

A study on the possibilities of interactive documentary through political aesthetics and text mining[★]

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Abstract. Interactive documentary refers to a new style of documentary that is created and accepted through active interaction in a cloud server using various multimedia materials. Interactive documentaries are attracting attention as a platform that forms a public sphere for social issues and mediate audiences to directly participate in social change through cognitive and affective experiences based on interactivity. However, from a theoretical point of view, the possibilities were not systematically explored, and from a practical point of view, there was a lack of consideration of effective strategies and methods to develop them. In this paper, as a theoretical basis, discussions on the political aesthetics of Walter Benjamin, especially the politicization of art, are examined. And, through text mining, we examine the media characteristics of interactive documentary focusing on the technology. And by connecting the three attributes of the politicization of art and the three media characteristics of the interactive documentary, a map of its political and aesthetic possibilities is drawn. This study is a preliminary study to make an analysis and planning methodology for interactive documentaries, and in subsequent studies, a study on strategies to develop the political and aesthetic possibilities proposed in this paper will be conducted.

Keywords: Walter Benjamin, Politicization of Art, Interdisciplinary Research, Digital Humanities, Transmedia Activism

1 Introduction

‘Interactive Documentary’ refers to a new style of documentary that is created and accepted through active interactivity on a cloud server using various multimedia materials. Interactive documentary can be said to be a representative practice type of transmedia that has emerged due to the recent rapid media convergence. With the development and dissemination of various mobile devices, it is expanding its scope to applications, social media, and VR/AR as well as traditional media.[1]

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Interactive documentaries with transmedia characteristics are attracting attention as a useful tool to practice collective intelligence through global participation and solidarity. In addition, it is making a big change in the cultural, artistic, academic, and industrial paradigms as well as the mechanisms of creation and acceptance.[2]

Among many interactive documentaries, works of an activist characteristic that directly dealt with social issues have garnered attention from audiences and critics. These works seek to expose the absurdity and contradiction of reality, give a cognitive and emotional shock to the audience, and form a public sphere for problem solving, based on an alternative perspective that mass media does not deal with. This activism has been emphasized in traditional documentaries, and interactive documentaries try to perform this role more effectively by utilizing new media technologies.

Despite the active research and production in this regard, there are some shortcomings. First, from a theoretical point of view, the political and aesthetic possibilities of interactive documentaries were not systematically explored. Although excellent works have been produced depending on the artist's ability, theoretical studies on the possibility have not been sufficient. In addition, there has been a lack of research on how to develop the possibility of interactive documentary and maximize its effect from a practical point of view. It is necessary to study the planning methodology for expanding the denotation and connotation through connection with other media, and activating the participation of the audience.

In this context, this paper explores the rich political and aesthetic possibilities of interactive documentaries, and plans strategies to develop them. For this, the following three tasks are performed. First, on a theoretical basis, we examine the discussions on the political aesthetics of Walter Benjamin, especially the politicization of art. Through literature research, the concrete contents of the politicization of art that Benjamin argued are summarized into three. Second, it examines the media characteristics of interactive documentaries, focusing on the technology that is the material foundation. Articles on interactive documentaries are text-mined and their distinguishing features as media characteristics are summarized into three. Third, it rearranges and intersects the three attributes of the politicization of art and the three media characteristics of interactive documentaries. Through this, we draw a map of the political and aesthetic possibilities of an interactive documentary.

2 Walter Benjamin's political aesthetics – the politicization of art

In this chapter, as a theoretical basis, discussions on the political aesthetics of Walter Benjamin, especially the politicization of art, are examined. Benjamin says in his <*The work of art in the age of mechanical reproduction*>, communism should confront the 'aestheticization of politics' of fascism with 'politicization of art'. What is fascism's 'aestheticization of politics' is described relatively clearly with specific examples in the paper. However, there are scattered discussions about what is the 'politicization of art' that faces fascism, and debates about its meaning continue among several researchers. It is difficult to organize all of these discussions clearly in this paper. Here, we would

like to summarize the concrete contents or attributes of ‘politicization of art’ into the following three, focusing on two thesis -<*The author as producer*>[3], <*The work of art in the age of mechanical reproduction*>[4]- that best reveal Benjamin's political aesthetics.

First, it is the change of the author's role and characteristics. Benjamin in his thesis emphasizes that artworks are ‘social products’ and that the author is ‘producers’. In the existing capitalist relations of production, it is argued that the distinction according to specialization should be crushed through the ‘refunctioning’(Umfunktionisierung) of the artistic means of production, and cooperation between the author and the audience should be made so that each person can freely use the means of production for their own work. Shim notes that Benjamin's ‘author as producer’ organizes cooperative relations of production to promote the socialization of intellectual means of production. In order to change into a new relation of production, it is necessary to pay attention not only to the author as a producer but also to the author as an organizer.[5]

Second, it is the change of the audience's perception system. Benjamin says that a cinema is basically a moving image, and because it is composed by editing, it has a different acceptance method than a traditional artwork that requires immersion. This is called distributed perception or tactile perception, and he advocates it as the political possibility of new popular art. Instead of being passively immersed in the imaginary, the ‘distracted’ audience actively absorbs it, and maintains an analytical and critical attitude toward what they see without being hesitated by the atmosphere. In that sense, Benjamin defined the cinema's audience as ‘distracted inspectors’ and expected them to leave the theater as a collective subject of social criticism. Benjamin believed that the new way of perception made by technology would raise public criticism.

Third, it is the creation of a play space (Spielraum). Benjamin says that what happened with the collapse of the aura in artworks is the expansion of the play space, and the cinema has become the widest play space. In several works, Benjamin emphasizes the healing, educational, and emancipatory character of play(spiel).[6] Benjamin says that the cinema opens up a world of visual unconsciousness, increasing insights into the inevitability that dominates our existence. At the same time, he says that the cinema is an entertainment as a form of play based on social life. In the process of collectively accepting the new art of cinema, the public enjoys it as an entertainment and at the same time imitates and practice life in the city with a critical attitude.

3 Media characteristics of interactive documentaries

In this chapter, we examine the media characteristics of interactive documentaries focusing on technology through text mining. First, we searched for articles in the ‘Web of Science’ database using ‘interactive documentary’ and ‘web documentary’ as keywords. From 528 search results, only 491 journal articles without missing metadata from the 2000s were selected. For the abstracts of these articles, text mining was performed using *Orange*[7] and *Vosviewer*[8] data analysis software. After text preprocessing, 181 terms were selected with a minimum occurrence of 10 or more and a relevance score of 60% or more. Using these terms, a co-occurrence network was created

and hierarchical clustering was performed. As shown in Figure 1, it was divided into three clusters.

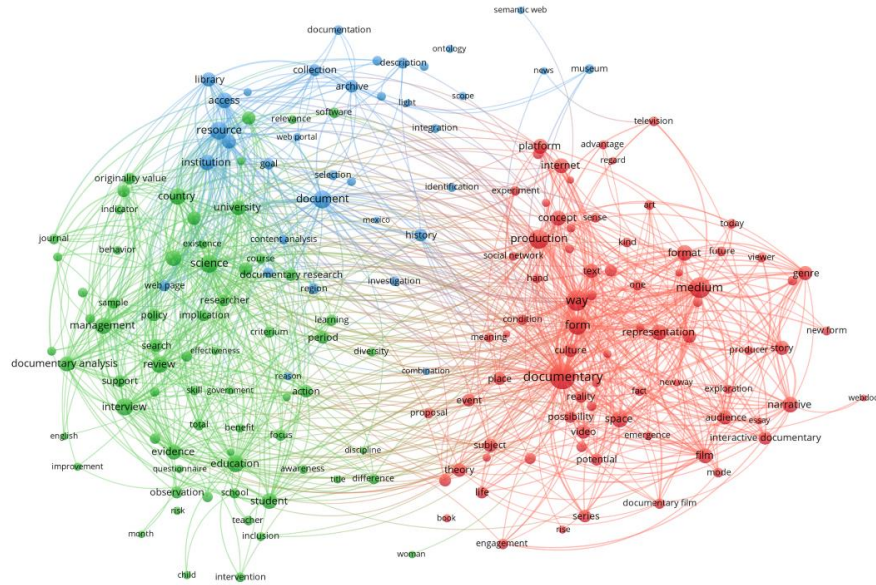


Fig. 1. The co-occurrence network of the main terms of the articles

Among the terms included in each cluster, terms related to technical factors are selected in order of relevance score as follows.

- Cluster 1: interaction, engagement, exploration, participation
- Cluster 2: resource, data collection, database, multimedia
- Cluster 3: access, web, portal, internet, social network

The keywords of each cluster can be seen as representing the media characteristics of the interactive documentary, and its specific contents are as follows.

The keyword representing Cluster 1 is interactivity. As can be seen in the term interactive documentary, interactivity is one of the key attributes that distinguish traditional documentaries from interactive documentaries. In terms of interactivity, Gaudenzi explains that users have an agency, that is, they can take physically meaningful actions on artifacts (or within those artifacts) and see the results directly.[9] Because of its interactivity, the recipient of interactive documentary is referred to as a user, not as an audience or viewer. In this respect, Dovey and Rose regard the creators and users of interactive documentaries as members of a total relationship, explain that they emerged from the network of relationships.[10]

The keyword representing Cluster 2 is multimedia. Interactive documentaries use various types of multimedia contents (video, audio, photos, text, animation, infographic, etc.), and these are stored in a database. Meaning is created only when a user enters this database and combines and visualizes multimedia contents in an interface. In this sense, interactive documentary can be said to be the user's selection and trajectory in the database. The sensory modality in the user's activity is complex (or synesthesia), and its trajectory is nonlinear.

The keyword representing Cluster 3 is network. Interactive documentaries generally take place on the web (more precisely, a cloud server), which functions as a platform in which creation, acceptance, and distribution are integrated. Due to the development of network technology, the platform can be accessed through a variety of devices. It facilitates information production and diffusion by users, enables interactive message delivery and acceptance, and allows more diverse members to participate beyond time and space. In other words, the interactive documentary platform connects people (creators and audience) to people, people to content, and content to content in real time.

4 Political and aesthetic possibilities of interactive documentaries

In this chapter, the three attributes of the politicization of art and the three media characteristics of the interactive documentary discussed above are rearranged and intersected. Through this work, we draw a map of the political and aesthetic possibilities of an interactive documentary.

The three media characteristics of interactive documentary -multimedia, interactivity, and network- correspond to material, form, and substance (or function) in semiotic systems, respectively. And the three attributes of the politicization of art -the artist as a producer and organizer, the change of the perception system, and the creation of a play space- correspond to the change of producers, recipients, and contents from a political aesthetic perspective. Table 1 shows a matrix using these two as the horizontal and vertical axes, respectively.

Table 1. The Political and aesthetic possibilities of interactive documentaries

Media characteristics of interactive documentaries (Means of production)		The axis of semiotic system		
		Material	Form	Substance (or Function)
Attributes of the politicization of art (Relations of production)		Multimedia	Interactivity	Network
The axis of political aesthetics	Contents	Database	Gamification, Simulation	Live contents
	Recipient	Synesthesia or multiple sensory modality	Agency	Tele-presence
	Producer	Crossing over various media	Operable interface	Collaboration

From a Marxist point of view, the horizontal axis represents the means of production, and the vertical axis represents the relations of production. According to Benjamin, the author must organize the public and intellectuals from various angles through the re-functioning of the literary means of production given to him in the existing relations of production.[3] The contents indicated by the diagonal shade in Table 1 can be said to be the blueprint for this refunctioning. The rest of the content can be said to be the condition or foundation for achieving the refunctioning.

5 Conclusion

In this paper, by connecting Benjamin's discussion on the politicization of art and the media characteristics of interactive documentaries, its political and aesthetic possibilities were examined. This paper is a framework for the first of the two issues raised in the introduction. Building on this research, we will proceed with a follow-up study on the second problem, practical strategies for developing possibilities. Details of the follow-up study are as follows.

First, the whole process from planning to acceptance(use) of the interactive documentary will be closely examined, and how the possibilities proposed in this study can be combined into this process. And through various case studies, we will analyze in detail how the interactive documentary work was planned and worked, and what were its problems and limitations. Through this research, we will derive an effective strategy for interactive documentary as a transmedia activism, and develop an analysis and planning methodology.

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