

Embedded Art

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Content

Brief history of painting

- main milestones
- the tree of modern art

New art media and Moore's law

- acrylic and modeling paste
- microcontrollers and sensors
- conductive paint wiring

Hybrid techniques

- generative art
- interactive art

What about the future?

- new media
- new paradigms



Der Winter,
2015 (30x20, Installation)

The history and theory of art

- Cultural artefacts have been created at all times.
- Later generations look with own eyes on artworks earlier created, again and again perceive artworks back that makes the history of art.
- The contemporary artists and viewers put these artifacts over a certain relation to the now day, and just this makes the theory of art.
- This theory (history) of art is then reflected down in the way how artworks are produced now.

Any theory of art is estimated by their ability to answer the crucial questions for their time in relation to the art:

1. What do I have to consider?
2. What does make an artist?
3. How can we distinguish good from bad art?

Georg Mitrohin and Miguel Covarrubias

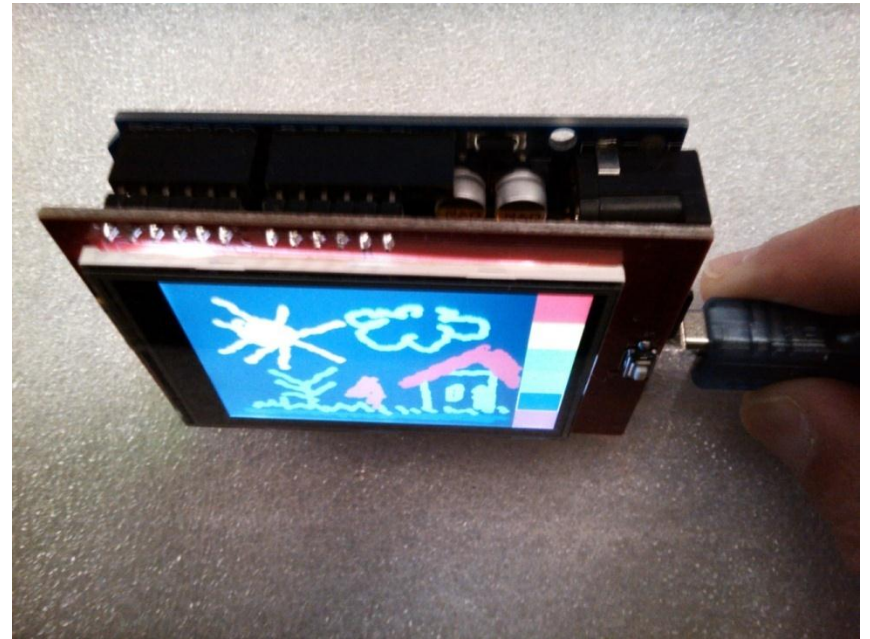
- Figurative art
 - romanticism
 - realism
 - impressionism
 - surrealism
 - expressionism
 - cubism
- Non figurative art
 - abstractionism
- Zeitfigurative art
 - constructivism
 - minimalism
 - conceptualism



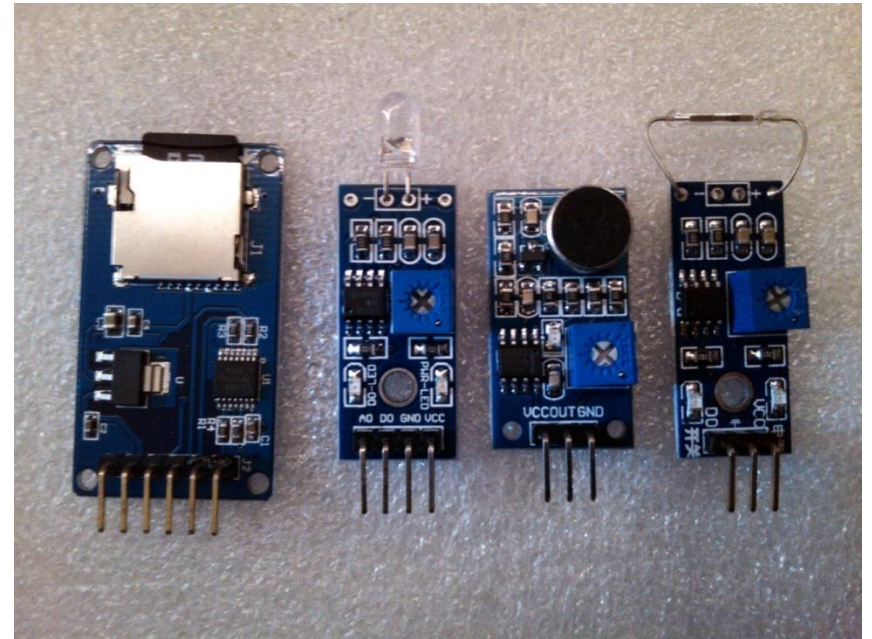
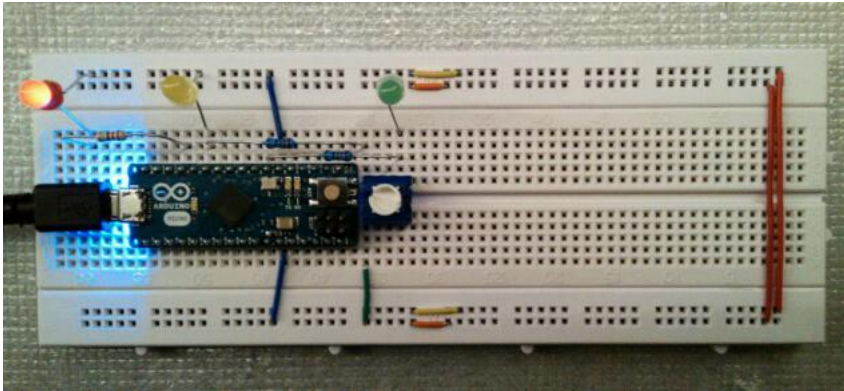
Painting and embedded electronics



Make it smaller



Arduino micro and sensors



Small canvas

Alter Baum,
2015 (10x10, Acryl)

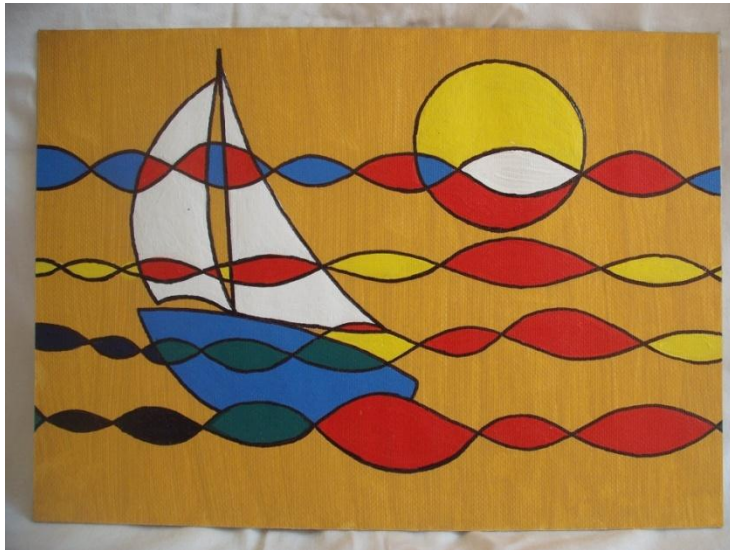


Мыс Тигровый, Фиолент,
2015 (7x7, акрил)



Constructivism

Весёлый кораблик,
2015 (15x20, акрил)



Stealth technology,
2015 (21x21, acrylic)

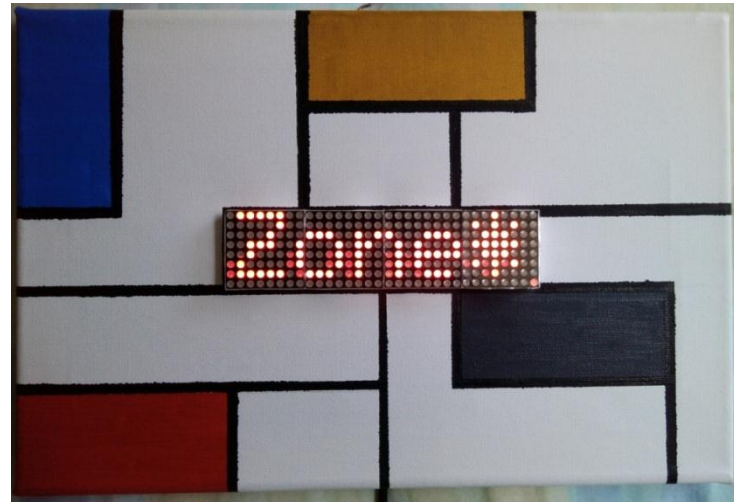


Abstraction and generative art

Robin Hood,
2015 (24x18, acrylic)



Matrix,
2015 (20x30, installation)

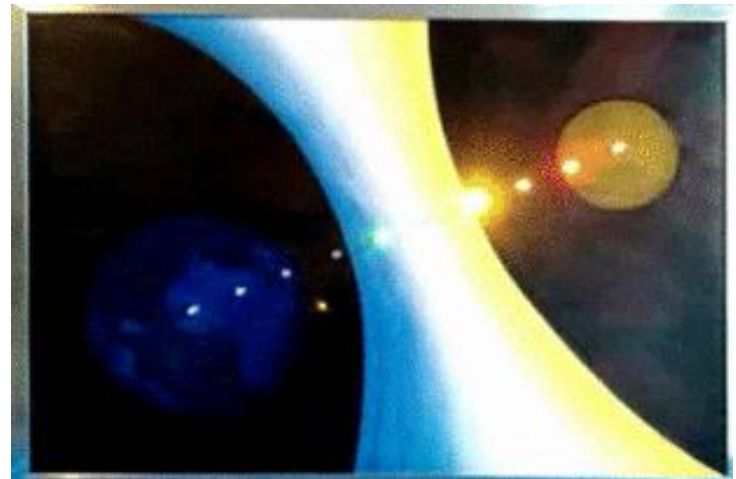


Space

Habitable zone,
2015 (20x30, acrylic, LEDs)

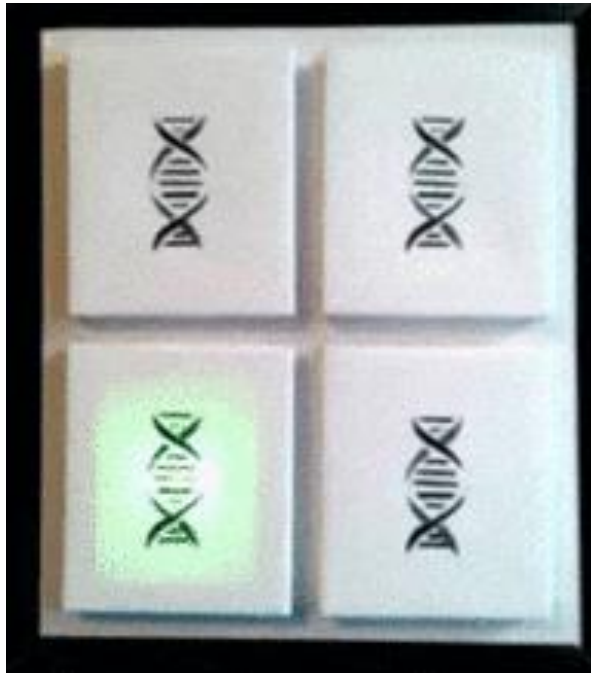


Mars exploration,
2015 (21x29, acrylic, LEDs)



Biology

Replication,
2015 (25x20, installation)



Synthetic biology,
2015 (52x36, acrylic, LEDs)



Interactive art

Roten Kreuz,
2015 (26x20, Installation)



Octopus,
2015 (27x37, Installation)



Embedded computing art

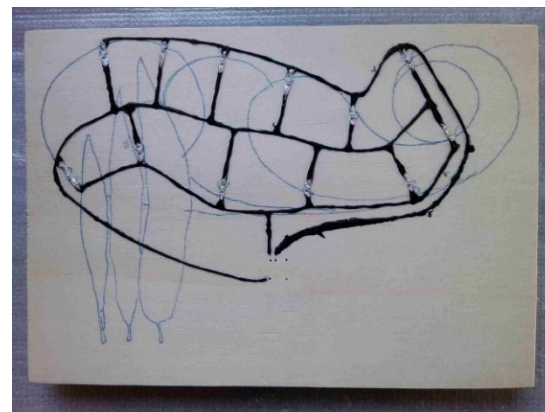
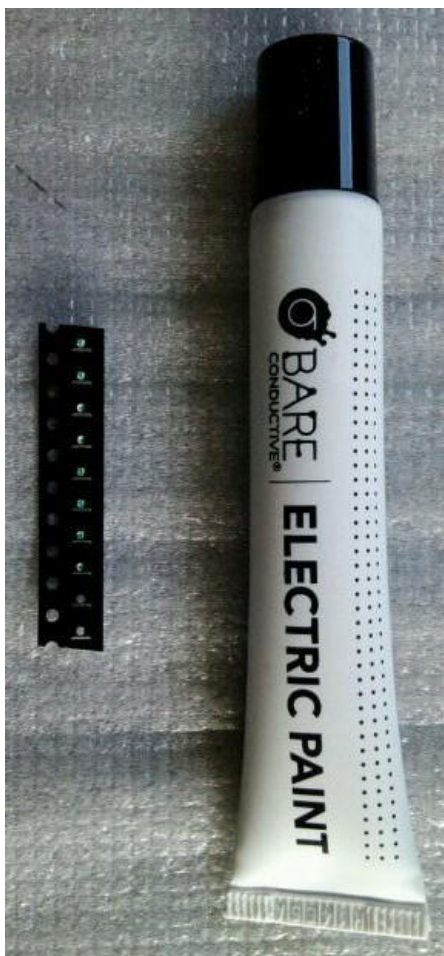
The house,
2016 (21x21, installation)



It's a sunny day,
2016 (30x21, installation)



Conductive ink



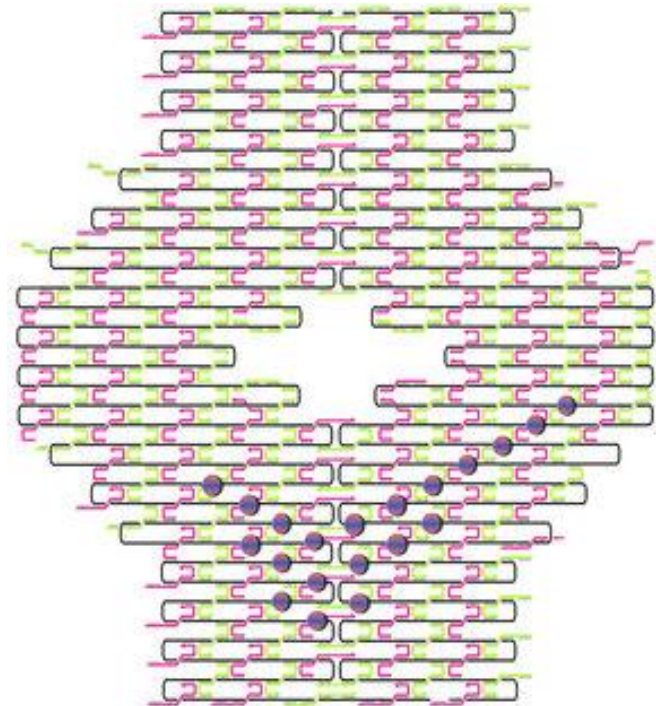
Крым, 2016
(15x21, акрил, дерево, LEDs)

Nano art

Barbie Nanoatelier,
2006



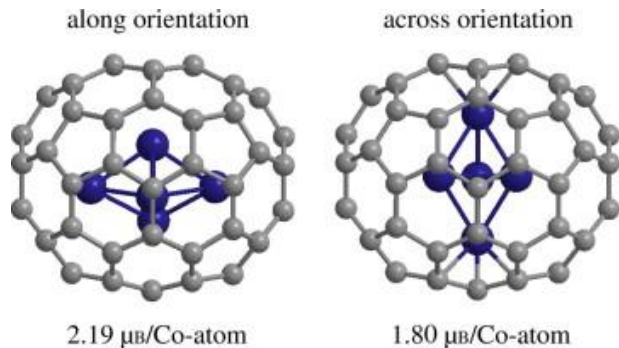
T-Shirt from DNA,
2006



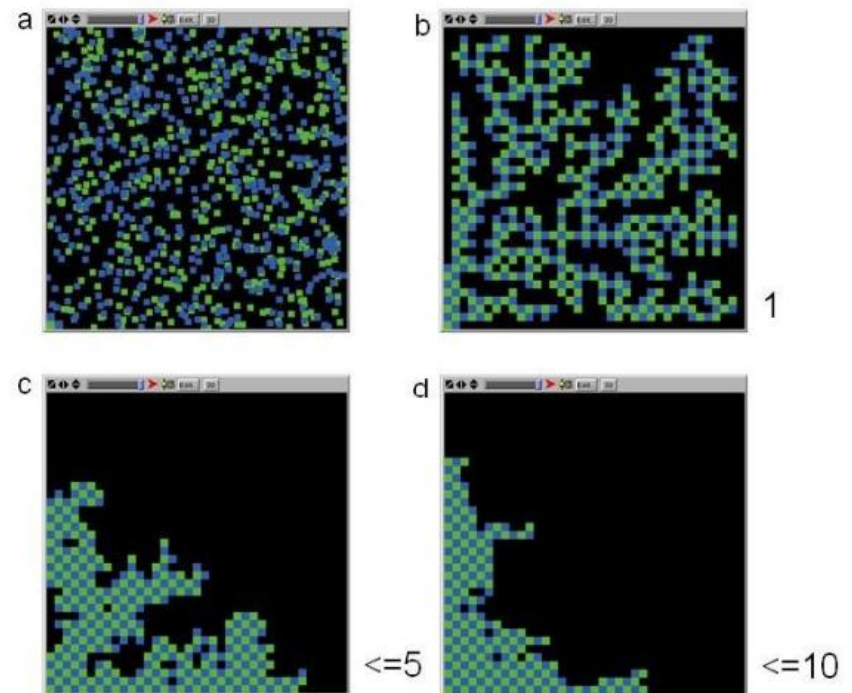
Irina Petrova (2006)

Art of rules' design

**Cobalt cluster within
fullerene in along and
across orientations,
2012**

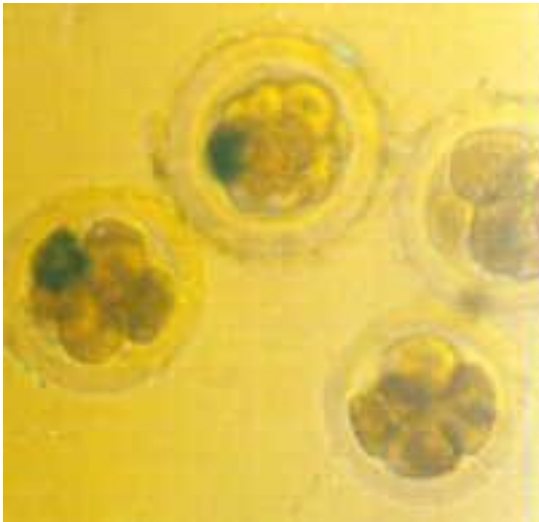


**Chessboard pattern
formation by adhesion
rules, 2007**



a – initial state, b-d – final states
with different values of diffusion

Biological embedded systems?



Rabbit embryos injected with RSV-*lacZ* DNA and stained by X-gal [Gogolevsky et al, 1991]

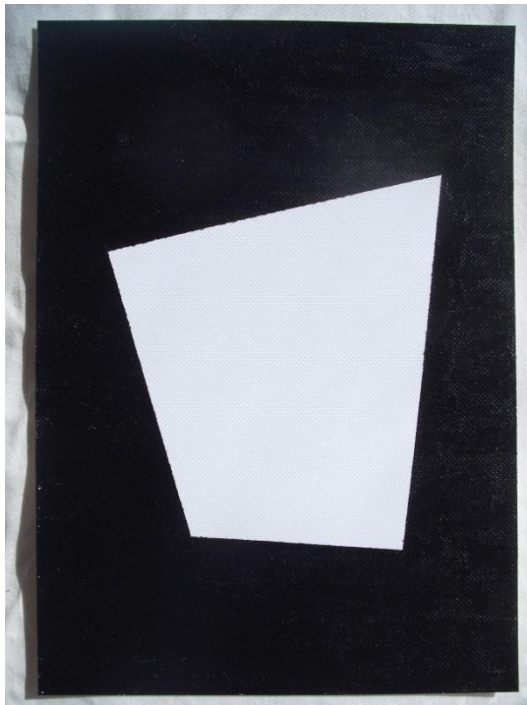


Links

- Eine künstlerische transzendente Abhandlung, was der Mensch ist und sein soll / Georg Mitrohin. - Bucuresti : Editura argument MP, ca. (2000). - (66) Bl. : zahlr. Ill.; (dt.) ISBN 973-99504-1-8
- <http://blogs.artinfo.com/lacmonfire/2012/02/13/the-tree-of-art/>
- <https://www.facebook.com/embedded.art/>
- <https://www.arduino.cc/>
- <http://invite.c-lab.co.uk/artfromsynbio/#home>
- Kuznetsov A. Barbie nanoatelier // IET Synthetic Biology. 2007. V. 1(1–2). P. 7–12.
- Kuznetsov A. Compositional basis of biological design // International Journal of Modern Engineering Research. 2012. V. 2(5). P. 3190-3200
- Many thanks to Dr. Georg Mitrohin and Dr. Mikhail Kats

The End

White and Black,
2015 (20x15, acrylic)



Yellow and Black,
2015 (20x15, acrylic)

