

Changes of Media within Technological Development

“The past decade has seen the two powerful technologies of computing and telecommunications converge into one field of operations that has drawn into its embrace other electronic media.”¹ said Roy Ascott. Examples of joining electronic media include those of video, computation, artificial intelligence, and telematics. In the form of digital media, replication and imitation is so easily and perfectly performed that our identities and times are dismantled and reformed. Moreover, artificial intelligence and computation is attempting to go beyond humans, even creating art, forcing us to rethink the conception of art and the relationship of art and creator.

The organization and characteristics of video is changing when it comes together with new technology. When joined with software techniques, which can be dealt with using databases and algorithms, it becomes as a software cinema. This attempt is “Soft(ware) cinema” which is a project directed by Lev Manovich. As algorithmic cinema, macro cinema, multimedia cinema, and database cinema, as known as the software cinema are breaking the rules of cinema, which had been perceived as a scene in a single frame and in a single time line. In cinemas or in comics, focusing on one frame at a time and making several frames connected into a single time line was the standard to send a single storyline. But through the representational techniques in soft cinema, it is deploying the new dimensions of our time.² Giving several shots in one scene and giving possibilities of multiple stories, soft cinema can be appreciated as a poem within multimedia.

The rule of the viewer is challenged nowadays, when videos are supported with interactive technologies. The precondition of a video dialogue is that it does not talk back, as well as producing is active and viewing is passive.³ But the radical shifts in communication technologies have challenged this assumption. For example, in You-tube, the consumers are not only acting as viewers but also as producers. People react actively by remaking the contents of others and commenting on the video. Indeed, You-tube is a personal broadcasting system as well as a multi-media storage and a community. Lynn Hershman’s video “Lorna”, is a first interactive video art installation, and an attempt to break the rules of passiveness of the viewer and to explore ideas of contact and perception, not only metaphorically, but through the process of playing.⁴ The passive viewers that only receive the information are changing into active selectors because the interactive systems require the viewers to react and choose.

¹ Roy Ascott. “Is There Love in the Telematic Embrace?” 1989

² Lev Manovich. Soft Cinema. <<http://www.softcinema.net>>

³ Lynn Hershman. “The fantasy beyond Control”. 1990.

⁴ Lynn Hershman. “The fantasy beyond Control”. 1990.

The traditional techniques of cinemas and animations, which had been abandoned for a while, are reemerging in the computer age within a new context and a new function. Looping is used as a new narrative engine in 'Akvaario' and 'Flora Petrinsularis'. Looping had been previously used in nineteenth century moving image presentations, twentieth century animation, and the avant-garde tradition of graphic cinema but now in a database narrative, a looping is generating a narrative, bridging the story with the viewer's interaction.⁵

Invented graphic techniques of cinemas and animations are raising issues on our visual cultures. Digital computation applied to the graphic technologies on digital images are giving breathe to the images as to look real even without the origin. Jean Baudrillard refers this with the term 'hyper-real', which the virtual image without origin gains reality much more than the real object.⁶ The Moving image museum is revealing the fakeness of the reality created through these fictions by presenting both the movies as well as the technologies to make the effect of the hyper-real. Today, it seems useless to argue the reality of the image.

The loss of originality on digital video encourages artists to think critically towards our culture in terms of identity and originality. Personal identity is recognized to be a tenuous territory within video, where information is presented beyond individual control and viewers are separated from the referent.⁷ Lynn Hershmen said on her writing that viewing images creates a distance from the original event because mass media redesign information by replacing the vantage point of the viewer with the frame provided by the cameraperson or the journalist photographer.

Jennifer and Kevin McKoy attempts to erase the personal identity and reinvent the identity of the public. In their video projects, the identity of the original person vanishes but the identity of the character in the video is emphasized. In the video "Princess Painting" the actors are falsely acting as an artist and presenting the artwork as if it were their own work. Detached from the real situation where the artist really paints it, the viewers have no choice but to believe the actors-in the first few seconds. Another video, "I'll replace you" is an attempt to break the time line of the individual lives and reform it into one time line of a collective. These two projects question the originality and personal identity of modern humans where everyone shares the same life style that someone else could replace the other.

However, the augmented reality technology is inviting people into the virtual world without losing their identities. Adding the virtual object on the real space and object, we can keep the

⁵ Lev Manovich. "Digital Cinema and the History of Moving Image". The Language of New Media, MIT Press. 2001, pp. 293-322.

⁶ Jean Baudrillard. "Simulacra and Simulations" Stanford University Press. 1998. pp.166-184.

⁷ Lynn Hershman. "The fantasy beyond Control". 1990.

distinction between reality and the virtuality. But if the virtual world gives any impact on our mind, can it be perceived as existing in real world? Char Davies is a pioneer artist who experimented with users to 'immerse' them into the virtual world. Connecting our real vision, sound and senses with the navigation system in the virtual world, we feel as rebirthing and gaining new identities in the virtual world. The future form of the augmented reality interface would be invisible and flexible, which we almost don't feel whether it is real or virtual.

If the virtual world can be called our second nature, then the codes and data within computers could be called the elements and laws in that second nature. If the Renaissance artists were as well scientists who tried to find out the structures of the world and depict them in paintings, now code artists whom are programmers as well try to figure out the beautiful structure of software and generate art by them. Indeed, computation technology has encouraged the artists to utilize computers to create a new form of art with codes and data. Data visualization is a collaboration of art and computer science. Analyzing, and reinterpreting the data, known as the data visualization are appreciated on its artistic beauty as well as its intellectual virtue.

With the conjunction between computation and art, computer with artificial intelligence might be used create art in the near future. Roman Verostko's drawings encourage us to imagine the future artist as a robot. Moving the same way humans do when they paint, and making almost the same irregular brushstroke which would possibly drawn by humans, the drawings erase the border between the art by human and by machines.

As an extension, even code could be the artist itself who generates the visual output. In the artport of Whitney, Sol Lewitt's artworks are reborn as several versions of computer-generated interactive projects. Created by Casey Reas and other artist, Sol Lewitt's drawings and the structures are re-interpreted and extended as softwares. Even though they interpreted the same structure, the visual output is variable according to the creator. This is an art of discovering the minimal formula, which can generate and evolve into a complicated completion.

In a near future, it would be possible that the codes generated their own code. This imagination raises the question of whether the code could be perceived as the artist. Code artists Golan Levin said in his essay that software is a living record of thought and executes the will as a single coextensive unit of thought and purpose. Code, with its own thoughts, takes part as a human artist in production. In this state, how would we distinguish a human from a computer, and the artwork produced by a human and by code? Alan Turing gives criterion on how to test digital computers as human. It is the imitation game, which computers would have to answer the questions by human. The premise is that if the computers make human during conversation think that they are speaking with humans, then the computers would be able to perceived as human.⁸

⁸ Alan Turing. "Computing machinery and intelligence". 1950.

Even though attempts to make cyber artificial intelligence have not been in full success yet, the development stage of it seems promising. According to Alan Turing, a better way is to make the artificial intelligence to simulate and learn human intelligence. Instead of making the intelligence as an adult brain, making it as a baby whom with a learning brain would be better. Also, instead of making it perfect, we should make them learn human mistakes. The drawings done by Jared Schiffman, as the “Turing machine visualization” (2000) illustrates the data nodes as organic forms rather than the rigid construct of computational processing.⁹ Interestingly, the edge of technology refers back to the past, with a world of unpredictable randomness.

With the premise that the artificial intelligence would gain thoughts as human in the future, we should find a way to connect human beings with artificial intelligences. Telematics is a broad term used to designate computer-mediated communications and also involves the technology of the interaction between human and artificial intelligence.¹⁰ Roy ascot is questioning in his essay. “Is there love in the telematic embrace?” In the artwork “Network touch” by Galen Scorer, people can touch each other virtually through the camera. In this bio-electric and haptic interface, people can feel love at the moment they interact with among each other.¹¹ In telematics art, the meaning of the artwork is created not by the artist but by the observer and their interaction.

Within the computation and telematics technology, our art culture and the medium of art has changed on its forms and characteristics. Art is getting inspiration by the technology and forced to critically think and reshape of the past medium and the culture. Furthermore, the collaborated art and science is encouraging to create a new form of art. The development of technology of artificial intelligence and its possible convergence with art makes us dream of the future when computers would be creating art and people interacting with them but feeling the physical and haptical effect even from far away.

References

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Noah Wardrip-Fruin, Nick Montfort. *The New Media Reader*. Cambridge, Mass. The MIT Press. 2003.

⁹ John Maeda. *Creative Code*. Thames & Hudson. 2004. pp 42.

¹⁰ Roy Ascott. “Is There Love in the Telematic Embrace?” 1989

¹¹ Galen Scorer. Network Touch. <<http://www.galen.ca/art/networktouch/index.php>>