

## DEVELOPMENT OF SCIENTIFIC MONOGRAPHY PROJECT ON "AXONOMETRY"

Yo'ldashev Solmonjon Iqboljon o'g'li

Step 1 Master of the Kokand State Pedagogical Institute

### Annotation

Observations show that the knowledge, skills and competencies in graphics are widely used, especially when professionals are working on a new product project. At this stage, the creative specialist makes extensive use of a type of image, especially called axonometric projections.

**Keywords:** axonometry, projection, coordinate, method, monography, coordinate system.

### INTRODUCTION

The term "axonometry" is derived from the Greek words  $\theta\xi\omega\nu$  - arrow and  $\mu\epsilon\tau\rho\epsilon\omega$  - measure, which means measurement on axes. When we say "arrow" here, we usually mean coordinate axes.

A single straight line represents the coordinate axis of a one-dimensional geometric space. A point on it is strictly defined as the origin, and other points on that straight line are measured or placed relative to that point taken as the origin. In this case, the cross-section, which has a constant length, is taken as a unit of measurement. When we say the coordinate of a point, we mean that it is at a distance equal to exactly the unit of length from the origin.

### MATERIALS AND METHODS

A two-dimensional coordinate system is typically used to represent two-dimensional geometric shapes represented in an algebraic form in the form of drawings. Among professionals or professionals whose activities are directly related to image creation, such a system can be used effectively when copying a finished image of the same size, enlarging or reducing the copy several times.

When copying a given image that is equal to, greater than, or smaller than a given image using a two-dimensional coordinate system, a clear coordinate system is usually introduced in the tag copy of the image. Since the images have mainly surfaces bounded by a rectangle, it is not particularly difficult to do such work. For example, any end of a rectangle that delimits an image (in the practice of photographers, the lower right dot is more common) is considered to be the origin, and the two adjacent sides of that triangle are considered to be the coordinate axes. In order not to refer to the measurement work at each step, a coordinate cell is created on the image surface in some way. The dimensions of a coordinate cell are usually in the form of squares, the side of which is usually taken to be equal to or multiplied by the unit of length taken. To avoid damaging the original image, the grid lines are drawn with lines that are easy

to erase. Or, more often than not, the surface of the image is covered with transparent paper and the coordinate cell is formed on that transparent paper. Such a device is called a palette, which means "plate" in French

## RESULTS AND DISCUSSION

One of the most important concepts in the science of perspective is the concept of a geometric apparatus that justifies the process of forming perspective images. Of course, there are a variety of such devices in the future. But we will limit ourselves below to an introduction to one of its most commonly used types.

In the future, the images created using the coordinate apparatus are typical: the majority of those who see the inconvenient and "incomprehensible" images, such as the depiction of straight lines parallel to each other as intersecting lines, the depiction of intersecting parallel and intersecting lines of different lengths. specialists, especially engineers and various professionals. In addition, the relative complexity of the theory underlying the creation of perspective images also frightened many experts and discouraged them from working in perspective.

In order to create a perspective free from the "flaws" listed above, it was necessary to look at the image object from a very distant distance, pushing the point of view  $S$  to infinity. But in science, this work was not easy. In this regard, it is especially worth recalling the opinion of VF Kagan (1869 - 1953), one of the most famous mathematicians of the second half of the last century and the first half of the twentieth century. "... It was easier to stop the sun and move the Earth than to shrink the sum of the angles of the triangle, to gather the parallels to one-third, and to direct the perpendiculars drawn in a straight line," he said.

When working on new technical solutions, such as tools, equipment, mechanisms, benches, machines, in other words, the general appearance of inventions or the appearance of parts in them, □ experts are more irrational (visible but measurable) than rational (measurable, but not visible) images. non-images) in practice. Because irrational (visual) images allow a person to think a little more perfectly about images, it activates the process of exchanging ideas with their colleagues.

Necessary details. In teaching the science of descriptive geometry, students have to be given a purposeful scientific knowledge about "closed screw surfaces". Information about them has not yet been included in the existing textbooks of descriptive geometry. But from some sources it is possible to collect and sort the most basic information about them.

## CONCLUSION

Thus, puzzles are still common in scientific and didactic work on axonometrics. Head over heels always offer unexpected positive solutions.

## **REFERENCES**

1. Глейзер Г.И. История математики в школе VII-VIII кл. Пособие для учителей.- М., "Просвещение", 1982.-240с.
2. Рузинов Л.Д. Проектирование механизмов точными методами. Ленинград, «Машиностроение», 1972-192с.
3. Шитов В.М. Механизация чертежно-конструкторских работ. М.: «Машиностроение», 1966-72с.
4. Р. ХОРУНОВ «Чизма геометрия курси» ТОШКЕНТ 1997-158с.