Chapter 12
Subjectivity and Inadverence in Computational Art: Muta-Morphosis

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ABSTRACT
Creativity is stochastic and assumptive in nature. The importance of randomness in the creative process must not be ignored, underestimated or intentionally disregarded in a condescending way. Notions of chance, randomness, or unpredictability are much important, especially when it comes to artistic creation. In addition to above notions, serendipity can be seen as the expected contribution for making expedient discoveries by coincidence, by chance. To put serendipity into work, there is need to accumulate a list of questions that need solving, acquaintance with already existing answers, and their use in daily life. Only when this knowledge is present, ‘chance’ can take its part in establishing the perfect milieu for the ‘problem’ and the ‘solution’ to find each other. If there is already a great deal of knowledge accrued in our minds about the problem and the requisites for the solution, chance adds the final piece to the puzzle. It is when we can start to talk about a traditional ‘prescriptive, authoritarian and rather conventional’ aesthetics vs. a new ‘generative, irregular, unprescribed’ aesthetics.

INTRODUCTION
Marshall McLuhan, Canadian professor of English literature once said: “We shape our tools, and then our tools shape us.” As soon as the use of digital tools and processes started in art and design, the creative output began to be influenced by these tools, processes and evolved into a new aesthetics. Computers seem to have very precise and strict rules about how one uses them and this concrete ‘mechanical’ aspect leads to the perception that abstract notions like spontaneity and serendipity cannot exist in the course of digital creation. This view is challenged both by scientists and artists. One of the early and significant efforts is ‘Cybernetic Serendipity’: the first large international exhibition of electronic, cybernetic, and computer art which took place at the Institute of Contemporary Arts (ICA) in London, UK, from 2

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August to 20 October 1968. “The title of the exhibition suggested its intent: to make chance discoveries in the course of using cybernetic devices, or, as the Daily Mirror put it at the time, to use computers ‘to find unexpected joys in life and art.’” (Usselmann, 2003).

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This dimension of unexpectedness can be taken to the apparently paradoxical conception of ‘aesthetics of failure’ level; where, be it good or bad, you find accompanying abstract concepts of surprise, luck or chance. These concepts are quite in harmony with the phenomenon of internet, where non-linear navigation is of intrinsic nature. Internet surfing is a fantastic practice of serendipitous discovery, in which getting lost to find an unanticipated result or content is highly typical.

**SERENDIPITY AND SPONTANEITY IN THE CONTEXT OF DISCOVERY**

Serendipity plays an notable role in the history of revelation, within the fields of criminology and science in general. In other words, any insignificant environmental incident carries the potential of inspiring a solution which can unexpectedly surface from the unconscious mind. This frequently happens when one takes things easy. Imagine Archimedes in his bathtub, finding the principle that can be shortly defined as ‘any object, wholly or partially immersed in a fluid, is buoyed up by a force equal to the weight of the fluid displaced by the object’, or Newton under an apple tree, with a falling apple that initiated the universal theory of gravity. Serendipity, however, hits only the willing mind. Both Archimedes and Newton had been working on their corresponding challenges for some time and were consequently ‘alerted’ to their resolutions. Not everybody sitting in bathtubs or under apple trees will find inspiration for invention without spending the prerequisite effort.

Ward, Finke and Smith describes this alertedness through Archimedes’ experience: “Archimedes was the greatest mathematical and scientific thinker of the third century B.C., and King Hiero of Syracuse, his relative, knew it. Archimedes had proved this to the King when he built a machine that, powered by one arm, could move a fully loaded ship out of a dock, whereas the entire Syracusan crew, without the machine, could barely budge the ship. King Hiero asked Archimedes to determine whether a gold crown he had commissioned had been surreptitiously alloyed with cheaper (and less dense) silver. Archimedes attempted first to determine the volume of the crown, so that he could compare it with the volume of an equal weight of pure gold. The crown was such a complex shape, however, that Archimedes was initially thwarted. When he neglected his personal habits in his absorption in the problem, his friends carried him by force to the public baths. While in the bath, he noticed the water displaced by his body, and he realized that the crown would also displace an equal and measurable amount of water. Screaming ‘Eureka!’, he is said to have run straight home in his excitement, without pausing to dress himself.” (Ward, Finke, Smith, 1995).

Did Isaac Newton really come up with the theory of universal gravitation after being hit on the head by an apple? Royal Society publishes memoirs of William Stukeley, 18th century author with firsthand