

# Heraclitus's Forest: An Interactive Artwork for Oral History

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## ABSTRACT

Heraclitus's Forest is an interactive artwork that utilizes birch trees as a metaphor for the life stories recorded in an oral history database. We design a day/night cycle system to present the forest experience along the time elapse, multiple interaction modes to engage audiences' participation in history exploration, and evolving forest to arouse people's reflection on the feature of history, which is constantly being constructed but can never be returned to.

## CCS CONCEPTS

• **Human-centered computing** → *Visualization; Interaction design*; • **Applied computing** → **Media arts**.

## KEYWORDS

Interactive Artwork, Oral History, Human-Computer Interaction

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## 1 INTRODUCTION

Oral history has become an international movement in historical research [1]. As a collection of historical information from planned interviews, oral history brings depth to the audience's understanding of the past by carrying us into the experience at an individual level. However, it is still a challenge to attract public interest with the conventional exhibition of documentary materials, including audiotapes, videotapes, or transcriptions [2]. To address this issue, we present *Heraclitus's Forest*, an interactive artwork for oral history, to engage more potential audiences with immersive oral history exploration [3]. In this work, we utilize the forest as a metaphor for the life stories of 40 senior artists recorded by Project 987 at Guangzhou Academy of Fine Arts (GAFA). Each artist's transcription is visualized as a birch tree. By exploring the forest and interacting with these trees, our audiences will be guided to access the artists' transcriptions up to 1 million words. Meanwhile, the audiences' interactions with the forest will make an instant impact on the evolvement of the forest. Therefore, the forest will be distinct after interacting with every single audience.

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## 2 CORE MECHANICS

The process of construction and destruction is the core mechanic through the artwork, which presents our understanding of the narrativity of history from the viewpoint of new cultural history: the history is continuously constructed along the time in a linear fashion; there exists no single essential history, thereafter no one can return to the historical scene. This understanding reflects Heraclitus's famous analogy of life to a river: *Upon those who step into the same rivers, different and ever different waters flow down*. To reflect our design philosophy, we designed three mechanics as follows:

### 2.1 Day/Night Cycle System

Our artwork features a day/night cycle system to keep track of how time passes by and what state of the day it is on screen. Figure 1 presents the day and night view of the forest. In a normal setting, both daytime and nighttime will be 5 minutes in the forest.



Figure 1: Day and Night of the Forest

### 2.2 Interaction Modes

The audiences may enter 3 different role-playing interaction modes [4], in which the avatars are seagull, elk, and the hare, respectively.

Seagull is an avatar available for daytime exploration. As a bird, the seagull enables the audience to take a quick browse at the oral history transcriptions. In this mode, all trees will present the audience with a word cloud generated by machine learning algorithms in the back-end, as illustrated in Figure 2. The audience may click a keyword of their interest to read a paragraph of the transcription associated with it. Afterward, other trees that contain the same selected word will be highlighted with light paths, following which the seagull may find distinct artists' stories on the same topic.



Figure 2: Interaction Mode of Seagull: Browsing

Another daytime avatar for the audience is an elk. The audience may control the elk to approach the birch trees for detailed transcription reading, as depicted in Figure 3. To improve the immersive reading experience, the daytime will be prolonged if the audiences keep devouring the literature.

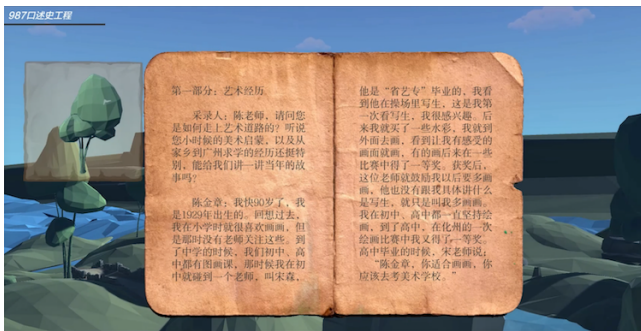


Figure 3: Interaction Mode of Elk: Reading

When the nighttime comes, seagull and elk will be prompt an option for a secret interaction mode. In this mode, the audience's avatar will transform to a hare, following the guide of a keyword to hunt mushrooms in the night forest, as shown in Figure 4. If the mushroom with the matching keyword is found, the time will elapse at a high speed so that the audiences can return to the daytime to continue their exploration of the forest.



Figure 4: Secret Interaction Mode of Hare: Searching

If the audience chooses not to enter the secret interaction mode, he/she will need to spend the night doing nothing but experiencing the breath of the forest in darkness. In fact, the keywords searching and lonely wait resembles the working status of history researchers, who experience the darkness of the unknown, discover missing pieces from the dust, and reassemble them into reasonable stories.

### 2.3 Evolving Forest

The forest is constructed in a Roguelike fashion every time the artwork launches: the size of each birch tree is generated proportionally to the length of the corresponding artist's transcription, while these birch trees are randomly distributed in the designed island scene. On the contrary, the destruction of the forest is a slow, gradual process that will be influenced by the audiences' actions. Along the time, randomly selected birch trees may start to vanish unwittingly. Figure 5 illustrates a fading away process of a tree. It is a metaphor for memory loss in the historic river.



Figure 5: Destruction of Tress in the Forest

The only way to preserve these vanishing trees is to start reading the transcriptions associated with them. We design this mechanic to arouse audiences, as the inheritor of history, to recover and consolidate the memory of the past proactively. Also, it is an implication that history will be reconstructed through repetitions during wide-spread circulation. As a result, the remaining trees form a unique forest, which will finally dissolve in a short time. This is a poetic representation of Wang Yangming's School of Mind: *Before you look at these flowers, they and your mind are in a state of silent vacancy. As you come to look at them, their colors at once show up clearly.*

## 3 CONCLUSION

Heraclitus's Forest is an interactive artwork aiming at attracting youth generations' interest in oral history. With interactive multimedia, we expect better interactivity, engagement, and empathy.

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