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THE PYRAMIDAL AND POLYGONAL CONSTRUCTIVE MODELLING METHOD IN THE SYSTEM OF PROFESSIONAL ART EDUCATION Kostyantyn Parkhomenko¹

Abstract: This article considers academic drawing a fundamental discipline that forms the professional qualities of future artists. It reveals and determines the value of a new, modernized method of pyramidal and polygonal constructive modelling, and it proves its significance for increasing the development of constructive-spatial thinking among students. The paper also shows the necessity of studying academic drawing and describes the positive aspects of the method in question. It considers academic drawing a process of cognition and determination of regularities in the surrounding reality. In addition, it analyzes the relationship between academic drawing and plastic anatomy, and determines the global nature of the need for knowledge of plastic anatomy. Furthermore, the text emphasizes the significance of the method as one of the most important ones in the process of professional art education, capable of developing constructive-spatial thinking. It analyzes the scientific developments and teachings of artist teachers and art historians who dealt with the problems of drawing and, in particular, the problems of developing a constructive understanding and of introducing this thinking into the professional art education process. What is more, the paper reveals the essence of the point, line, and subsequently faces as expressive means and techniques that affect the overall design. It proves that the comparison of reference points with geometric shapes helps clarify proportions and convey space. The effectiveness of a method that allows you to consciously and structurally create a form, revealing its capabilities and 'vital' truth, is proved. Finally, the article outlines the effective ability of the pyramidal and polygonal constructive modelling method to reveal the character and internal plasticity of the human figure. A conclusion is drawn about the importance of this method in the learning process. Keywords: teaching method; constructive method; academic drawing; art education; education.

Introduction

The method that I have been guided by all my life is to draw, draw, and draw. To draw every day as long as you are alive, as long as you exist, because to draw means to live, to join all living things. According to D. Mitrokhin (Mitrokhin 1977), drawing is the basis of all types of fine arts.

Professional art education is one of the most important areas for the formation of cultural society and a harmonious environment. Each country and region rely on certain approaches, methods, and patterns, which makes it possible to determine the *fine school* of the particular area. Modern education and the creation of the *new* social society require adjustments in the methodological process when teaching special disciplines.

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The disciplines of the professional cycle are aimed at bringing the student closer to understanding the essence of objects and phenomena. Thus, the *deep* study of them will allow us to abandon the empty, superficial copying of lines and spots.

The formation of the professional and competent personality remains an urgent issue at all stages of social development. And to achieve this, high-quality modern education is needed.

The purpose of the article is to consider one of the methods in the study of academic drawing, which stimulates creative thinking and develops the understanding of the anatomical structure. Thanks to this technique, the student actively uses theoretical knowledge of anatomy, which contributes to faster mastering of the material and acquisition of practical skills.

Many figures of culture and science were engaged in research in the field of high-quality vocational education. They considered methods and techniques, but there was no structure and consideration of the method we proposed – a method with combinatorial content called "pyramidal-polygonal constructive modelling."

Theoretical Foundations

One of the fundamental disciplines in the development of professional qualities is Academic Drawing. It affects all specialties in the field of arts and design, such as Easel Painting, Historical Painting, Sculpture, Art Animation, Graphic Design, and Environmental Design.

Academic drawing is aimed at detecting and conveying the most characteristic features of the model, the object. The essence of the learning process comes down to understanding form in space, and developing geometric shapes with perspective cuts. Before proceeding to the image, it is necessary to conduct an analysis to identify the internal content of the object, its characteristic features.

One of the methods that allow you to develop a spatial and constructive construction is the volumetric-constructive method.

The person consists of the most complex forms and configurations, and, in the process of drawing, this requires understanding of the design features, the anatomical structure.

Of course, without visual means it is impossible to reveal the essence and possibilities of the image. Such means are the point, line, plane, and spot. All of them interact with each other and allow you to convey the authenticity of the form.

Methodology

Method for Plastic-Artistic Construction and Image Modelling

Let us consider one of the methods for constructing the image – the pyramidal and polygonal constructive modelling method, thanks to which the model gains confidence in the construction, constructability, as well as a complex geometric structure in space.

This method contains the classical approach or methodology, elements of creative experiment and interpretation, and technological methods. All these components help to more accurately reveal and convey the image, and to achieve a global solution to the tasks set.

The classical approach remains the main one in the educational process, but the introduction of additional elements into the system can lead to improvement in the quality of education and modernize the educational process and the artistic and aesthetic system as a whole.

First of all, the method of pyramidal and polygonal constructive modelling, the initial simplification of the form, allows you to study the structure in more detail and find the relationship between the elements. This method provides the possibility of initial organization of the volumetric solution. Let us define this method as the selection of points that form segments which turn into a series of polygons. The image begins to break up into geometric edges that work in perspective and bring spatiality. As a result, the form is filled and the outer contour of the model is determined. The triangle is the most common shape for creating a polygon. Additional dots enrich the image and reveal its characteristic features. The distinctive feature of the *live* form is that the forms at this stage of work look like a cut, faceted.

The polygonal and constructive drawing implies that a real object will be executed in full accordance with proportional relationships and all elements will be interconnected. Note that, in this case, the polygon is not just the auxiliary building block that does not carry theoretical knowledge. Each face conveys the anatomical design that is embedded in the living model. The crystallization of many geometric facets harmonizes the overall shape. The result is one complex configuration or *living* form.

The study of the human structure is a priority during the training period.

The French philosopher Pierre Teilhard de Chardin is convinced that "we are forced to consider man as the key to the universe for two reasons that make him the center of the world. First of all, subjectively, for ourselves, we are inevitably the center of perspective" (Teilhard de Chardin 1965).

The human figure is the most complex harmonic form, which includes the laws of geometry, physics, and psychology. The external plastic form is directly revealed due to the internal structure. Understanding this structure will allow the student to convey all the changes in the outer contour, behind which there will be fundamental knowledge.

The relationship between science and art can be traced and embedded in the human body, and when building it, this point should be taken into account.

Albrecht Dürer accurately said: "Italian treatises on art insistently spoke of the closeness of painting to science. Italian artists were convinced that painting should be based on arithmetic and geometry, on the sciences of numbers, lines, planes and solids. The secret of beauty is entirely in the hands of science" (Lvov 1985).

This is undoubtedly the case. Art must be fundamental and built on exact laws it must obey. Numbers, segments and figures form the golden proportions, revealing the harmony of the human body. Structured logic, imagination and memory reveal the living form and its content through geometry.

As mentioned earlier, one of the main shapes that are present in the human body is the triangle. First of all, a triangle is laid, which has equal sides and which symbolizes perfection according to ancient Greek tradition.

It can be noted that, when constructing the image, we are dealing with stereometry to a great extent, which considers figures in space. Planimetry is also involved in the construction process, but it deals with questions of figures on the plane. These two sections are interconnected and participate in the creation of the object.

The necessary and significant fact in the construction of the head and figure of the person is the reference point. We consider the reference point an anatomically significant, structure-forming system in the human body, on the basis of which plastic transitions take place from one form to another. This includes a constructive node, the point of plastic transition of forms. The foundation of man is the skeleton and the whole structure is based on it. The bone bulges that lay the fracture of shapes and directions will be anchor points. The most significant ones that affect the overall plasticity are used when drawing. The points are defined symmetrically. At a certain angle, if one of the dots is invisible, we need to see through the shape to find it. In the future, symmetrical drawing will allow us to attach the muscles, to create a unity of plasticity, and to convey the overall volume.

The main anatomical nodes or points interact with each other and work in space. The points in turn are converted into lines and further into geometric shapes, and the shapes reflect faces. The artist is interested not just in the line, but in the form in the spatial environment. As a result, there is a 3D volume even without the use of tone. At the same time, we note that the artistic and visual possibilities of the line are endless. The nuance of tonal pressure and the thickness of the line can convey space and depth.

When conducting research in the field of construction and volumetric construction of any complex shape, it should be understood that the distribution of geometric shapes should not line up meaninglessly. One geometric form may not contain volume, but several forms already lay a certain constructive block, which creates the impression of planning and environment. The geometric figures allow you to lie down and check general and particular proportions, and to convey a certain angle. Conventionality is not acceptable in the construction, and with any convention, it remains important, the bookmark of the *depth* of understanding.

Using an understanding of three-dimensional volume, the student develops spatial thinking and learns to work with masses in space.

Plastic anatomy is also fundamental in the learning process, without which a reliable display cannot occur. The understanding of tubercles creates and reveals the pattern of creation and operation of elements in the human body. Also, the work of all anatomical reference points determines and accurately conveys proportional relationships. Thus, by relying only on points, we can draw a complete figure from any angle.

With further work, all points and shapes will be softened, brought to one holistic *live* system.

It should be noted that the transfer of plasticity remains important in displaying the truth and authenticity of life and in revealing the individual psychological characteristics of a person. Sometimes, we can talk about the single layer line, which characterizes a person and reveals his/her fundamental structure.

Plasticity is the volumetric and expressive property of the human body. It is inner content. Plastic does not only mean the change in the outer contour of the figure. The internal dynamic plasticity plays an important role in the learning process. You can approach plasticity by studying the person. It is necessary to find individual characteristic features in it, which, in the future, will bring the student closer to an understanding of internal plasticity. The student studies gestures, facial expressions and gait, which reflects the emotional structure of the figure and contributes to the disclosure of the inner content.

If we consider plasticity in a narrow sense, then we can characterize it as a perfect mastery of form, with soft tonal transitions from one form to another. The form becomes more expressive. This action takes place with the help of graphic and pictorial techniques.

We emphasize that we regard plasticity not as a dynamic physical action, but as a dynamic property with a static one.

Graphic plasticity contains elements such as light, shadow, proportions, perspective, and line.

Let us return to the pyramidal and polygonal constructive modelling method. It allows us to identify and activate the plasticity of the figure. As a result of the search for forms and the imposition of geometric figures, activity and dynamics in specific parts of the figure are enhanced. We begin to perceive internal plasticity through important strict points in the figure, which are transformed into one plastic line, which lays down the overall dynamism.

Structural Formation of the Human Figure Based on Anatomical Reference Points

The anchor point is a starting point, i.e. the point from which the linear constructive construction is carried out, which sets the correct course of work with the correct application of this starting point, and its auxiliary elements are points located nearby – points that form various geometric shapes from which the volume construction form we need arises (Kuznetsov 2013).

We note the main anatomical reference points of the human figure, thanks to which the construction is carried out. The position of the pelvis determines the pubic fusion and the anterior superior iliac spines; if we consider the position from behind, then these points are the last vertebra of the coccyx, the protrusion of the iliac bones and the ischia tubercles.

Having determined the anatomical reference points in the spinal column, it is possible to convey the general plasticity, the nature of the movement. The active value is occupied by the first and seventh cervical vertebrae, the twelfth thoracic and fifth sacral vertebrae.

The reference points are considered and applied in the head vertex (the highest point of the crown), frontal tubercles, glabella, nasion (middle of the bridge of the nose), rinion (the highest point of the nasal bones), lateral protrusions of the superciliary arches (superior orbital protrusions), zygomatic protrusions, angle of the lower jaws, edges of the orbital cavity, gnathion (chin elevation), parietal tubercles, ear opening, and mastoid processes.

The following anatomical reference points are responsible for the formation of plasticity, transmission of rotation, the angle of the chest and torso as the jugular cavity, acromion, the xiphoid process of the sternum, the edge of the end of the false ribs, nipples, and the navel.

The points protrude in the upper shoulder girdle as olecranon, styloid process of the radius, and fingertips.

The relationship of the upper part with the lower one is carried out thanks to points as the greater trochanter of the femur, the patella, the head of the fibula, the inner and outer ankles. In the foot, important points are the fingertips and the calcaneus.

The reference points can be used much more when building. We have named the main ones that actively reveal plasticity and construction.

The systematic interaction of all points determines the work of geometric shapes; first of all, this form is a triangle. With the complexity of the design, complex geometric configurations and shapes are created as pyramids that turn into tetrahedra, octahedrons, and icosahedrons. This once again confirms that any image and everything visible consists of geometry and combinatorial solutions and interactions.

Working with the complex geometric configuration is the form of geometric interconnection that is necessary to convey the *weighty*, fundamental image and internal content.

When working on the *live* model, all these structures are softened, but nevertheless incorporated.

The pyramidal and polygonal constructive method stimulates analytical thinking. It allows you to find the relationship, the patterns between elements and to subordinate them to the whole.

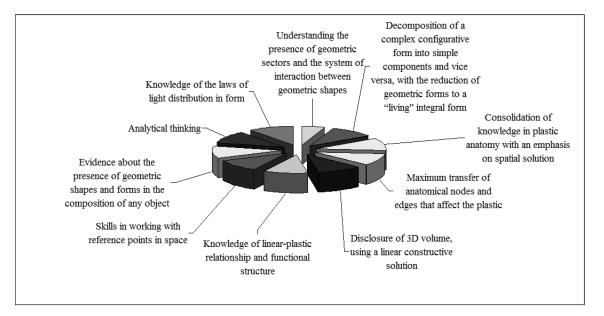


Figure 1. Elements of the Anatomical Polygonal and Constructive Modelling Method

P. Chistyakov argues that "Drawing is the same harsh and, most importantly, exact science as mathematics. It has its own unshakable laws, harmonious and beautiful, which need to be studied..." (Great artists about drawing 2022).

We agree with this statement, since the surrounding reality and, in particular, art basically contains mathematical laws. Art is a well-considered and structured science based on evidence and rules.

On another occasion, he declared: "Drawing, if I may put the question this way, is the masculine part of art. The painting is feminine. Everything courageous, firm, stable, noble in art is expressed by drawing. Everything tender, caressing the eye, the nerves, everything that is strongly liked at first impression is expressed by painting. Yes, yes, it is painting. The fall of art creates painting... Drawing is the rise! These are the foundation and at the same time the top!" (Smirnova-Rakitina 1961).

P. Christyakov said the following to his students: "I teach you, I teach, but all of you do not understand that it is necessary not to complicate, but to simplify the already excessively complex surface of each visible form... Reduce it to the simplest system of several private, mutually intersecting surfaces... Look for the utmost simplicity... Generalize... (Smirnova-Rakitina 1961).

What is created by nature conveys the perfect form that cannot be copied. In order to understand the design, it is necessary to disassemble it into its components, the most significant, characteristic forms

that affect plasticity. The system of simple forms, their combinatorial sound, is further transformed into the complex solution.

The problems of drawing and constructive construction have been addressed by artist teachers, such as Anton Ažbe, Shimon Kholoshi, N. Volkov, V. Vesnin, D. Kardovsky, and J. Preisler.

According to A. Ažbe, it is necessary "to study the depicted form well and understand its structure, and understanding its structure, he cannot fail to notice that, no matter how complex the form is, its surface can be seen as a combination of separate parts that are simple in form items..." (Moleva 1958: 60).

Of course, it is a fact that any complex shape consists of many small and simple geometric shapes. And before starting work, it is necessary to conduct a deep analysis, to understand the design, and to decompose a complex form into simple ones and subsequently combine them.

Shimon Kholoshi believes that, having first depicted the object in the form of the certain general scheme, the artist will then be able to organically build its form on this basis.

Initially, this approach separated the construction of the form from the tone, which made it possible to convey the construction more strictly (Moleva 1958: 60).

We note that, at the initial stage of construction, the most methodologically correct solution will be the decision to transfer the *wide* design solution, and then to carry out the detailed design construction, already on the basis of the total mass. This approach makes it possible to reveal the structure more clearly. Also, the design does not always have to work separately from the tone. The tone reveals the possibilities of transmission, the most accurate proportional values and full volume.

N. Volkov claims that "It is necessary to teach the logic of perception of three-dimensional forms in order to solve more and more complex issues of perspective construction even by sight. It is necessary to go from objects with a clear frame to objects in which the constructive frame is hidden and can be detected by a skilled eye" (Volkov 1950).

The formation of three-dimensional thinking, the formation and activation of the logical perception of three-dimensional forms occupies a priority place in the development of the professional qualities of future artists. By understanding the construction of simple forms, one can detect them and render them in the complex form.

The development of the analysis of logic, shaping in the environment, and patterns of structure entails the transfer of the *depth* of thought and the *rich* living form, construction as a whole.

The entire construction of geometric shapes reveals the rhythmic plastic form-building of the particular model.

Discussion

D. Kardovsky advised that it is necessary "to extend the analysis of the three-dimensional form of simple geometric bodies (cylinder, ball, cube) to the nature of a living model." He suggested that, when drawing the nose, one should be guided by the fact that it is a prism, limited in space by four main planes. He also advised breaking up the whole figure on a plane, i.e. "chopping off the form" and, only after having comprehended the large form, to proceed to solving small parts (Kardovsky 1938).

J. Preisler considers geometry and drawing from nature as the basis for teaching drawing. He believes that "geometry helps to see and understand the shape of an object, and when depicting it on a plane, it facilitates the process of construction, and the use of geometric figures should be combined with knowledge of the rules and laws of perspective, as well as anatomy" (Cesi 1749).

V. Vesnin accurately notes that "... first of all, all methods of 'copying' should be discarded as methods that teach a passive attitude towards nature, to imitation, to its meaningless repetition. We must firmly grasp that drawing is an active process – a great work of thought, eye and hand..." (Ghenadie sontu fine art 2020).

There is no doubt about this belief. Passive drawing leads the student to superficial work, finding only the contour on the surface of the plane, without the clear understanding of the structure and patterns. Such drawing often leads to a decrease in the professional qualities of both the individual and the student group as a whole. In the process of visual activity, you need to constantly think, analyze, and compare. Drawing is the active process.

The tasks for linear-constructive construction of the form help students better assimilate the educational material, teach them to constantly think and reason while drawing, and wean them from passive copying of light and shadow effects. With the help of these exercises, the draftsman begins to understand that the structure of the form is always constant, regardless of the angle and lighting (Rostovtsev 1989).

Having studied the form, students can realize that it is constant, present in every person, and more or less expressed. When shaping the form, students will analyze and focus on its significance and influence the general plasticity. Consequently, the mental activity is turned on, which will not allow *blind* copying of the surface. Having understood the design, the task is simplified when transferring complex angles and movements.

Having mastered the method of comparative characteristics between points and geometric shapes, it is quite easy for a student to solve any tasks.

The important thing throughout the construction of a human figure or head is the comparison of points with each other and understanding them in space. Each point is compared with each other relative to the vertical and horizontal axes. As a result, each point is precisely fixed in the right place. This system of building the human figure and the whole arsenal of techniques create the learning system and contribute to the development of spatial vision.

We could say that the pyramidal and polygonal constructive modelling method is identical or close to the 3D method, but it is not. With our method, only a triangle and its further volumetric transformations are laid as a basis. The pyramid acts as a more voluminous form relative to the triangle, so we are laying it as the basis. All lines of geometric faces are auxiliary, and the modelling tonal. The search for a large number of pyramids in the construction system with different pressure on the pencil leads to the disclosure of already tonal problems. Drawing begins to be regarded as a full-fledged volume with subtle nuanced tonal transitions. The layering of lines that is darker in tone on lines that are lighter reveals spatial possibilities and solves light and air problems. Light lines no longer work actively and convey the semantic load of the revealed constructive form, which is processed with a stroke. Thus, all construction lines remain; moreover, they are transformed into a *live* form. At the same time, the internal readability of the pyramids on a large form remains, the main of which reveal the most convex forms of the structure.

One of the tools that allow you to take timely strategic steps towards solving the problems of education and improving quality, as well as to adjust the methodology, is the systematic monitoring of progress. The teacher constantly systematizes and processes statistical data that are related to academic performance in the student group, which makes it possible to predict and make appropriate adjustments to the educational process in time.

Results

In order to most accurately and correctly determine the effect of the pyramidal and polygonal constructive modelling method, we used the method of multivariate statistical analysis. Also, we carried out a pedagogical experiment, an observation, and a conversation, and we used the method of problem presentation, as well as the heuristic and research methods.

On the basis of the performance statistics on the academic group, which was carried out over a certain period, we can draw the appropriate conclusions about the efficiency of the practical method. Students performed practical work on academic drawing, using the volume-constructive and tonal-painting methods. Also, work was underway on copying works. During this period, the students were not offered to use any of these methods and approaches when creating a graphical work; they chose the methodolog-ical sequence on their own.

When drawing, a visual method was used, which included drawing by eye and feelings and the sighting method; it helped determine the proportional ratios of elements with a pencil and compare the main directions.

It should be noted that some students used these approaches and methods in turn; others were guided by the methods in parallel and applied in practical work. Initially, part of the group began work on the construction and methodical conduct of a graphical work using the pyramidal and polygonal constructive modelling method.

The practical work was evaluated and points were given, with the help of which we determined the level of progress in the group and identified the most effective method.

The analysis of progress was carried out in two groups of students in the Easel Painting specialty. There were two years of study with seven students in the group and four years of study with 10 students in the group.

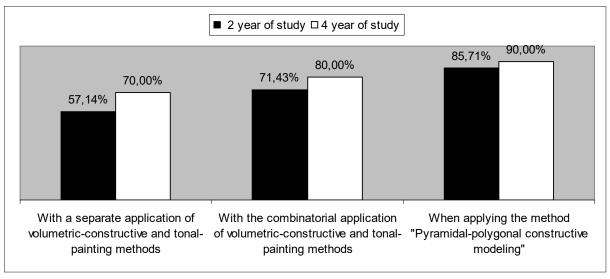


Figure 2. Comparative Analysis of Qualitative Progress

We also note the fact that, at the initial stage of training, it is necessary to include the study of simple geometric bodies in the year, such as a cube, a pyramid, a prism, and a ball. The gradual complication of tasks will reveal new opportunities for the student, improve the quality of tasks, and form a method of figurative analysis and synthesis, comparison, and generalization.

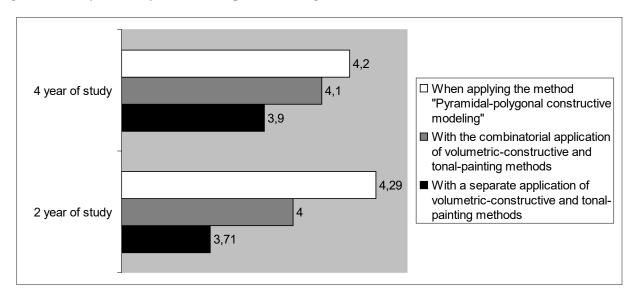


Figure 3. Average Score in the Two and Four Years of Study

The study clearly showed that, due to the use of the pyramidal and polygonal constructive modelling method, there is a systematic and steady increase in the level of academic performance and assimilation of educational material. Based on these data, we can say that the constant application of the method can radically change the quality of education and raise the level of constructive-spatial thinking in the student.

Reception of the Transition from the Planar to the Volume-Spatial Image Solution

In the article, we have already considered how the organization of tonal relationships and the layering of lines occur, which form the tone and reveal the planeness. Let us consider this question again, but in more detail. It is often believed that the constructive method, especially at the initial stages of building a figure, does not solve three-dimensional problems. If you work incorrectly on the image, this situation may arise. When applying the pyramidal and polygonal constructive modelling method, one should perceive the airspace from the very beginning.

When creating the image, it is necessary to identify and determine the tonal relationships and to find the amount of shadow in kind. The shadow helps enhance and reveal the content of the form.

By operating with the pressure of the line, it becomes possible to transfer space. The first plan is saturated with the most active line or stroke. The active line is superimposed on the light line, lighter, and thus the work on the task is already carried out with the use of tone and analysis of tonal relationships. The light lines do not lose their significance; they soften and fill the bottom layer of the format with tone. All light lines intersect with each other and work as additional lines.

You do not need to remove these lines. In this case, the light lines will be the gray tone. We know that any image contains three tones: gray, dark, and light. In subsequent work on the image, a search for tonal nuances is carried out. Let us consider in a broad sense the creation of tonal relations and the identification of the forms of the human figure on the picture plane. In the process of working on the modelling of a form, one can consider not the line, but the triangle or its volumetric transformation, i.e. the pyramid. At different angles or inclinations of triangles and pyramids, with their systematic crossing, the sides or faces serve as a stroke that has a different slope, thereby revealing certain forms and solving them in tone. It turns out that the human figure is being built and the image is simultaneously filled with tone.

The long-term work on the task allows you to achieve the maximum result and complete solution of tonal problems. The tonal analysis creates a three-dimensional and air-spatial image.

Therefore, with this approach, we denote the contrast of light and shadow by increasing the tone where the form is refracted. The edges of the geometric forms create the illusion of a darker tone in relation to other areas of these geometric forms. The light source appears in the image. At the same time, it is necessary to compare one section of the form with another in tone, compared with nature. After subordinating all parts (the geometric blocks) to each other and bringing the structure to integrity, one can consider the figure of a person or a person's head as the *living* form endowed with psychological characteristics.

The interesting fact is that, with maximum layering of lines, the volume increases and the shape of the model is enriched. At the same time, volumes of less significant forms are subtracted, which affect the overall plasticity of the model.

Based on all observations and experiments, it can be argued that the method reveals three-dimensional problems through a constructive-linear interaction of forms.

Thus, we get a modernized model of methodical work on the image. In this model, the conditionally abstract beginning and the finished result are combined, which already acts as a realistic image.

Conclusions

The study of academic drawing remains the basis in artistic and professional education. The drawing is closely interconnected and comes from the accurate understanding of theoretical knowledge and practical skills in plastic anatomy. The knowledge and understanding of the anatomical nodes contribute to the formation of polygons that reveal important anatomical facets. The basis is the triangle which, with further development of the design, turns into a complex geometric system.

The pyramidal and polygonal constructive modelling method simultaneously involves the number of disciplines and contributes to the development of spatial thinking. There is an interweaving of disciplines, such as Plastic Anatomy, Perspective, and Fundamentals of Composition. One of the main tasks of the method is the transmission of the 3D image by means of the linear constructive solution. Also, it develops memory and promotes active analytical activity.

The anatomical structure and nodes are identical in all people, only displayed in varying degrees. By revealing the anatomical nodes in each, we can convey the character of the model and the rhythmic-plastic shaping.

The questions of the *new* level of professional education, the development of students' creative and aesthetic thinking, and constructive understanding were and will be of interest to researchers in this field.

The pyramidal and polygonal constructive modelling method is able to contribute to the development of art education. It can help students master the basic shapes and structure of the human figure, human head, or any other object, using geometric shapes to solve tonal problems.

This object modelling model makes it possible to reveal the internal plasticity of the human figure through understanding the internal state, physiological and psychological properties and states.

The pyramidal and polygonal constructive modelling method is the new improved model of the methodical sequence of work on any graphic and pictorial work.

All methods and forms of mastering constructive understanding are necessary for the development of professional artists.

The systematic and active application of the pyramidal and polygonal constructive modelling method in the educational process in higher education can raise the professional level of students, improve the quality of education at the university, and realize the transition of the region/the country to the new global world level of high-quality effective professional education.

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