LOOKING AT THE SKULL

The skull is the most important of the deep forms that give shape to the face. Differences between one person and another are largely a result of differences in the skull. The skull determines the shape of our head and the location of our features. Hallowe’en and horror films aside, it is a beautiful and fascinating structure.

Part of an artist’s training is to carefully observe and draw the skull from a variety of angles (a plastic skull can be used). Eventually, the skull’s basic framework is memorized and then used as sort of a mental armature whenever the head is drawn. Norman Rockwell, whose drawings of heads were always his strong point, recalled, “I had an art teacher years ago (George Bridgeman) who made us draw hundreds of skulls in all positions. I felt he was overdoing it at the time, but now I realized what a wonderful lesson he taught us. Whenever I draw a head, I instinctively feel the skull structure beneath.”

We’ll look at the skull in a simplified, streamlined version. Then we’ll examine it’s proportions, finally describing the different parts of the skull and how they relate to what we see on the face.

A Simple Version

The best way to memorize a complex form is to find a simpler form that’s a close equivalent. From an artist’s viewpoint, cars are boxlike; Christmas trees conelike; smokestacks and pencils simply larger and smaller versions of cylinders. Relating objects to simple forms is very helpful both in drawing them from life and from the imagination. Although attempts have been made to equate the head with a box, an egg, or another fundamental form, most artists prefer a slightly more complex shape to use as their imaginary model. One example is illustrated.
Skull and Head Proportions

Although the skull is what makes our heads different, all skulls are basically the same. We think that because everyone looks so different, the differences between one person and the next must be quite pronounced. But we're experts; we've been looking at faces every day of our lives. If you've ever watched an expert in another field at work—say, a geologist examining a rock, or a palm reader looking at a hand—you know how much more they see in what they're examining than we do. Their long experience lets them distinguish tiny variations between items we might think identical. The distinctions we are capable of making with the face are just as refined, but skulls are another matter—we simply don't have enough practice looking at skulls, and so the variations aren't obvious. People, and skulls, are different, but not all that different. We're just used to people.

The consistent shape of the skull makes proportional rules for the head possible. The exceptions to the rule aren't off by much. It's not true, for example, that all people have eyes halfway up their heads. The exception might be someone with eyes slightly higher or slightly lower. And for the vast majority of us, this pattern will hold true.

**Some Proportional Facts**

There have been a lot of rules invented concerning the proportions of the skull going back at least as far as the Greeks. I discuss below the ones I think the most important.

**Overall Shape**

The height of the skull and the depth of the skull are nearly the same. Keeping this fact in mind helps avoid the common drawing error, "cutting off the back of the head"—making it too short. In a side view, before marking off the end, compare the height to the depth, making sure they're approximately the same.

The width of the skull is the smallest dimension. The average skull is only about two-thirds as wide as it is tall. It gets that wide at the level of the cheekbones; it's narrower above and below. Skulls with wider cheekbones have a more oval shape. With slender cheekbones, the skull appears more rectangular, because there's less difference in size between the cheekbones and the rest of the skull.

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**Some Proportional Facts**

The similarities among human heads are more striking than the differences. Artists have a name for the major type of similarity: proportion. Proportional patterns in the head have been the subject of artists' attention since classical times. We use the skull as our guide because its landmarks are the most stable. The most consistent, and useful, proportional rule regarding the skull is the location of the halfway point. It almost always falls in the middle of the orbit, which on the face is the middle of the eye: The eyes are halfway up the head. Exceptions to this rule are rare. Another important pattern is the rule of thirds. From the top of the forehead, the skull divides into three equal sections: forehead—brow; brow—base of nose socket; base of nose socket—chin.
Location of the Eyes
The smaller forms of the skull help determine the locations of the features. The eye socket, for instance, determines the position of the eyes. Since the eye socket invariably falls about halfway up the skull, the eyes are always found on or near the midline of the head. To be more precise, the inner eye corner usually sits on an imaginary line drawn through the middle of the head. This rule alone would save many students a lot of grief. Because people tend to make the features too big, the eyes tend to go a lot higher up the head than just halfway.

The Rule of Thirds
The skull can be divided in another way. A point is located just below the top of the skull called the “widow’s peak.” This is the spot where the frontal bone (corresponding to the forehead) makes a sharp break with the upper plane—it’s just slightly below the actual top. From here the skull is divided into thirds, and each dividing line falls on a major landmark as follows:

☐ One-third of the way down from the widow’s peak, the bony prominence called the eyebrow (or superorbital) ridge bulges out above the eye socket. On the face, this is where the eyebrows grow.

☐ Two-thirds of the way down from the widow’s peak, the bottom of the oval-shaped nose socket is found. On the face, this is where the nose ends—where the tip turns under to meet the upper lip.

☐ The lower border of the skull is the edge of the bony jaw. On the face, this is the border of the chin, where the face ends and the neck begins.

This proportional pattern—the dividing of the skull (and face) into three equal regions—is not quite as universally true as the one concerning the eyes. But skulls—and people—don’t vary from this arrangement by much.

When there are exceptions to this rule, it’s usually the central third that varies from the arrangement. According to the rule of thirds, the distance from the base of the nose to an imaginary point between the eyebrows is the same as the distance from nose base to the bottom of the chin. I’d say this is right on the mark about 70 percent of the time. The rest of the time it’s usually the length of the nose that’s short. About 30 percent of us have noses that are a bit shorter than the space from nose base to chin. It is exceedingly rare to find someone with the distance from nose base to eyebrow longer than the distance from nose base to chin.

Nobody’s perfect. Was it she, or was it her portrait painter? A most peculiar-looking effect occurs when the eyes fall higher than halfway up the head. The woman might have looked this way, but a far more likely explanation is that the artist (an early American painter) inadvertently left out part of her forehead. Taking a bit off the top is the most common of all errors in portraiture.
The muscles of the face from in front

- Frontalis
- Corrugator
- Orbicularis oculi
- Levator labii
- Alaeque nasi
- Levator labii
- Zygomaticus minor
- Zygomaticus major (smiling)
- Risorius (grinning)
- Levator anguli oris
- Mentalis
- Depressor anguli oris
- Depressor labii
- Orbicularis oris
The muscles of the face from the side
The eyeball and related structures

Orbital cavity

The lids follow the form of the eyeball

Form of orbital bone margin under eyebrow

Medial palpebral ligament

Area of soft tissue which can sag

Orbicularis oculi

Raphe

Lateral canthus

Lacrimal gland

Lacrimal ducts

Tear duct

Caruncle

Plica semilunaris

The thickness of the lid

When the eye is looking forward in a natural position the upper lid usually crosses the iris halfway between the upper edge of the iris and the pupil. The lower lid just meets the lower edge of the iris.
UPPER LEG
ROUND

LOWER LEG
SHARP EDGE

USUALLY
2 LUMPS

1 LUMP

CHILD (ROUND)