Chapter 15

The Metaplastic Cyber Opencode Art

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ABSTRACT

This chapter explores the continuum between old and new media and presents the research area of Metaplastic Art and Design. The description of the Metaplastic Metaspace and its own methodology create interactive virtual spaces for Cyber Art between reality and virtual realities, from living code to software and vice versa through the Metaplastic Opencode Platform.

INTRODUCTION

Technological progress has led to the creation of the interactive media for the Internet by reintroducing and extending Web experiences based on the relationships between digital artwork, audiences, and authors. The computer, in its interactivity, is capable of virtual object reproductions that do not act as “things” any more with forms and immutable properties, but as artificial “beings” more or less sentient, more or less lively, more or less autonomous, more or less intelligent. These achievements were derived from the Artificial Life and Cognitive Sciences research areas. Researchers in the field of artificial intelligence were moving towards non-programmed behaviour by utilizing genetic algorithm properties.

There is a basic principle within these studies: interactivity at its highest level of complexity between basic elements of artificial life (genes or neurons) and their configurations, which correspond to the production of these emergent phenomena. The art of virtual worlds integrates informatic devices and modifies their interac-

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tion with the audience, too. It cannot be reduced only to technological manipulations. John Cage’s artworks have strongly anticipated interactive art experience by introducing spectator participation through objects, combinations and their casual instructions. In the same way, Duchamp stated that artwork becomes physical and objective through its interactivity. Nowadays, research on spectator participation has been used in different areas of media art as performance, kinetic art, conceptual art, body art, and other forms of art. Contemporary interactive media contain dialogues with their spectators that are more than simply observations, they have an active function. Interactive media is created with two actors: the first actor creates or defines programming rules for the user’s/spectator’s conditions; the second actor-spectator introduces the progress of the artwork with the goal of acting in its potentiality, differently from the traditional spectator/user that has no possibility of interaction. The media-work is therefore composed of two different semiotic objects: the “actor” that is a computer program and the other “object,” the spectator/user with the role of co-authoring or co-acting (Mura, 2010). Ted Nelson (1965) and Marshall McLuhan (1967) have previously referred to a new relationship between form and content in the development of new technologies and new media, focusing on social and cultural collaboration across interactive media and software development methodologies. Laurel (1990) explicitly discussed human-computer interaction and interface design research fields, emphasizing the importance of natural experience in our interaction with technological media. She describes a medium in terms of mimesis, imitation, or representation of sensitive world aspects, especially human actions, in literature and art, like the relationships between user and technology from acting in gaming. Engagement, the emotional state of someone using digital media described by Laurel, serves as a critical factor in personal relations.

THE METAPLASTIC ARTS AND DESIGN THEORY

Interactivity has become the main aspect of new media since the fast evolution of digital processes and media convergence on the Web. In brief, the notion of interactivity means the possibility of real-time interaction with digital media. The new media along with technological convergence are changing the model of mass communication into new ways for people to interact and communicate with one another. The digital innovations of the Internet have made possible the shifting towards the new media model of communication from the traditional “one-to-many” mass communication to the wide range of possibilities of a “many-to-many” Web communication. The conversational dynamics of mediated communication forms can be considered as a central point in understanding new media.

However, different types of media possess various degrees of interactivity, even some forms of digital and converged media are not interactive at all. For example, digital television uses the most recent technology to increase the number and quality of channels and their services, but it does not transform the user’s experience of television into a more fully interactive one. Instead, virtual realities, as an extension of the world we live in, actually appear to be the best possible digital conceptualization in terms of a new interactive media environment. Cybernetic studies transform spectators into actors where the artist invites the spectator to get actively involved, to participate, making a device “alive.” In conclusion, last century the interpretation of the machine as a co-operator in human dynamics demonstrated the possibility for the development of actual virtual realities. Virtual realities present new possibilities for society, art, and science.

This disciplinary field is derived from the first developments of cybernetics. New aesthetics of hybrid forms between artwork and spectator has