The Metaplastic Arts and Design Innovations

Gianluca Mura, Politecnico di Milano University, Italy

ABSTRACT

This article discusses the theory of the Metaplastic discipline for the study and the realization of new virtual media through interdisciplinary methodologies between reality and virtual realities. It explains the theoretical and artistic background of metaplastic virtual worlds evolutions, from their archetypes to their definition. The union between plastic elements and the fuzzy logic systems, found their expression with new metaplastic semantic and aesthetic values. The virtual media acquire form and meaning through its process of conceptual interpretation. The metaphor of the artistic machine finds its new realization where the metaplastic machine itself becomes aesthetic expression of the virtuality. The following paragraphs use metaplastic definitions within Design, Art, and Sciences application fields. The Open Metaplastic framework’s general approach applied to software and hardware modeling design are discussed.

Keywords: 3D Modeling, Digital Metaplasticity, Metaplastic Design, New Media, Virtual Reality

INTRODUCTION

There is a need to realign the critics’ models to fit the new relational media environment. Nowadays new configurable technologies can be employed in developing variable virtual worlds which offer a way to understand much more about the complexities of new media experiences. The increased media plasticity, extensibility and responsiveness of the post-Web 2.0 stage of digital media, seems to offer another level of potentiality, dimension, or reflexivity in how it extends human communicative competencies and creative capacities. However, the characteristic plasticity of the media was discovered within the spatial and kinetic methods of the plastic arts, drawn from painting, sculpture, visual, and material design and architecture, which forms the basis of the current interests toward creating digitally mediated virtual worlds. In this way, the sciences of the virtual realities have been described by artists, designers, and creative practitioners as alternate visions of reality, as Grau (2003) and Mura (2008) have observed.

Manovich (2001) declared that the first decades of the last century, the Early Age of Machines, have been more relevant to New Media culture than any other time period. “The earlier plastic art movements characterized the conceptual and structural basis of the virtual media with the spatial and kinetic methodologies activated by the user during its interaction processes” (Mura, 2010). Manovich utilizes the term Meta-Media to describe contemporary works that coincide with a postmodernism’s
“ready-made” design concept of making new artworks from reinterpreting existing artifacts. This New media Avant-Garde “is about new ways of accessing and manipulating information” (e.g., hypermedia, databases, search engines, etc.). Meta-media is an example of how quantity can change into quality as in new media technology and manipulation techniques can “recode modernist aesthetics into a very different postmodern aesthetics” (Manovich, 2001).

Nelson (1965) and McLuhan (1964) referred to new relationship between form and content in the development of new technologies and new media, focused 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 of ours’ interaction with technological media. She describes a medium in terms of Mimesis, imitation or representation of the sensible world aspects, especially human actions, in literature and art, as relations between user and technology starting with acting to gaming. The Engagement, emotional state described by Laurel, serves as a critical factor in personal relations. Aesthetics of participation found its new redefinition within actual digital technologies. Technological progresses have conducted to the creation of the first interactive media for Internet with reintroducing and extending on the web the experiences based on relations between digital artwork, audiences and authors. As Rodchenko observed in 1919, analysis is the “engine of invention” and the “spirit” of creativity, when engaged into action. The key features of the virtual visual environment are firstly their interface systems where digital interaction occurs, that modulates both actions and content, and to a certain point the form; secondly the database data storage system from which individual items can be retrieved by different levels of user manipulation, and thirdly the computational algorithmic operations which determine the kinds of connections the user behaviours can result in, along certain cyber pathways.

Digital creative process (and its resulting artifacts) becomes the outcome of complex collaborations among different co-authors from various levels and matter of research in many interdisciplinary areas. Interactive media contain dialogs with their spectators that are more than simply observers, they have an acting function. The interactive media is created with two actors. The first actor that originates or defines programming rules for (user’s) spectator’s conditions and the second actor-spectator that introduces the progress of artwork with the goal of acting its potentiality, differently from the traditional spectator(user) that has no possibility of interaction. The media-artifact is therefore, constituted of two different semiotic objects: the actor that is the computer program and the other object, the spectator (user) with the role of co-authoring or co-acting (Mura, 2010).

THE METAPLASTIC ARTS AND DESIGN THEORY

Interactivity has become the main aspect for new media since their rapid evolving of digitalization processes and media convergence on the web. The notion of interactivity briefly, means the possibility of real time interaction with digital media. The new media with technology convergence change the model of mass communication into new ways for people to interact and communicate with one another. The digital innovations of Internet have made possible the shifting to 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. Vin Crosbie (2002) describes three communication media types: the Interpersonal media as “one to one”, Mass media as “one too many” and New Media as Individuation Media or “many to many.” The conversational dynamics of communication mediated forms can be considered as a central point in understanding new media, but different media types possess various degrees of interactivity, even some forms of digital and converged media are not
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