Chapter 2
The Metaplastic Virtual World Theory
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ABSTRACT
This chapter introduces a methodology of metaplastic discipline for the realization of new virtual world. It explains the theoretical and artistic background of metaplastic virtual worlds evolutions, from their archetypes to their definition. The union between the plastic elements and the fuzzy logic systems, found its expression with new metaplastic 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 machine itself becomes aesthetic expression of the virtuality. The following paragraphs use metaplastic definitions within Art and Sciences application fields. In the conclusion of this chapter, two practical examples will be introduced.

ARCHETYPES OF VIRTUAL MEDIUM
The poetics of artistic machine indicated different hypotheses of evolution within the Avantgarde movements’ ideas from the beginning of the 20th Century. Therefore, it is necessary to introduce several historical moments of artistic and scientific thoughts that have conducted to actual media developments. This paragraph on Art History would introduce and follow a conceptual path of different notions exploration about artistic machines visions. It is also a search for aspects of artistic machines which had led to the definition of original characteristics of the metaplastic virtual worlds. The Manifest of Futurist Reconstruction of the Universe wrote by Balla and Depero in 1910, emphasized the particular interests of the Futurists’ movement which suggested a future fusion of Art and Science. Boccioni, one of the major Futurist’s exponents, aimed to represent the Space of Soul and he has tried to decompose the object-painting to explore the Pure Becoming of Perception. He places the spectator at the center of the painting as in his artwork “The Matter” (1912), where the idea
of plans interpenetration, reaches up remarkable levels. With that painting, he obtained the objective that would make the spectator and the entire scene eternal, nearly a possible virtual space-time (Boccioni, 1971, reprinted). It is the light that gives Life to the Shape, for artists and in this concept he seems to relate to secret relations that exist today between digital images and coded artifacts, which regulate movement in the computer space. The Constructivism becoming and diffusion, coincided with the Futurist’s-Machinist’s aesthetics development, which assumed their own inspiring models from the technological and the Industrial worlds’ achievements. In the Bauhaus artistic movement, we find correspondence with these topics, in the theories of Laszlo Moholy-Nagy expressed in “Theater der Totalität” and those of Walter Gropius in his article “Totaltheater” of 1927. Moholy-Nagy wrote:

“It is time to develop activities which will not allow the masses to remain spectators, which will not only move them inwardly, but seize them, make them participate, and in the highest transports of ecstasy, allow them to enter the action on stage” (Moholy-Nagy, 1922).

Moholy-Nagy reinterpreted the ideas of Richard Wagner, famous composer, with reducing the importance of the spoken word in a synthesized vision of space, movement, sound, light, composition and increased different artistic expressions with technical equipment. He demanded complete mobilization for all artistic forces to create the Gesamtkunstwerk (the universal artwork).

**MACHINISM**

New phenomenology in Contemporary Art was a creation of Mobiles, developed by Alexander Calder. Mobiles are abstract sculptures, made of metal plates, plastics, wood, capable of movement with air breezes. It was the first time that movement has been added to plastic figures. Calder accomplished that in his creations which reached a dynamic equilibrium between their weight and levity. The equilibrium is the most important quality of his abstract sculptures: equilibrium are balances of statics and dynamics; statics in “mobiles” and dynamics in “stabiles” (AAVV; 2004). Kinetic researches started from concepts perceptively static (Optical art) and it has changed to dynamical perceptions by using infinite possibilities offered with the union of dynamic and luminous effects. Moholy-Nagy in 1922, started his researches on light, space and movement. He constructed his machine, the “Lichtrequisit” (Space-Light Modulator), introduced at the international exposition of Paris, in 1930, with describing it as “half-sculpture and half-machine construction”. The construction was depicted by the author as:

“a superficial reflecting machine, in motion, on a circular base in which three cells create the movement in the given space. The rectangular metallic pieces move in irregular and undulatory way. The second part made of perforated metallic discs complete a vertical movement from above to the bottom, that frees one small black ball, which crosses this space. In the third cell, a spiral glass produces a virtual conical volume. The construction, moved by an engine, is fortified with hundreds of electrical light bulbs in various colors, connected and controlled by number of coils which create a complex light show”. (Moholy-Nagy, 1947).

Munari in his Machinist’s Manifesto in 1927 wrote:

“The artists are the only one to save our civilization from that danger. The artists need to learn about machines, to abandon their romantic brushes, palettes, canvas, frames and start to understand mechanical anatomy, the machine language, to understand the nature of machines by making them
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