"Engraving" Style

Pen & Ink Drawing

2

BASIC PORTRAIT DRAWING

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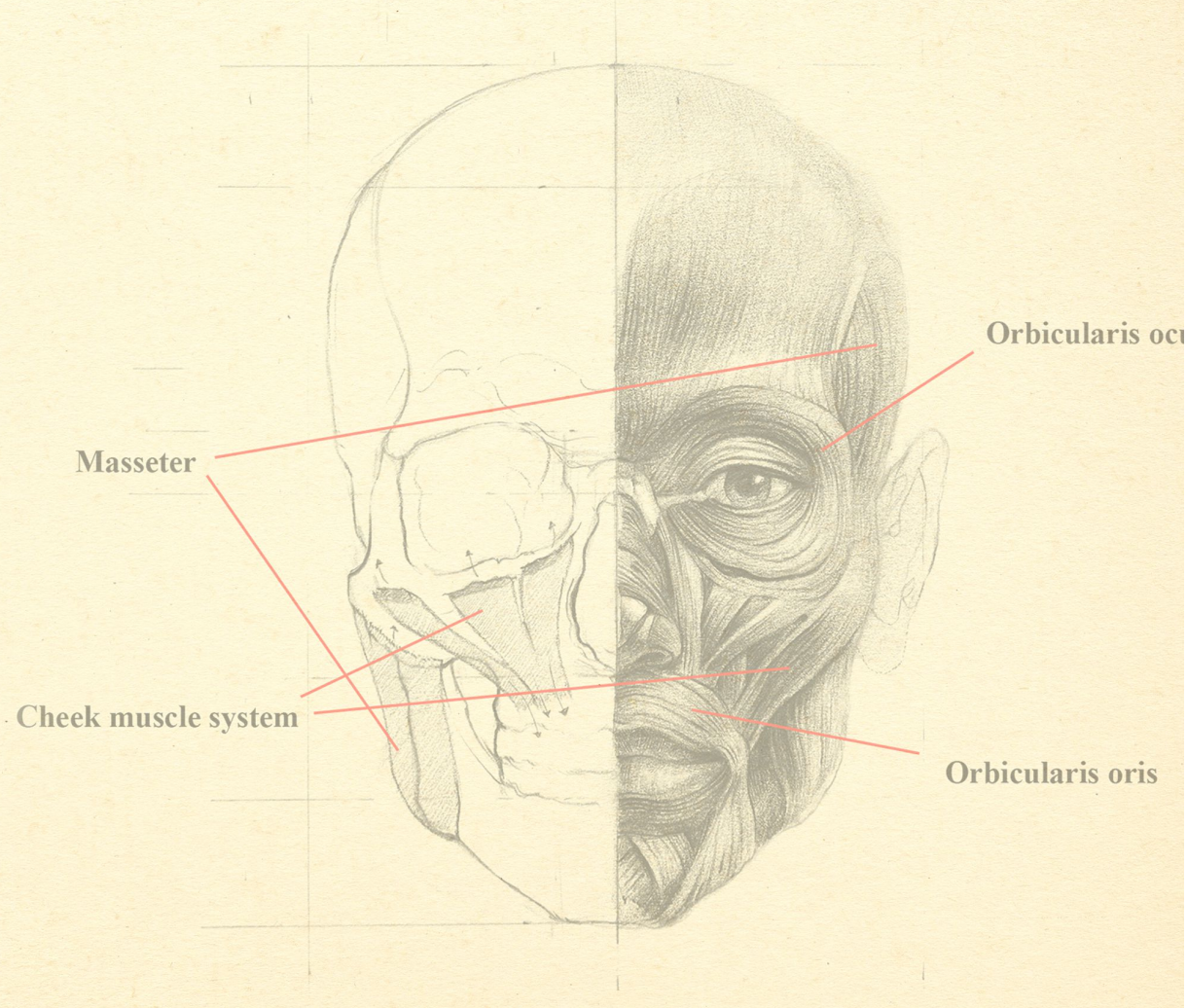
Chapter 1

The Basic Head Proportions & Anatomy

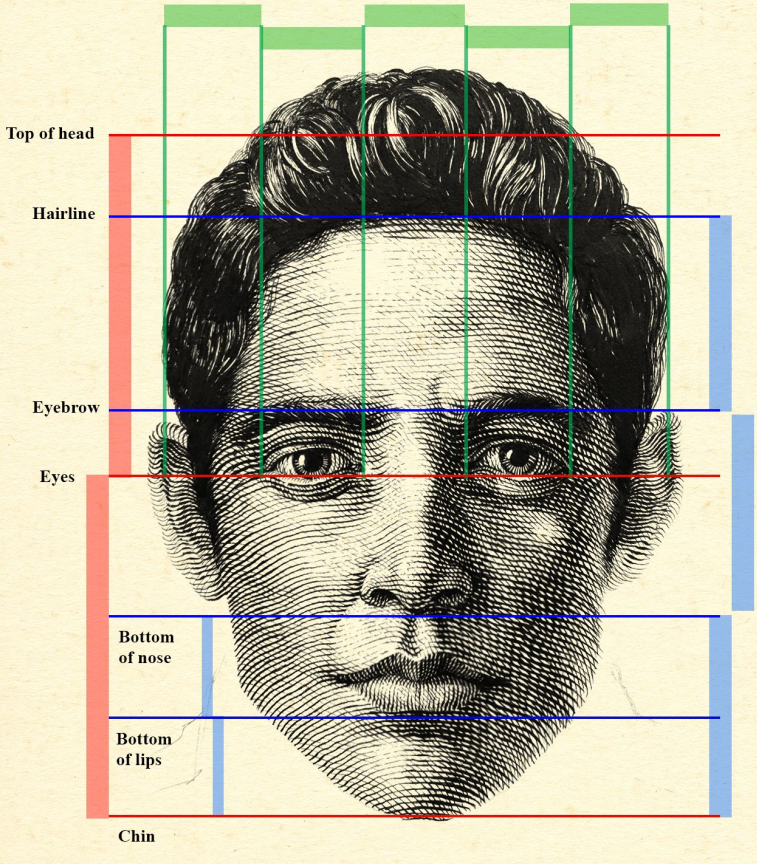


BASIC HEAD PROPORTIONS AND THE INTRODUCTION OF HEAD ANATOMY

Head proportions

Each individual has a unique skull structure. Therefore, each person has a specific head proportion. However, we can start with the **"Basic Head Proportion"** concept. The Basic Head Proportion is widely used in art and art schools, through which learners draw according to a standard proportion and then modify it to express the model's unique personality.

The Basic Head Proportion can be described by the illustration below:



Eyes: located in the middle between the top of the head and the chin.

Eyebrows: The position of eyebrows is little higher than the eyes. The detailed measurement will be discussed in the Loomis method, but the distance from the eye to the eyebrow can be estimated to be almost 1/10 of the head height.

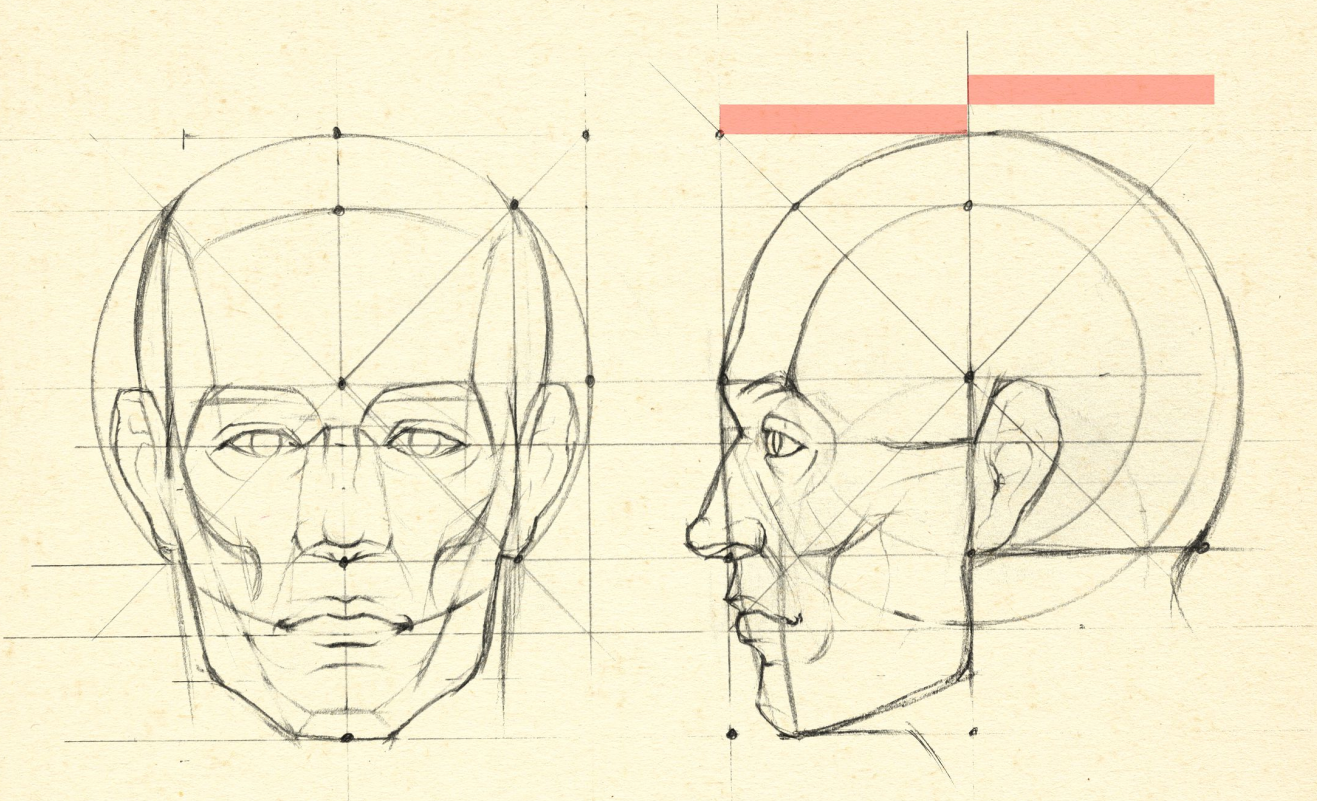
Bottom of the nose: The position of the bottom of the nose is in the middle between the eyebrows and chin.

Hairline: The distance from the eyebrow to the hairline is equal to the distance of the eyebrow to the bottom of the nose and the bottom of the nose to the chin.

Lips: The position of the lower lip is in the middle between the bottom of the nose and chin.

Eye width: To define the eye width, we can divide the head width into 5 equal parts, the eyes will be located in the 2nd and 4th parts.

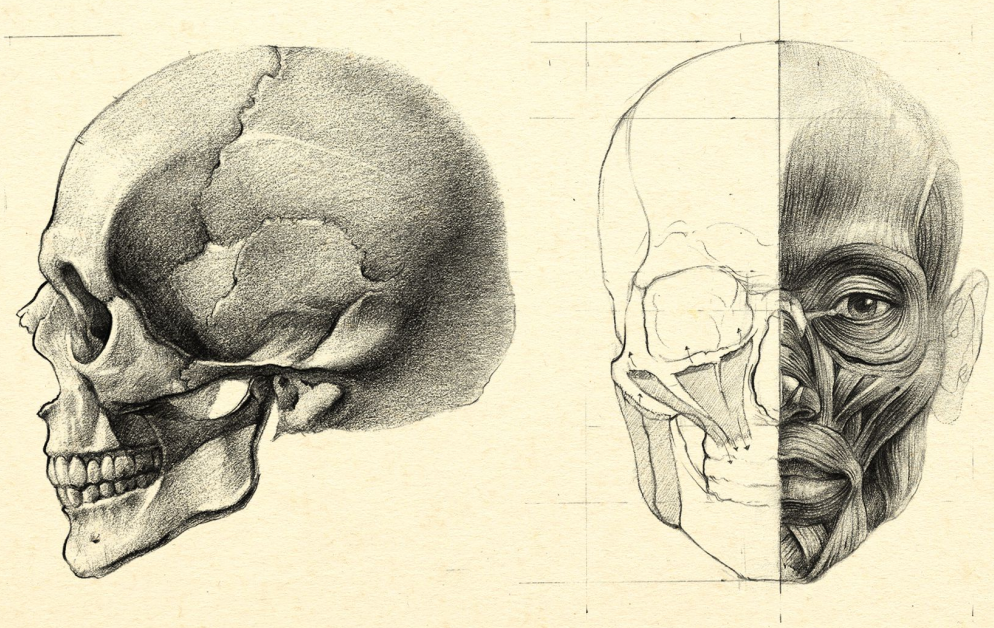
Ears: The ears are located between the eyebrows and below the nose. If you look at the head from the side view (profile perspective), the ear is connected to the jaw line.



The position of the ear divides the head into 2 equal parts (side view)

The introduction of head anatomy

Learning the anatomy of the head helps us to understand the structure of the head as well as the face muscles. In this part, we will go through the general introduction of the head anatomy. Basic head anatomy includes **Bone Structure** and **Muscle System**.



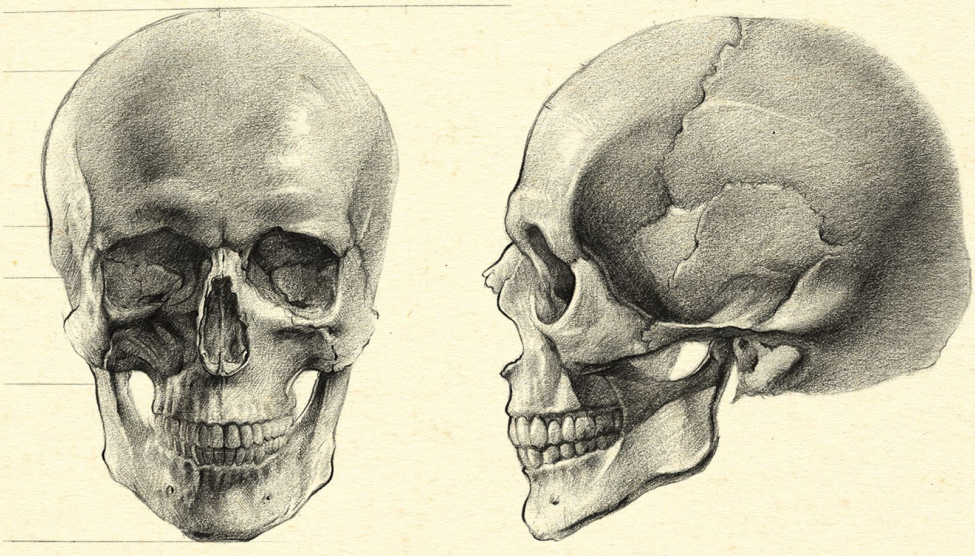
Skull side view

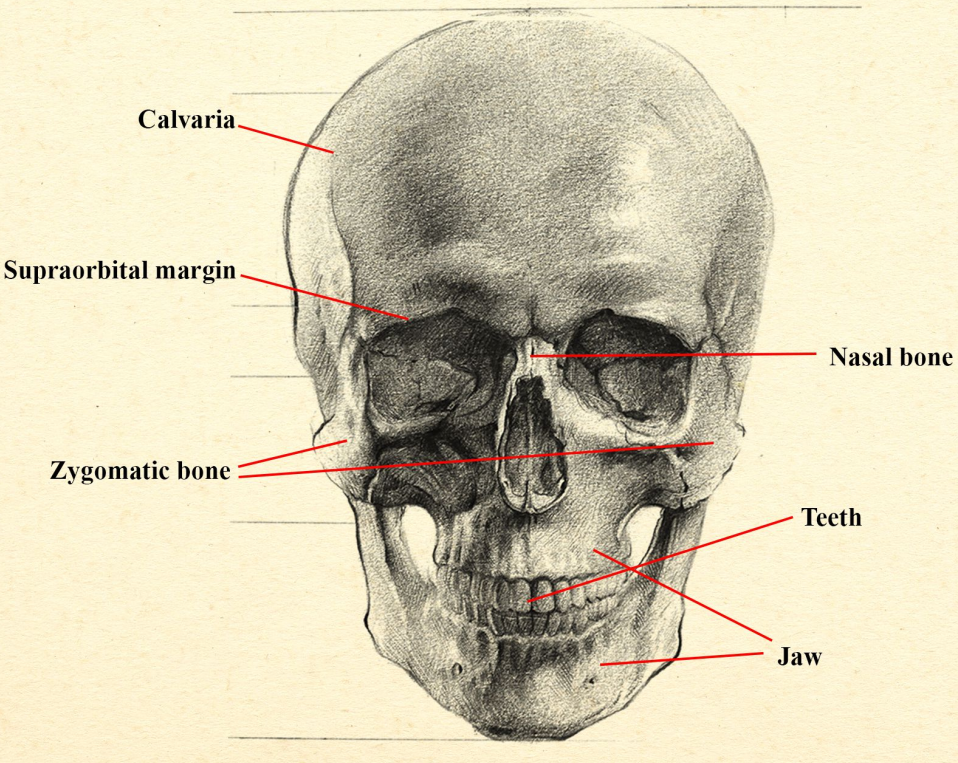
Muscle system front view

The skull

Learning about the human skull has many benefits in portrait art. However, we are learning anatomy for drawing, so we may not need to study complex medical concepts but only pay attention to some essential points that directly support the artwork.

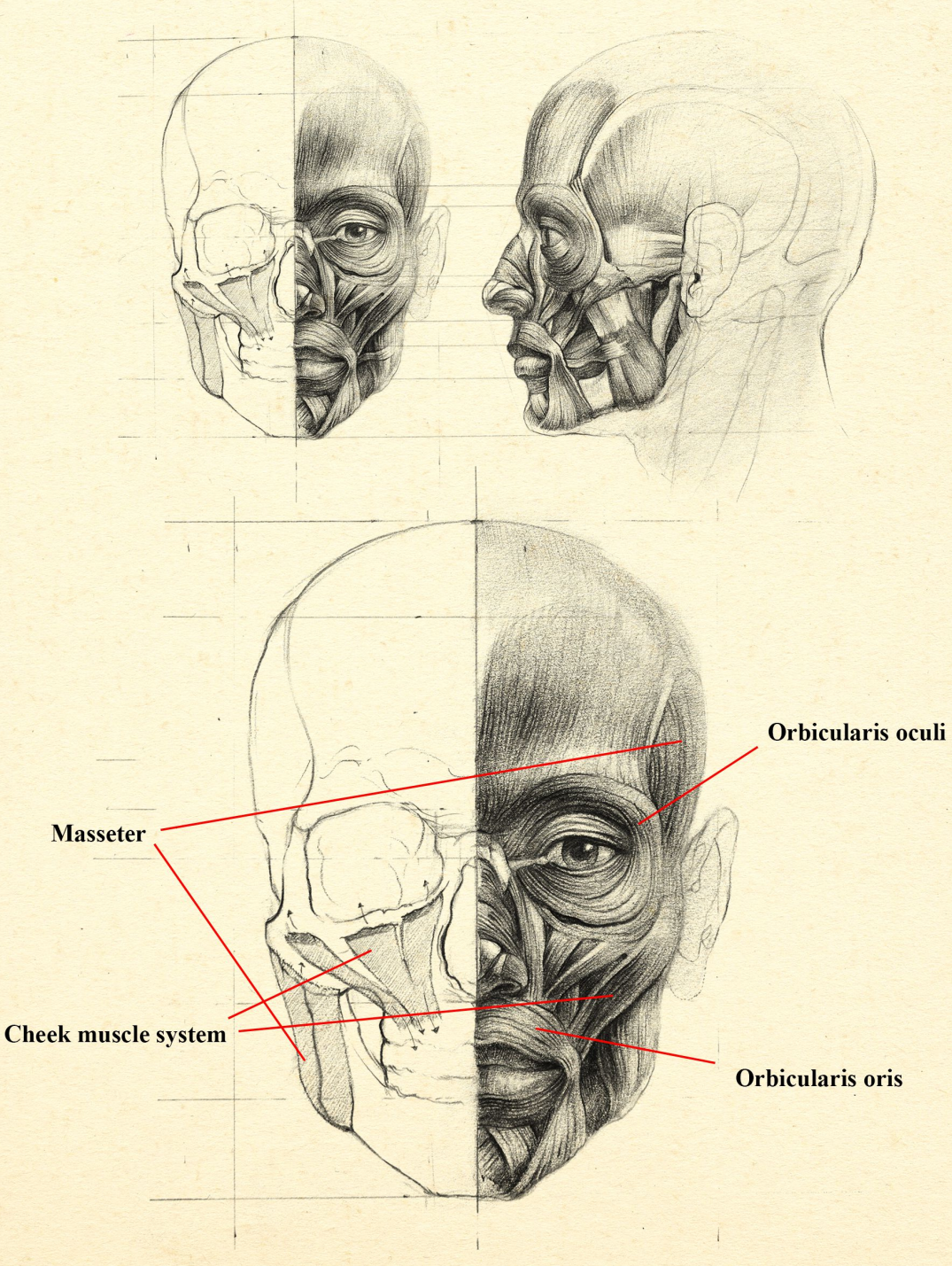
• **Supraorbital**: The position of the bone that protrudes above the eye, corresponds to the position of the eyebrow.
• **Nasal bone**: The top of the nose.
• **Zygomatic bone**
• **Teeth, jaw, the calvaria.**



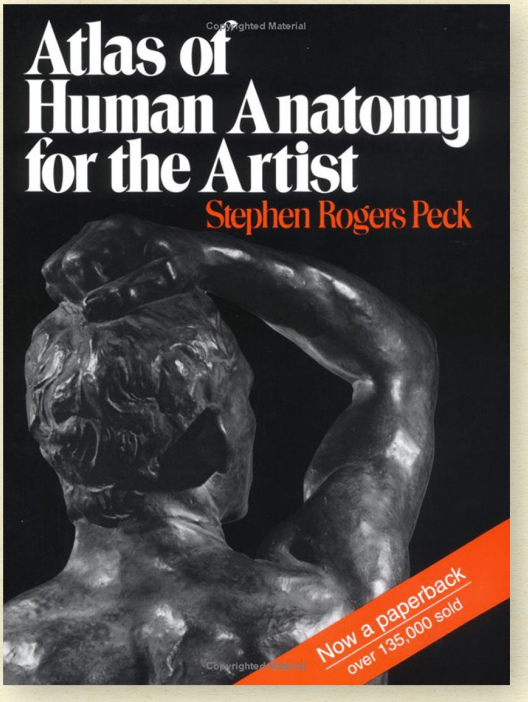


Muscle system: The muscular system is closely linked to the structure of the skull. Below are some key muscle systems:

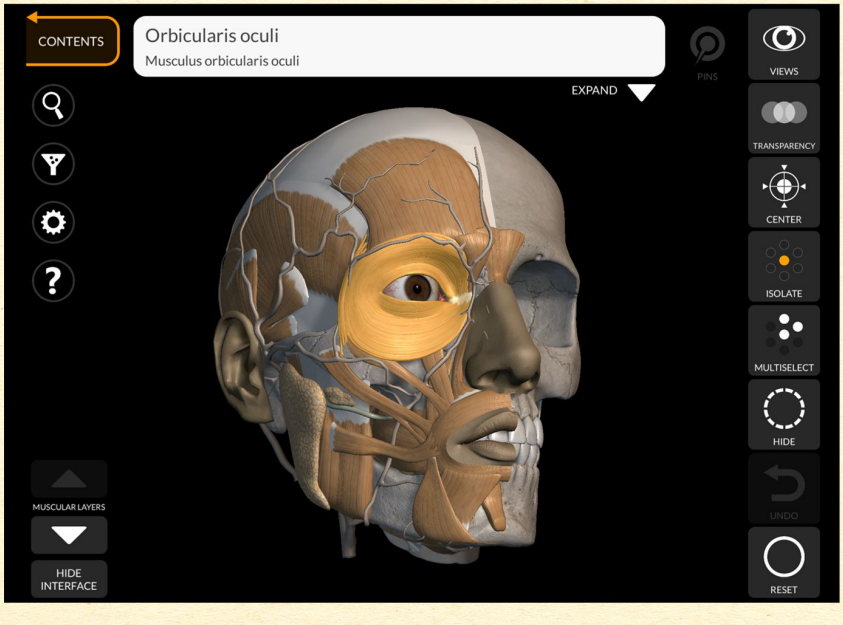
• **Orbicularis oculi:** The muscle surrounding the eyes.
• **Orbicularis oris:** The muscle surrounding the lips.
• **Masseter:** This is the muscle system that helps lift and protrude the jaw, supporting the temporo-mandibular joint area.
• **Cheek muscle system**
• The muscles surround **the calvaria.**



For understanding of human anatomy in depth, I recommend studying specialized anatomy books and materials. **“Atlas of Human Anatomy for the Artist”** by *Stephen Rogers Peck* is a useful resource to get started. In addition, some 3D technology apps and websites have made it easier for learners to access anatomy information such as **"Anatomy for the artists"** by *Catfish Animation Studio*.



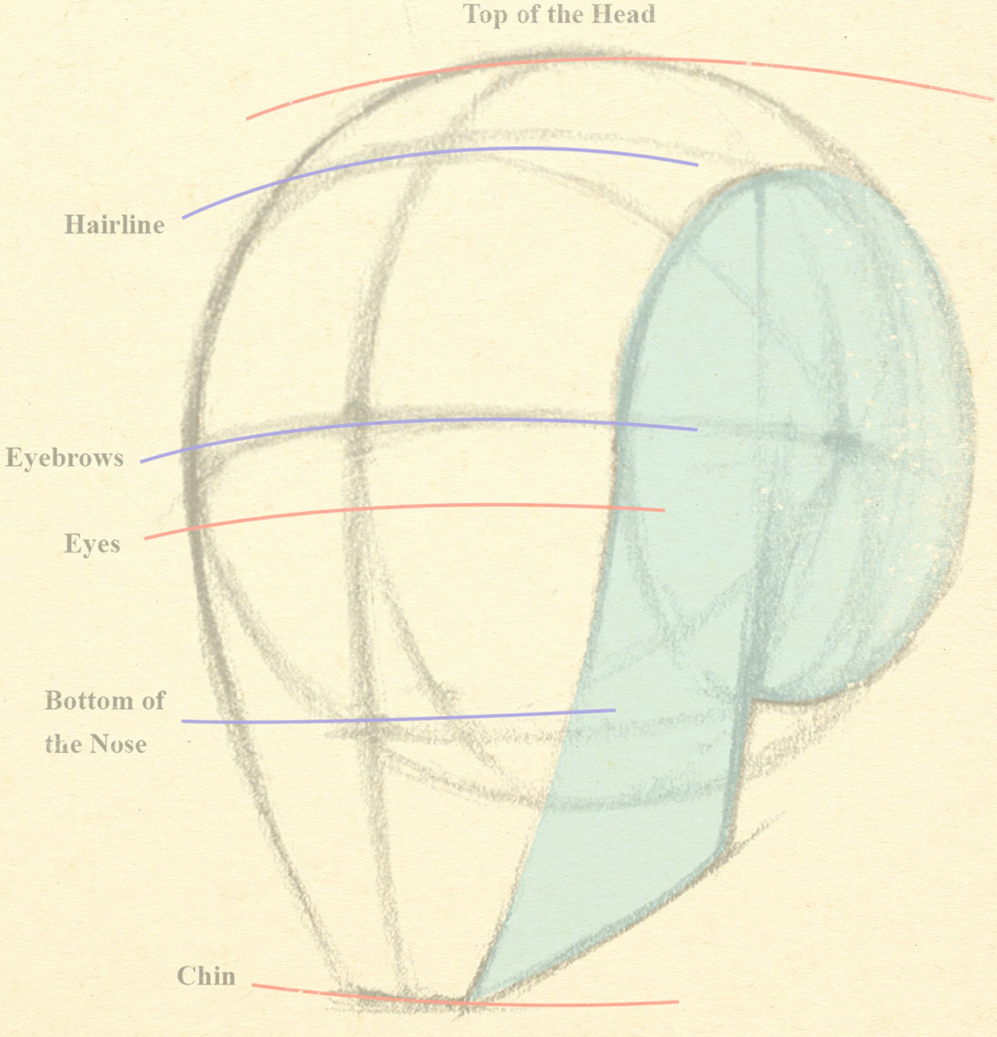
“Atlas of Human Anatomy for the Artist” by Stephen Rogers Peck

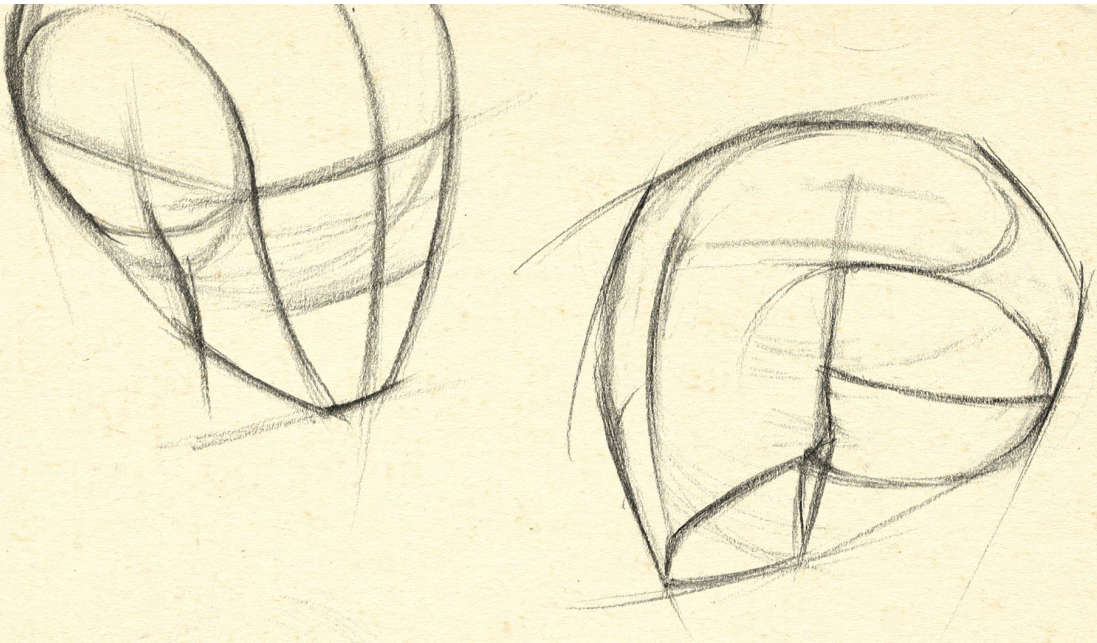


A screenshot from “Anatomy for the artists” app developed by Catfish Animation Studio

Chapter 2

The Loomis Method

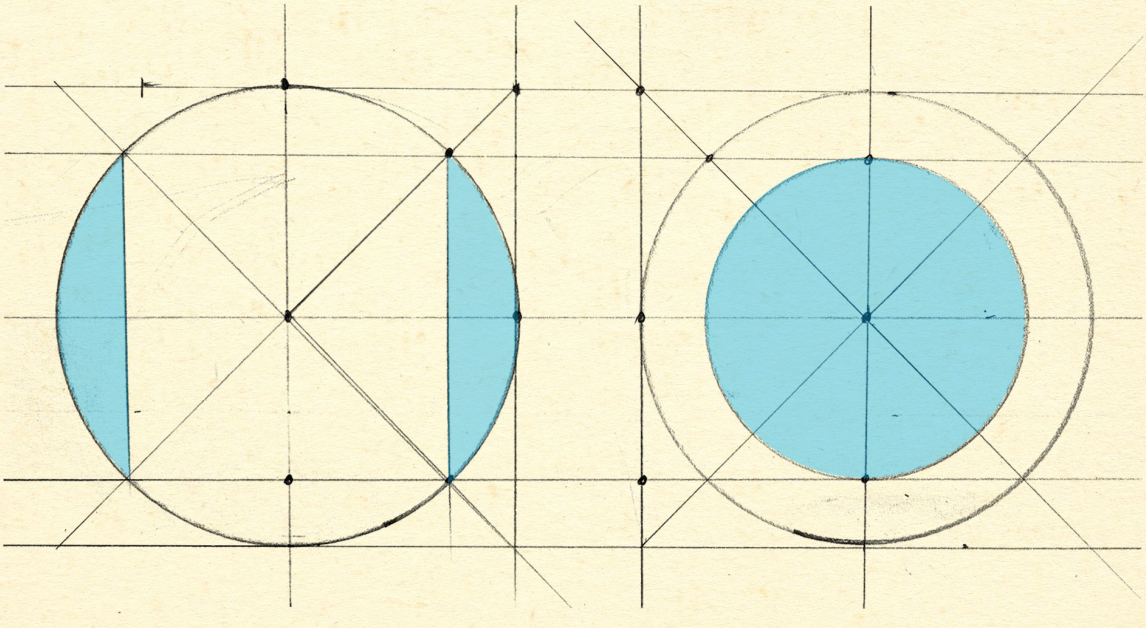




Andrew Loomis (1892-1959) was an American illustrator. Loomis, Andrew. Drawing the Head and Hands. New York: The Viking Press, 1956 is the book which has developed the foundation for an effective portrait drawing method of Loomis. This method is commonly used by visual artists.

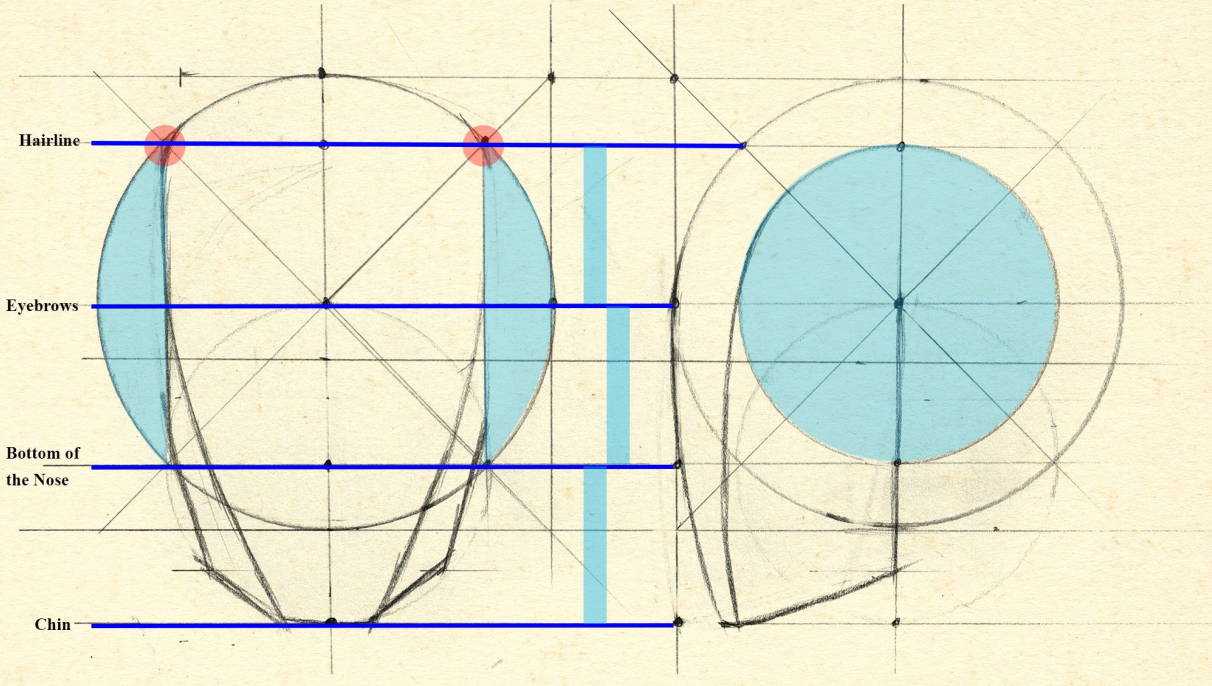
In this part, we will learn the portrait drawing method inspired by the Loomis method.

Portrait in frontal view and side view

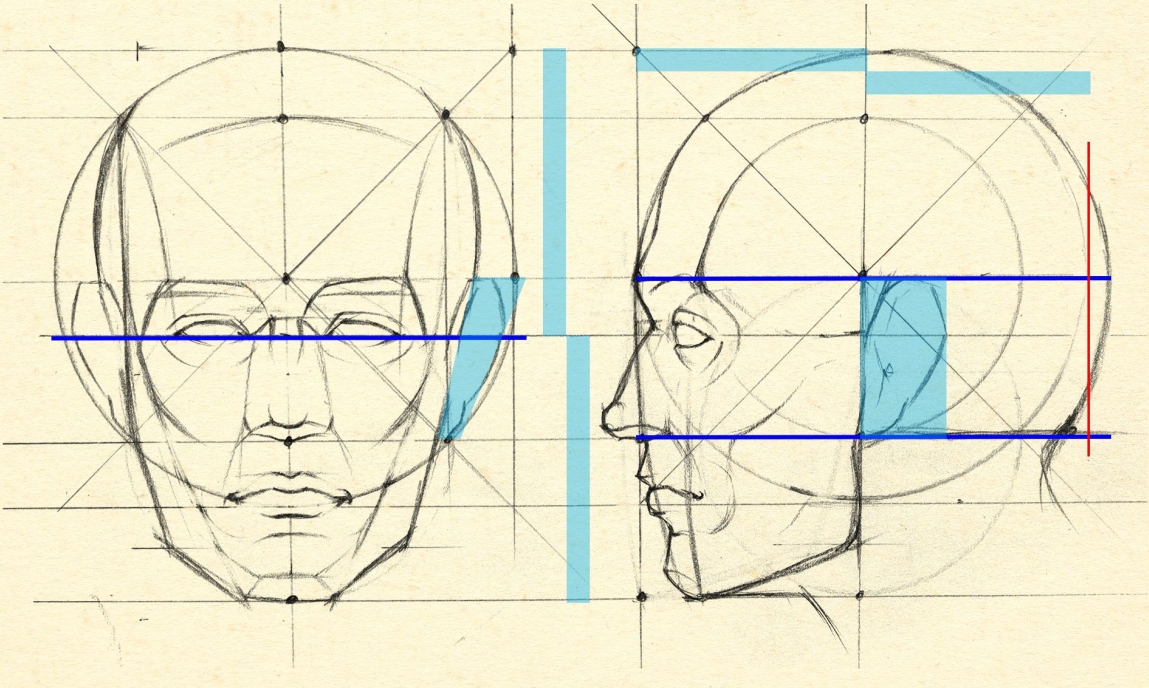


Front view *Side view*

To draw a portrait, the first step is to draw a **sphere** representing the upper skull of the head. The sphere will be partially removed to create a flat surface on both sides of the head. In the front view, we can draw two **45 degree** diagonal lines crossing the center of the circle. The position where the two diagonal lines intersect the circle is the position where the sphere is cut.



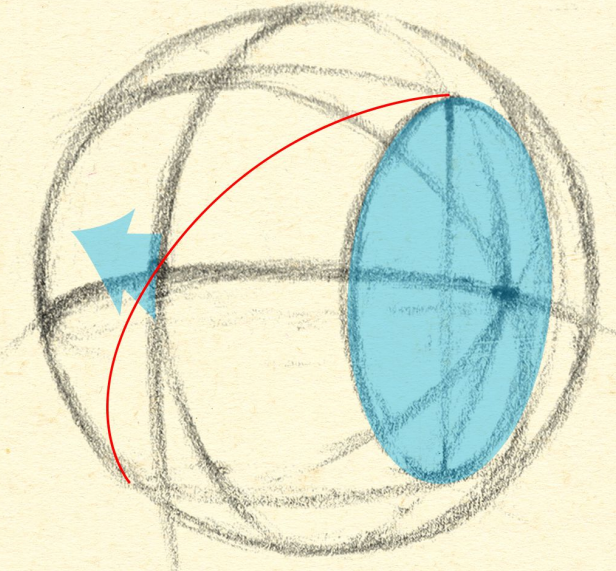
The position where the **two diagonal lines** intersect with the **circle** is the position of the **Hairline**. The **eyebrows** is in the center of the circle. Based on these two positions, we can measure and define the position of **the bottom of the nose** and **chin** based on the basic **Head Proportion** *(the measurements between the hairline - eyebrows = eyebrows - bottom of the nose = bottom of the nose - chin)*



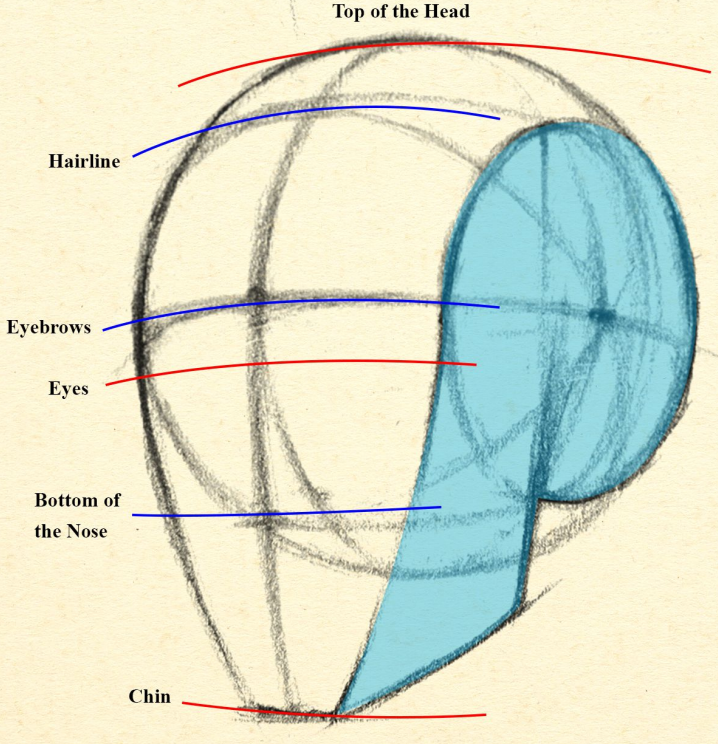
After defining the head height *(top of the head to the chin)*, divide this height in half to define the position of **the eyes**. At the same time, we have the position of **the ear** *(between eyebrows and the bottom of the nose)*. Based the Loomis Method learned from the previous section, we can also define the postion of **the lips**, and the **eye width**.

Drawing the Simplified Human Head

In this demonstration, we will practice the Loomis method by drawing the simplified human head from the Three-Quarter view.

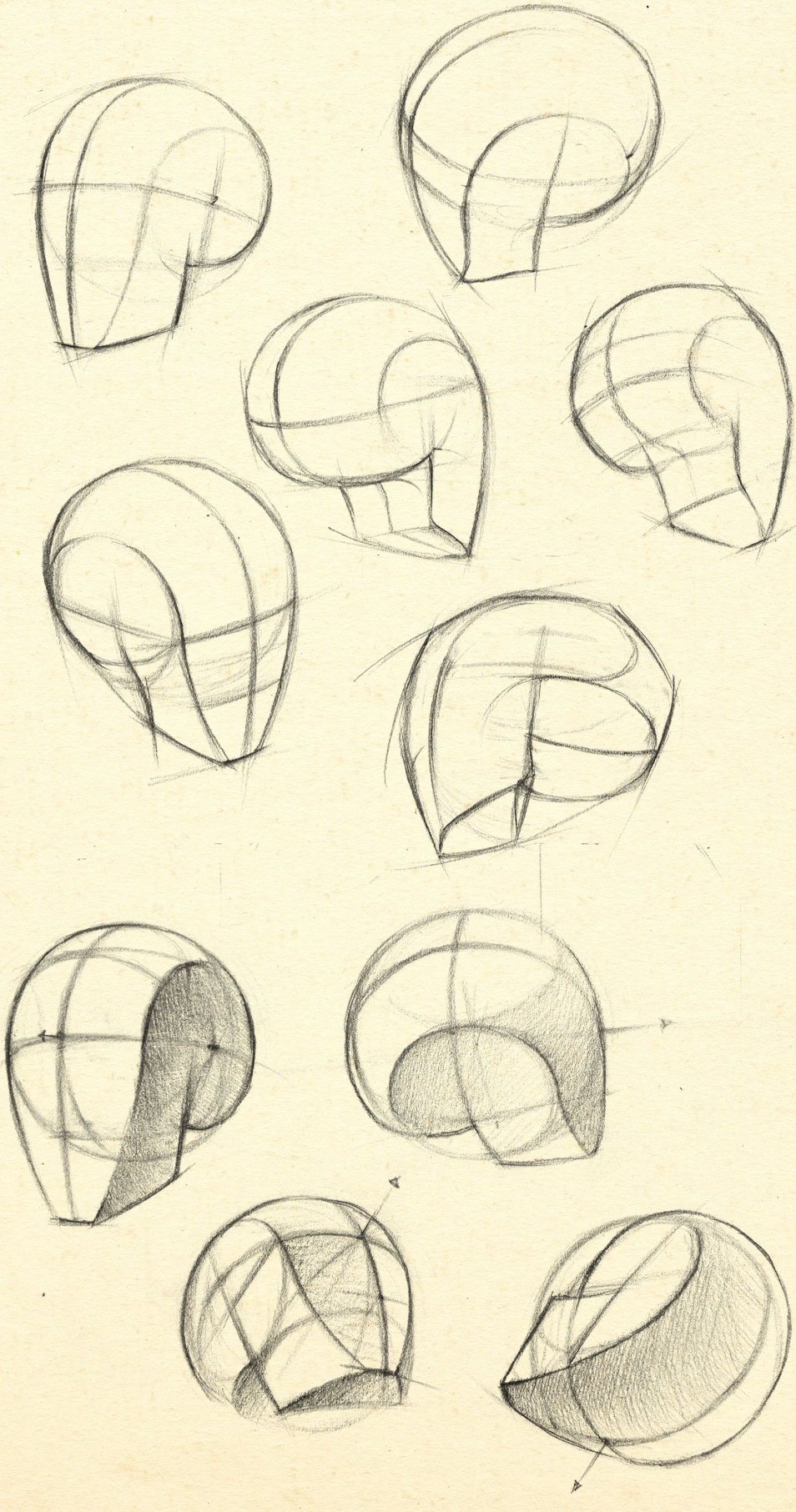


Drawing the **sphere** and defining the face's direction. Flattening both sides of the the sphere. In this angle of view, the shape of the flattened areas will be oval shapes instead of circles.



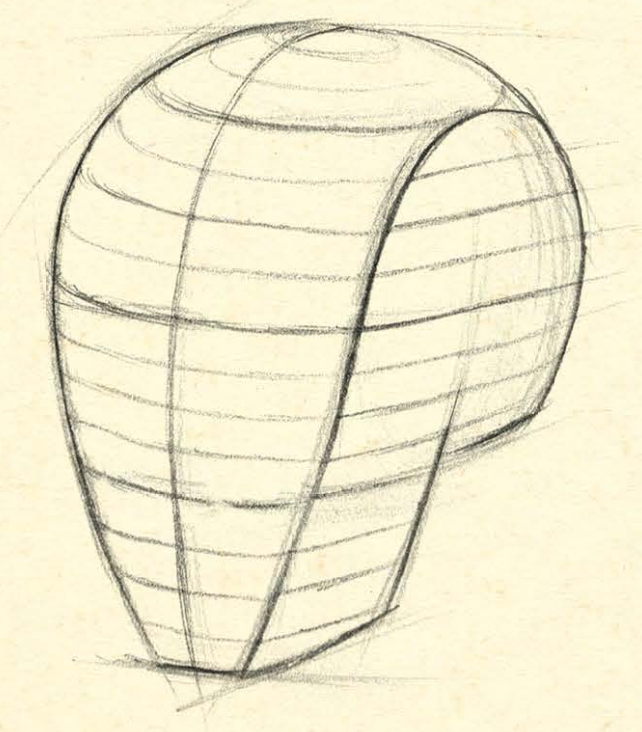
Based on the Basic Head Proportion and Loomis Method, defining the position of the **hairline, eyebrows, eyes, bottom of the nose, ear** and **chin**. The flattened areas are linked to the side of the face (Cheek, Jaws, and chin)

Practice drawing the Simplified Human Head in various angles of view

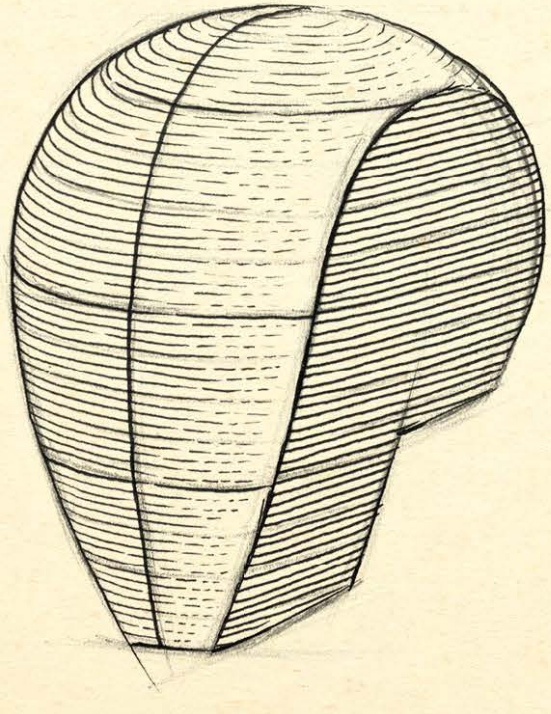


Pen and ink drawing techniques | Human head simplified form

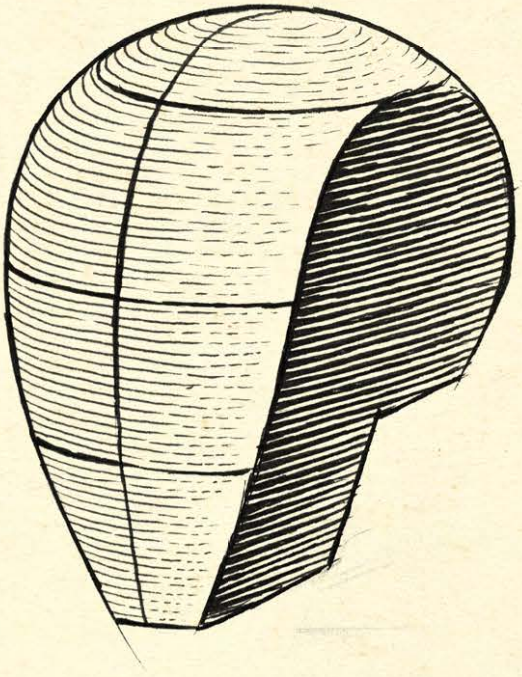
Before drawing the portrait with pen and ink, we can practice drawing the simplified human head to get used to the head basic struture. For drawing the simplified human head, we will only focus on the head form instead of the details. Using basic straight, curved and broken pen drawing line to practice the exercise below.



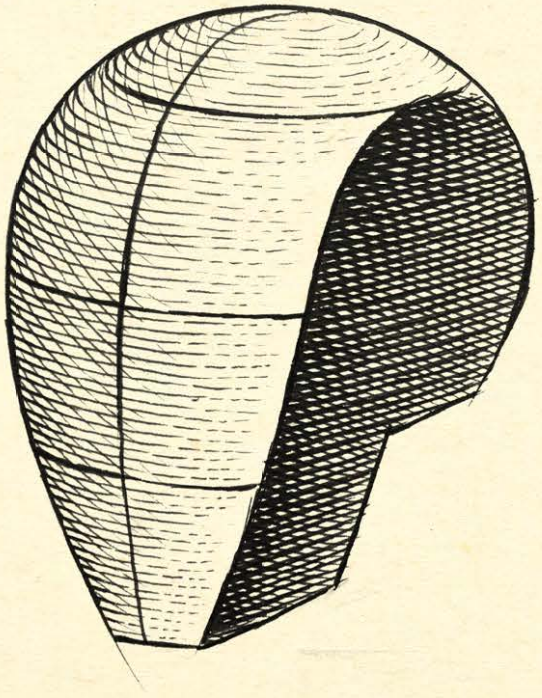
Sketch the simplified form of human head based on the **Loomis method** *(We can ignore the face component for this excercise)*. Define the line directions by "cutting" the head horizontally. Start drawing the overall value by using cross-contour hatching technique.



Following the line direction defined in the first step, drawing the overall value by using multiple pen drawing techniques. The continuos lines can be used in the dark and the mid-tone areas, and the broken lines can be used in the Direct Light and Highlight areas.



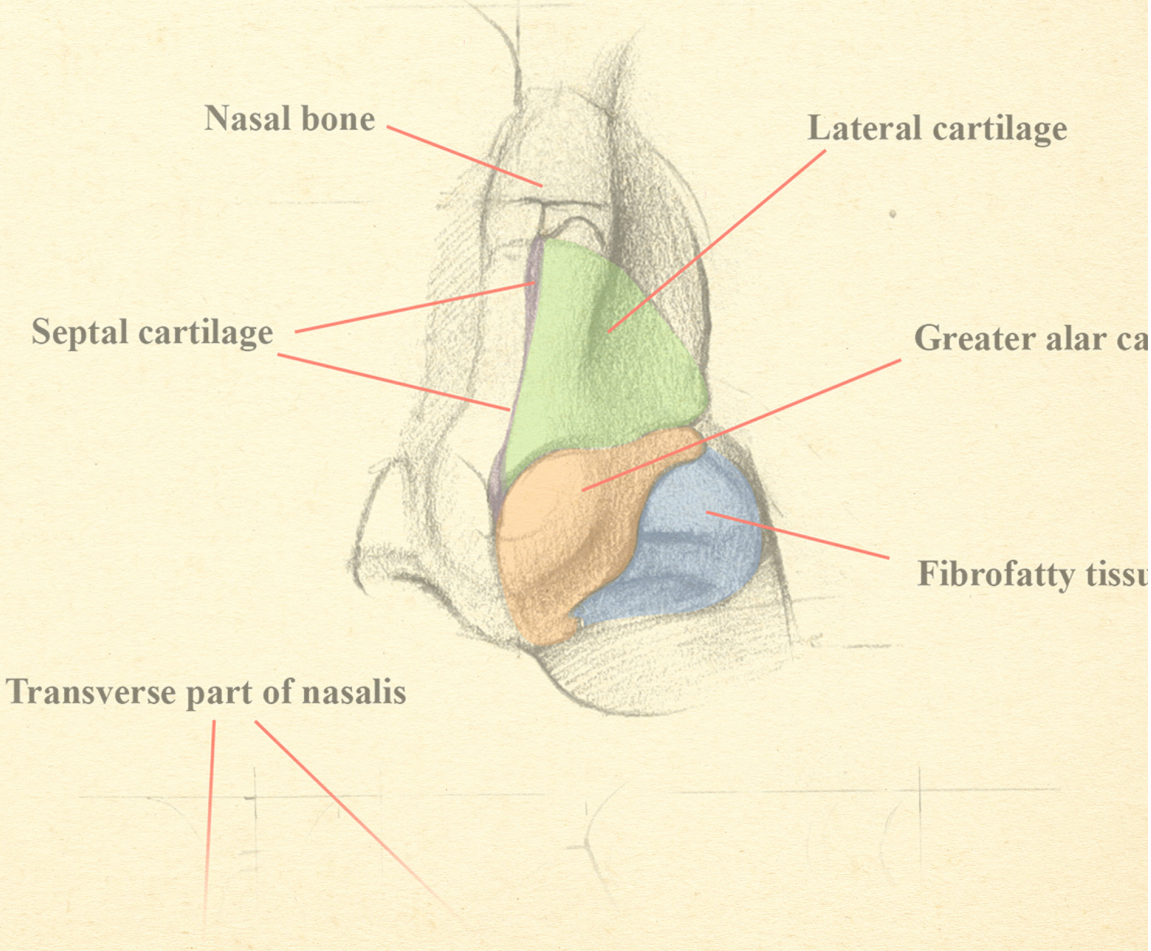
From the overall tonal value, we can define some key shading components. The Core Shadow will be at the sharp edge in the position of the cheek. From there, we can increase the line thickness (Line weight). At the same time, we can also express the Reflected Light areas on the right side.



To improve the value balance and enhance the contrast in your exercise, you can apply the Cross-Hatching layer to emphasize the Core Shadow, the mid-tone and other areas.

Chapter 3

The Basic Structure & Anatomy



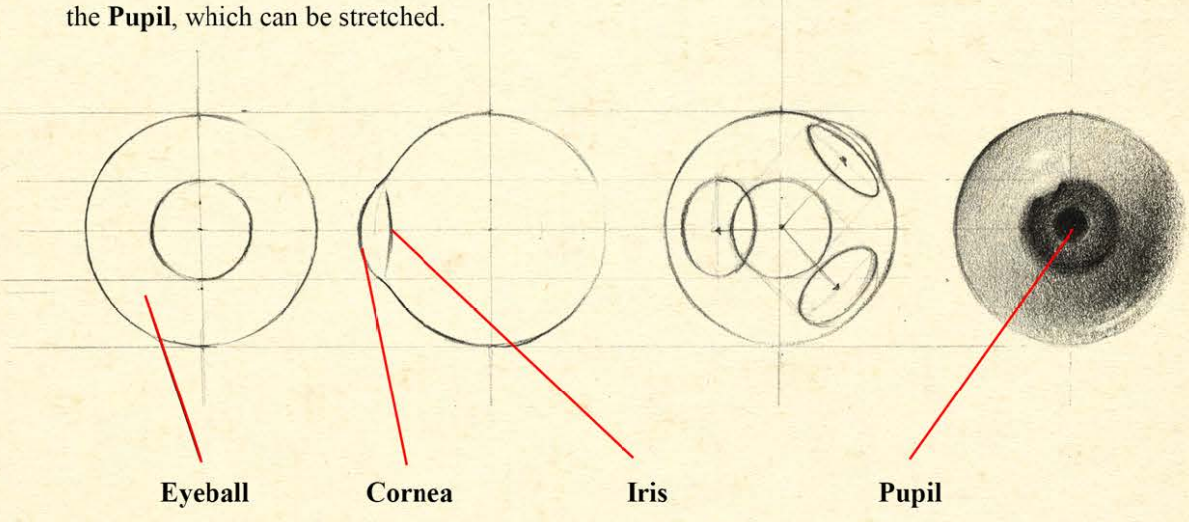
PORTRAIT DRAWING

In this chapter, we will start to learn the details of Portrait Drawing. This chapter includes both Portrait Basic Anatomy and Pen Drawing Techniques. Let's get started with Face Components.

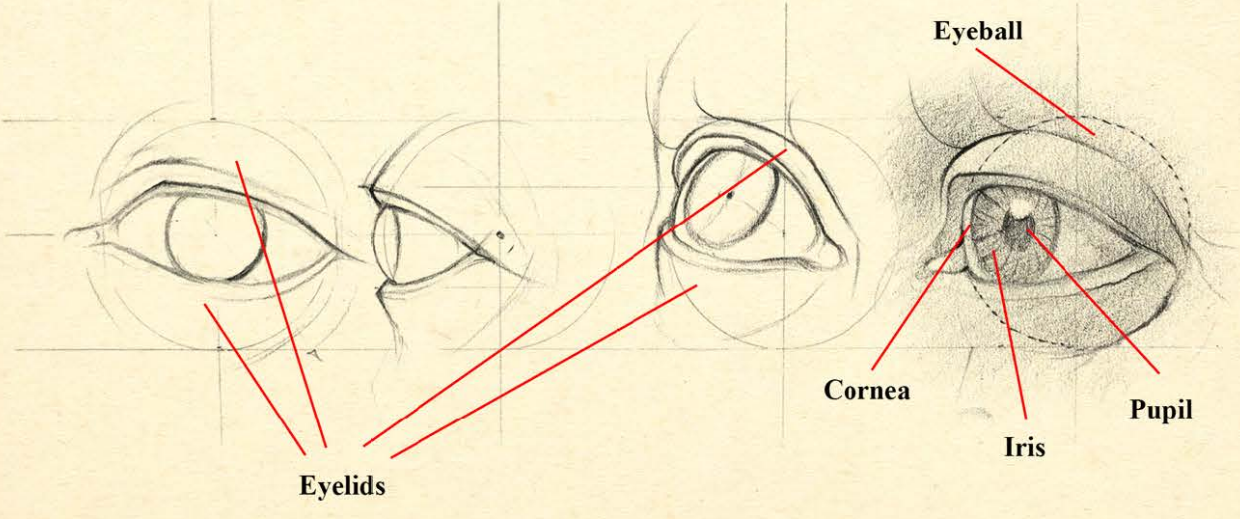
The eye

The basic structure

The **Eyeball** *(Oculus)* is a spherical form, located in the eye socket *(Orbits)*. The eyeball contains the **Cornea**, a convex transparent part, surrounding the **Iris** which is concave. In the middle of the Iris is the **Pupil**, which can be stretched.

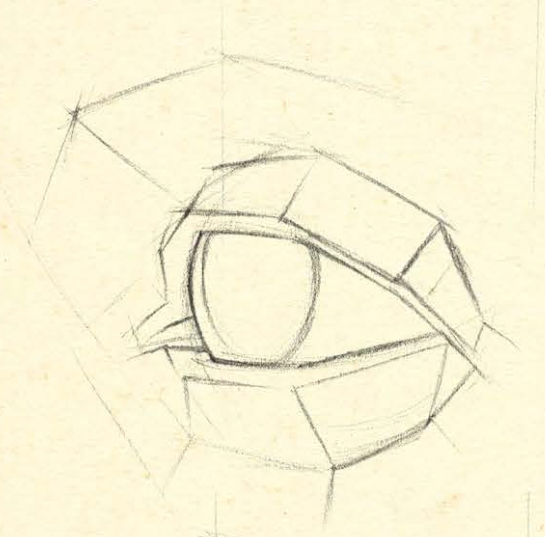


The eye is protected by the surrounding bones, muscles and tissues and is only partially exposed. **Eyelids** are soft structures that directly protect the eyes from external influences.



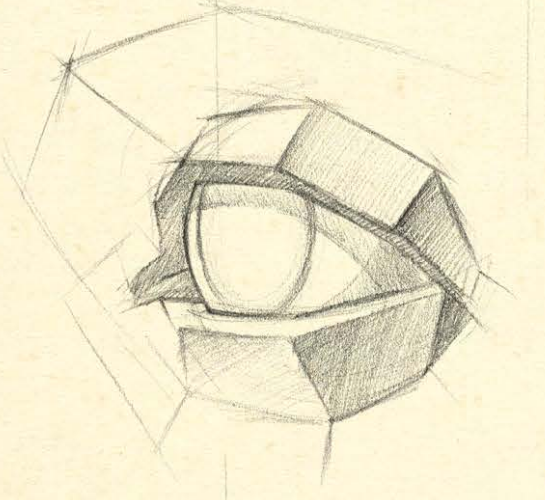
Drawing the Simplified Form of the Eyes with Pen & Ink

As usual, I always recommend everyone to learn drawing the simplified form before the realistic expression. In this demonstration, we will learn how to draw the simplified form of the eye with pen.

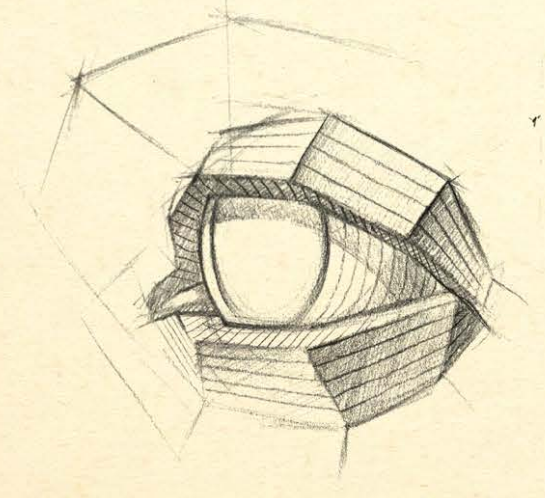


The **Eyeball** is a basic form itself, a sphere. Therefore, we can simply draw the Eyeball as a sphere contained within the Eyelids.

The **Eyelids** are also look like a part of the sphere. However, to define the structure easily, I recommend to simplify the eyelids into simple planes facing in different directions.

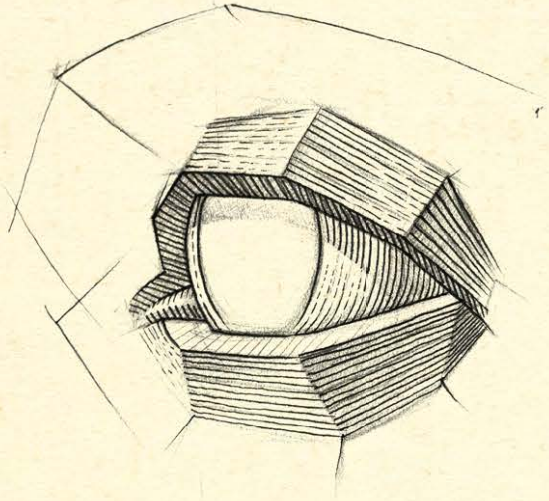


Before applying the pen and ink drawing, we can use pencils to define the overall tonal value.

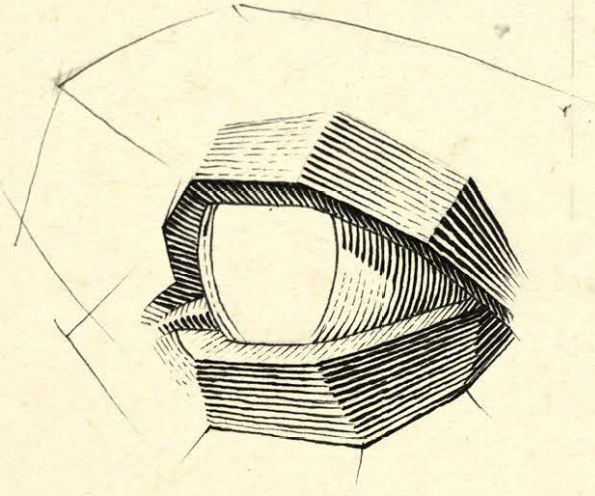


The eyeball is a sphere, so we can use the same basic form shading techniques to apply on this part of the eye.

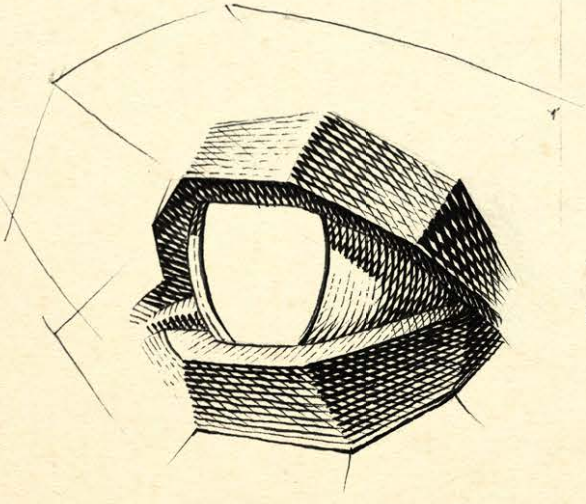
Follow the direction of the eyelids, we can draw some parallel lines to define the drawing line direction.



Based the the line direction defined in the previous step, we can start to work on the **Overall Tonal Value** with pen and ink. We can use multiple basic pen drawing techniques to express the value.



When the overall value defined, let's focus on the **Key Shading Component** such as the Core Shadow, the Reflected light,... These components can be expressed by changing the line thickness.



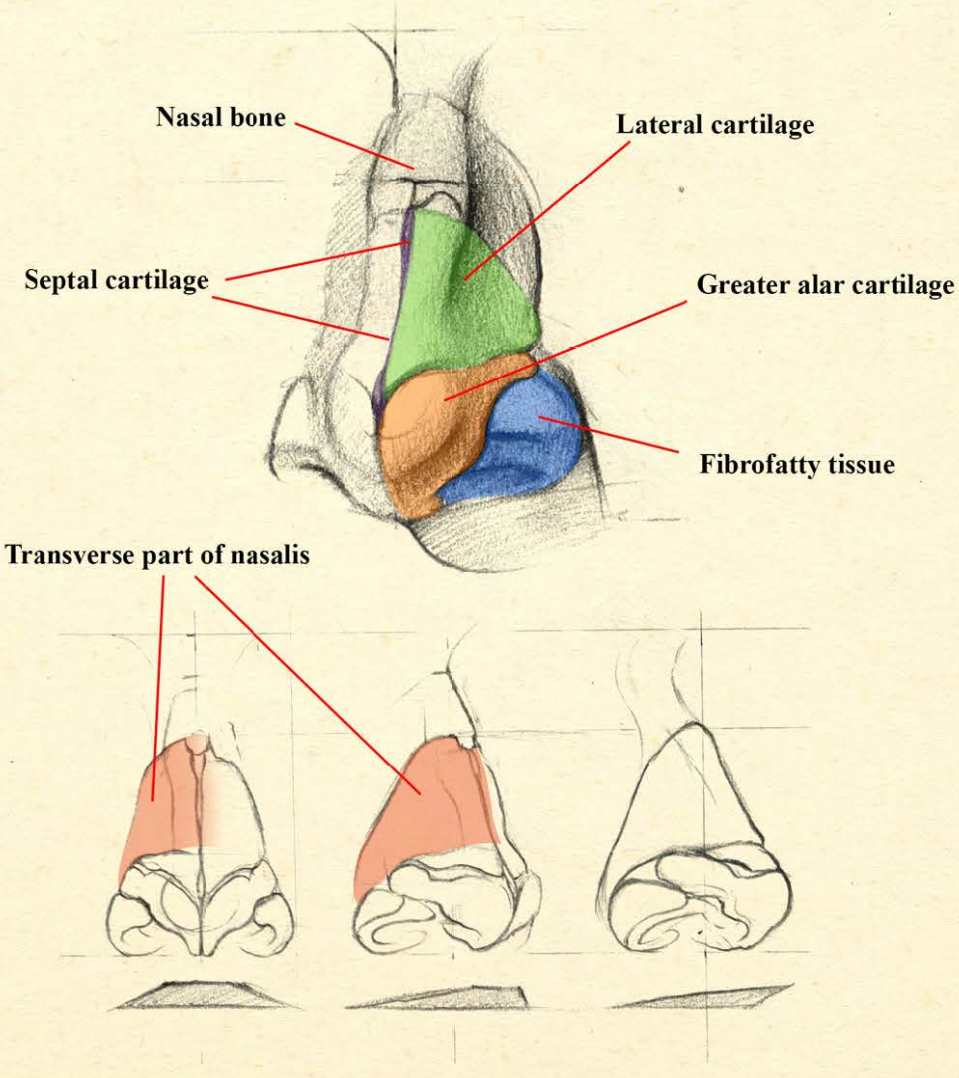
To enhance the value and the contrast, we can use the cross-hatching technique.

The nose

The basic structure

The nose connects directly to the **nasal bone** through tissue, muscle, and cartilage structures. Some major nose's anatomical parts are mentioned below.

Nasal bone: Is a protruding position on the top of the nose that can be felt from the outside.
Lateral cartilage, *lateral process of septal nasal cartilage*: Is the large upper cartilage on both sides of the nose.
Septal cartilage: The middle cartilage located in the center of the nose.
Greater alar cartilage: Cartilage on both sides close to the tip of the nose.
Transverse part of nasalis: Is the part of the muscle that crosses and overlaps the septal and lateral cartilage.
Fibrofatty tissue: The tissues that cover and form the nostrils.

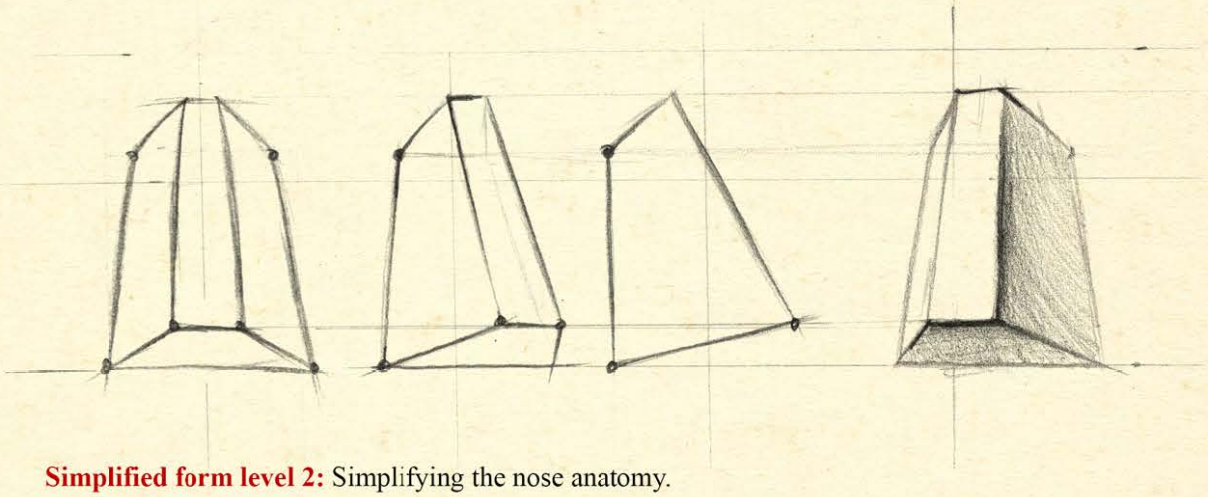


The nose

Simplified form

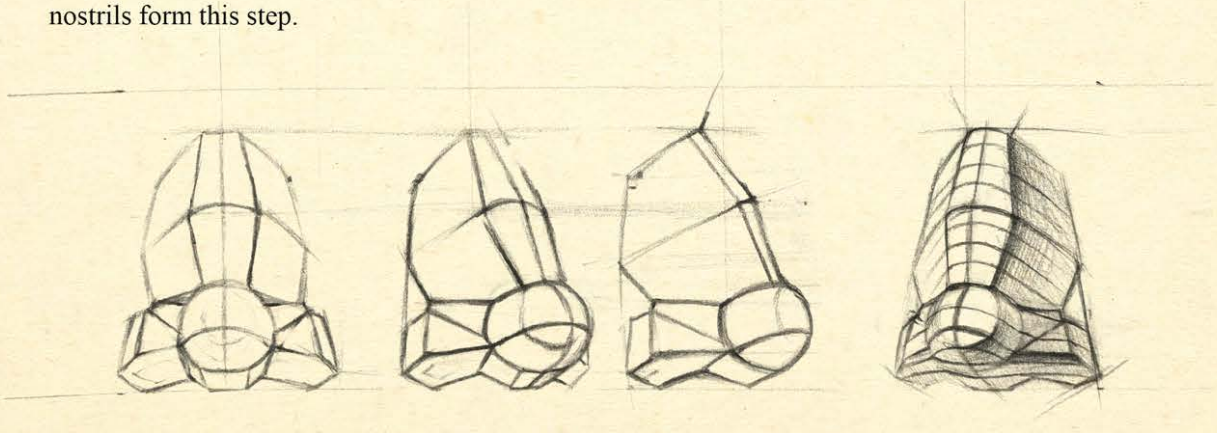
Simplified form level 1: The nose can be simplified into a single basic form consisting of planes.

Frontal plane: Shows the bridge of the nose from the nasal bone to the tip of the nose.
Side planes: Includes lateral cartilage, parts of greater alar cartilage, and the transverse part of nasalis.
Bottom plane: Is the plane connecting the nose to the lips area, containing the lower part of the alar cartilage and the nostrils.

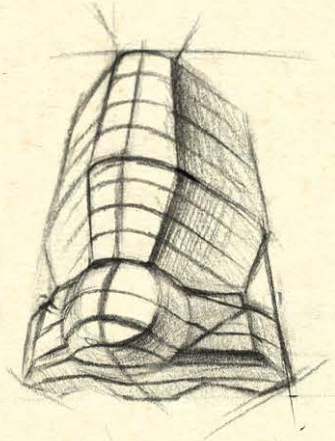


Simplified form level 2: Simplifying the nose anatomy.

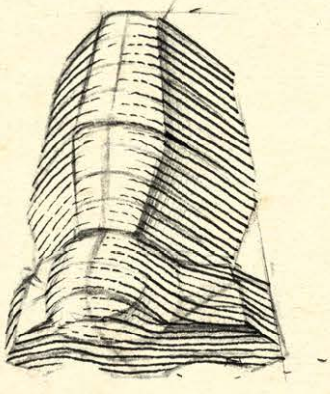
Simplify the bridge of the nose: The bridge of the nose includes the nasal bone, septal cartilage and partial major alar cartilage.
Simplify the tip of the nose: The tip of the nose can be simplified into a sphere that connects to two greater alar cartilages and the bridge of the nose.
Simplify the fibrofatty tissue: The fibrofatty tissue can be simplified into a form with multiple flat surfaces.
Simplify the bottom part of the nose: The bottom part of the nose is the connection between partial greater alar cartilage to the nose tip and the fibrofatty tissues. We can also define the positions of the nostrils form this step.



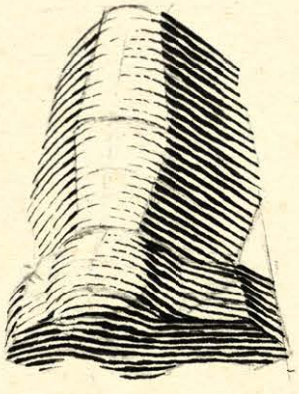
Drawing the Simplified form of the Nose with Pen & Ink techniques.



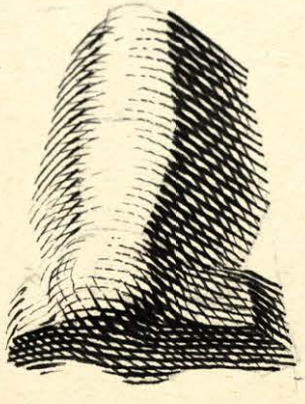
Starting with a sketching of the nose's simplified form. Based on the form structure, the drawing line direction can be defined. In addition, we will add the overall value shading with pencils.



Based on the drawing line direction and the overall tonal value in the previous step, using multiple pen & ink techniques to express the overall value.



Add depth to the nose drawing by increase the line thickness to express the key Shading Components such as Core Shadow, Reflected Light, Mid-tone,...



To enhance the contrast and the balance of value, we can apply the cross-hatching layer using the same pen & ink drawing techniques.

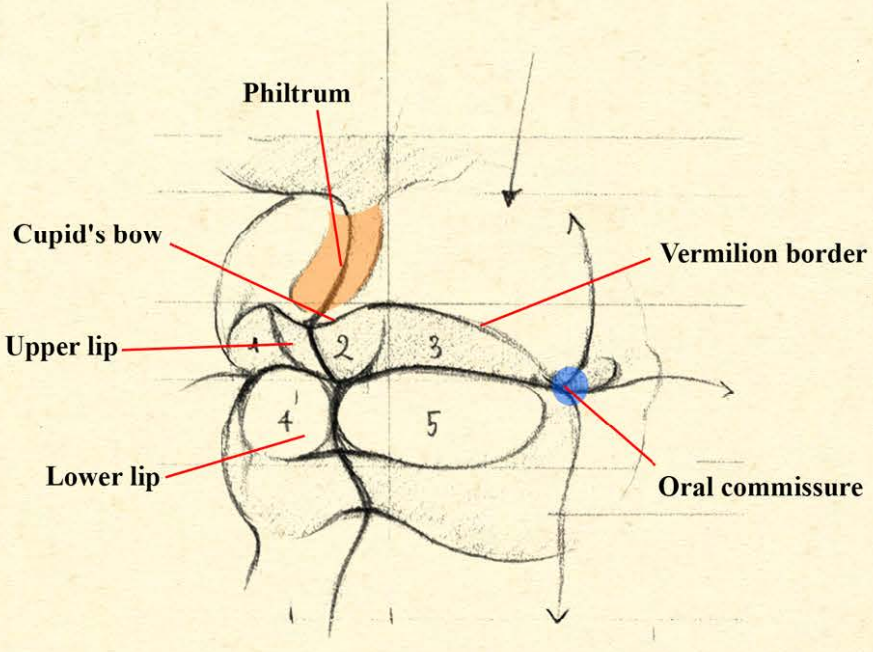
The lips

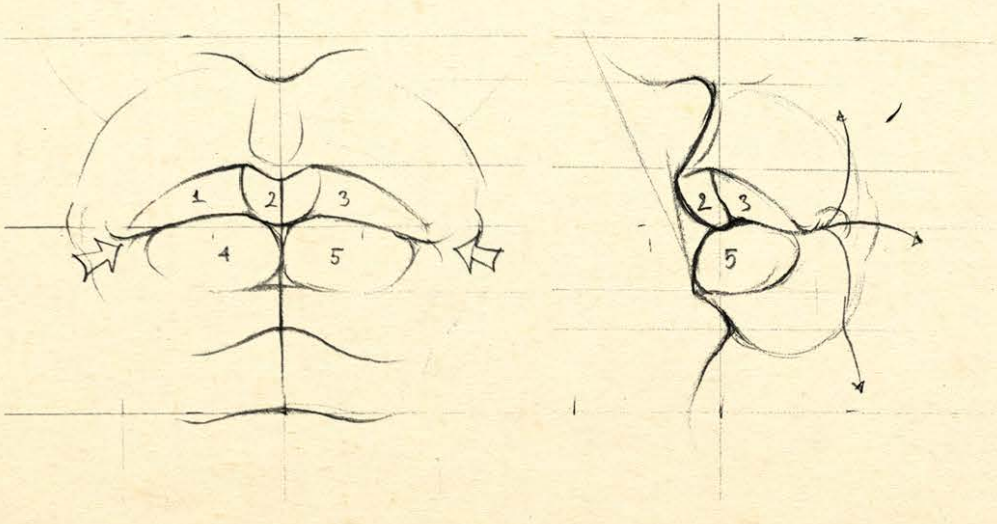
The basic structure

The external structure of the mouth includes the surrounding muscles and lips.

Orbicularis oris: A complex muscle that surrounds the lips and connects to surrounding muscles on the face.

Lips: Including **upper lip** and **lower lip**. The **vermilion border** is a border that defines the boundary between the lips and surrounding skin. **Cupid's bow** is a double curved line located in the center above the upper lip. The **philtrum** is the connection between the upper lip and the bottom of the nose. **Oral commissure** is where the upper lip and lower lip conntected *(at the corner of the mouth)*.



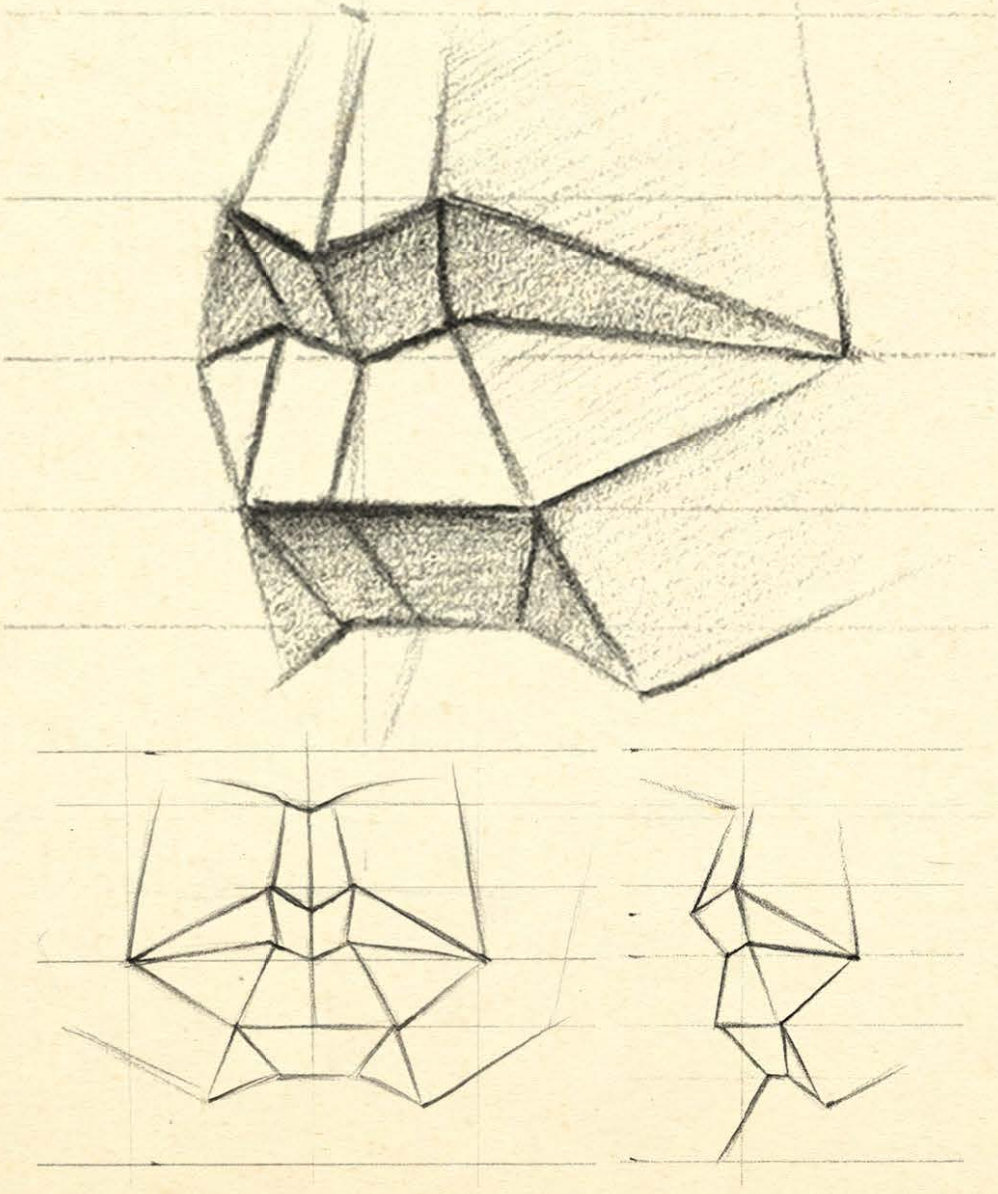


The lips

Simplified form of the lips

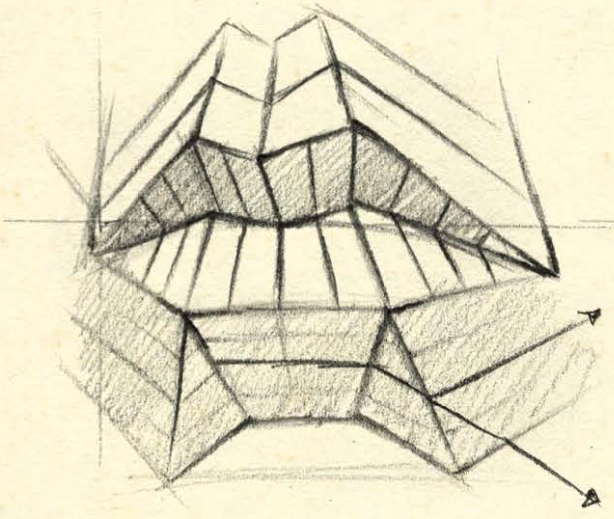
The lips can be simplified into planes:

Plane above the lips: Facing up planes. These flat surfaces includes the lateral subunits, philtrum and Cupid's bow.
Upper lip plane: The upper lip is facing downwards, and we can use planes to represent the upper lip. The plane can be divided it into smaller structures to express the connection with the vermillion border and Cupid's bow.
Lower lip plane: Planes facing up representing the lower lip.
Plane below the lips: The plane facing downwards connect to the chin. This plane is concave in the middle.

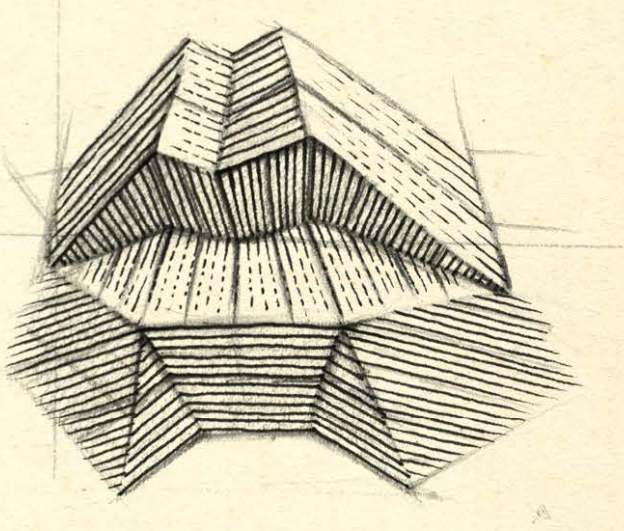


The lips

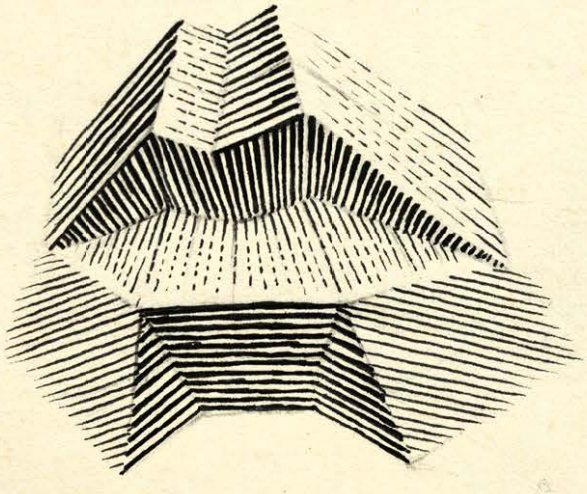
Drawing simplified form of the lips by using pen and ink



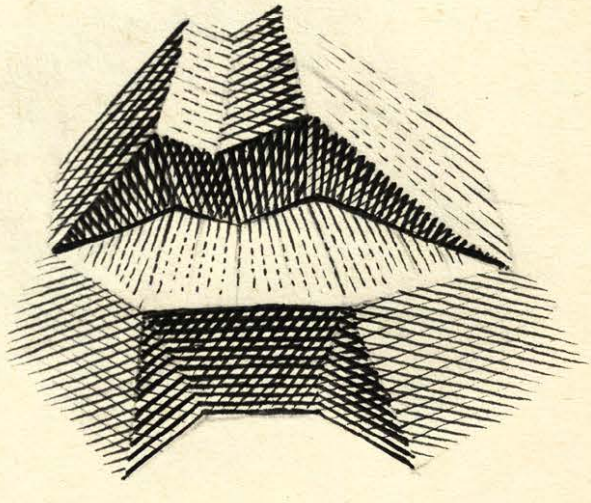
Sketching the simplified form of the lips based on the planes structure. At the same time, we can use pencils to add the overall shading and define the line drawing direction.



Using multiple pen & ink drawing techniques to express the overall tonal value. The line direction for the lips can be vertical instead of horizontal like the surrounding surface.



Using multiple pen & ink techniques to express the shading. Changing the line thickness to add depth to the drawing.



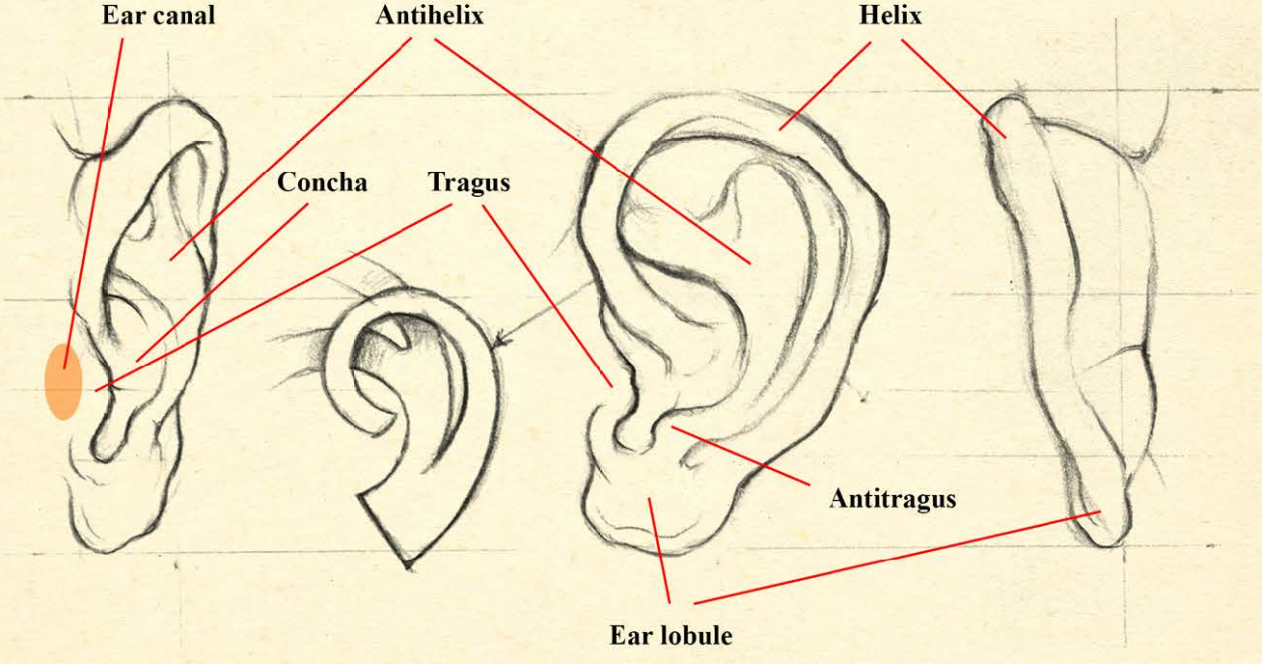
Enhance the drawing by using the cross-hatching technique.

The Ear

The basic structure

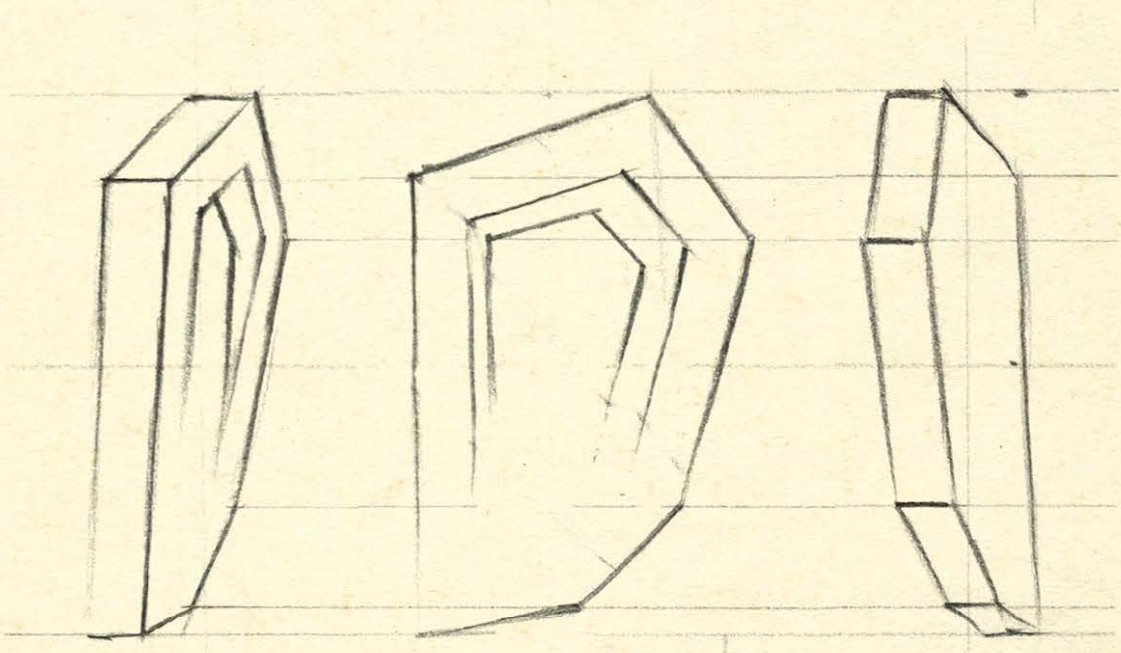
The outer ear has a complex structure. We can breakdown the anatomical parts of the ear into:

Ear canal, *external auditory meatus:* Is an important part connecting the outer ear and inner ear.
Concha: The surface located near the ear canal.
Helix and Antihelix: Helix surrounds the edges of the ear in the shape of a question symbol (?). The Antihelix has a Y-shape surrounding the concha.
Ear lobule: Is the only soft structure of the ear that does not contain cartilage, connected to the Helix.
Tragus and Antitragus: Tragus is the small piece of ear cartilage located outside the ear canal, Antitragus is a small piece of cartilage located right above the ear lobule, and Intertragic notch is the groove between the Tragus and Antitragus.

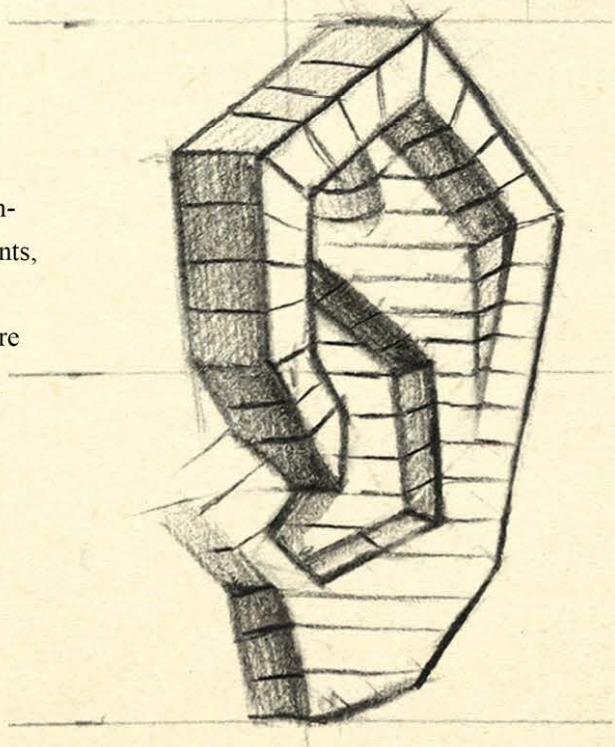


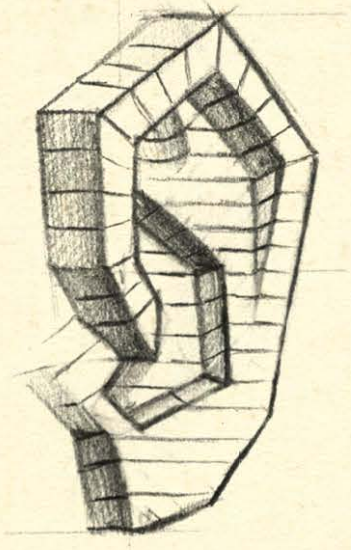
The Ear

Simplified form of the ear

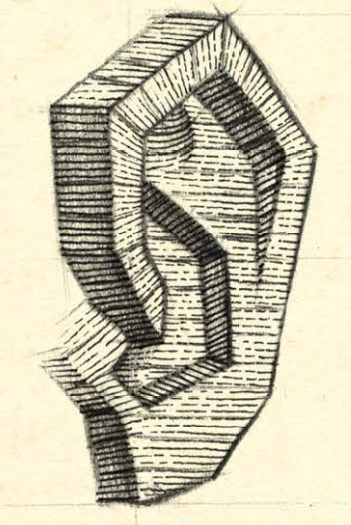


Similar to the technique we used to simplified the form of other face components, the ear can be simplified by using flat planes. Based on the simplified structure discussed in the previous section, each part of the ear can be simplified into planes that face in multiple direction.

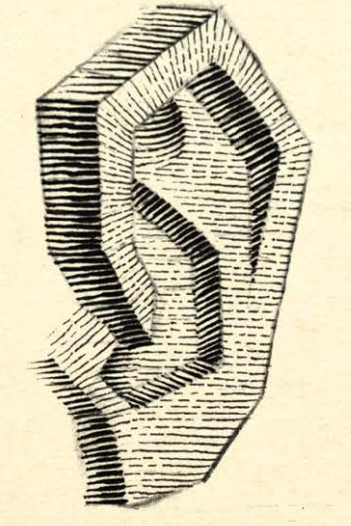




Based on the simplified form, analyze the structure by using contour lines. In addition, apply the overall tonal value by using pencils.



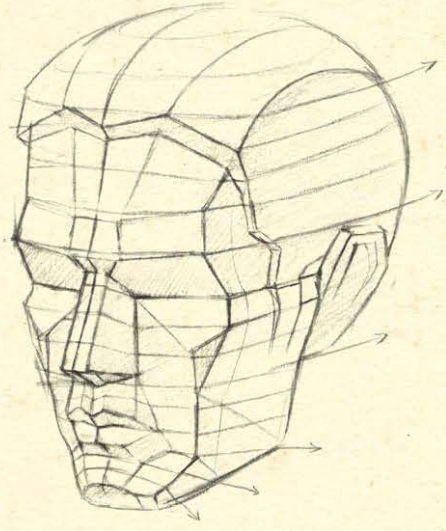
Following the contour in the previous step to apply the pen & ink drawing. In this step, we just need to use some basic pen & ink drawing techniques to express the overall shading.



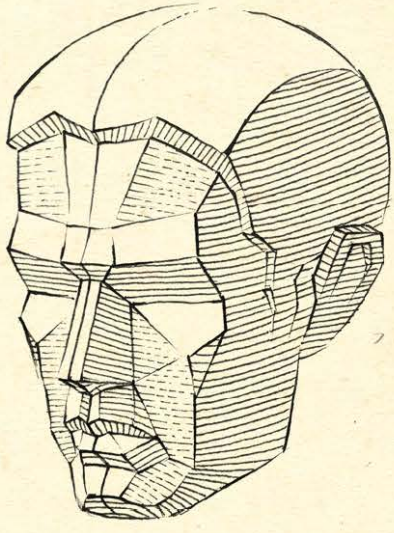
Add depth to the drawing by changing the line thickness to enhance the key components of shading.

Simplified Portrait Drawing

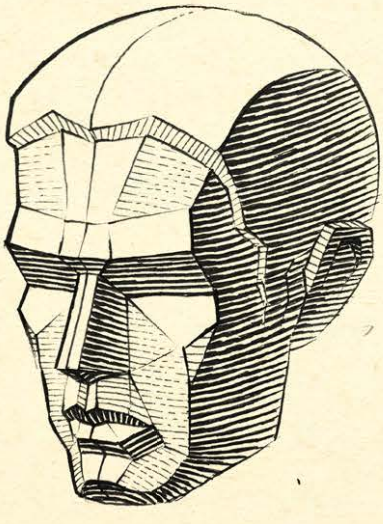
Different than the Simplified Human Head form we practiced in the earlier section. In this section, we will draw the Simplified Portrait based the the Lomis Method, the Basic Human Head and the Simplified Face Components we discussed in the previous section. The point of this exercise is to understand the connection between parts of the face, and combine them into one drawing with the same lighting.

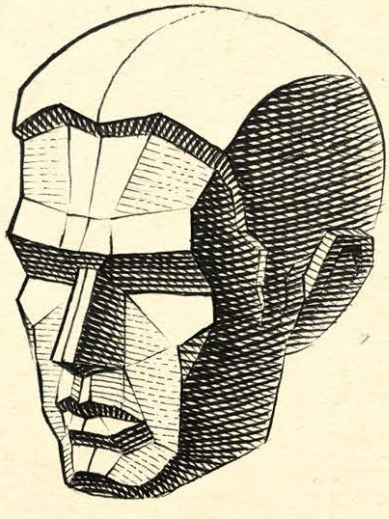


The first step is to sketch the simplified portrait based on the Loomis Method and the Simplified Face Components form. In this step, we will only use flat planes to draw the portrait, drawing eyes is optional.



The second step is to use contour drawing technique to define the drawing line direction. Using the basic pen & ink drawing techniques to add the overall shading.

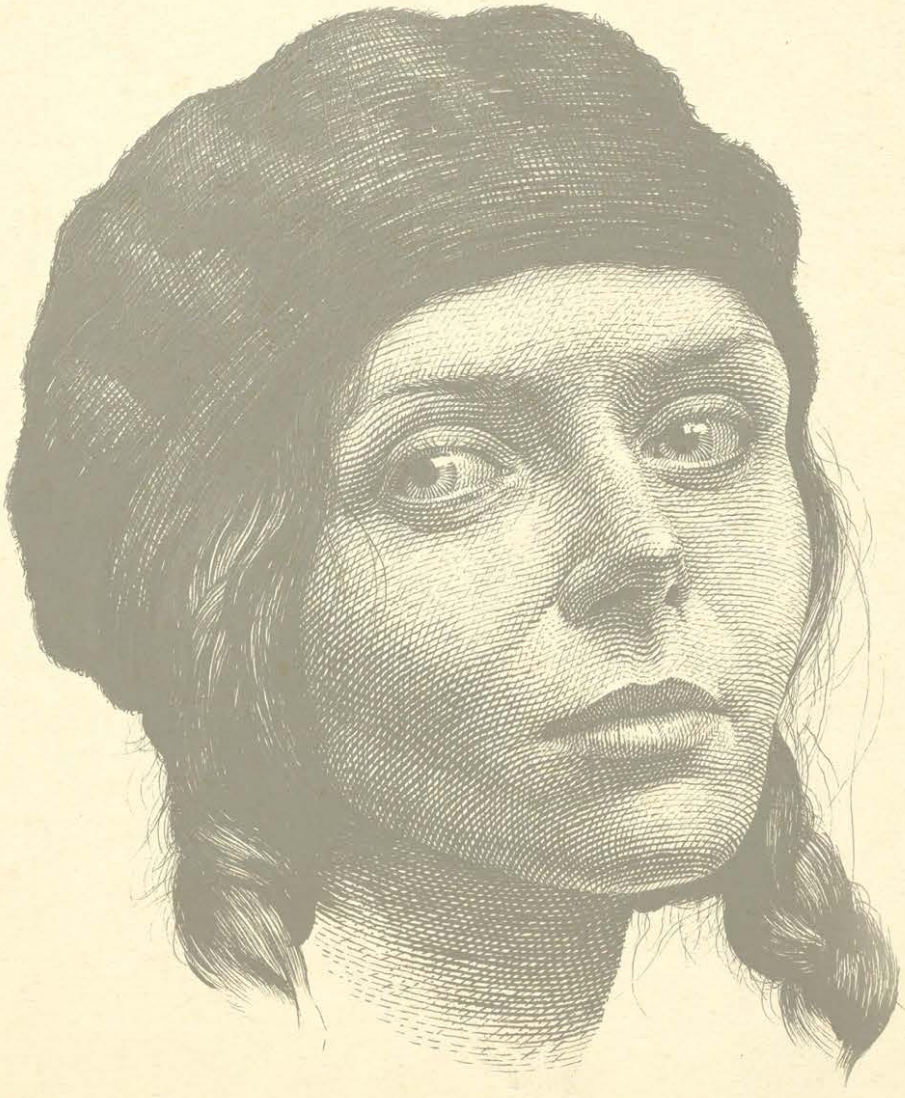




Using multiple pen & ink techniques to express the tonal value. Changing the line thickness to enhance the shading key components. In addtion, we can apply the cross-hatching to imphasize the shading and the contrast.

Chapter 4

Portrait Pen & Ink Drawing

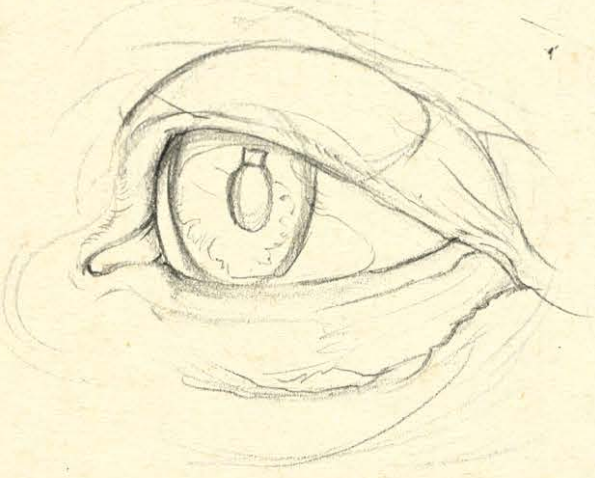


REALISTIC PEN & INK DRAWING

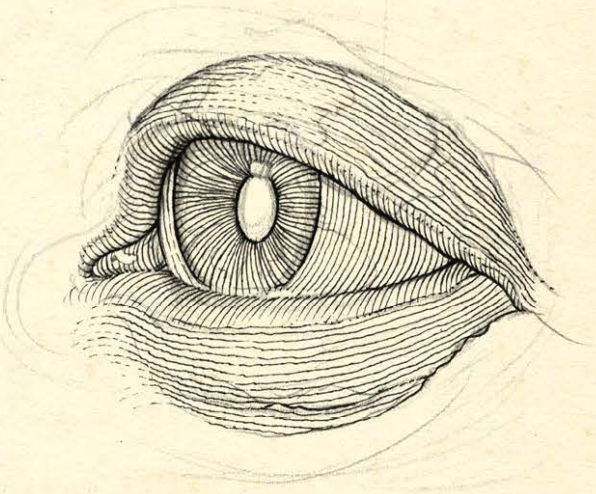
Now we have completed the fundamental concepts & techniques. In this chapter, we will get started to drawing realistic portrait by using pen & ink.

The eye

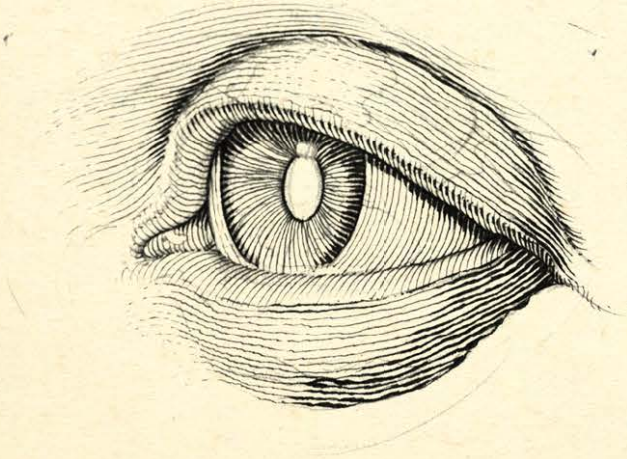
Following the previous section, we will start to draw the eye in realistic style.



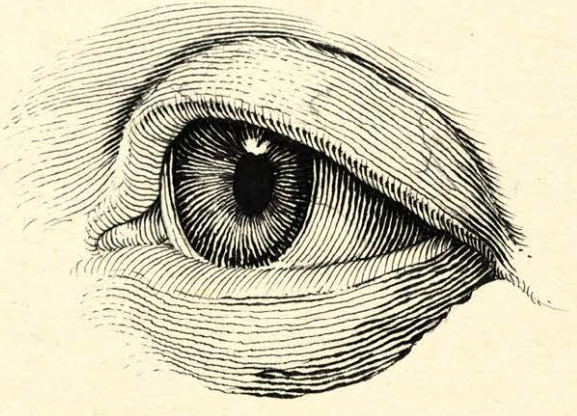
Step 2: Using pencils to sketch the eye. In this step, we will use curved sketching lines to express the realistic structure.



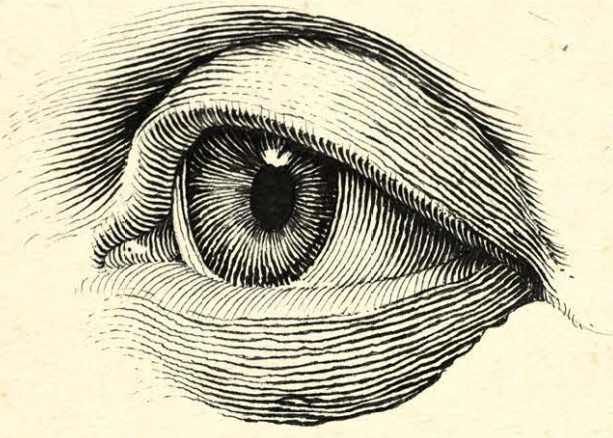
Step 2: Adding the overall shading by using the basic pen & ink techniques. Slowly draw following the curved form of the eyeball and eyelids to express the sphere form.



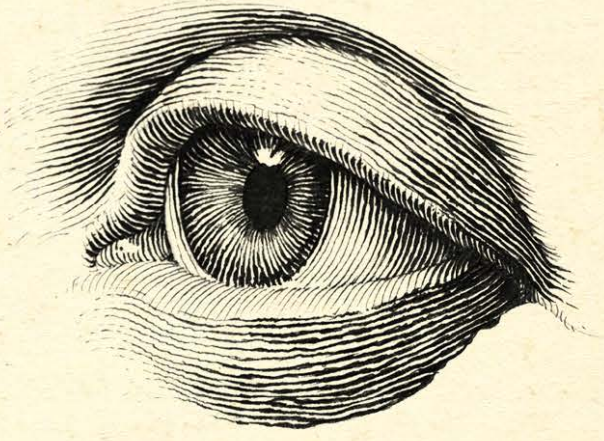
Step 3: Add shading in the darkest (lowest value) areas to capture the contrast.



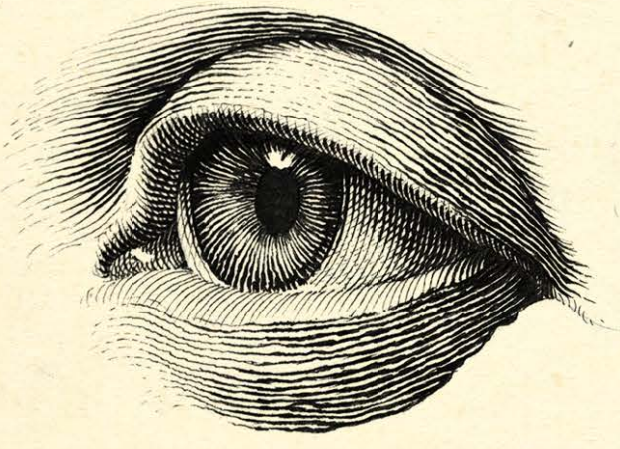
Step 4: Continue adding shading in the lowerst value areas and expressing the Core Shadow.



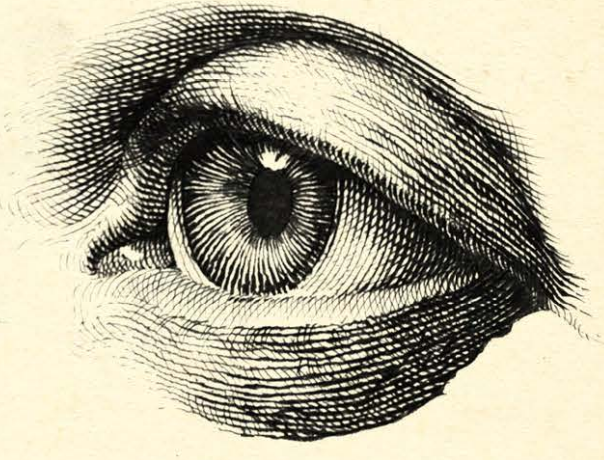
Step 5: Based on the darkest areas and the Core Shadow we have, we can extend the shading to express the mid-tone, reflected light and the direct light. In this step, we change the line thickness to perform the tonal value and balance the contrast.



Step 6: Now we defined the key shading components in the drawing, and we just need to play with and modify the value until the drawing looks more realistic.



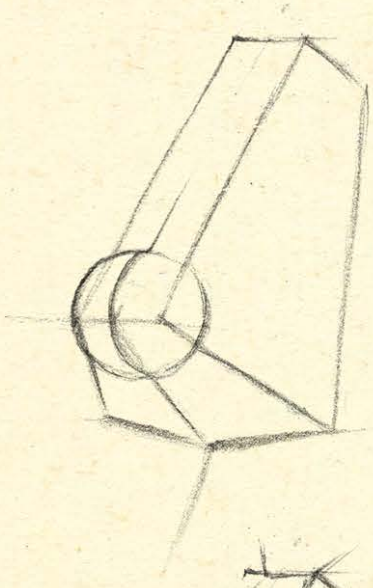
Step 7: In general, the eye drawing in the previous step looks close the reference already. However, we can still enhance the 3-dimensional and realistic feeling by adding the cross-hatching layer.



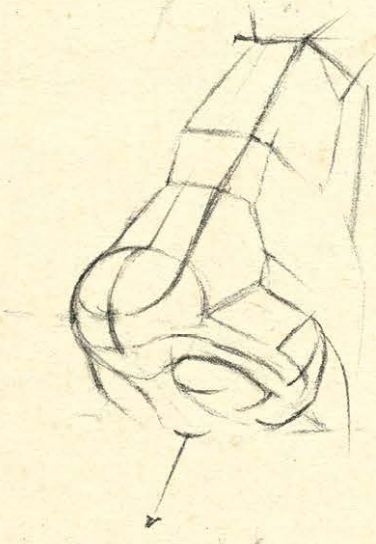
Step 8: Continue adding the cross-hatching and the details to complete the eye drawing.

Drawing the realistic nose

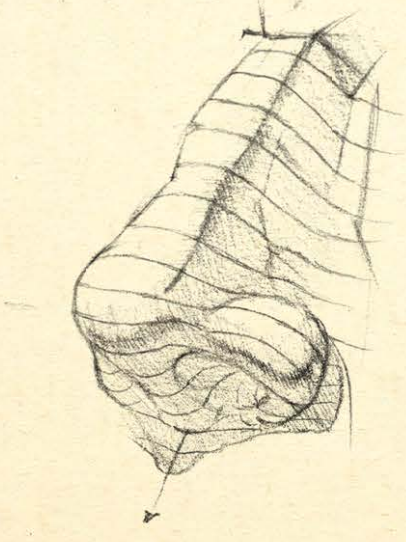
In this demonstration, I will show you the process of drawing the realistic nose from sketching to shading.



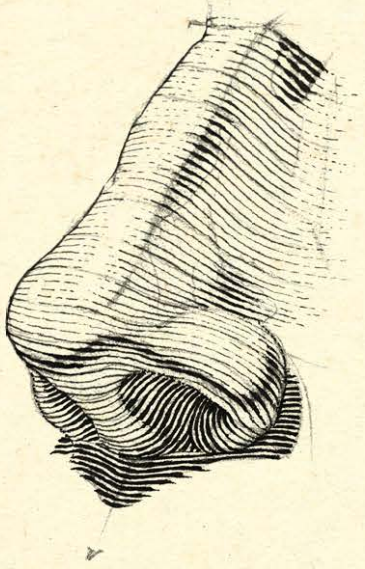
Step 1: The most important step in any drawing is sketching. For drawing a nose, we can start by sketching the simpliefied form level 1 to define the general structure. In addtion, we can add a circle in the position of the nose tip to define the sphere form of this structure.



Step 2: Following the simplified form sketching level 1, we can build the simplified anatomical structure of the nose. The nasal bone is really important to capture the realistic feeling of the nose. At the same time, we can also define the overall shading areas.

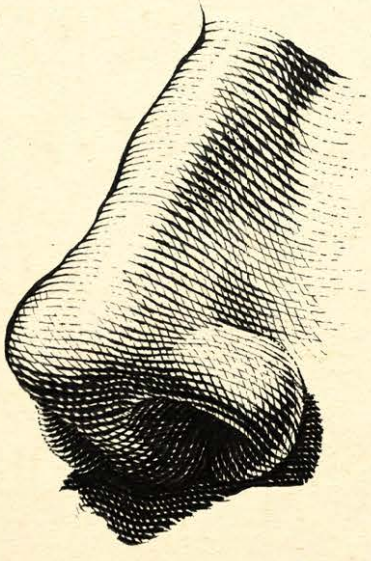


Step 3: I suggest to follow the reference to apply the overall tonal value. In this demonstration, the light comes from the upper left, so the right side and the bottom of the nose will be in the dark areas. At the same time, using cross-coutour technique to define the line direction.



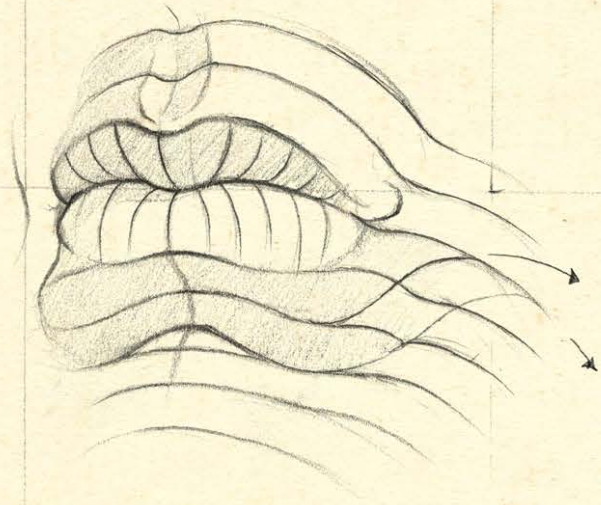
Step 4:Core Shadow is a special key shading component. By defining the Core Shadow, we can extend the shading to express other components. In this step, using the Line Weight (Line Thickness) pen & ink technique to depict the Core Shadow.

Step 5: The next step is to enhance to Core Shadow, extend the shading to the areas surrounding the Core Shadow, and emphasize the contrast by adding shading to lowest value areas. From this step, we can see the key shading components more clearly such as the Reflected Light, the Highlight, Mid-tone, Direct Light, and the Cast Shadow.

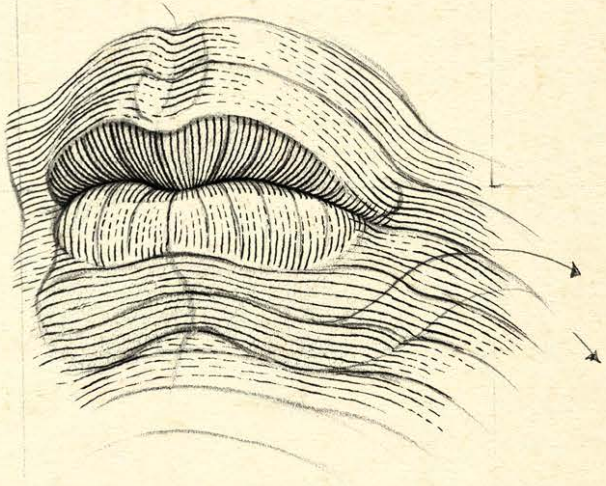


Step 6: Complete the drawing by adding cross-hatching layer, using the same pen & ink technique. The Reflected Light and the Core Shadow are the essential components to enhance the 3-dimensional feeling of the drawing, we may need to work carefully on these parts.

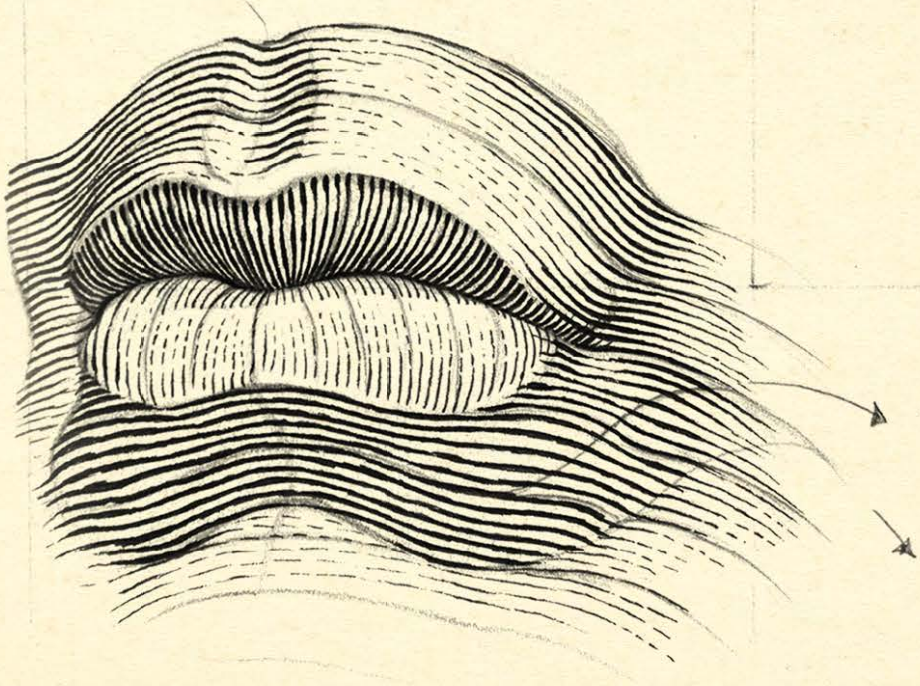
The Lips



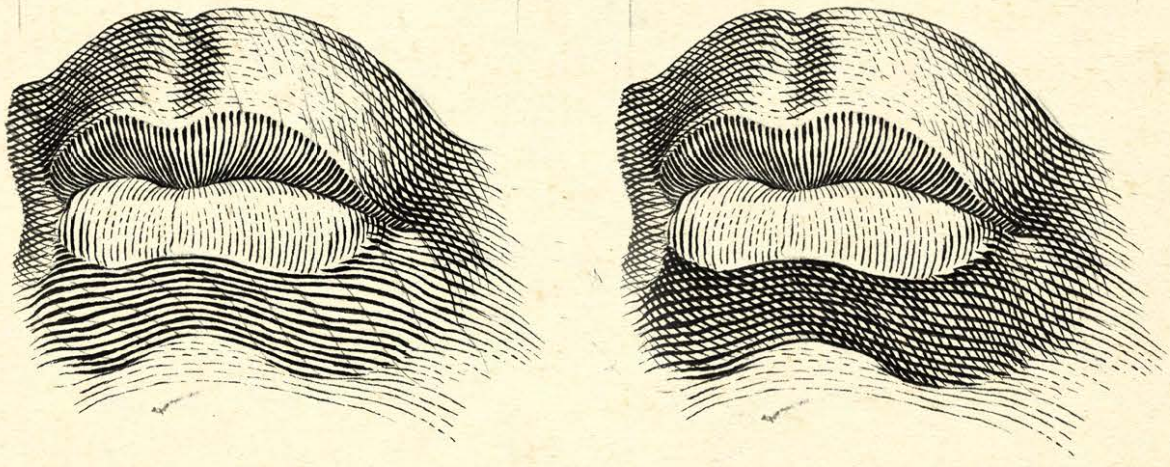
Step 1: Sketching the structure of the lips. Following the muscles, we can define the line drawing direction. The cross-contour in the lips can be drawn vertically.



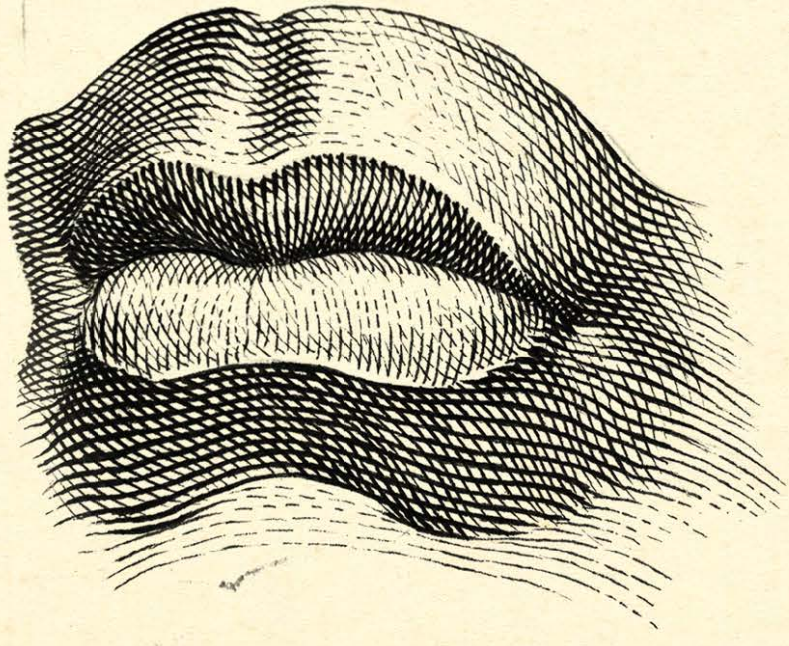
Step 2: Following the cross-contour drawing, we can add the first pen & ink layer using multiple techniques. As usual, we can use the broken lines for the Direct Light and Highlight.



Step 3: Express the Core Shadow and dark areas by changing line thickness. When drawing the lips, we can emphasize the highlight a bit more in some areas facing directly to the light such as the Vermilion Border, or the lower lips.



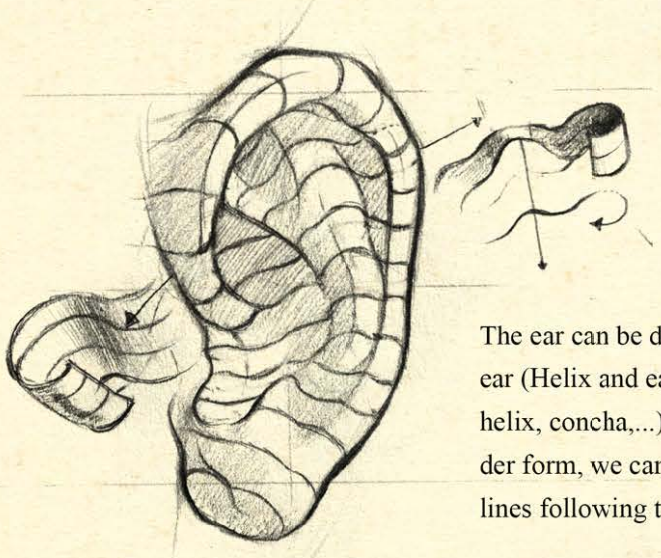
Step 4: When all the key shading components defined, we can add the cross-hatching layer. The cross-hatching can be added in 2 main areas: The lips and the areas surrounding such as the area above the Vermilion Border and the area under the lower lip.



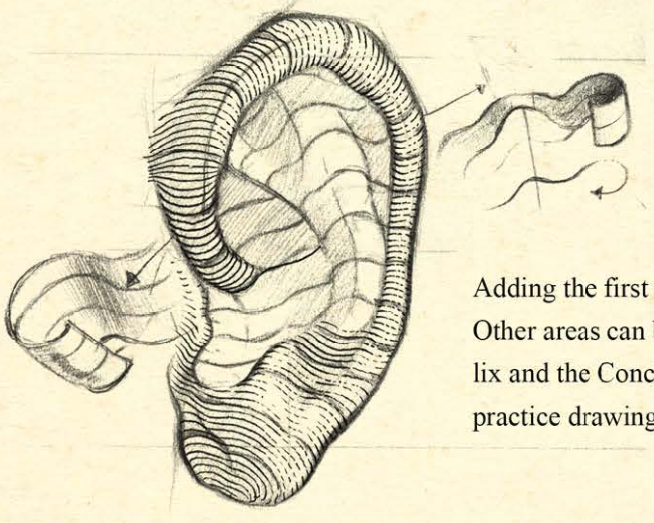
Step 5: The contrast can be emphasized by adding more shading on the lowest value areas. Oral Commisure can be a special area to emphasize because of its depth.

The Ear

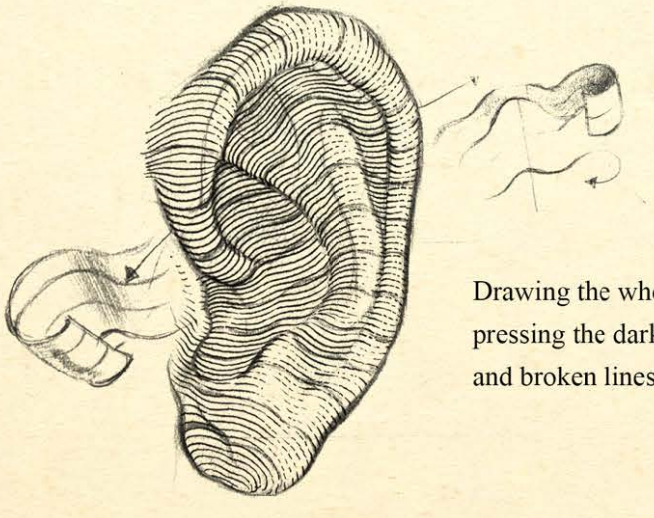
The ear can be more challenging to draw because of its complexity. We can divide the ear into major areas to work on the cross-contour drawing.



The ear can be divided into 2 major part: The area around the ear (Helix and ear lobe), and the area inside the ear (The Anti-helix, concha,...). Imagine the helix is a bended/curved cylinder form, we can draw the cross-contour by using the curved lines following that form.

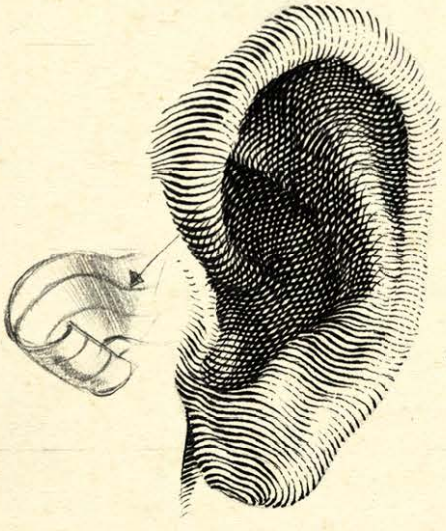


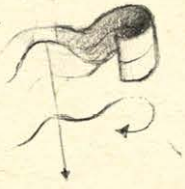
Adding the first pen & ink layer in the Helix and ear lobe. Other areas can be analyzed following the form of the Antihelix and the Concha. I suggest to use reference photo/model to practice drawing the ear to express the detailed structure.



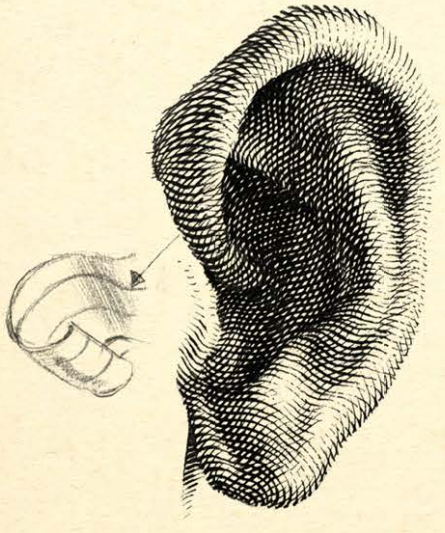
Drawing the whole ear by using hatching cross-contour. Expressing the darkness and brightness by using curved lines and broken lines.

Define the Core Shadow areas and the lowest value areas. Changing the line thickness to express the value. Highlight areas in the ear can be emphasized in the Helix, the Antihelix, and the ear lobe.





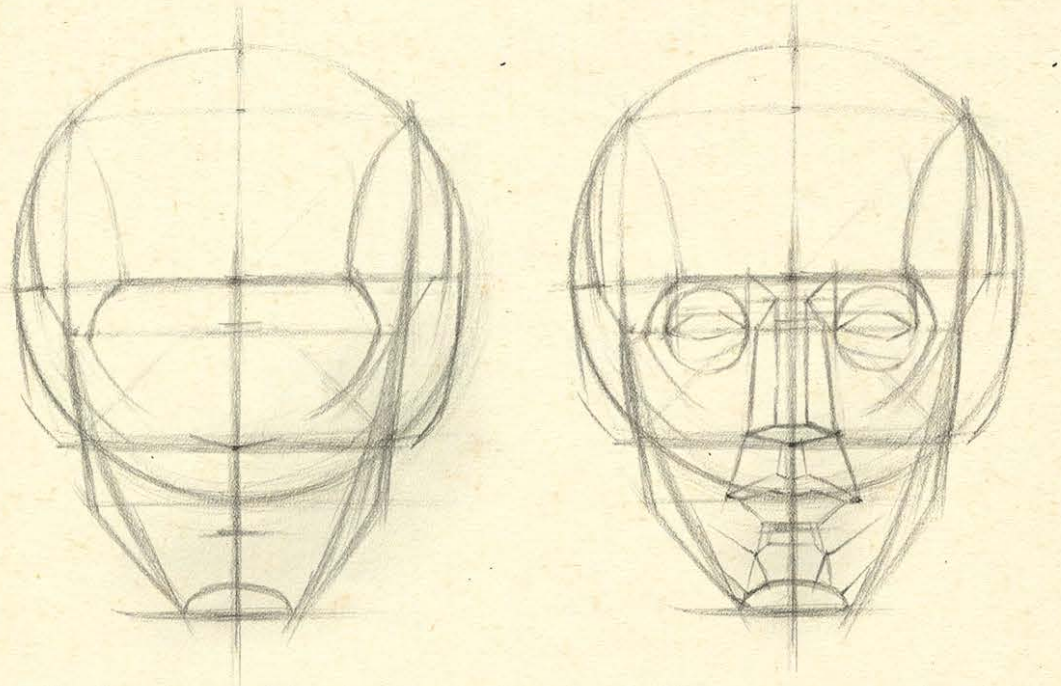
Apply the cross-hatching. Starting with the darkest areas in the ear such as the concha, the area near the ear canal, or the area under the helix.



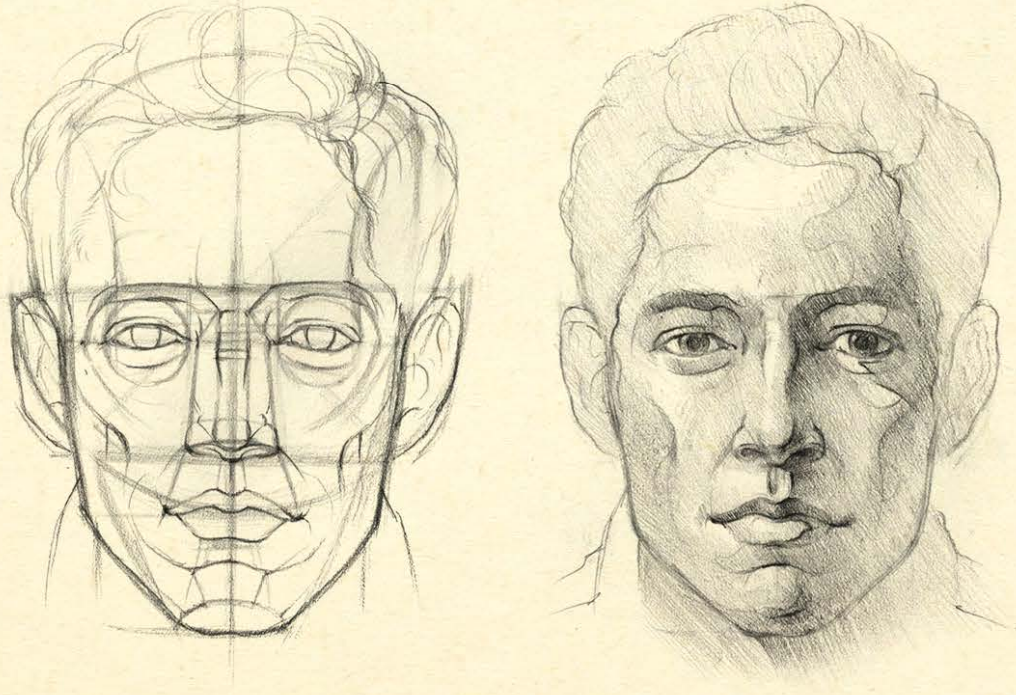
Extend the shading areas to express all the key shading components. Emphasize the contrast and balance the value.

DRAWING THE BASIC PORTRAIT

In this section, we will start to draw the basic portrait from frontal view. Take your time to work on the sketching by using the Loomis Method.

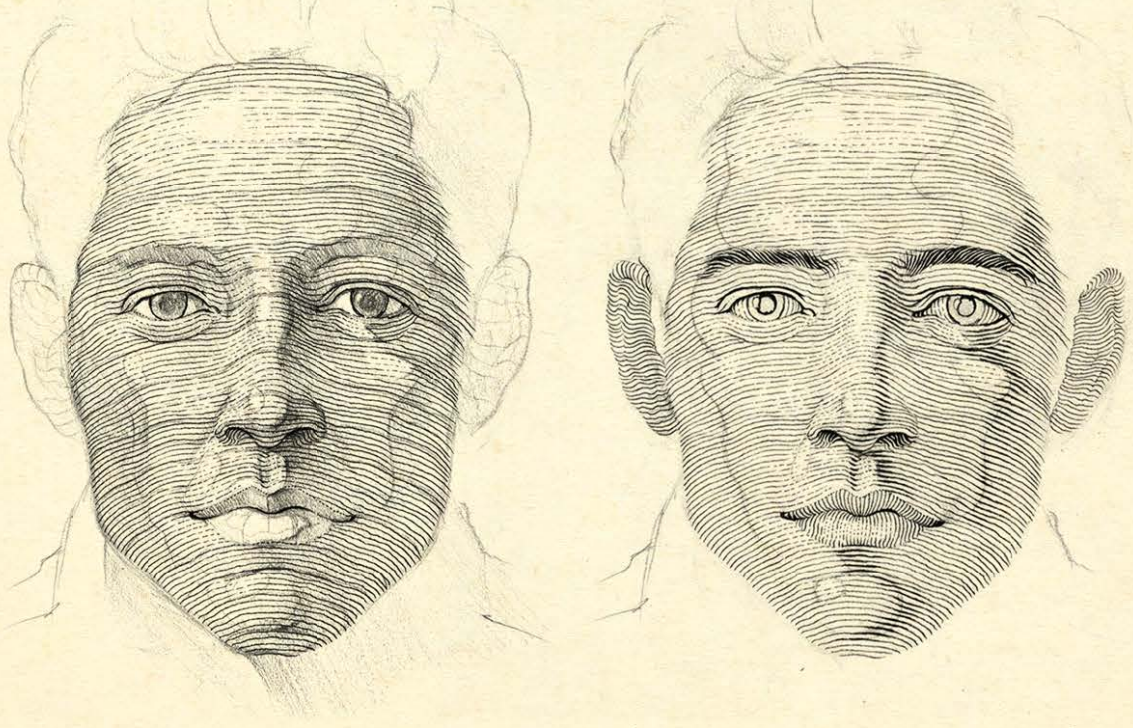


Step 1: Sketching the portrait based on the Loomis Method. In this step, we can use only straight sketching lines to define the face proportions. At the same time, the face components such as the eyes, nose,... can be simplified to basic forms.

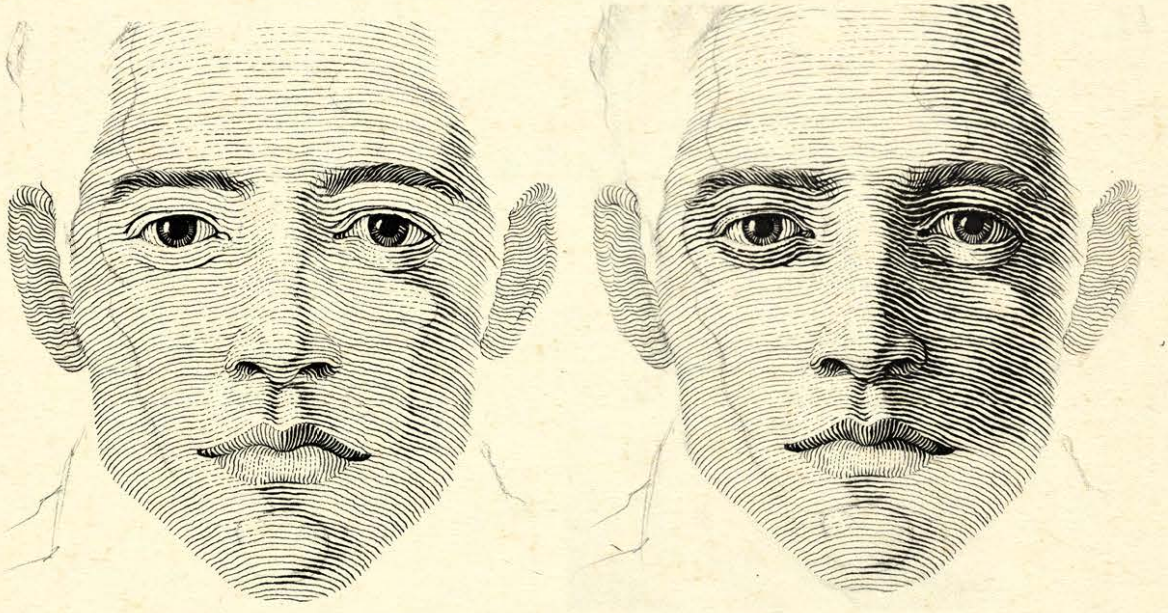


Step 2: Following the constructive sketching in the previous step, drawing the face, the hair with curved line sketching. Using pencils to add the overall shading with key shading components.

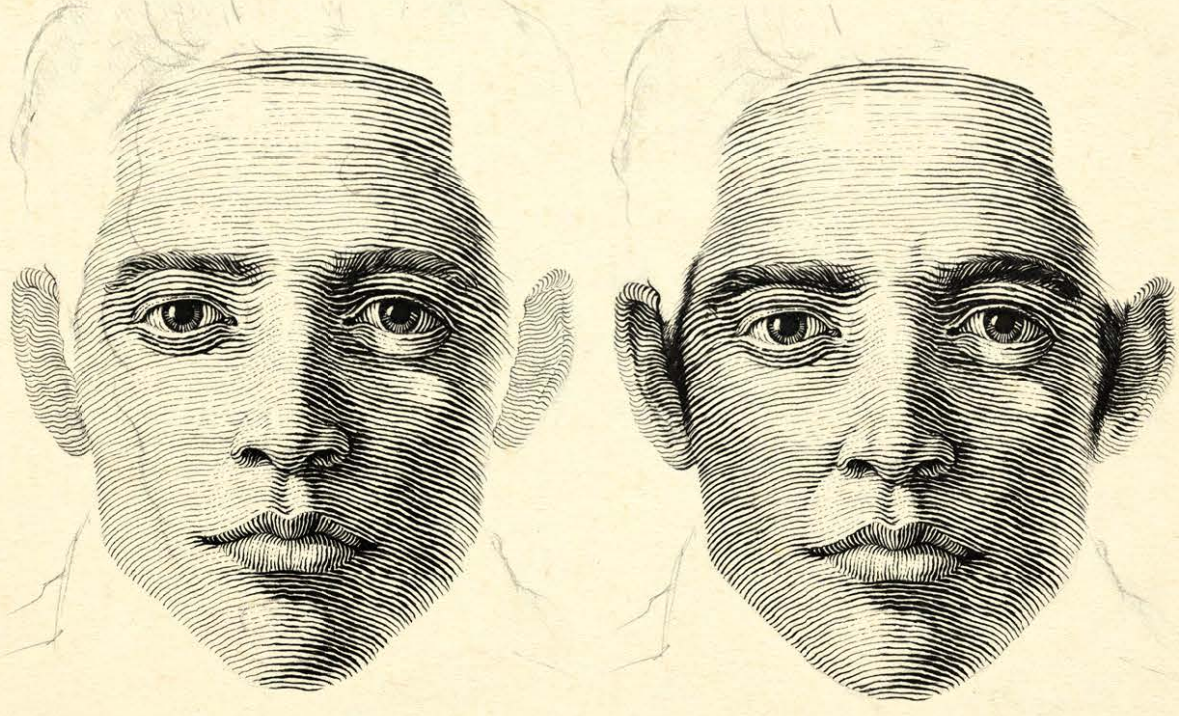
Step 3: Expressing the face anatomical structure by drawing horizontal lines to define the drawing direction. Adding the first pen and ink drawing layer using curved and broken lines. In this step, we don need to change the line thickness or the shading components, just the overall tonal value.



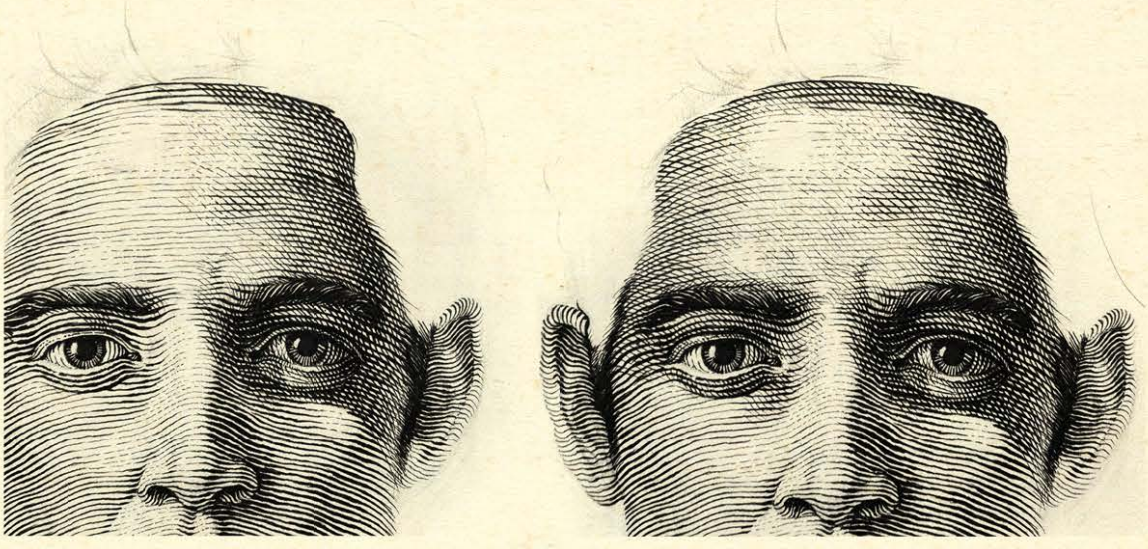
Step 4: Complete the overall shading and start to draw the darkest areas (lowest value) such as the Eyebrows, the Nostril, the Oral Commisure and the Pupil. In addition, we can change the line thickness in the Core Shadow areas to capture the key shading components and remove some sketching to see the drawing more clearly.



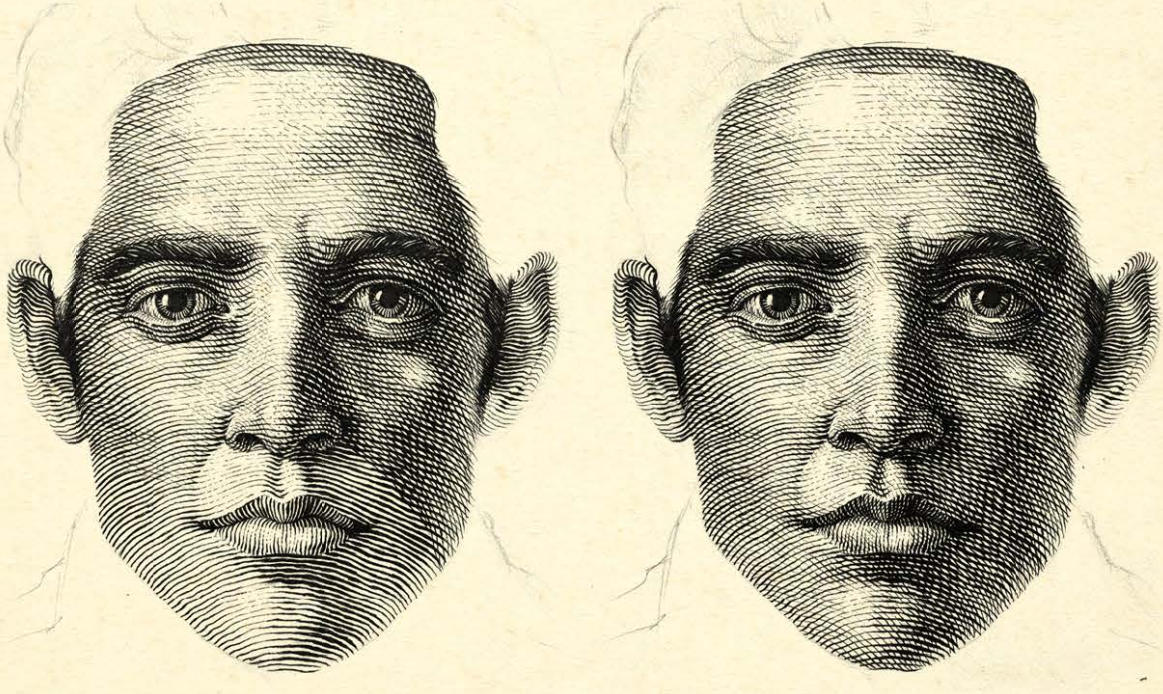
Step 5: Remove the pencil sketching, and continue drawing the lowest value areas. Following the Core Shadow defined in the previous step, extending the shading to surrounding areas to capture the mid-tone and the reflected light.



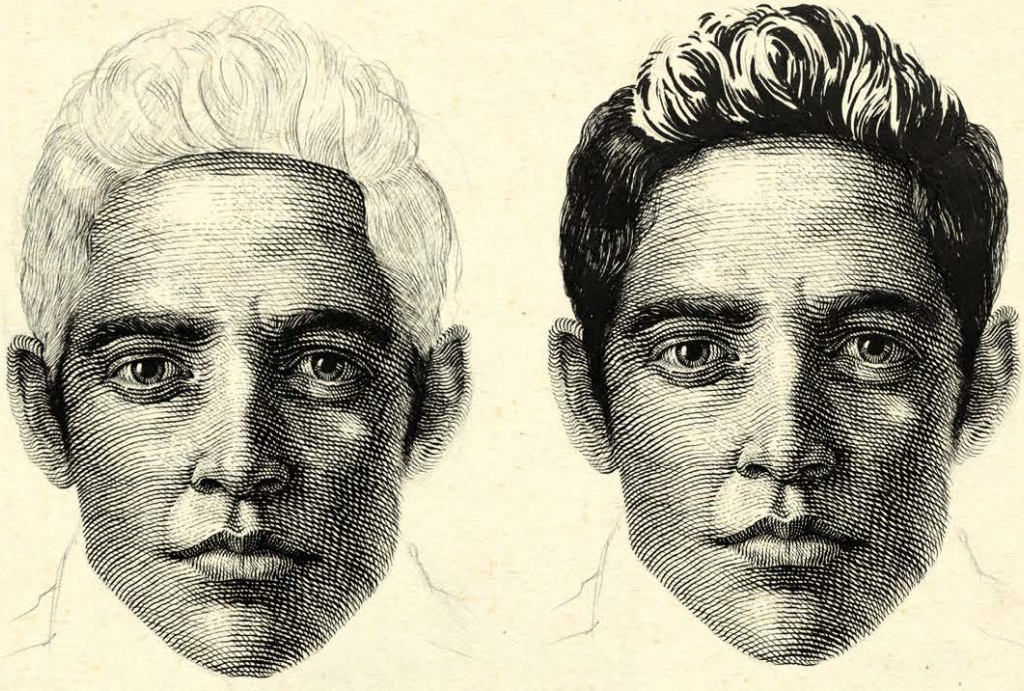
Step 6: Shading in the dark areas and changing the line thickness in the Core Shadow. When we complete the right side of the face, we can work on the left side to enhance the contrast of the value to highlight the bright area in the middle.



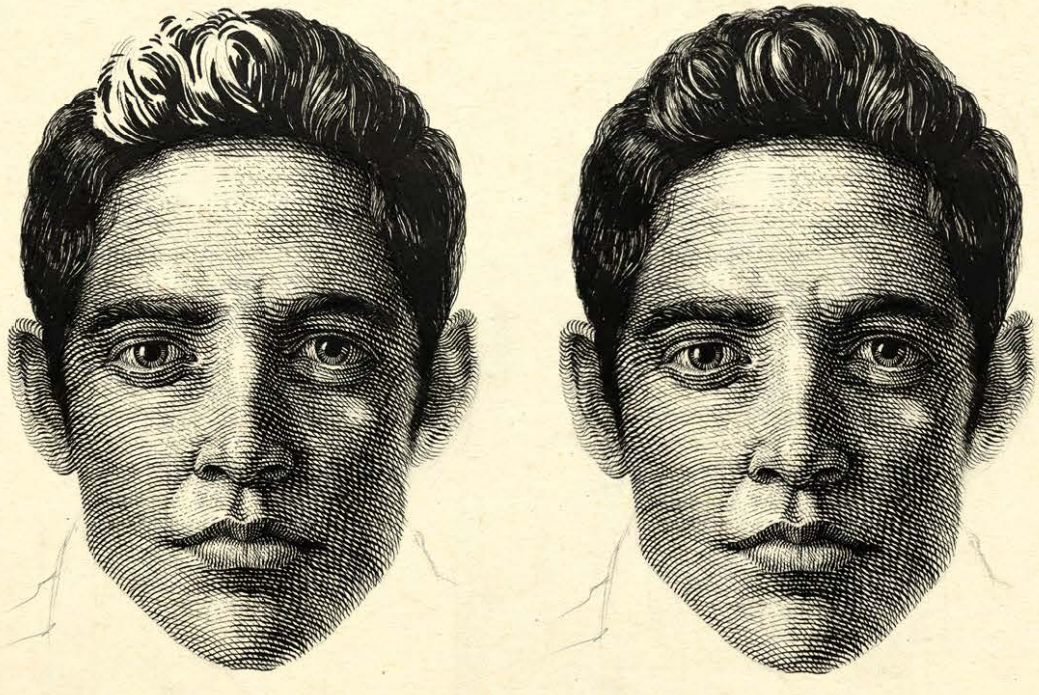
Step 7: Now it's time to improve the tonal value by adding cross-hatching layers. In my experience, it's easier to control and balance the value by starting from the darkest areas. For example, in this demonstration, we can start to apply the cross-hatching in the areas surrounding the eyes.



Step 8: Keep working on the cross-hatching and complete the whole face. The tonal value balance and contrast is really important to express the 3-dimensional structure, the Highlight and the Core Shadow can be enhanced.



Step 9: Complete the face drawing and start to work on the hair. As demonstrated above, the hair can be expressed by multiple direction lines growing from the top of the head. After the directions defined, we can add shading depending on the hair colour.

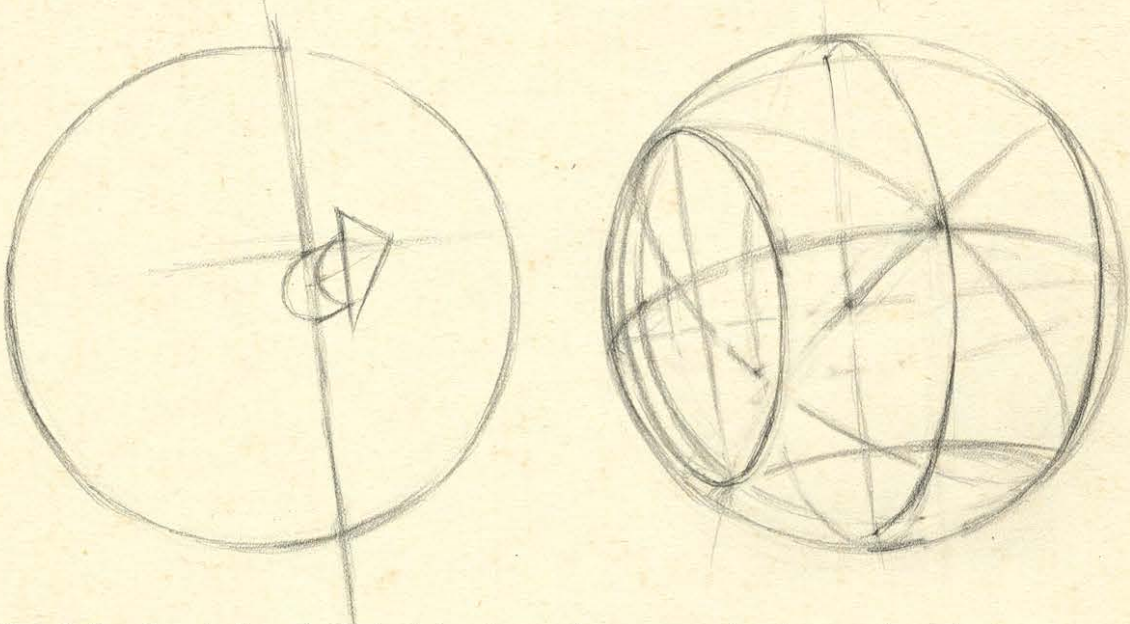


Step 10: The Highlight of the hair can be emphasized to express the high contrast. In this step, we finish the basic frontal portrait drawing.

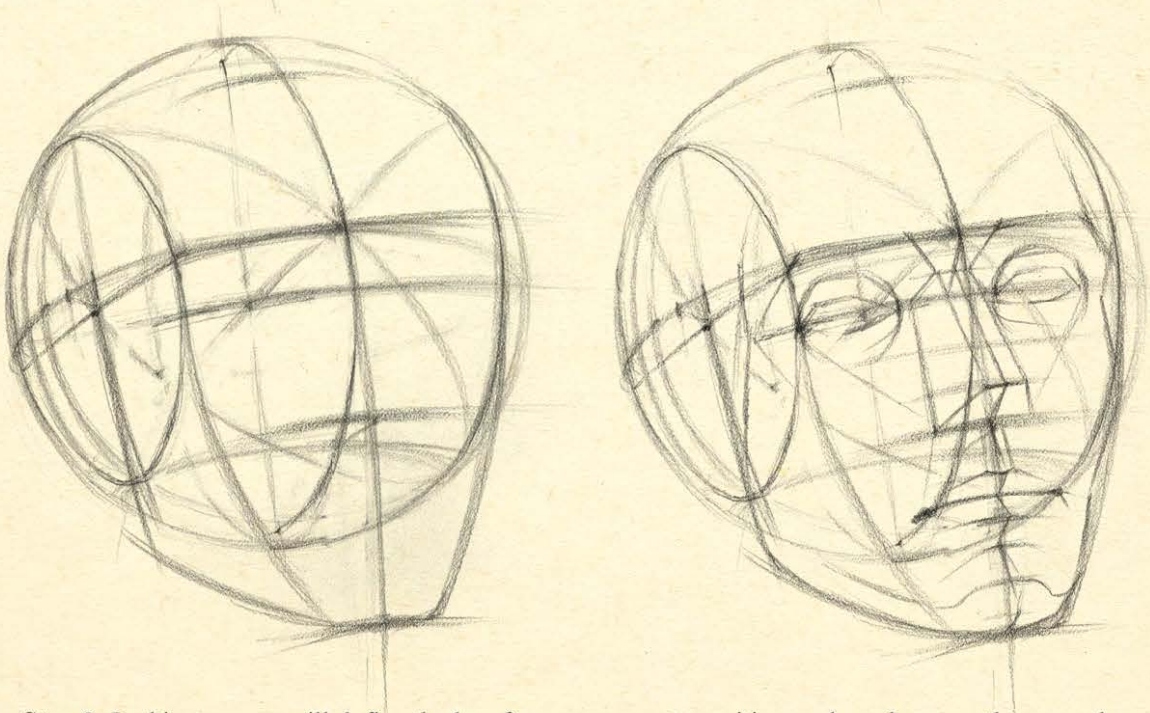
The complete demonstration for the basic portrait pen and ink drawing.

Demonstration 2

In the second demonstration, we will practice drawing the portrait in the Three-Quarter angle of view. By drawing from this perspective, we can express both the front and the side of the portrait.

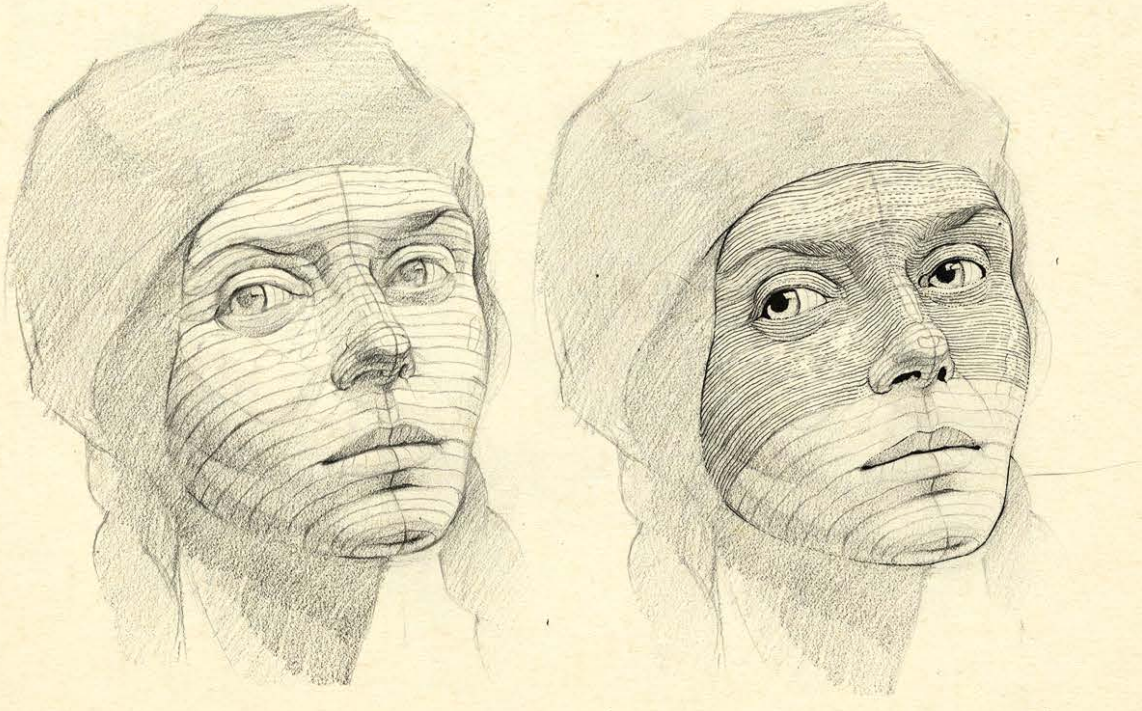


Step 1: Based on the Loomis Method, drawing a sphere representing the upper head. At the same time, we need to define the face direction, and using the constructive sketching method to define the key head proportions.



Step 2: In this step, we will define the key face components position such as the eyes, the nose, the lips,... by using straight sketching lines and the simplified forms.

Step 3: Complete the pencil sketching and capture the uniqueness of the figure. Adding the overall shading (with pencils) to capture the general value, and starting to define the line drawing direction.

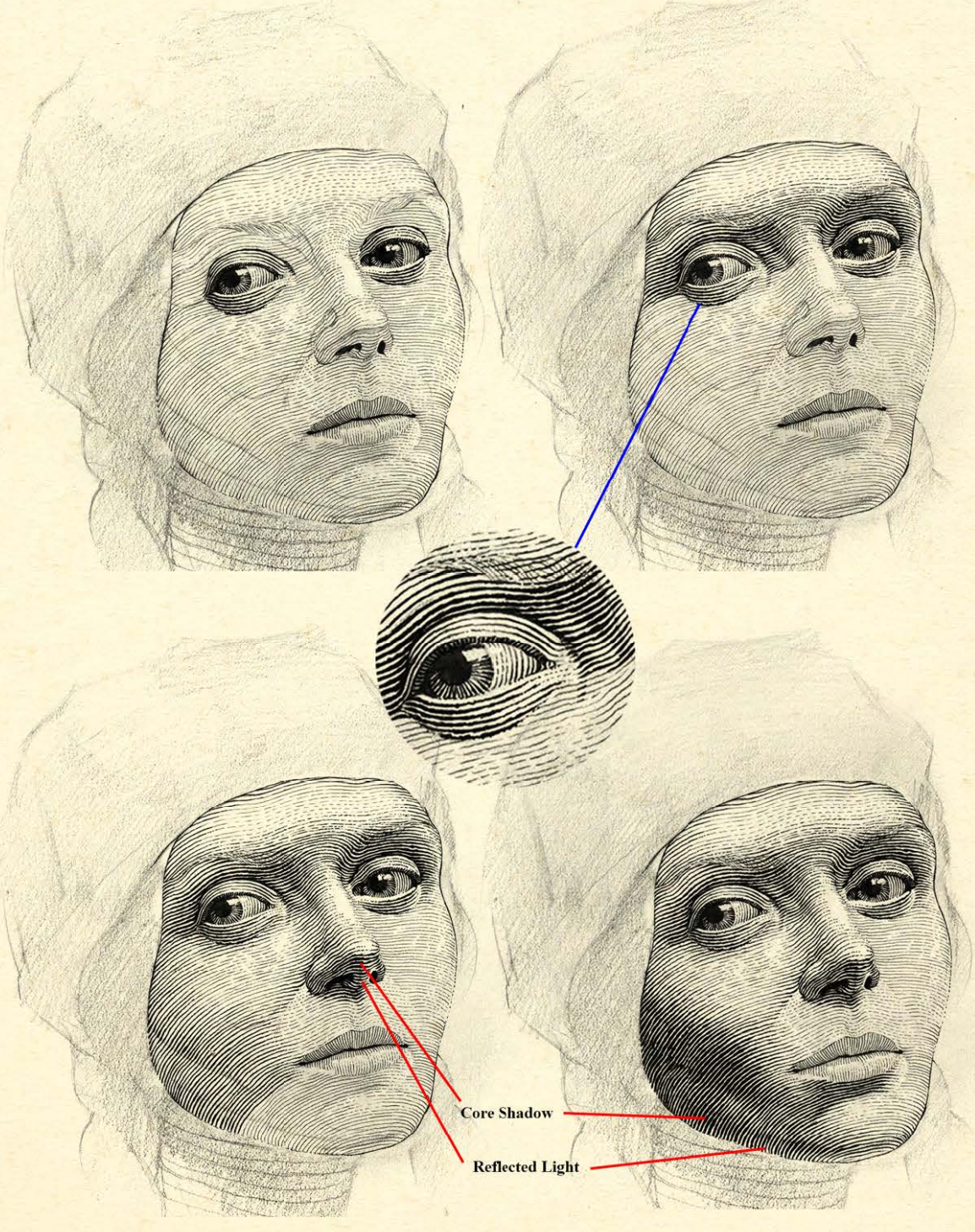


Step 4: Slowly analyze the whole face to define the line drawing direction by drawing parallel lines. When the overall shading the and drawing direction defined, we can start working on the lowest value areas such as the Pupil, the Nostril, the Eyebrows, and the Oral Commisure.

Step 5: Using curved and broken line to capture the overall shading with pen and ink. Some areas can be emphasized such as the highlight in iris, the line between the lips.

Step 6: Remove the pencil sketching to see the drawing more clearly.

Starting from the areas surrounding the eyes, changing the line thickness to express the value based on the **Core Shadow** defined in the previous step.

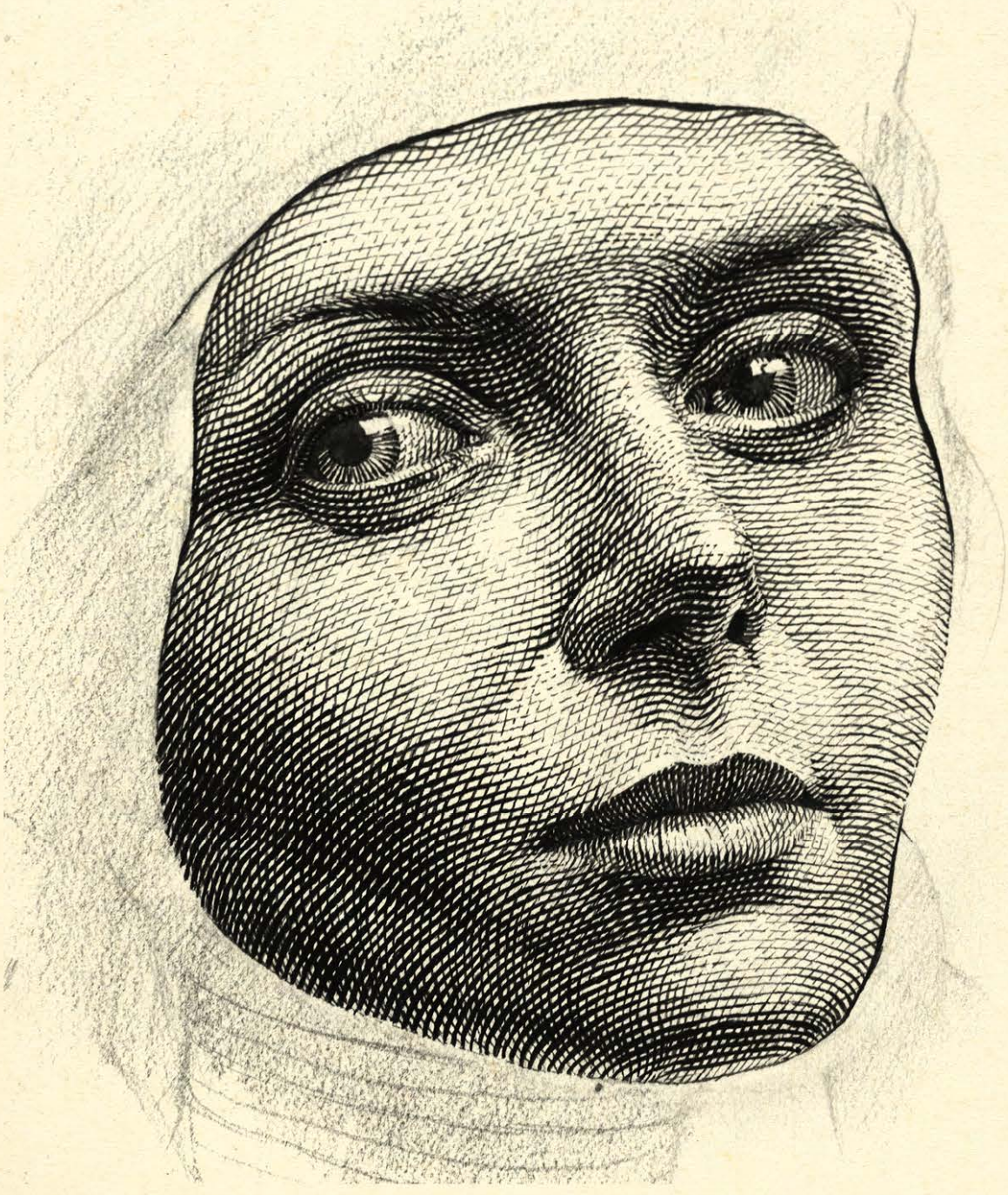


Shading the left side of the face and the area under the nose, keep using the **Line Weight** technique to express the **Key Shading Components**. In additon, pay attention on the **Reflected Light.**

Keep modifying and balancing the value by changing the line thickness.

Enhance your portrait drawing by adding the cross-hatching layer. As we discussed in earlier section, we can start to apply the cross-hatching layer in the lowest value areas such as the areas surrounding the eyes, under the nose or the upper lips.

Keep working on the cross-hatching, first we can start from the dark side of the face, then extending the shading to the other side. In addition, we need to be flexible when shading by keep changing the line thickness to express the correct tonal value.



Complete the face drawing with pen and ink.