# Aisthésis of Communication Visualization through Twitter

Miohk Yoo and Kyoungju Park

GSAIM, Chung-Ang University, Korea voque901@naver.com, kjpark@cau.ac.kr

**Abstract.** As technology develops, the communication methods are diversified, and, among them, the social network service (SNS) becomes popular by spreading intuitive and instant messages in cyber-physical space. Due to its unique features, this SNS-based communication inspires many media artists, who produced the visualized artworks after analyzing and extracting text messages on the SNS. We produce a prototype for interactive art installations, which involves audiences, analyzes the Twitter messages between audiences and many others, and visualizes the data on the screen in 3D, so that the audiences can experience and enjoy sensual Aisthésis of their communications. The works are made as follows. Once the Twitter messages are sent to the randomly designated accounts, they are animated by varying properties, such as the translation, rotation, font size, and color, and then the animated messages overlay with the existing messages that other audiences already sent. The animation follows either predefined shapes or paths, changes the velocity of message, and swings the individual letters of messages randomly. (To better express the process of mutual communications through twitter messages,) We also visualize the animated messages in 3D space that allows changing camera viewing and lighting, and divide messages into letter by letter so that each letter are able to be animated as a single object.

Keywords: Twitter, SNS, Aisthésis, Information Visualization, Media Art.

# 1 Introduction

With the high penetration of smart mobile phones and the constant development of ubiquitous environment and its relevant technologies and ideas, the public has easily faced and experienced such environment. Besides, social networking service (SNS) in which smooth communication among multiple people is made possible has been on the rise [1]. SNS is a sort of networking service that has the advantage of the temporal and spatial flexibility to send simple messages and experience mutual communication through direct and indirect communication structures [2]. With diversification of the types and methods of mutual communication participation, the interactive artworks that focus on multiple-communication are very interesting. As a feature of SNS, the smooth multiple-communication way can be used to present the interactive art that has the linear and spatial restriction shape in diversified ways.

In this paper proposes the diversified presentation methods and possibility of interactive art on the basis of the SNS feature described earlier. It gives both spectators

and others in a different space an opportunity to provide a variety of experiential factors of media art by combining SNS with interactive art. By combining the mutual communication networking of SNS with the media art leading aisthésis, this work produces a system through which spectators who look at artworks in an exhibition space share aisthésis with SNS users in a different space, and telepresent about mutual communication between users, and thereby tests the environment where aisthésis is delivered through "HOSHI" and "KKAMUU".

# 2 Aisthésis of Interactive Art

Aisthésis appears in the cognitive processes of a genuine existence through human sensible perception. Also, people understand and experience this, realizing essential and genuine meaning through experience of sensitivity, sense and perception [3]. Interactive Art is a part in Art that chances audience can experience personally are occurred frequently [4]. For audience, art formation such as movement change and finishing work with their experience through audience's intervention is very interested. Also, work of Interactive Art that can make a work of art with human various and sensible components using five senses, has sensible experience with interaction of various approach in contrast to earlier approaches. This is used as possibility that when audience encounter works, they experience this directly, and audience's experience at accepting sensuously experiences things artist wants to express sensuously through subjective reinterpretation.

# 3 Related Works

Interactive art is a form of art that involves spectators in a way that they interact with artworks, offering multiple spectators experiential experiences [5]. The art form that uses interactive art and the temporal and spatial mutual communication way of SNS plays a role to offer spectators direct and indirect experiential factors and drawing the empathy and communication between spectators and users. For example, Jon Montengro's 'happyrain' in 2011 used social media information in twitter. Twitter messages are information of designated time, and are comprised of sensitivity messages involved happiness [6]. Also, independent messages are personified with shape like rain, so message color is expressed variously. Lee Jun's 'A dream of tree' [7] is an installation work impacted a meaning that vitality of dead branches is recovered; with using twitter messages involved a city [Fig.1].



Fig. 1. "happyrain" and "Dream of Tree"

# 4 Concept of Artwork "HOSHI" and "KKAMUU"

To reflect to concept based on above-suggested SNS characteristic and aesthesis of Interactive Art, basic components are twitter and typography design, so with borrowing these, work is formed. Therefore, system structure, aesthesis, multilateral communication and sharing telepresent, is made through messages from audience seeing exhibition. Both artworks have been installed in exhibitions by visualizing the communication between audiences and random other people, and by providing the sensual experience of the communications in cyber-physical space.

### 4.1 "HOSHI"

"HOSHI" [8], in which there are existing messages in 3D space, new messages are generated and are harmonized with the existing messages after undergoing the camera viewing and text color change. New message color is changed, so camera is zoomed in. Therefore, audience can enjoy messages they send, in real time. These messages not create once thence become extinct, but coexist with as-found text as optical typography with new messages in 3D space.



Fig. 2. "HOSHI" Artwork Screen image

#### 4.2 "KKAMUU"

"KKAMUU", in which the new messages are divided into each letter, the letter is animated following the shape of the designated 2D image texture, and is gathered together on the bottom of the image in the end. Messages received form twitter are exposed to the top of tail of cat texture fixed in 2D, so legibility and meaning of

messages appearance are given by audience. And then, after about 2 seconds, each independent shaped text is animated and is accumulated so is piled up among texts. Texts which are stored before are located under cat texture, and visualize like Figure.3 in limited texture space.

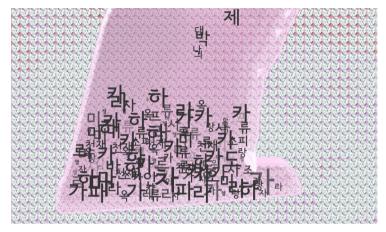


Fig. 3. "KKAMUU" Screen image

# 5 Conclusion

The thesis made Media Art experimentally with SNS characteristic, delivered a telepresent differentiated from as-found work with suggesting connected passageway to communicate oneself, and considered with environment construction that people do aisthésis of mutual communication, and work producing. Also, the thesis suggested the possibility that aisthésis of Interactive Art is amalgamated, based on characteristics such as free mutual communication, liquidity of time and space, and delivering telepresent among active parts that SNS has, so telepresent is delivered, is shared and is communicated with network communication between audience in exhibition and non-exhibition, so communion of multilateral aisthésis is maximized. SNS can supplement the limitation of exhibition form in interactive art with freedom of time and space. In the future works, if people use not only text but also various media such as image, video and sound, it will be possible to make production environment of various Interactive Art rather than aisthésis in as-found.

# References

- Sung, J.-S.: A Study of Contents Secure in Smart Phone, Security Engineering Research Support Center. Journal of Security Engineering 8, 665–672 (2011)
- Boyd, D.M., Ellison, N.B.: Social Network Sites: Definition, History, and Scholarship. Journal of Computer-Mediated Communication 13(1), 210–230 (2007)
- 3. Ranciere, J.: Thinking between disciplines: an aesthetics of knowledge. Parrhesia 1 (2006)

- 4. Lee, S.J.: Die Kunstlehre bei M. Heidegger. Heidegger-Gesellschaft in Korea, 7, 209–243 (2002)
- 5. Jung, H.H.: A study on the Aesthetic Characteristics of Digital Art. Korea Digital Design Council 33, 203–212 (2012)
- 6. http://www.variousways.com/blog/2011/03/happyrain-twitter-art/
- 7. Korean Cultural Service New York, http://www.koreanculture.org/?document\_srl=28834&mid=cr\_exhibitions
- 8. Hoshi, Digital Playground in Island, in Malaysia, International Exhibition, Total Museum (2012)