

# Optical illusion: Apogee Development

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**Abstract** – The article provides a classification of optical illusions performed by the authors. Briefly described each of the 11 identified species. Offered the variants using optical illusions in the urban environment, exterior and interior.

Key words – optical illusions, anamorphosis, installations, angular illusion street art, cylindrical mirrors, surrealism, reverse 3D images, body art illusions.

## I. Relevance of research

For research we choose subjects relating to a variety of optical illusions. Immediately there is a logical question, why is this the subject? Optical illusions Elena Chernychuk began to admire at school, but once due to the lecturer of the course "Principles of Composition," and now her supervisor Victoria Bazylevych, capture has become a serious disposition, in fact capable of illusion to deceive not only the eyes but also the mind, and that's worth something. But for us the optical illusion also carried a certain philosophical disposition: if you can deliberately distort reality and not believing his your eyes, then why not fly to the moon? So we knew that for manthere is nothing impossible. The further we deepened in the "wonderland" of optical illusions, the more realized how little we know. In Europe and the USA optical illusions with every year reaches its peak, and when in Ukraine - on the contrary, it was over in the begining. Following by various artists in social networks, we realized that each of them is trying to work outside the box, and with some hard questions, but where are no mystery in the art without optical illusion? Therefore we think that we have chosen the actual theme.

## II. Types of optical illusions and their practical application

Certain kinds of illusions, exhibitions and creative artists of this trend, devoted articles the last years of Internet resources [1], [2], [3], [4], [5], [6]. The creative legacy of world famous artists of optical illusions in graphics, art and architecture represented in the Illustrated Encyclopedia 2007. "The world of art. Optical illusions in painting and graphics "[7]. However, over time the publication of this book, new kinds of optical illusion art come into the world new authors that deserve the attention of both researchers and practitioners design. Furthermore, the known optical illusions research can hardly be called generalizing and structured. Optical illusion began to develop in the 16th century, but the peak of its development they achieved only in the 21st century.

One of the earliest well-known anamorphic art is work by Hans Holbein «The ambassadors». In the foreground of the painting shows a human skull, which takes readable form, examine it only if the right side and at a certain angle (figs. 1 and 2).



Figs. 1 and 2. «The ambassadors». Hans Holbein, 1533 p. [8]

During the entire study we successfully found the material and it was sampled and analyzed for further research. Analyzed as existing classification of optical illusions and contemporary art, invited the author's own - the disposition and the technique works. The samples classified into 11 types of optical illusions:

❖ *spatial installation*. Shapeless heaps of things scattered in large halls transformed into a work of art, the viewer need only look at a certain angle. Representative: Bernard Pras (France) (fig. 3);



Fig. 3. Spatial installation B. Pras [9]

❖ *shadow illusion*. Shadows inherently fleeting, so it's hard to tell when people first began to use them to create works of art. But modern "shadow artists" reached unprecedented heights in the use of shadows. Artists use careful positioning of different objects to create beautiful shadow images of people, objects or words (fig. 4) [1].

At first sight installation resembles a bunch of garbage, only light streams through all covert becomes apparent.

Representatives: Tim Noble & Sue Webster (UK); Shigeo Fukuda (Japan); Kumi Yamashita (Japan) (fig. 5); Fred Eerdeken (Belgium), Rashad Alakbarov (Azerbaijan);



Fig. 4 . Shadow installation Tim Noble & Sue Webster [10]



Fig. 7. Street art Nicholas Arndt [2]



Fig. 5. Shadow installation Kumi Yamashita [11]

❖ *angular illusion* (distorted texts that can be read only from a specific position). Representatives: Hunter Thompson and Joseph Egan (UK) (fig. 6);



Fig. 6. Corner illusion Hunter Thompson and Joseph Egan [12]

❖ *street art* (creating 3D chalk drawings on sidewalks cities). Representatives: Julian Beever (UK); Nicholas Arndt (Russia); Edgah Mueller (Germany) (fig. 7);

❖ *anamorphosis on paper* (3D pictures on paper). Representatives: Sandor Vamos (Hungary), Ramon Bruin (Netherlands), Stefan Pabst (Germany). Authors works with pencils on sheets of paper, adding to his drawings such items that make the viewer it's difficult to understand where the real world ends and begins a fictional picture (fig. 8);



Fig. 8. Anamorphosis on paper Stefan Pabst [3]

❖ *gallery anamorphosis* (3D image through shadows and create a certain point of view 4D effect) (fig. 9);



Fig. 9. Gallery anamorphosis  
Magic Art Special Exhibition Of China [4]

❖ *cylindrical mirrors* (abstraction, which is reflected on the cylinder and becomes intelligible features). Representative: Awtar Singh Viridi (India) (fig. 10);

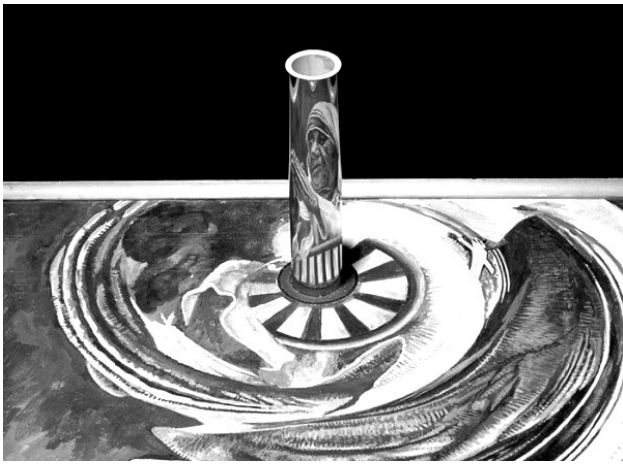


Fig. 10. Portrait of Mother Teresa by Awtar Singh Virdi [5]

❖ *art installation in the air* (installation becomes supernatural features, as not seen the object support and the object appears to "lift" in the air). Representative: Johan Lorbeer (Germany) (fig. 11);



Fig. 11 Art installation in the air by Johan Lorbeer [13]

❖ *surrealism, ambiguous - two sides of vision* (an image that conceals ambiguous meaning in the film). Representatives: Oleg Shupliak (Ukraine), Rob Gonsalves (Canada). A striking representative of realism in Ukraine is Oleg Shupliak. He creates masterpieces on canvas, embodying ambiguous meaning in the work, which usually depicted the silhouette of giant Shevchenko (fig. 12).

Pictures by Gonsalves - it is always a magical union of worlds, subtle metamorphosis flow of objects from one figure to another. Artist as hints to us - everything is interconnected in the world (fig. 13);

❖ *reverse 3D images* (artist paint the man and his environment, transforming reality in a picturesque setting). Representative: Alexa Meade (USA) (fig. 14);

❖ *body art of illusion* (to human body drawings depicting the 3D effect). Representative: Hikaru Cho (Japan) (fig. 15).

Optical illusions are attractive art form and have the potential for use in modern life, particularly in Lviv. In an



Fig. 12. I passed thirteen... Ambiguous by Oleg Shupliak [14]



Fig. 13. Sailing Island. Surrealism Rob Gonsalves [6]



Fig. 14. Reverse 3D images by Alexa Meade [1], [15]

urban environment and can use the exterior street art, art installation in the air, surrealism. We offer to use surrealism on ashen walls from trivial round houses that will certainly be positively perceived by local residents, will bring color and a certain philosophical sense in building. In particular, use of or offer us a famous surrealist and contemporary Ukrainian Oleg Shupliak. The interior - use spatial installations, shady, angular



Fig. 15. Body art illusion "surprise, which can not hide" by Hikaru Cho [16]

illusion of body art gallery and anamorphosis. We propose to use gallery anamorphosis in children's clinics: many times we watched as children exhausted long queues, and such a non-standard course can interest both children and parents, moreover, this will allow to inure love for art since childhood.

### Conclusion

It is noticeable that in our classification of 11 types of optical illusions only one Oleg Shupliak presents Ukraine in this art. Inconsolably, that we, Ukrainians, with great potential go far away behind world progress. Note that the material also sought to expand the horizons of our industry specialists.

After the study, we realized that in art there are no restrictions, here you are free, but at the same time bound limitations of his own body. To create genius does not need to be a genius, you must be a little crazy, do not be afraid to go beyond the desert-trivial round. Who knows, may be located outside the crystal waterfalls, but you can never quench your thirst until thou wander closed circle desert.

Ukrainians also be listed above the brilliant creators - need only to believe in themselves and assert themselves in some way. In order to do this, in our opinion, it is necessary to find the truth. However, as said Socrates: «Truth is like the sun, take a look at it - and then once will be blind, so it should look in the reflection. It is - how to look at the sun in a puddle». Artistic path only for the brave, but "bold always have happiness" (I.Bahrianyi «Tygrolovy»).

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