IMITATION OF TRADITIONAL PAINTING TECHNIQUES IN A GRAPHIC EDITOR
Perova O.V. (Russian Federation) Email: Perova543@scientifictext.ru

Perova Olga Valentinovna – 2D-Illustrator and digital Painter,
FREELANCE ARTIST, SOCHI

Abstract: modern graphics editors allow the artist to imitate any technique of traditional painting on the computer. Despite the criticism of adherents of traditional art, who believe that the computer does all the work for the artist, one should understand that this is just a tool. Any traditional artist who has mastered the skill of working with graphics editors is able to work in the usual pictorial technique, but in its digital embodiment. The author focuses on the techniques used to fully imitate traditional painting techniques, such as watercolor, oil, and pastel. Watercolor is one of the most difficult techniques, but using brushes with soft edges and controlling the transparency of the stroke allows you to achieve an impressive result. Oil painting is characterized by textured volumetric strokes, that can be achieved by using textured brushes with the effect of embossing (Bevel). Pastel refers to the graphic, but it can be used to convey the entire complex range of color relationships. Using brushes with torn strokes reproduces it quite accurately.
Keywords: digital artist, graphics editors, traditional painting, watercolor, oil, pastel.

ВОСПРОИЗВЕДЕНИЕ ТРАДИЦИОННЫХ ТЕХНИК ЖИВОПИСИ В ГРАФИЧЕСКОМ РЕДАКТОРЕ
Перова О.В. (Российская Федерация)

Перова Ольга Валентиновна - 2D-иллюстратор, специалист в области цифровой живописи,
художник–фрилансер, г. Сочи

Аннотация: современные графические редакторы позволяют художнику имитировать на компьютере любую технику традиционной живописи. Несмотря на критику приверженцев традиционного искусства, считающих, что компьютер выполняет за художника всю работу, нужно понимать, что это всего лишь инструмент. Любой традиционный художник, овладевший навыком работы с графическими редакторами, способен работать в привычной живописной технике, но уже в ее цифровом воплощении. Автор акцентирует внимание на приемах, используемых для полноценной имитации традиционных живописных техник, таких как акварель, масло и пастель. Акварель – одна из сложнейших техник, но использование кистей с мягкими краями и управление прозрачностью штриха позволяет добиться впечатляющего результата. Масляная живопись характерна фактурными объемными штрихами, что решается за счет использования текстурированных кистей с эффектом тиснения. Пастель относится к графике, но с ее помощью можно передать всю сложную гамму цветовых отношений. Использование кистей с рваными штрихами воспроизводит ее довольно точно.
Ключевые слова: цифровой художник, графический редактор, традиционная живопись, акварель, масляная краска, пастель.

Digital painting is a relatively new style in the visual arts, which has become widespread since the end of the 20th century. Digital painting works are created on a computer using graphics editors. Compared to traditional art, digital painting has several obvious advantages. The computer allows you to edit the image at any stage, save intermediate stages and return to them at any time, as well as gives you access to extensive tools.

This has generated a wave of criticism of digital art. One can find statements that "true" painter, that's working with the traditional techniques, must learn basics of the pencil and brush drawing, color mixing, various types of pigments, peculiarities of material. When traditional painter ends work, his painting becoming unique, the one and only that exists physically. While digital artist just buys expensive equipment and is able to produce great work right away [6].

However, the graphics editor is only a tool, a digital embodiment of a brush, pencil or fountain pen. The final result will look like an oil-painted portrait, watercolor sketch or stylized poster - it depends solely on the artist and his artistic skills. Graphics editors fully model and copy the traditional tools of the artist, digital painting is based on the same academic laws as the traditional one. But, unlike the traditional one, it hardly ever involves life drawing. In the workplace of a digital artist, there is a computer, drawing tablet, one or two monitors - it does not imply the real presence of the depicted object in the first place.

Adobe Photoshop and Corel Painter are the most popular graphics editors. The programs contain sets of various brushes and allow you to put the most perfect, accurate and sensitive to pressing and texture of the selected surface strokes on the virtual canvas. Brushes can imitate not only oil, watercolor or pastel painting, but

also applying paint with a palette knife or a sponge, a technique of applying splashes. In addition, there are functions provided to create your own brushes and fine-tune existing brushes to suit specific tasks, define colors for each bristle, so that you can paint with multi-color strokes and simulate any artistic technique [1].

Imitation of the artistic technique is understood as methods and techniques of work that allow either to stylize pixel images as works of traditional art (photo processing) or to create a new image from scratch [4]. Next, we will consider ways to recreate some traditional painting techniques, namely: watercolor, oil, and pastel with the help of graphics editors.

Watercolor - painting technique, implying the work of water-based paints, one of the most complex types of fine art. A special feature of watercolor is an airy and light texture. Transparency of watercolors allows you to paint air, subtly transmit a play of light and shadow. Due to the high fluidity of the watercolor, the amount of paint applied should be minimal in order to avoid spreading and over-wetting the sheet, while brush strokes should be smoothly joined and form a color gradient.

Digital imitation of watercolor, as a rule, is carried out with brushes with a soft edge, with no more than 30% transparency. The contours of the objects are applied with a thinner stiffer brush, then filled with large strokes. Tone density is achieved by several translucent layers laid one on top of the other. The effect of over-wetting the edges of the brush and uneven swelling of paint along the stroke is adjusted separately in the settings of the drawing tools. Partial erasing and blurring of the strokes can reduce the sharpness of the borders and weaken the tone. At the end of the work, a watercolor paper texture is laid over the drawing.

Fig. 1. Two transparent layers are applied with a soft brush one on top of the other and processed with an eraser; a watercolor paper texture is superimposed on top

In addition to the usual soft brushes, the artist has access to special sets of watercolor brushes, which are solid spots identical to the tracks left by the real brush on paper. Such stains can be created in the graphics editor independently, however, this is a laborious task. The finished set provides several dozens of ready-made spots of various shapes that give a very realistic effect to the final work.

Fig. 2. Watercolor brushes from the finished set

Oil (and acrylic) painting have significant differences from watercolor, as the physical properties of oil paints - three-dimensionality, opaque broad strokes with a noticeable relief.

When working with a digital painting that imitates the technique of oil painting, first of all, you should do a linear compositional drawing. A layer of evenly filled areas of the image is placed above it; it is made with large-diameter brushes with the full opacity of the stroke and low softness of the edge. You can also fill the layer with a neutral brown color and apply a blending mode to it, which will create an imitation of yellow ocher or burnt sienna used in oil painting.

Then comes the layer with details of the image. When working for greater authenticity, it is recommended to use textured brushes designed specifically to simulate oil or acrylic paint. For the effect of a thinner brush, you need to add a few lines and reduce their transparency.

Fig. 3. Brushes allow you to simulate an oil painting

You need to impose a canvas texture with a transparency effect on the image to give a final look to the work. In addition, it makes sense to paint additional scratches and cracks inherent in oil painting with a thin brush. Finally, create another layer with the Bevel effect, make a few strokes in the most saturated places of the image, and then wipe it occasionally with the eraser with 30 - 50% transparency. This will give an additional feeling of voluminous relief strokes.

Fig. 4. The effect of voluminous strokes

Pastel comes in the form of crayons or rimless pencils, consists of pressed pigment with the addition of linseed oil or wax, or without additions. According to the theory of art, working with pastel on paper refers to a graphic art, but it is also possible to create a real painting with pastel, conveying the entire complex range of color relationships. Digital imitation of pastel technique is quite complicated. Generally, it is preferable to draw a sketch with uniform fills, then process it using the filter built into the graphics editor.

When creating an image from scratch, it is recommended to use a brush that imitates a pencil, since a torn pencil stroke is similar in appearance to that of a pastel chalk. You should create a new translucent layer and use the soft brush to draw the primary colors. Then, on top of it, you need to go through with a wide ragged brush, leaving a trace of chalk.

Fig. 5. Pastel stroke

If the image requires a gradient transition, it can be done with the appropriate Gradient Tool and finished with pastel strokes. In the end, you'll need a thinner pencil brush to add more detail to the work. You should take darker shades of the colors present in the image and add rich saturated strokes. You can also select a layer of strokes and make a color transition directly in the selected area.

Список литературы / References

1. *Turlyun L.* Cifrovaja zhivopis' kak vid komp'juternogo iskusstva [Digital painting as a type of computer art] // Molodoj uchenyj [Young scientist], 2016. № 4. P. 876-879 [in Russian].

2. How to paint in oil at a computer. [Электронный ресурс]. Режим доступа: https://cgmag.net/kak-napisat-kartinu-maslom-za-kompyuterom/ (дата обращения: 20.09.2018).

3. How to create a pastel painted landscape in Adobe Photoshop. [Электронный ресурс]. Режим доступа: https://design.tutsplus.com/tutorials/how-to-create-a-pastel-painted-landscape-in-adobe-photoshop--cms-23477/ (дата обращения: 25.09.2018).

4. *Mironov D.* Komp'juternaja grafika v dizajne. [Computer graphics in design] // BHW Petersburg, 2008. 560 p. [in Russian].

5. *Blais Joline, Ippolito Jon.* At the Edge of Art // Thames & Hudson, 2006. 256 p.

6. *Perova O.* Fan-Art: Independent Art or Blind Copying? // Young Scientist USA, 2018. № 14. P. 31-36.