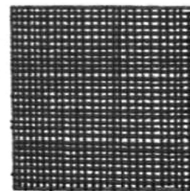
Letters can be covered by many different types of materials: drawing pen, water color, Acrylic, lead or charcoal, etc. And today, I will guide 6 ways of shading letters with drawing pens. The techniques below will be combined together according to each individual's idea to create a final work.



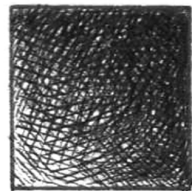
Blending



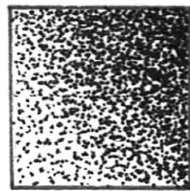
Hatching



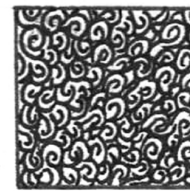
Cross-hatching



Fine cross-hatching



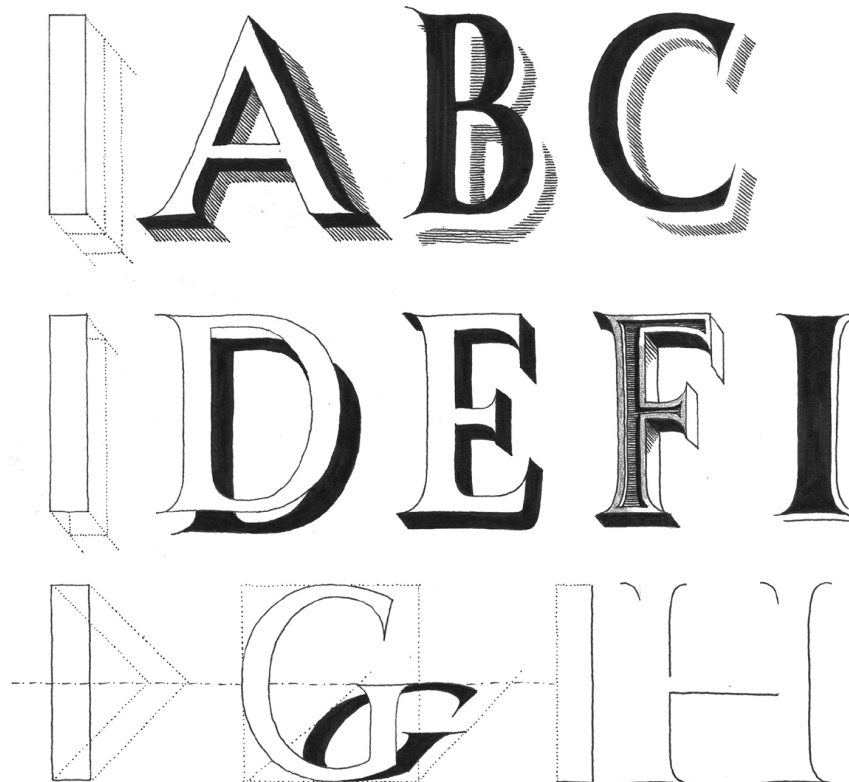
Stippling



Pattern

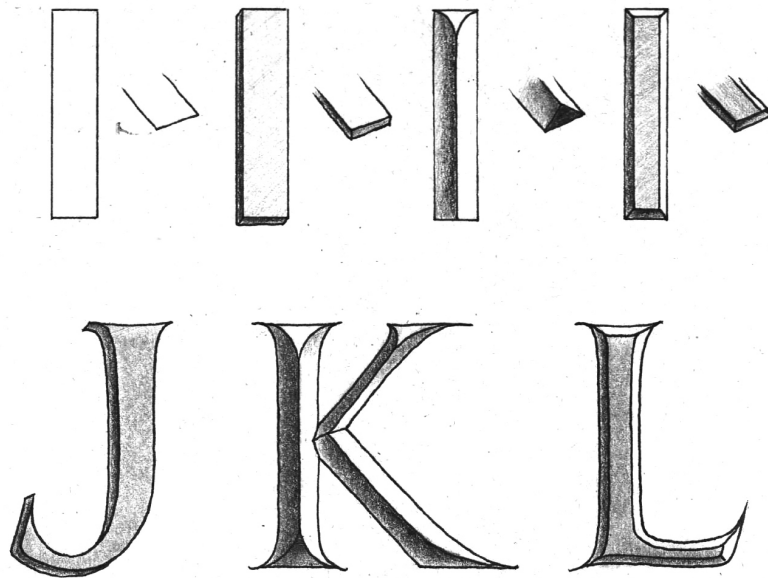
B. SHADING TECHNIQUES

Shading is the technique commonly applied to emphasize the letters in both classic and modern Lettering. Shading helps create letter space and distinguish the main from the minor parts of an artwork.



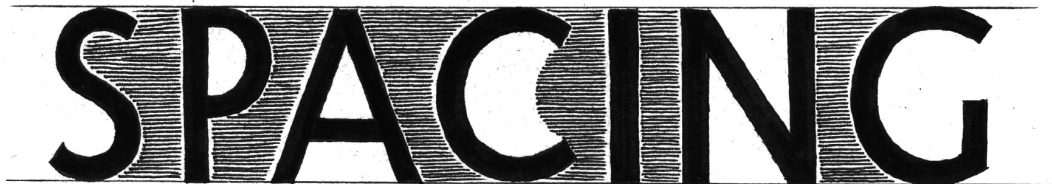
C. FORMING TECHNIQUES

Forming is the technique of creating three-dimensional illusion for letters, mainly based on the method of letter carving formed from the first century. The most typical and always seen as the norm is the Trajan alphabet which was carved on the Italian city of Trajan.



OVERVIEW

SPACING IS CRUCIAL



USE VARIOUS STYLES



ROMAN LETTERS' FORMS

Below are the forms of Roman letters I analyze based on Trajan alphabet on the Trajan's Column in Italy. The structures are simplified in proportion to ensure a good overview of the whole alphabet as well as make it easier to use. Notice the groups and proportions to write properly.

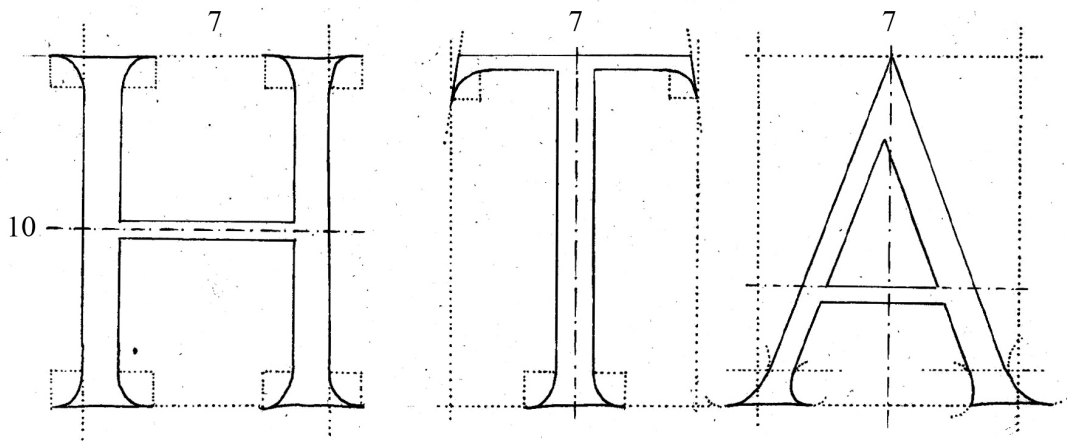
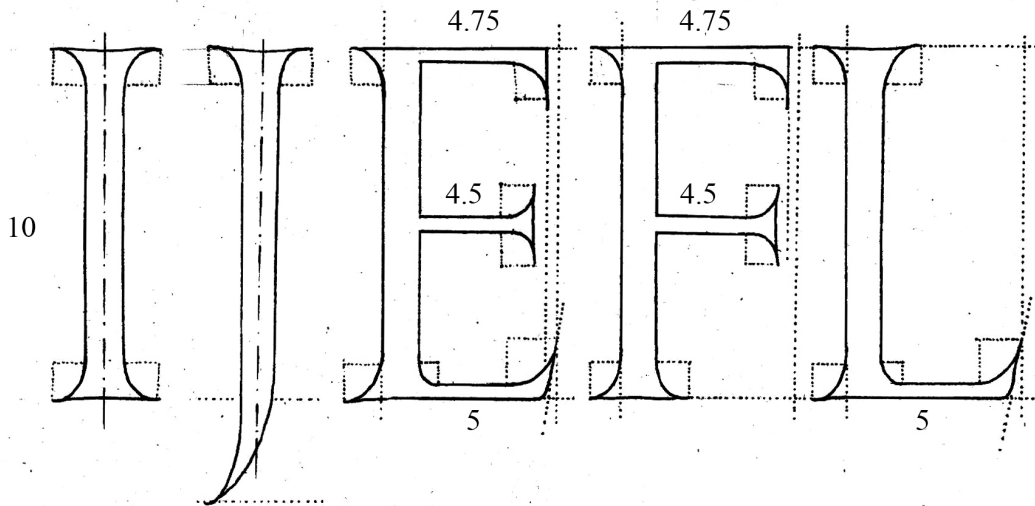
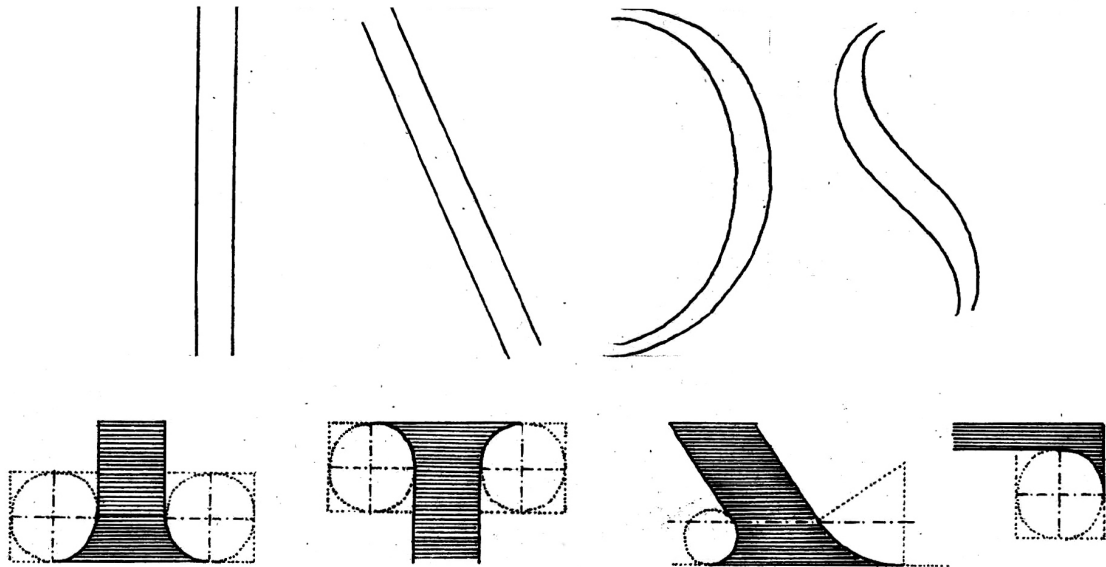
ROMAN FORM

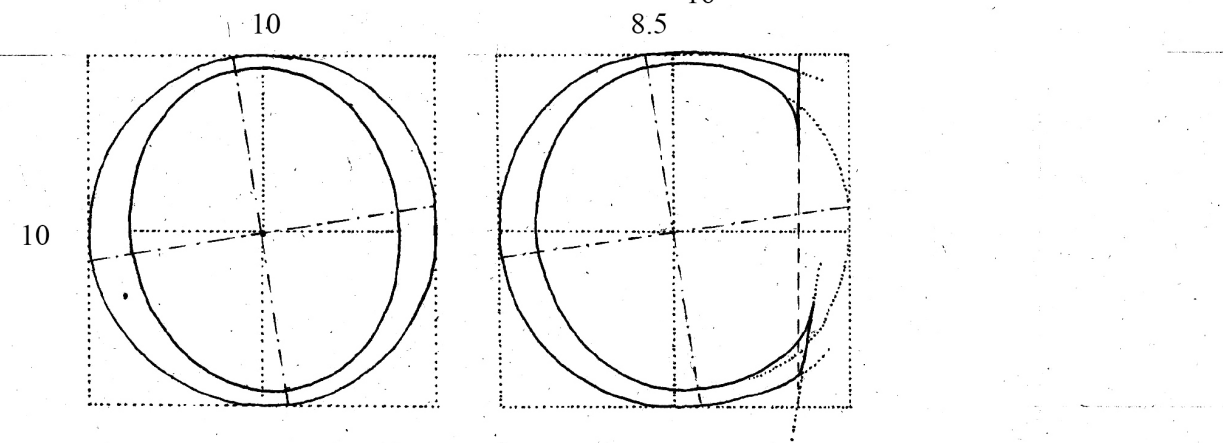
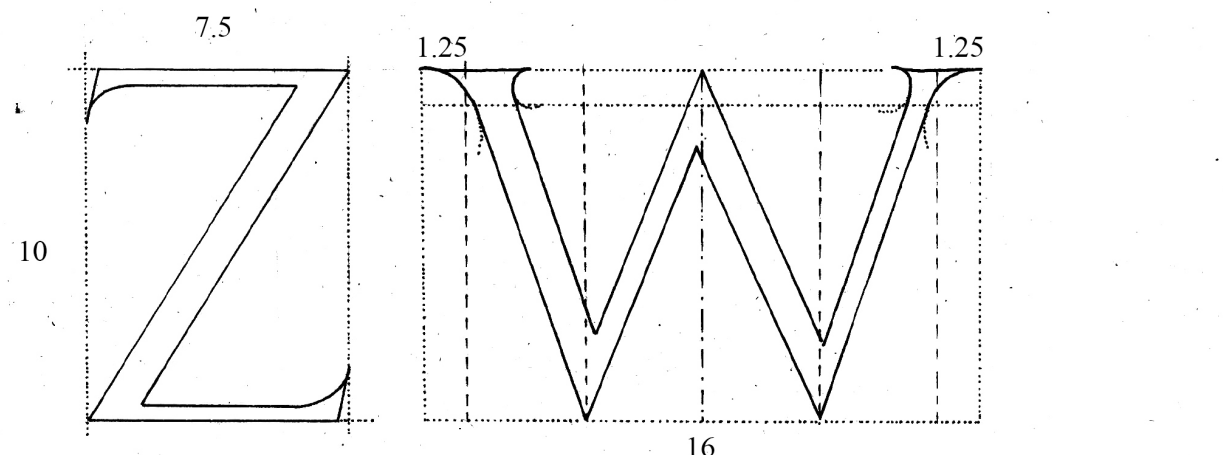
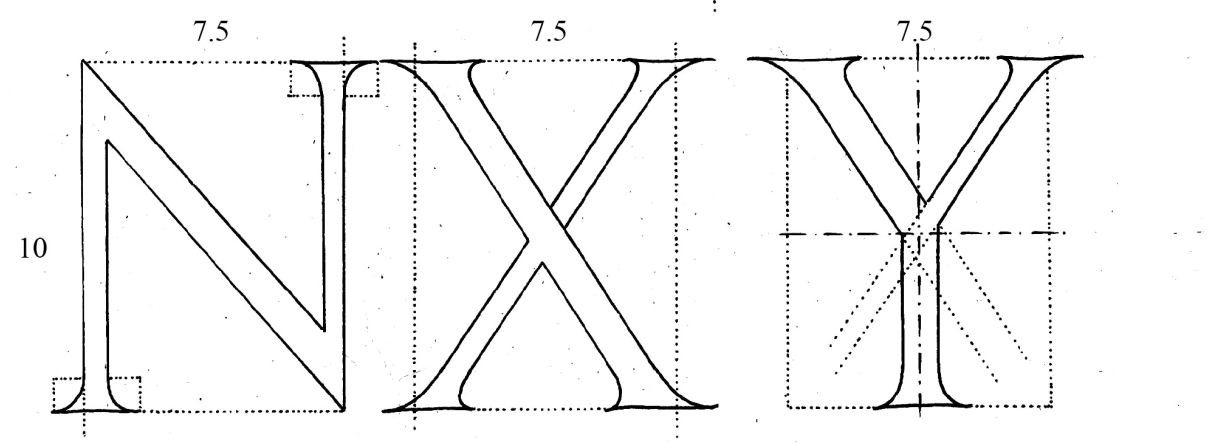
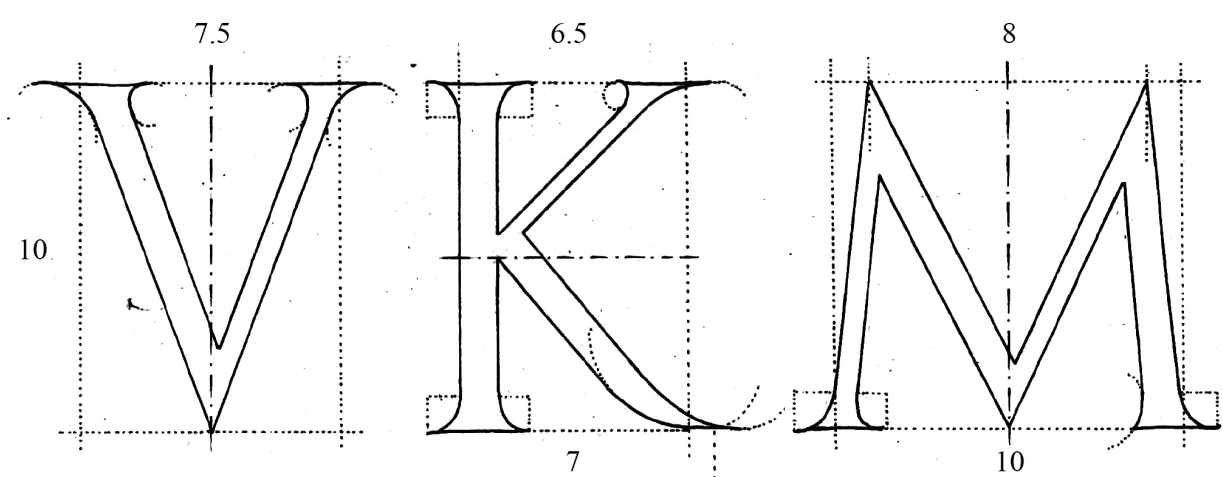
The diagram illustrates the proportions of Roman letters on a four-line grid. Each letter is accompanied by its width and height measurements:

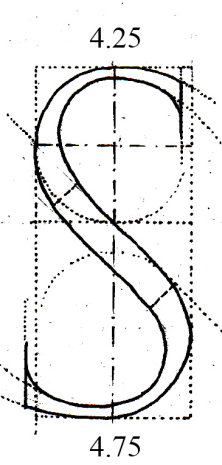
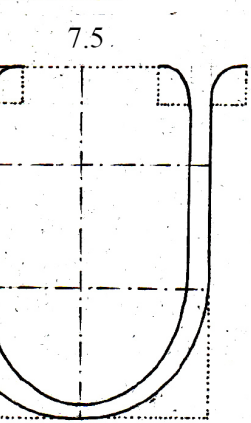
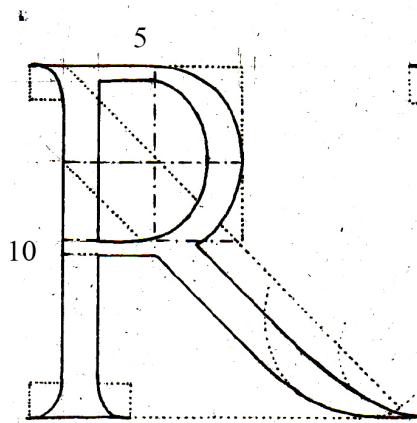
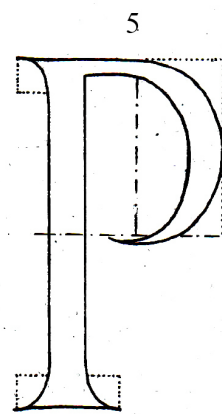
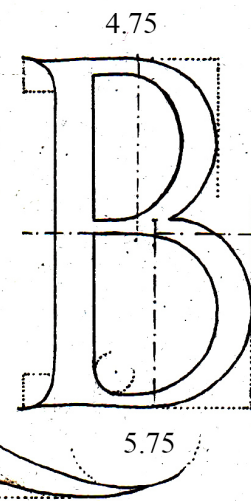
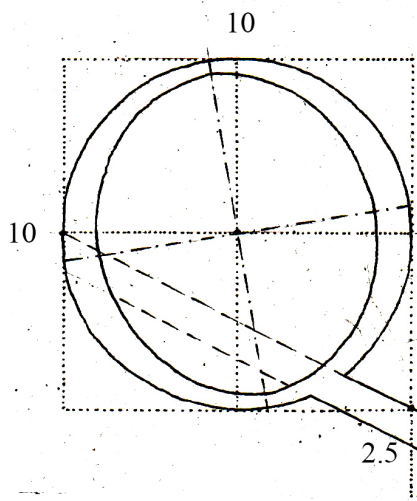
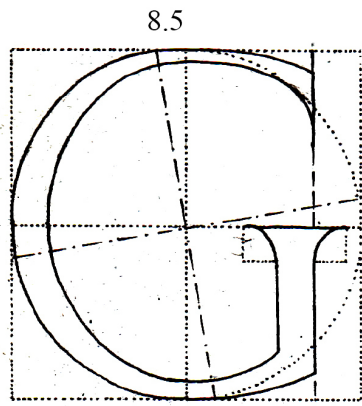
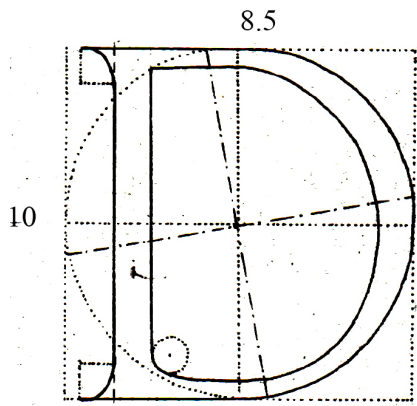
- Row 1:** O (width 9, height 9), Q (width 9, height 9), M (width 7, height 9), and a blue box labeled "9x9".
- Row 2:** Y (width 8, height 9), C (width 8, height 9), G (width 8, height 9), and D (width 8, height 9).
- Row 3:** A (width 7, height 9), V (width 7, height 9), X (width 7, height 9), Z (width 7, height 9), and H (width 7, height 9).
- Row 4:** N (width 7, height 9), K (width 6, height 9), I (width 7, height 9), and U (width 7, height 9).
- Row 5:** B (width 4, height 9), R (width 4.5, height 9), P (width 4.5 (5), height 9), E (width 4.5, height 9), F (width 4.5, height 9), L (width 4.5, height 9), and S (width 4.5, height 9).
- Row 6:** J (width 5, height 9), an ampersand (&), W (width 9x1.6, height 9), and a bracketed "3" at the bottom left.

COMPLETE ROMAN LETTERS

The Roman alphabet below shows the notion of Roman structure. Notice some important factors: The width of the main strokes must be equal; the serif is formed from a curve of an arc. The proportion of a complete alphabet is calculated by the width of the main stroke, the height equals 10 strokes.

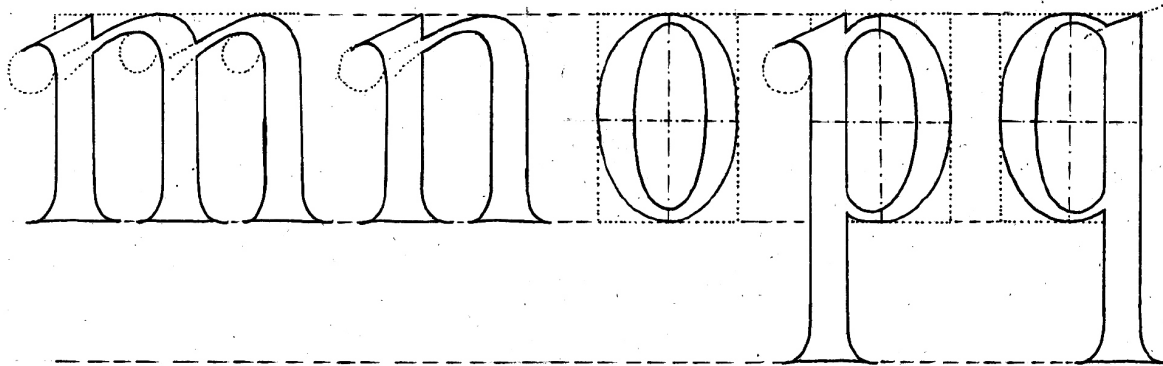
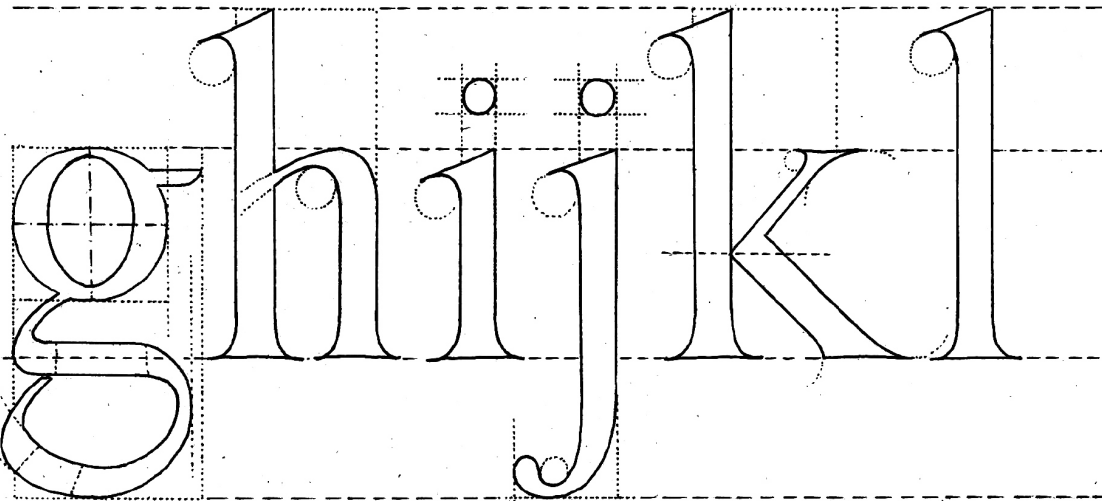
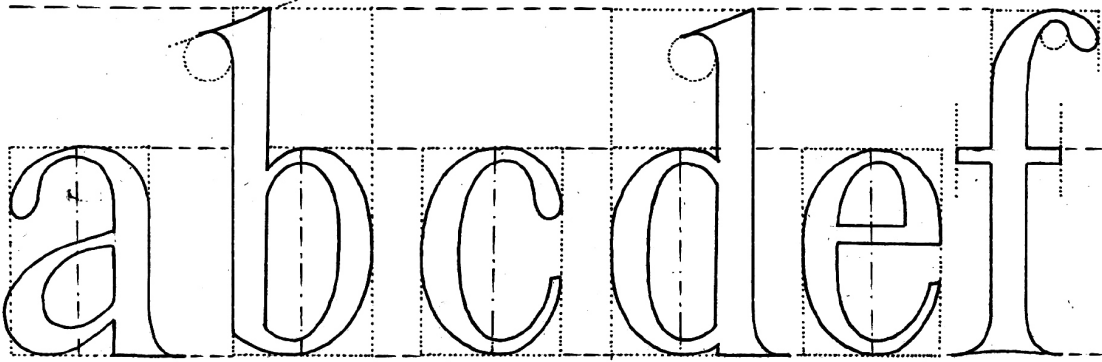






ALPHABET REFERENCE

In the past, the Trajan alphabet had no lowercase letters; they were developed later on. Below is the lowercase alphabet I design based on many formed lowercase alphabets and simultaneously link to Trajan capital letters to create uniformity.



r s t u v

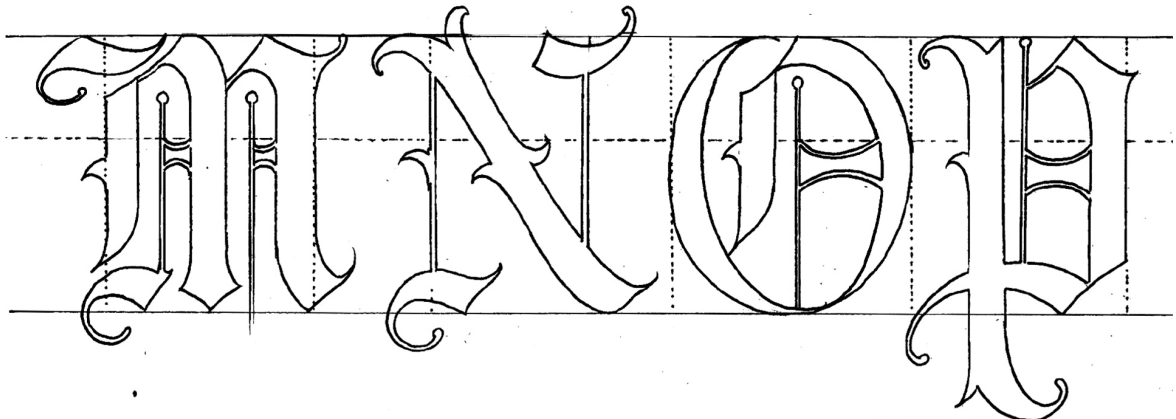
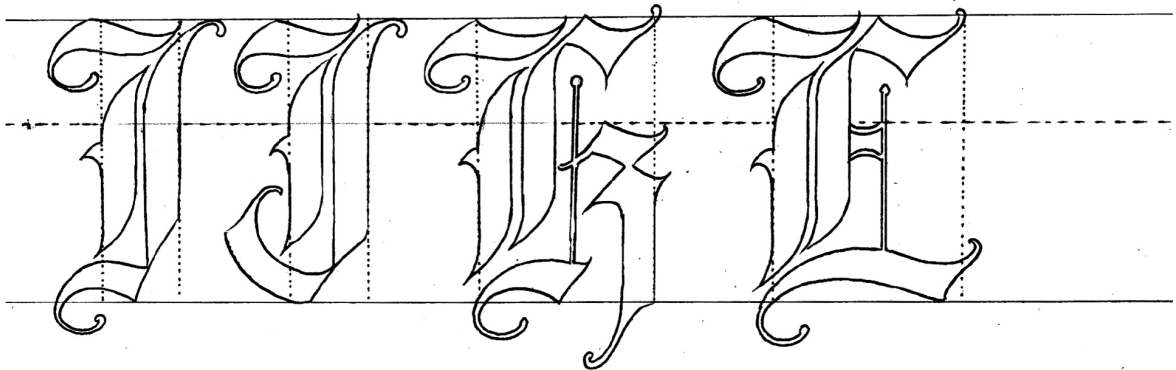
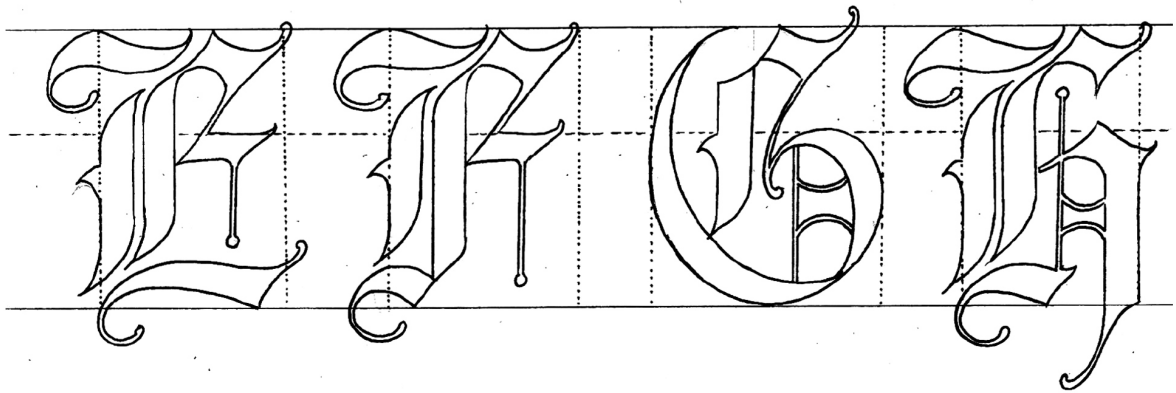
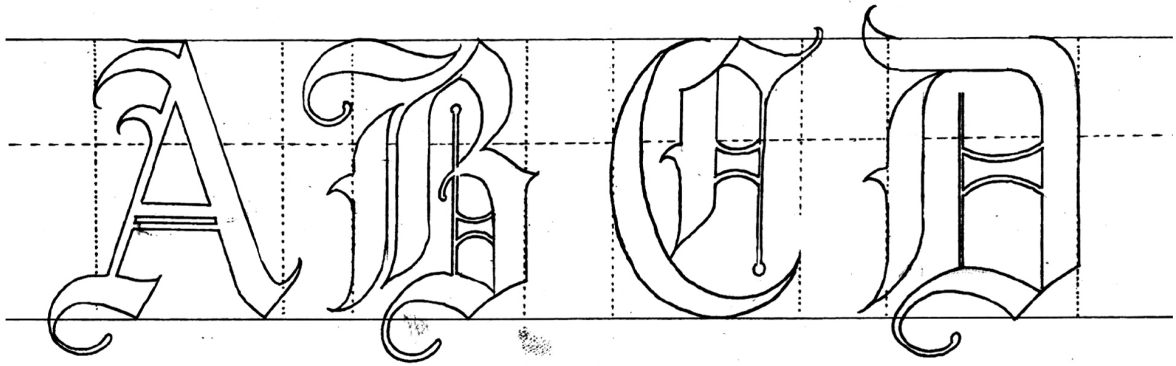
w x y z

1 2 3 4 5

6 7 8 9 0

ALPHABET REFERENCE

Representing the Decorative group, I select Blackletter (Old English). Letters in this group are quite complicated in textures but more liberal than Roman.



Q R S T

U V W X

Y Z

a b c d e f g

h i j k l m n

o p q r s t u

v w x y z

ORNAMENTS

Decorative ornament is a crucial part in Fine Arts; ornament can be purely aesthetic or can be applied extensively, especially in Architecture. Each region, culture, and age has its own ornaments. In Europe, ornaments and decorations transformed and developed rapidly through historical periods.

Ornaments are inspired by nature including plants, animals and human figures. In particular, Acanthus leaf motif was specifically used in Europe. Acanthus (*Acanthus spinosus*) was a common plant of the Mediterranean, which was stylized to form the characteristic decoration on the Corinthian column in Greece in the 5th century BC. This Mediterranean plant, especially the leaf, had a beautiful natural look and a perfect leaf structure that gave loads of inspiration for artists who loved ornaments at that time.

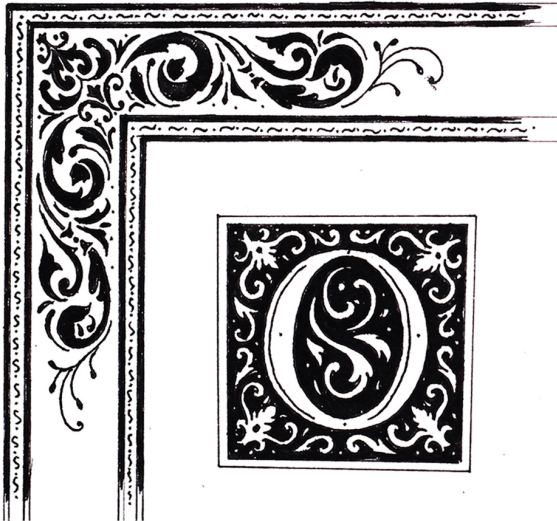
Ornament is a greatly broad and elusive aspect; from flowers and leaves to animals such as lions and horses, all are applied. However, we concentrate on Acanthus, the most prevalent type of European motif and see it as the basis of other rules of design and decoration.



APPLICATION

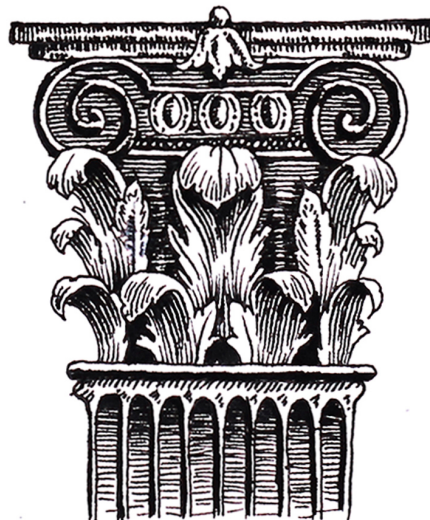
Previously, I was confused when someone asked me about the applications of traditional arts. I later realized that no art was practical: Art was a type of enjoyment (a piece of music, a painting, a play, a movie,...). Visual arts (Fine Arts), in particular, are brought into use called applied Fine Arts and that is what we are discussing. Art is applied when it brings a certain beauty combining with suitable objects that serves human life and creates aesthetic values for the appliance.

Here are some reasonably popular applications of ornaments.



Some easy-recognized applications are decorations on picture frames, photo frames, aesthetic details of furniture, wood carvings, leather decorations, patterns on cards, books. It is nice to see many novels using Ornamental Letters at the beginning of each chapter (no one handwrites books nowadays) and many other gadgets.

I separate one of the applications of ornaments which is Architecture because this is fairly the most incredible application. You can see spectacular classic buildings in many places and such works cannot be beautifully done without ornaments. Stone branches and leaves grew harmoniously thanks to the handy architects that kept classic Architecture flourishing in this field.



BASIC DECORATIVE ORNAMENTS

Ornaments drawing techniques are divided into 3 types as described below for a more holistic view of Acanthus in particular and ornaments in general.

Flourish

Flourish is not formed from natural figures. The curves are created and combined harmoniously by using single strokes according to certain rules. Flourish occurs frequently in Calligraphy or applies individually in the borders around an artwork.



Simple line ornaments with form

This natural-based motif is broadly used. It is not simply created by single lines and not as realistic as Geometric Art, which still forms the shapes of leaves, flowers, branches, yet not too detailed.



In the example above, this ornament can be replicated from a single ornament to create a Damask background (on silk and fabric) and create a wide range of applications in many aspects of life.



The application to letters also developed promptly before printing technology was born. Initial letters in hand-written books were ornamented to represent the story as well as the aestheticism, which are analyzed in detail later on. Likewise, embossing in Architecture often uses a similar type of ornament.

Realistic motifs

This is probably the most difficult style; from hand-drawing to sculpture, realistic motif always requires a high level of patience. In this respect, realism does not mean drawing actual leaves with the characteristic green color of plants. It is how we stylize and create forms for motifs based on Graphic knowledge and techniques of light, perspective, etc. There are two common types of realistic motifs addressed below:

1. Geometric realism

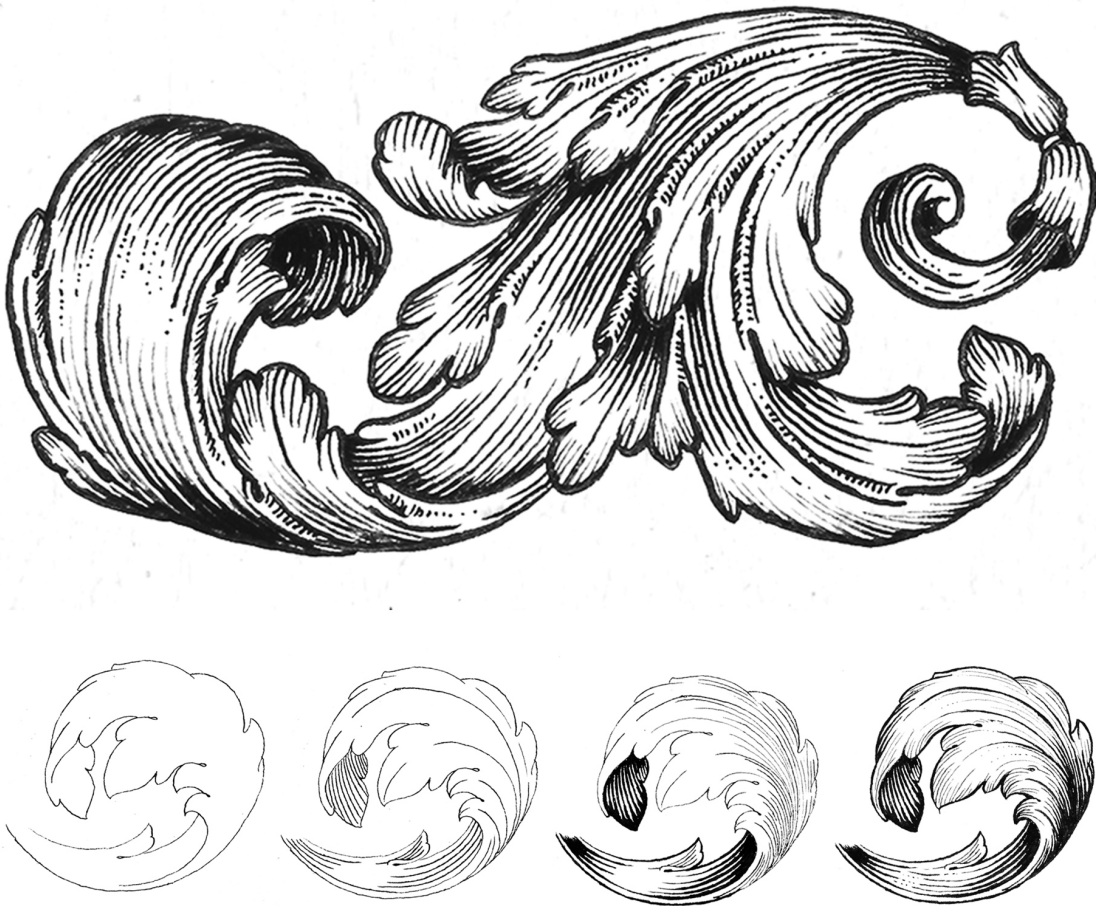
Similar to painting, geometric realism uses light and related techniques to create ornaments with depth and create various materials.



The ornament above is not a real branch; it has been stylized based on the figure of the branch to draw harmonious curves. It is not simply combined strokes, but also the depth of the forms and scientific light.

2. Scratchboard Illustration

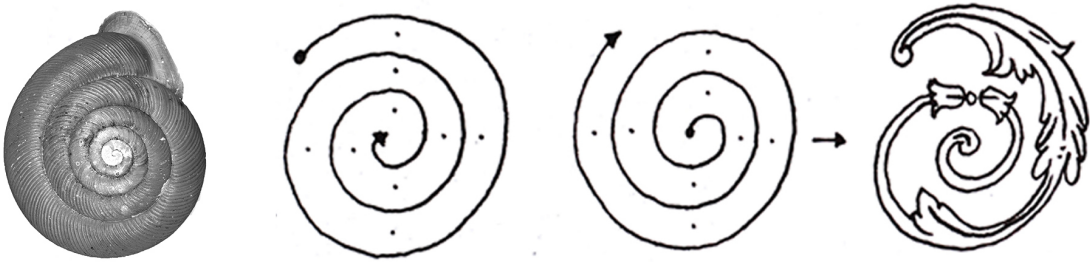
Scratchboard is a type of art drawing on black background by the method of making knife cuts; the white background below reveals the artwork. A similar type is Scratchboard Illustration. Scratchboard Illustration does not use a black background and uses lines as usual, but shapes and depths are formed by single lines. Another similar form of art is Line Engraving used extensively in the past for printing through metal engravings.



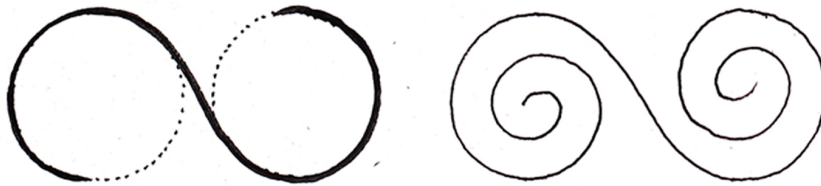
In realistic illustration with strokes, the midribs of the leaves are the most important points. From the midribs, we can form all the remaining veins through the direction of the leaf. A better understanding of this process is in the next section.

THE GENERAL RULE OF ORNAMENTS

No matter how complex the details are, the compositions start from the basic rules. It is interesting that all the rules are from Nature. Supposed we were witnessing the process of a bud growing into a tall trunk, the stem rose up straight, from which the secondary branches grew along the scaffold branches; leaves emerged from branches and flowers too. Everything is changing according to the appealing Laws of Nature. The spiral is also a practical example; the inward curves are created perfectly. Human has learned to design beautiful architecture and harmonious ornaments.



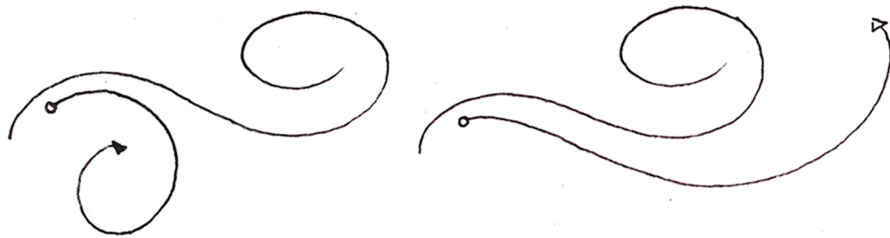
The spiral follows the circular motion rule, in which the spaces between the lines are almost equal (see the spaces at the dots in the spiral). Above is an example showing the spiral of the ornaments.



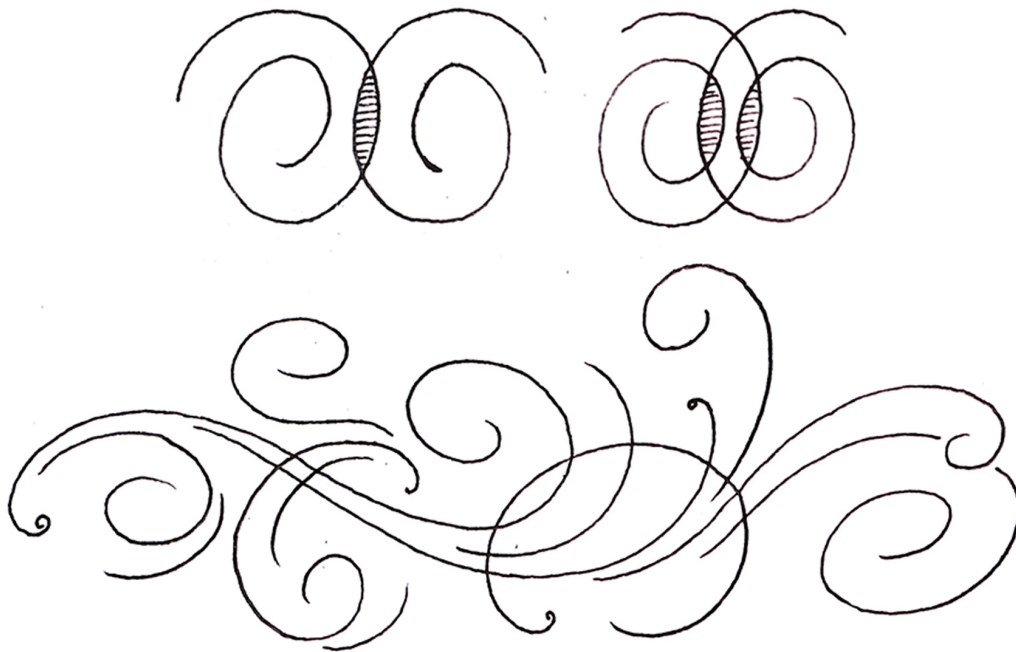
The law of the infinite loop is the way of combining round (or oval) motifs that spiral together, the infinity loop creates the linkage as the pulley in me-



Below is a demonstration of the directions when combining two patterns together. Fortunately, there are only two directions for a pattern following the previous one; each pattern may be a spiral or an infinity loop depending on the intention of each individual. The two directions are: In the opposite direction and in the same direction with the main "branch".



After understanding the directions of the minor details from the main details, we also need to consider the overlapped motifs; that is, an artwork does not always use a single "tree" and when combining the two "trees", the compositions must be overlapped on each other to create a proper space.



Above is an example of combining many details together, from the main stem creating the branches and incorporating many separately "trees". However, this is only the basic lines (not showing the leaves or flowers).

Frames of the ornaments

To draw ornaments from simple to complicated level, the very first step is sketching wireframes and shapes of the ornament, which means, even with a realistic Acanthus, we still need to create single lines before adding more details to the ornament.

Example 1

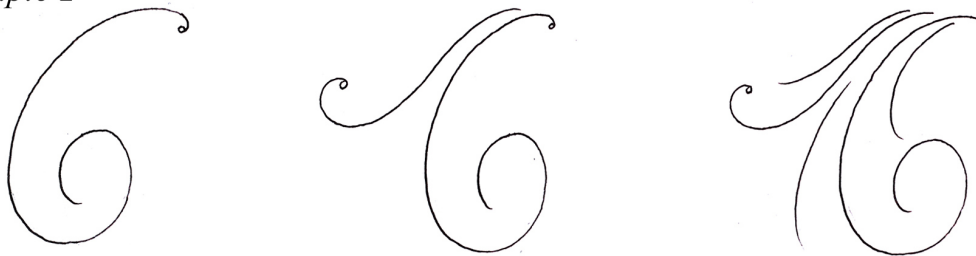


Draw the frame of the ornament

Draw the frame of the ornament

Add other details to harmonize

Example 2



Draw a spiral frame

Add a branch in the opposite direction

Add other details to harmonize

Example 3



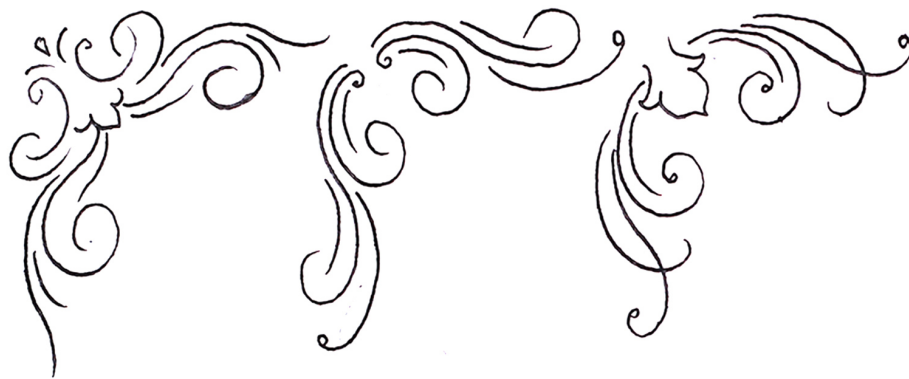
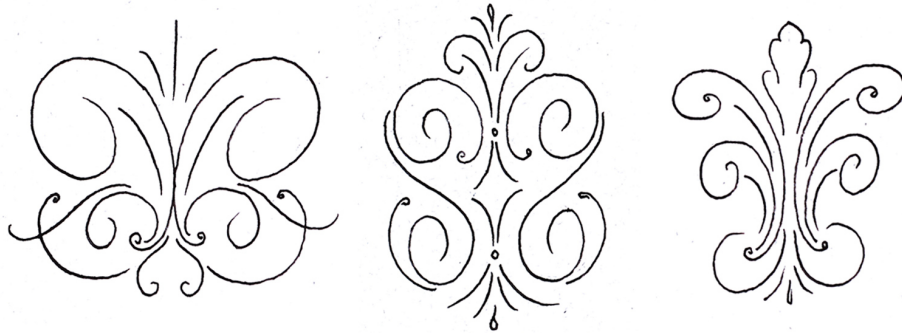
Draw a vertical infinity loop's frame

Add a separate branch to the frame

Add other details to harmonize

Ornaments shaping

Shaping ornament is for making applied ornaments. There are many ways to create them, the most common ways are: axis symmetry, center symmetry (used in Damask pattern), corner ornaments (used in the picture frame, invitation cards), border pattern, repeating patterns, free patterns, free frame patterns, ...

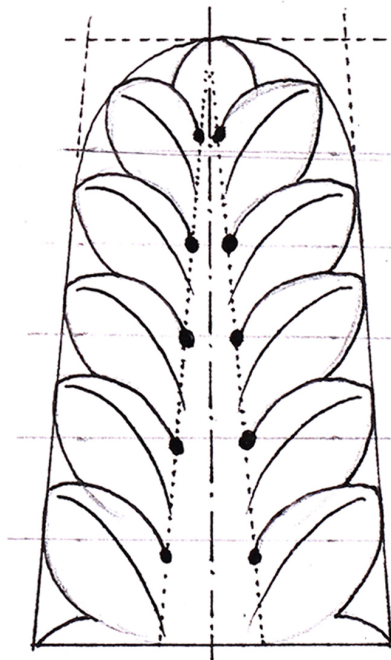


ACANTHUS

This section is the main part we learn: how to draw and the process to complete one ornament. As I mentioned earlier, those who have a background in fine arts will be easier to learn drawing Acanthus in realistic style, if you have not studied graphics yet, you can start by learning techniques to draw type 2 (creating simple forms) to prepare for more difficult ornaments later on. Here are the details:

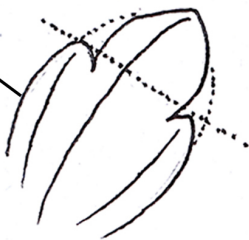
Acanthus leaf structure

We all know that leaves grow from branches; they have midribs in the middle from which the veins branch and form the laminae.

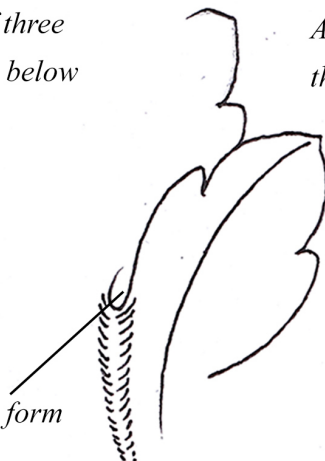


The overall shape of an Acanthus branch is composed of many leaves, as shown in the picture, the leaves are overlapped. The general shape of the leaves is common, but the picture shows only the frame of them. The lobe of each leaf is divided into three smaller ones as described in the picture below. Notice the black dots at the intersection of the leaves, where the leaves overlapped and form a fold (like folds on fabric) and this part makes up the main characteristic of Acanthus ornaments.

Single leaf structure consists of three smaller leaves and arranged as below



The folds between single leaves form the arch structure



A complete Acanthus branch



Create simple forms and Scratchboard Illustration

From the frame of the shaped ornament, we draw the remaining details to develop the specific shape of an Acanthus leaf.



Firstly, as done in the previous section, draw the frame and shape of the ornament. For this example, I draw one in a horizontal rectangle frame.



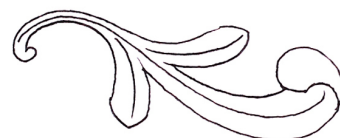
From here, other details are completed: leaves, flowers or crossed details evolved from the first single strokes.

Below are 3 steps to draw an ornament from a frame, these three steps help maintain the leaf structure and easily shape other details.

About the frame, most important lines are created first and the secondary ones follow, in the same or the opposite direction with the main branch.



The frame is seen as the midrib of the leaf, from which two parallel lines are drawn to form the lobe. Depending on the drawing, the leaves will be arranged in different order.



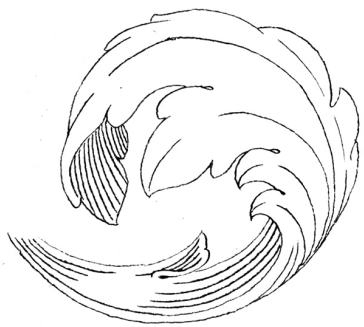
Finally, from the shaped leaf, details are drawn within that range and form the final shape of the ornament.



Details on how to draw Acanthus with Scratch Illustration



Starting with the finished Acanthus leaves in the previous part, this step describes the surrounding details without drawing the midrib of the leaf. Spiral Acanthus leaf is very common and intensively used.



The midrib goes from the petiole to the tip of the leaf. Any leaf has a midrib in the middle (as shown) whether it is single leaf or leaflet, and that is the first thing to draw. Then draw equally parallel lines in the direction of the leaf in the dimmed side.



After completing the most important veins of the leaf, based on the drawn main lines, the secondary lines are formed in the direction of the leaf. Lines in dimmed positions are emphasized at the beginning and the end of the lines. The form starts to be created.



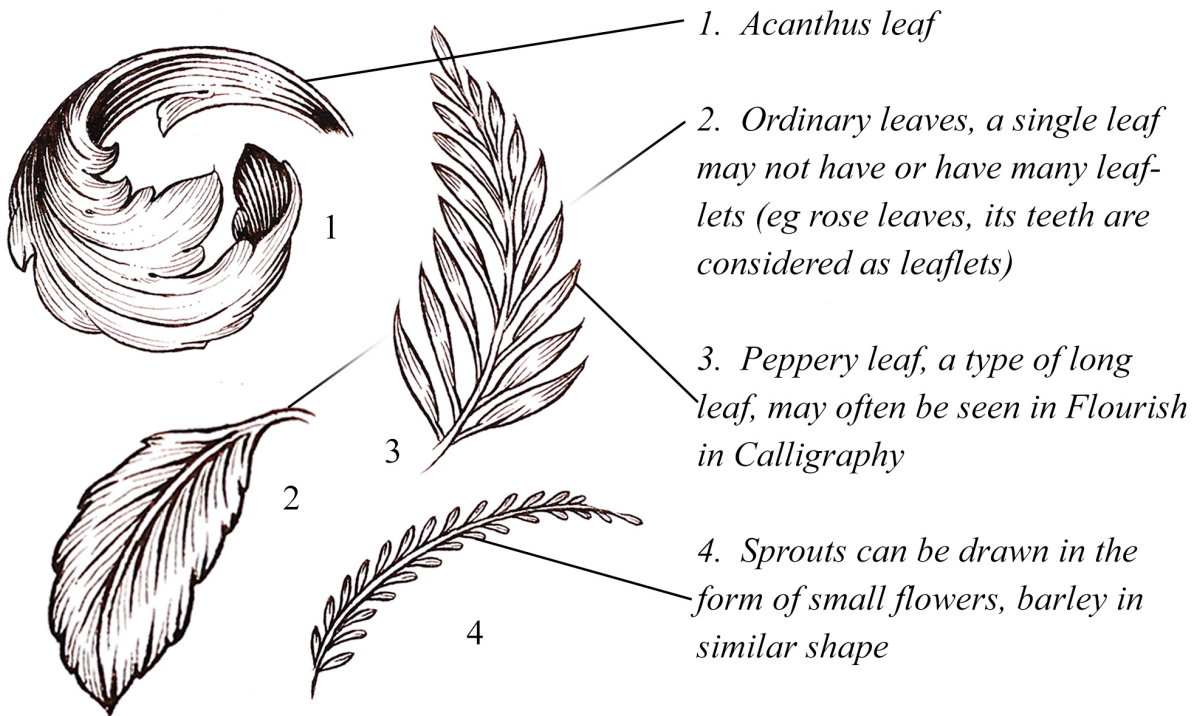
The last step is very important. To avoid breaking the form of the ornament, the rest of the details are light and overlapping lines should be avoided. Let's take a closer look, except for the parallel lines drawn at the third step, add similar lines from the tip of the leaf and the bending part of the leaf is also emphasized to create dark spots, increase the contrast.

Additional details

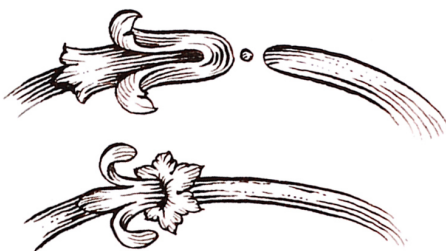
Regardless of animal ornaments, plants including leaves, flowers, nuts, nodes, sprouts are also added to avoid monotonousness.



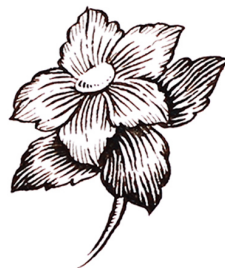
Before referring to other details, let's take a look at the folds where single leaves overlapped. As shown in the picture, the folds form the arch structure and contain the eyes.



Knots



Flower



Pepperry nuts

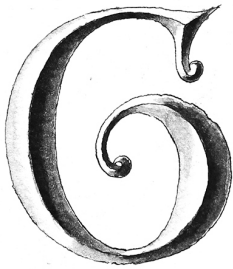


THE LOMBARDIC CAPITALS

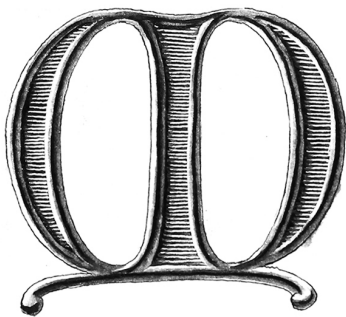
A B C D E
F G H I J K
L M N O P
Q R S T U
V W X Y Z

Create structure inside the letter

Letters can be covered monochromatically or patterned with ornaments and other techniques to emphasize and form real space.



Embossing style: A type of representing three-dimensional structure of letters that resembles traditional engravings on stone, wood or other materials. The example shows the light at an angle of 45 degrees from the left, the middle part of the stroke is emphasized.

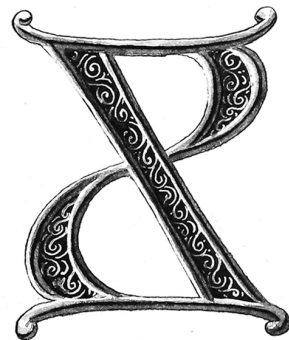


Creating border: This is the method of creating structures based on the metal border of gadgets, a single border (as shown in the picture) creates a block with a 45 degree angle of light down on the left. The inside of the letter can be monochromatic or covered with horizontal stripes.

Creating ornamental border: Similar to how to create a simple ornament, the borders are decorated with leaves and curves as the shape of the letter. The inside of the letter, in addition to the monochrome background and horizontal stripes, we can also use the dots.

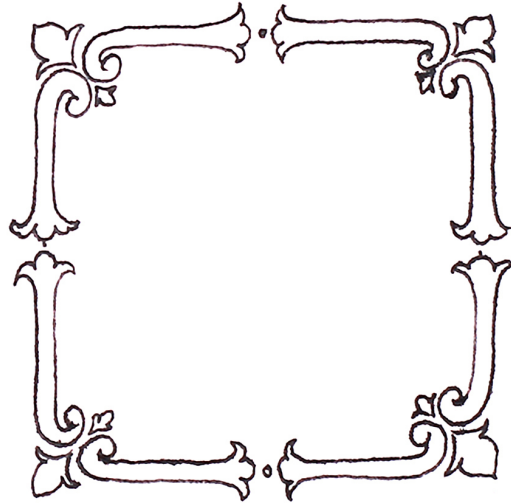
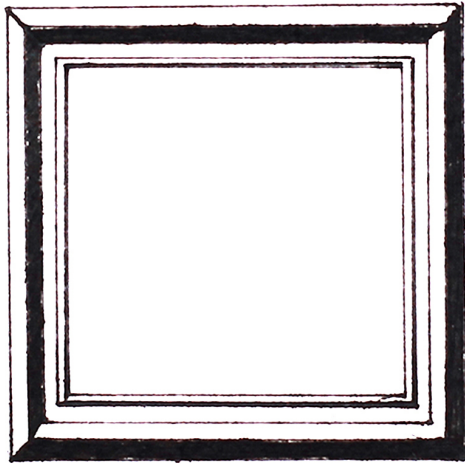


Ornamented background: Similar to the way of making letter border as number (2) and number (3), the background inside the text can be decorated with line ornaments (as shown). These ornaments should be simple and used effectively in order to avoid jumble of ornaments inside and outside the letter.

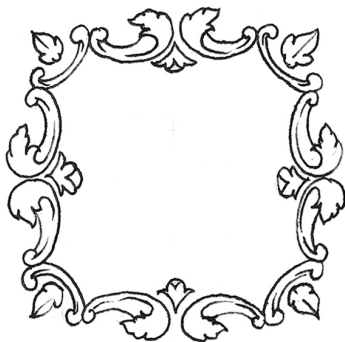


Create frame and background

Depending on the purposes, the letter may have a frame or not. Below are several types of frames that can be used along with ornaments.



No. (1) and no. (2) are the two simplest styles. No. (1) is a classic frame as we normally see in pictures and photos, no. (2) is decorated with simple patterns, added as a highlight.



No. (3), (4), and (5) are more complex. No. (3) uses symmetrical motifs to form the frame, no. (4) includes free motifs that follow the shape of the frame, and the last one is an example without a frame.

The final style can be used as an ornament outside the letter if its frame is designed as the previous examples; however, if the ornaments are complicated, the frame should be simple to avoid looking jumbled.



On the left are two concrete examples for framing the word. The first example is done with the letter "T" in Lombardic style. The letter is bordered and combined with an Acanthus leaf in Scratchboard Illustration. Inside the letter contains some simple patterns. The frame is designed in meticulous detail so the background is reduced in term of contrast and complexity to avoid looking jumbled.



A simple method is used in the second example to design ornaments for the letter. The monochrome frame and letter "S" go together with modest, non-realistic ornaments. The good thing about this style is that it is easy to create a drawing on computer to print the initial letters in books, wax seal or related printing and engraving details.

Conclusion

Ornament is an appealing aspect of Fine Arts in general; ornamented letter is a significant part of the art of letters. Every individual has their own sense and way of expressing themselves, and I believe traditional art shall be the beginning. Regular practice is the decisive factor for the ability to draw ornaments in various styles. The first step we need to do may be to imitate available ornaments, then we can compose by ourselves. The following is an example of the process of making a complete work based on what we have learned.

