# CCreative Thinking of Cybernetic Theory (Control & Future) as an Approach to enrich New Media Arts

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## **Abstract:**

The new techniques and the technological development accompanying the emergence of new media arts previously preceded by digital arts are integral parts of their existence due to their visual and sensitive impacts. Connection between science in general and art has started since the beginning of the history; whereas art is considered a deep expression about life and its particulars and science explains life and its particulars as well as laying down its regulatory laws. Every scientific theory has a thinking orientation and a philosophical hypothesis. In addition, it has laws regulating it. Art expresses it and is considered influenced by it and influenced with the development and the modern life, modern thinking and philosophical trends. Scientific discoveries and physical and mathematical theories are considered obvious, continuous and developed impact as universe has no wantonness. Everything in the universe has various images from the system explained by science. Science explains the processes subjected to basic laws. Every scientific theory has its basic laws and determinants. The world tries to study and investigate the cybernetic theory to confirm and verify certain hypotheses and conclusions expressed by art in general and new media arts in particular due to having designed formulas expressed by surprisingness, ambiguity, novelty, complexity and control with creativity and modernity in thinking and absorbing the new and modern concepts.

The close link between technology and art as a mediator for the creation of art in its new visual language and its development, scientific and philosophical studies and theories that studied nature, its structural system, its external appearance, its internal structure, and the relationships between its vocabulary and ways of growth with all the vocabulary that the universe carries, has contributed to this as well. To recognize and distinguish the validity of the scientific theory through its beauty." This is because both science and art explain the world. Science urges the answer, while art raises the question.. The research deals with a definition of what cyber is, with the theories and concepts it carries, including control, communication, artificial intelligence, and enhancement of the senses, which was It has a clear influence on new media art.

## **Key Words:**

- Cybernetic Theory , Control Theory , New Media

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# **Thesis Background:**

The new media are not only considered a tool for producing art – whether in the form of sculpture, photography, plastic portrait or a medium that can be merged into the traditional media with the possibility of having infinite copying – but the new media with its concept of the artistic medium do also represent by themselves an art of a special kind; namely the new media art since the presented art activates and applies all medium implied possibilities.

The technological developments have proactively contributed to the artistic formulas, their compositions and their collective merging in a way which makes it difficult to speak about an artistic form away from speaking about the other arts as there are overlapping among the various and multiple media with those arts depending on the accidental event such as movement in the time running within a context not accepting the return – like the event art and the performance art – with the variance of the medium such photographs and space preparation art.

The new media are digital reactive media and dynamic media which are able to respond to the actual inputs including the information and the data. The reactive medium has two interfaces, including an apparent interface with which the recipient reacts actually and visually and a hidden interface represented in the constructive structure of the apparent interface. It is the language of digital programming of the medium. In addition, the medium is customizable; i.e. the medium is adaptable and changeable according to the desire of the recipient, his motion or his data. The logic of the database is considered the basis of the digital media in addition to the infinity of the results and their ability to be developed, updated, changed, repeated and reproduced in various contexts.

#### **Thesis Problem:**

The close connection between science and art has affected the form and shape of arts in its general form and has also affected the new media arts in particular. Through its multiple specialization approach, Cyber Theory is interested in studying the systems and the automatic control science. Communication has a great effect on the form of the artistic arts in new media arts.

# Thesis problem is identified in the following questions:

• What is the extent of benefit from the creative thinking of cyber theory through control and future theories in innovating artistic works with the use of the New media?

## **Thesis Hypotheses:**

• The thesis supposes that the thinking theoretical study for cyber theory can result in motional artistic innovations for the new media arts with their visual language which in turn achieve the technological development and affects the artistic motion.

#### **Thesis Goals:**

This thesis aims to what follows:

1. Identifying the impact of the cyber theory as an introduction for enriching the new media arts.

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2. Achieving the integration and combination between the scientific theories and the new artistic trends.

# **Importance of The Thesis:**

This thesis is concerned about what follows:

- 1. Identifying the basic concepts of the cyber theory as an introduction for enriching the new media arts.
- 2. Confirming the integrated relationship between the cyber theory and the new media arts.
- 3. Confirming the creative thinking of the scientific theories as an introduction to reach the new artistic forms.

## Thesis Methodology:

• The thesis applies the analytical descriptive approach for the content of the creative thinking of the cyber theory from the perspective of the actual motion and its relation with the concept of the new media to reach a thoughtful and scientific development through the various theoretical formulas expressing the different visions and to achieve the continuous value and the active development in the field of arts.

## **Results and Recommendations:**

#### **First: Results**

- The new media art has become an actual and real representation for all surrounding scientific and thinking development through its various theoretical formulas expressing the various and different visions with achieving the value of continuity and the active development.
- Confirming the connection of the technology due to being a medium for the creativity of the new media arts with its visual language and the scientific theories and their impacts on the artistic motion.

#### **Second: Recommendations**

- Conducting more research about the thinking orientation of the scientific theories and their impact on the artistic fields and the artistic trends.
- Confirming the importance of knowledge and learning of the cultural changes, the scientific theories and the new media to open new horizons for the arts and to achieve progression, renovation and broad and wide variety in the artistic field

## References

#### **Arabic references:**

- 1. Al Rashed. Ebtesam bent s3ood, al sybrania fan al t7kom bel 3akl w mostaqbal al fnoon al tashkelia, mgalet al 3loom al tarbawea w al drasat al insania, 3add 12, selsela al adaab w al 3loom al tarbawea w al insania w al tatbekia, game3at ta3z, fr3 al tarbia, 2020.
- 2. Salem. A7mad Abd El 8ani, al sybrania kmad5al let7wal mafhoom al tasweer ela fan ma ba3d al 7dasa lelqarn al 7adi w al 3eshreen, resala doctorah 8er manshora, kolyet al tarbia al fannya, game3at 7elwan, 2000.
- 3. 3eed. Galal el 7ag, nazaryet al t7kom fe Al anzema al mekanikia, 2010.

- 4. Syaad. Galal, nazaryet al e7temalat, dar 7afez lelnashr w altozee3, byrout, 2010.
- 5. Raysar. Dolph, targma solyman dawood, dar al m2moon leltargma, f8dad, 1986.
- 6. Hwari. Sayed, al tanzeem, maktabet 3en shams, al qahera, al tb3a 5, 1992.
- 7. El 7ag. Kamal, nzryat ale3lam w aletesal, manshorat al game3a al eftradya al sorya, al gomhoria al 3rabya al soreya, 2020.
- 8. Al kon al raqami (al saora al 3alameya fe aletesalat), targma dya2 morad, mo2saset hendawe lenashr al ma3refa w alsaqafa, 2017.

# **English references:**

- 1. Manovich. Lev: "The language of New media, Publisher MIT", press, 2002
- 2. Foerster. Heinz Von: "Cybernetics of cybernetics the control and the communication of communication", 2ed Minneapolis, MN: Future system, 1995.
- 3. Umpleby Stuart: "Definitions of cybernetics Retrieved", 2000
- 4. JaCOBSON. Linda: "CYBER ART Exploring Art and Technology", Sanfrancis Co, Miller free man, 1992.