

*V. Loskucheriavyi,
Student,
V. Kulak,
Lecturer,
Zhytomyr Ivan Franko State University*

IMPACT OF DIGITAL COMPUTER TECHNOLOGIES ON ART AND DESIGN

In the 21st century, about half of the world's population turns to art. Each person, using it for their own purposes, seeks to stand out, attract attention, or become an example to follow. However, not everyone understands art and enlists the help of specialists: designers, illustrators, artists, etc.

The purpose of this exploration is to explore the impact of digital computing technology on art and design.

Art or art is created that reflects the expression of human ideas and feelings through the use of art forms and means. It includes various types of art: graphics, painting, photography, sculpture, dance, theater, etc. This term is also appropriate to use to describe subcultural trends. For example, "street art" is art created on the streets, which is a good manifestation of self-expression. Of course, if it is not illegal. In some countries, such as the United States, Great Britain, France, and Australia, authorities may grant permission to create street art and even commission it as part of public art projects [1].

Art has become so widespread that it is simply impossible to imagine everyday life without original and creative logos: "Sharikava", "Instagram", "Deviantart", "Windows", "Photoshop". Probably, life would be quite mundane and colorless. All images, textures, letters, and logos are the work of talented artists. Art is widely used both in offices (in the form of a brand book) and on the streets (in the form of a frieze light of a market or coffee shop), with the aim of attracting the attention of the consumer. Thus, the more the product design attracts attention and is remembered, the faster it is recognized on the market and among competitors. For example, consumers are more often interested in the question "who is the author or developer of this product?".

Nowadays, digital art has become extremely popular. It is creativity that uses computer technology and software to create various types of art. For example, it can be 2D art (drawing, graphics, and design) and 3D art (modeling, sculpting, and animation). Digital creativity uses a huge number of tools and techniques, such as raster and vector graphic editors (Adobe Photoshop, Adobe Illustrator, Paint Tool Sai, Krita, etc.), computer programs for 3D modeling and animation (ZBrush, Blender, Adobe After Effects), as well as programs for photo processing (Adobe Lightroom, Adobe Photoshop, Snapseed). It is extremely convenient because it opens up a wider range of possibilities for creativity to the artist than traditional techniques. Digital art is much more efficient and faster in creating works and also provides greater opportunities for experimentation with form, color, and texture. This art is rapidly gaining popularity in

the era of digital technologies and is used in many fields: web design, the film industry, the game industry, advertising, etc [2].

An illustration is an accompaniment of verbal material with visual images that help to enjoy the atmosphere of the world presented by the author of the book [3]. Previously, in order to create an illustration for a book or a cover, it was necessary to go through an extremely long and tedious step-by-step process, in which the artist used a sharp stick to draw an image or a small fragment on a metal plate, and only then paint was applied to the surface and an impression was made under the press on paper. A similar method of creating an illustration was called "Lino engraving", or rather, engraving on linoleum. This process is no less troublesome, but the result is always beautiful. To create such an illustration, you need to carve a picture on a piece of linoleum with special cutters and draw the image in a mirror image. At the end of the process, paint is applied to the surface and an impression is also made under the press. Thus, these two methods made it possible to make a series of images for later use, because the form remained and could be used for an extremely long time. Interestingly, even with the development of technology, these imaging methods are still quite popular and in good demand. Such images are called "ex-libris" and if, for example, they are used when creating an illustration for a book on a mythological theme, then the book will have a certain charm and indeed some magic, and all because the combination of black and white colors has a very harmonious sound [4].

At the current stage of technology development, illustration is no longer extremely "problematic" to create, because it can be drawn by graphic editors, and in case of any mistake, a certain element can be corrected in a matter of minutes. Thanks to raster and vector graphics programs, you can simulate a large number of tools (pencils, pastels, watercolors, oil paints, or felt-tip pens), apply filters (blur, stylization, texture, imitation, etc.) and textures (paper, wood, grunge, retro wallpaper, etc.). Also, you can use different overlay modes (normal, darken, multiply, screen, overlap, difference, subtract, divide, etc.), as well as perform various manipulations with vector and raster objects (resize, rotate, warp, distort, etc.) [5: 5].

With the development of technology and digital art, a huge number of companies in the game industry begin to actively collaborate with digital artists and designers. Working on certain projects, artists perform very responsible and titanic work. One of the many companies that have attracted an unrealistic number of digital artists to its project is CD Project Red and its online game GWENT: The Witcher Card Game, based on the fantasy works of the Polish writer Andrzej Sapkowski - The Witcher. Many talented and creative artists worked on the design of these maps and characters, which is what the game itself says. Ukrainian artists were also involved in this project and created many images for various maps, including the Hero map, which used the image of a Ukrainian Cossack [6].

An extremely effective and original solution is the combination of digital art with cards, which are extremely popular among people of all ages and nationalities. They are rectangular pieces of material made of ultra-strong plastic, specially prepared cardboard, or thin paper. According to their purpose, cards can be divided into playing cards, fortune-telling cards, cards for tricks or magic tricks, cards for solitaire, and specific cards [7]. So, for example, tarot cards are considered one of the most common

and difficult tools for divination. They contain a system of certain symbols, archetypes, and images that have a rather complex and multifaceted interpretation. All types of tarot cards are called "schools" because they are considered not just varieties, but separate divination systems. They can be divided into four main schools: Crowley, Papius, Veith, and Marseilles. The main distinguishing features of these decks are the images and numbering of the arcana. Tarot cards are particularly popular because of people's belief in various prophecies. It is under this condition that the received information will have an impact on the psyche, and the illustration of a specific card and the entire deck as a whole will emphasize and complement the informational content. That is why the main task of an illustrator of tarot cards is to create the most original, understandable, and unusual illustrations [8].

So, digital art is gaining demand every day and follows modern needs. Artists and designers, in turn, have to follow fashion and current trends, which are started almost every day. Also, analyze the preferences of the modern generation in social networks for an accurate understanding of popular things. Thus, a designer or illustrator must always be up to date in order not to remain "outside the game" and to be competitive.

REFERENCES

1. Meaning of art in English. URL: <https://dictionary.cambridge.org/dictionary/english/art>
2. 15 Top Best Digital Art Software in 2023. URL: <https://justcreative.com/best-software-for-digital-artists>
3. Історія виникнення книжкової ілюстрації. URL: <https://zski.com.ua/shkilna-biblioteka/uroky-rekomendatsiji/istoriya-vynyknennya-knyzhkovoji-ilyustratsiji>
4. Ліногравюра: що це і як можна застосувати. URL: https://pidloga.ua/ua/news/stati/linogravyura_cho_eto_i_kak_mozhno_primenit_osobnosti_linoleuma/
5. Мальцева А. О., Кугай Т. А., Павленко А. Ф., Басанець О. П., Бистрякова В. Н. Вплив цифрових технологій на розвиток ілюстрацій в графічному дизайні. *Технології та дизайн* : наук. журнал. 2017. № 2(23). С.1-9.
6. GWENT: The Witcher Card Game. URL: https://witcher.fandom.com/wiki/Gwent:_The_Witcher_Card_Game
7. Гральні карти. Види гральних карт і класифікація карт за основними факторами. URL: <https://www.nashpoker.net/ua/articles/id-9/>
8. Карти таро: що це таке, як вибрати ідеальну колоду. URL: <https://liza.ua/uk/lifestyle/self-development/karty-taro-dlya-novichkov-cho-eto-takoe-kakuyu-kolodu-vybrat/>