# THEORY SYMMETRY AS A FUNDAMENTAL TOOL FOR A NOVICE SCULPTOR Karo V.V. 

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#### Abstract

The article emphasizes a combination of theory and practical course for beginning sculptors. From this point of view, the necessary basic elements for the correct construction of a mask are summarized.


Keywords: mask, symmetry, plans, study of the original, volume integrity, main axes.
Every person has inherent creative capacities, regardless of how much they are actualized during their lifetime. The very existence of imaginative thinking within every person, manifested in both their creations and lifestyle, holds greater significance than even artistic literacy. This circumstance is crucial not only for eliminating unnecessary complexities surrounding creative copyright but also for facilitating self-expression in life. However, the goal of artistic education is to help the learner express their ideas with utmost precision (dimension).

The inception, evolution, and completion mark the journey of creating a work of art. The journey commences with a character and concludes with it. This observation applies to the learning process as well. The child interacts with characters and reflects them in their creations. Starting to learn fine arts, they have to solve more "technical" issues. To become an artist, they should undergo significant experiential learning. At times, learners may find it challenging, and it might feel like the enchanting world of childhood characters has faded away [2].

Nevertheless, over time, the learner begins to recognize their growing self-reliance and a diminished sense of helplessness.

Every new victory, every invaluable guidance of a teacher provides an opportunity to spread wings more freely. Achieving mastery in an ideal form allows the artist to feel liberated from the constraints of embodiment. At that point, the artist can focus solely on ensuring their characters are beautifully crafted to effectively convey their message to people. The sense of fulfillment and liberation brings the young artist back to the "beautiful, distant reality" reminiscent of when they created their childhood drawings [3].

However, a new phase emerges when the artist no longer finds fulfillment in what they are currently capable of creating. The desire to depict images with greater clarity, precision, and vividness propels them toward new explorations.

The creator continues to learn throughout their life, with all their knowledge directly tied to its practical implementation.

Art is not merely theoretical; it is fundamentally a practical endeavor. From this perspective, the knowledge of symmetry stands out as one of the future sculptor's most effective tools. Primarily, one should focus on comprehending human symmetries. Throughout history and across cultures, the primary subjects depicted in art are human symmetries, exemplified vividly by the fusion of mathematics and music [4].

During every cultural renaissance, there emerges a desire to represent humans (and deities in human form) as graceful, balanced, and flawless. Artists across Ancient Egypt, Antiquity, the Renaissance, and modern timesserve as prime examples of the unity and continuity within this association. Continuity (succession), as each subsequent builds upon the experiences and knowledge of their predecessors.

While cultures have experienced periods of decline, artistic craftsmanship has undergone a revival over time. While the language and atmosphere of each new era may vary, the fundamental principles remain unchanged. Taking all of this into consideration, it is important to acknowledge that there is a foundational set of theoretical knowledge and practical skills that a novice sculptor should bear in mind when creating a face sculpture. Specifically:

Structural elements of the sculpture: the chosen character, conveying mental states and facial expressions, manipulating facial features, understanding the skull and facial muscle structure, grasping basic symmetries of the head, identifying the "planes" of the head, comprehending the geometric structure of the head, and recognizing its axes.
Stages of performance of practical work: skeleton, mass, axes, oval, cylinder, correct order, pivot points, symmetries, feature, state of mind, wholeness of character.

In an ideal scenario, the character of the person being sculpted should deeply move (impress) the sculptor himself; otherwise, it's unlikely to result in a truly impactful portrayal. The process should begin with sketches. Sketches are usually created on paper and in dimensional form. They are generally small in size, serving not only for efficiency and the creation of numerous sketches but also because only in smaller dimensions can the entirety of the
sketch be comprehensively observed. The overall solution, distinctive features, facial expressions, symmetries, the sequence in which facial parts are completed, hairstyle, clothing, and decorative details collectively convey the emotions and inner world of the face being sculpted. Courage, diligence, and the application of experience serve as both a guarantee of success and a compass for uncovering one's unique personality. For a face sculptor, continuously studying a person's face, from fundamental aspects to distinctive features, is highly effective.

For self-assessment, one can compare whether specific emotions are reflected on a person's face and how they are manifested. For instance, one can observe the typical facial expressions of people heading to work, mothers strolling with their children, friends experiencing the joy of reunion, audiences at a concert, and children in various scenarios. Additionally, exploring animal facial expressions can also be insightful [5].

Observations can be translated into sketches, both from the original and with the help of imagination. It is beneficial to create small $(5-7 \mathrm{~cm})$ plaster head sculptures featuring various characteristics, symmetries, and facial expressions. Understanding the structure of the skull and facial muscles aids in comprehending the factors behind various facial structures. To achieve this understanding, it's essential to create not only detailed drawings of the skull and head musculature over time but also sketch them in various positions. The latter may be particularly valuable [3]. Understanding the fundamental symmetries of the head is crucial for accurately constructing the face sculpture.

- The inner corner of the eye (tear duct) is positioned at the midpoint of the head, equidistant from both the area above and the muzzle below.
- The space from the eyebrows to the muzzle is divided into two equal parts by the tip of the nose.
- The upper third of the area from the tip of the nose to the muzzle is occupied by the upper lip.
- The upper edge of the ear corresponds to the horizontal line of the eyebrows, and the lower edge to the tip of the nose.
- The angle of the jaw below the ear corresponds to the horizontal of the mouth.
- The distance between the eyes is equal to the size of one eye.

To fully comprehend the concept of symmetry, it's essential to engage in extensive practice by drawing and plastering from real-life examples. Small-scale plaster drawings and short-term studies from various positions and movements are not only useful but also complement long-term drawings and large-scale plaster head studies. Dimensions are constructed based on fundamental planes. Each dimensional object possesses six dimensions, akin to a cube: front, back, two sides, top, and bottom. Indeed, perfect cubes are not found in nature; therefore, planes are subdivided into sub-planes. Similar planes exist on the head as well. The frontal part of the face corresponds to the section of the frontal plane that is partitioned among the medial and two lateral planes, and so forth. For a novice sculptor, it's beneficial to cultivate the ability to "think in planes," which involves perceiving any dimension not only as a collection of shapes and external details but also as a composition of geometric bodies, with softened corners and edges. The exploration of planes typically commences with what's known as the "carved head. "It's beneficial to create plaster models of the carved head and sketch it from various positions and angles. Carving provides a preliminary understanding of the dimensions that require further refinement and enhancement[1].

The entire dimension is shaped by planes, and one should develop the ability to perceive and enjoy them. Furthermore, the head conforms to an oval shape, with a pointed end at the muzzle and roundness at the top of the head. The head has an imaginary axis that passes through the muzzle and crest. The neck also follows a similar axis. Its axis intersects with the axis of the head at the level of the ears. Naturally, the position of axes in space and the placement of body parts are inherently interconnected. Through the positioning of the axes in space the sculptor manages the installation of the body parts themselves.

Therefore, from the preceding points, we can infer that knowledge facilitates effective action while engaging in the practical process fosters a desire for further knowledge. Conversely, the practical process aids in simplifying any theory, by eliminating extraneous information and retaining only what is truly relevant to the work.

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