What could media art learn from recent experimental games?

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Abstract

This paper discusses the lessons that can be learned from recent experimental games for media art practice in order to think of more sophisticated interactive art experiences. Firstly, methodically examined interactivity in game helps to think how to approach for sophisticate interactivity. Secondly, the critical and aesthetic attitudes involved in recent game design and practice are useful to think of reflective mode in the interactive experience in media art. Lastly, the wide and rich use of interface technologies helps to consider the inter-relationship between media and technology.

Keywords

Interactivity, critical distance, aesthetic & reflective experience, media art, experimental games, persuasive games, newsgames, pervasive games, casual games.

ACM Classification Keywords

J.5 Arts and humanities, H5.m. Information interfaces and presentation, Miscellaneous.

Introduction

In *Art as Experience*, Dewey says that a work of art is an individualized participating experience[4]. A work of art is recreated every time that it is esthetically experienced by the viewer. The viewer creates an imaginative relationship with the self through his/her experience with an artwork, and this kind of process

can be called "interactive engagement." In this participation and interaction with the work of art, the most important thing is the interacting with the self. In this sense, according to Dewey, all artwork is interactive. However, questioning why and how interactive experience can be perceived differently in interactive media art work from fine art work, my former research has examined how the early video art works create different aesthetic experience from the interactive media art work, particularly focusing on the screen experience[7]. Looking at how physical and perceptual interactivity becomes a central component of the relationship between viewers and many artworks, the research examines that unlike the screen experience in non-interactive artworks (i.e. video art), interactive media screen experiences can provide viewers with a more immersive, immediate, and therefore, more intense experience through its instant feedback system. For example, many digital media artworks provide an interactive experience for viewers by capturing their face or body though real-time computer vision techniques. What I focused on in this situation was that as the camera and the monitor in the artwork encapsulate the interactor's body in an instant feedback loop, the interactor becomes a part of the interface mechanism and responds to the artwork as the system leads or even provokes them. This kind of direct mirroring experience in interactive screen-based media artworks hardly allow the viewer the critical distance or time needed for self-reflection. Therefore, in media art experience, the critical distance or time needed for self-reflection in the course of interaction needs to be greatly considered. And the interactive mechanism based on computational closed feedback system needs to be approached more philosophically and aesthetically.

Continuing this question, these days what I have found useful for this as references are diverse aspects that experimental game practice and research approach. This paper discusses three lessons that I want to share to through this examination of how to enrich interactive experience. Before this discussion, I should explain that the boundary between experimental games and interactive media arts is somewhat overlapped, since both create interactive experiences based on interactive computational systems. Thus, from certain perspectives, experimental games can be regarded as interactive media art. But in this discussion, I would like to look at how one domain of research and practice can influence the other by leaving the genre classification.

Sophisticated Interactivity

Firstly, the approach to interactivity in game research and practice that has been examined methodically and rhetorically helps to improve the approach of interactivity in media art. As I discussed, computational interactive systems are based on closed feedback loops. A programmed code is constructed as a subroutine procedure that that can be called at any time during program execution. It is encapsulated into a single command (i.e. a function or a method call) and contains a series of computational instructions in itself. "Procedurality" is one of properties in digital media and "agency" is involved to manipulate such a procedural system. But as Murray notes, "mere ability to move a joystick or click on a mouse" is not sufficient cause for agency, because the genuine agency means the embodied participation in an electronic environment [11]. In *Persuasive Games*, Bogost asserts that video games can creatively produce the sophisticated interactivity by incorporating the procedural rhetoric. Due to the "responsive behaviors" in its medium, it can

generate tighter symbolic coupling between user actions and procedural representations[2]. When in game play, "play" means "the free space of movement within a more rigid structure"[14], in a procedural representation like a videogame, the possibility space refers to the myriad configurations that the player might construct to see the ways the processes inscribed in the system work. Thus, while interacting with the system, the player literally fills the gap between subjectivity and the game processes and performs a great deal of mental synthesis. And the videogame's method of selectively modeling appropriate elements of that world in "abstraction" creates the "empathetic and dialectical engagement" and "vivid experience" of interaction[2]. This mental and subjective engagement and abstraction in the interactive experience needs to be examined in any artwork considering interactivity. The current technology-oriented interactivity based on the simple level of human-computer interaction can refer to this kind of sophisticated interactivity.

Critical and Aesthetic Attitudes

Secondly, the critical and aesthetic attitudes recently presented in game design practice are also useful to enhance the media art interaction to a more critical and reflective level. This lesson can be related to the former lesson about the sophisticated interactivity sought through persuasive games. But if the former discusses the methodical side of its approach, this section is to mention it with more critical and aesthetic level and from the cultural and societal sides.

Recently, diverse experimental games such as "newsgames" and "persuasive games" and the related theoretical research have been introduced[1,2]; i.e. "September 12th"[12], "Madrid"[12], "Cutthroat Capitalism"[3], "Every Day the Same Dream"[5] and "McDonald's videogame"[5] force players to understand the system dynamics by experiencing it. Also, by experiencing it the players can think of the event happening in the world more with more critical perspective. This becomes an example of journalism and criticism can be incorporated in game design to depict and express their subjective perspective[1,2] and to engage the game players to look at the same event with a reflective mode. In this way, these games share critical and aesthetical attitudes toward their community and environment.

With a slightly different perspective, "pervasive games" also use the strategies to look at the community and neighborhood with critical insights and reconstruct them as a game environment. By using their bodily engagement in the play, these games explore how to creatively combine the physical with the digital, life with play, virtual with real[8]. This processes also become a good example showing critical and reflective approaches to think of their subjectivity in the context of play and design at a societal and aesthetical stance.

The Wide and Creative Use of Technologies

Lastly, the wide and rich use of media technologies in games helps to think of the inter-relationship between media and technology for creative media art practice. Games always lead the media technology throughout history. However, particularly the recent trends found in game interface methodologies provide significant insights.

The pervasive games widely use the pervasive technologies and ubiquitous computing. Therefore, the use of media in these games is flexibly expanded and

interestingly approached. Also casual games led by game industries have developed diverse hardware interfaces. The game interface, such as Nintendo Wii[13] and Microsoft Xbox Kinect[9] involve intuitive user interactions, and thus invite the casual players or non-game players to play games[6,8]. These interfaces lead to think of how bodily engaged interactivity can be connected with the mental interactivity.

Technology is a new expressive design material that can generate and mediate our future interactions. The novel interface technologies developed in game design will continue to influence on the related research areas such as HCI and media art by expanding the inter-relationship between media and its technologies.

Conclusion

As game design and research have culturally, technologically and theoretically widened, its new possibilities and critical interaction methodologies become to influence on other domains of research and practice, particularly on interactive media art. Although the relationship between the critical distance and participation needs to be examined more thoroughly in the future discussion, the game strategies to involve the sophisticated and reflective interaction from the players deliver useful lessons to be referred.

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