

# Pseudo Real-Time Live Event: Virtualization for Nonverbal Live Entertainment and Sharing



<https://vr.gree.net/lab/vibeshare/>

GREE VR Studio

Yusuke Yamazaki, Akihiko Shirai

We have developed a pseudo real-time live system that allows users to share nonverbal interactions with past or future audiences. To test this system, we added nonverbal "Entities" such as sound and visual effects to an online video. We experimented with three conditions: (1) the Entities were added to only the first half of the video, (2) the Entities were added to only the second half, and (3) no Entities were added. The results showed that more participants were attracted to the experiment under the first condition than the others, and participants spontaneously interacted with the added Entities. This suggests that pseudo real-time interaction enhances the user experience for online video audiences.

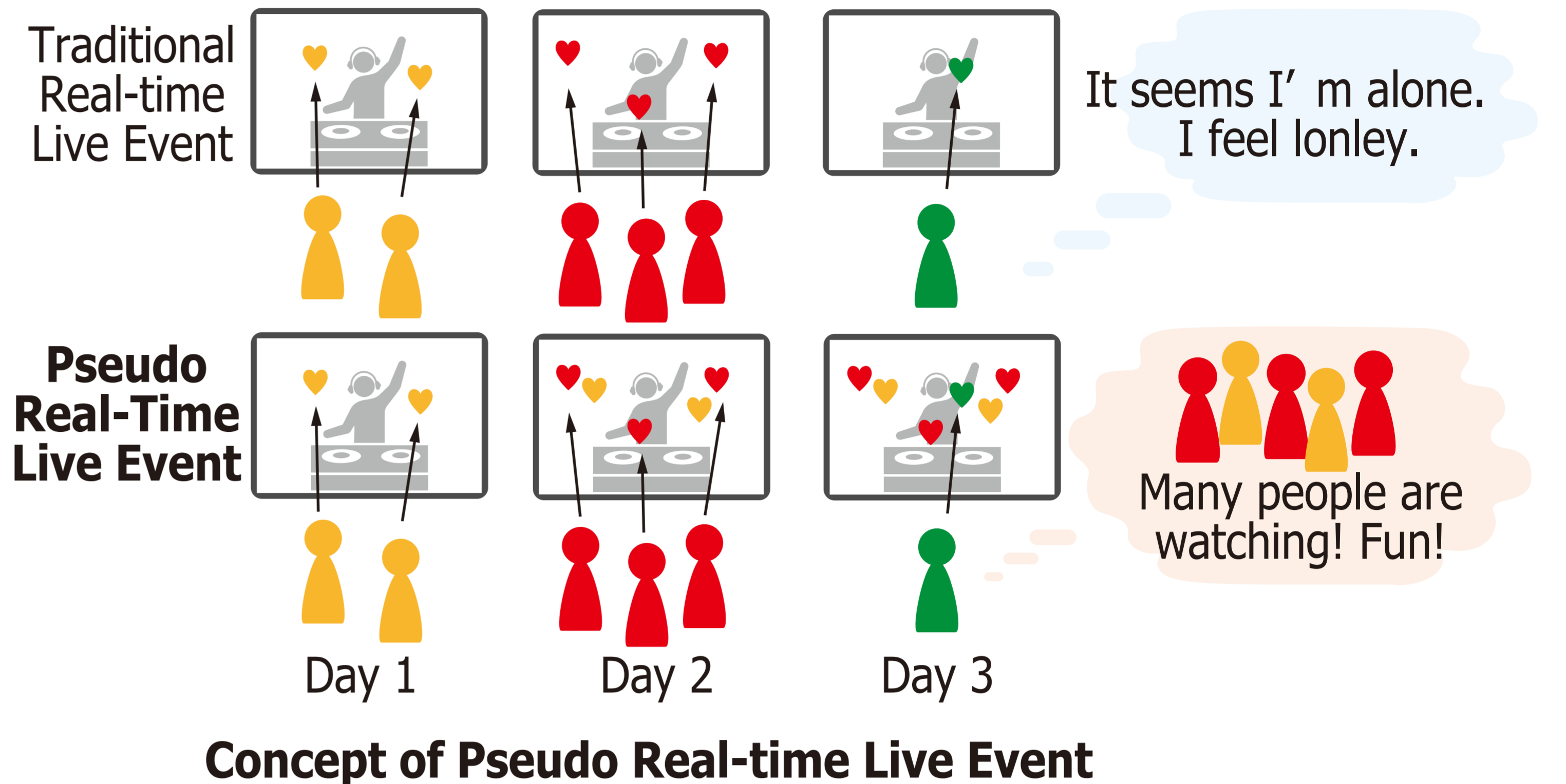
## Introduction

Current video conference tools and broadcast services lack some nonverbal elements: the presence, applause, cheers, and vibes from audiences.

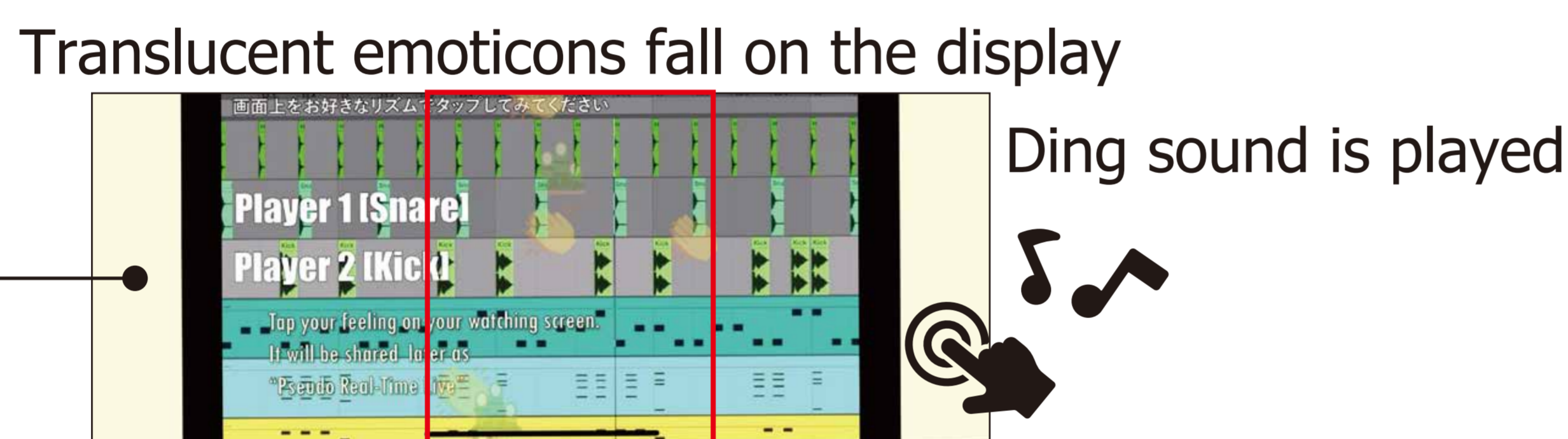
We developed VibeShare, which converts nonverbal input into multi-modal feedback. VibeShare enables nonverbal, real-time live interaction between the performers and audiences.

**Please scan a QR code at the right corner to see more detail.**

We propose a pseudo real-time live system, which enables asynchronous nonverbal communication and reports how it affects the user experience of watching online video content.



## Experiment



Description of the entities that occurs when a player touches the screen or the recorded Entities play



Timeline

0:00—0:45 New year greeting message

0:45—0:50 Tap instruction

0:50—1:35 Music playing with notes

Sequence of the video used in the experiment

## Purpose

Examine the effect of our concept on user experience of watching online video.

## Experimental Conditions

- (1) the recorded sound effects and emoticons (**Entities**) were **added to only the first half of the video**
- (2) the Entities were **added to only the second half**
- (3) **no Entities** were added

## Evaluation

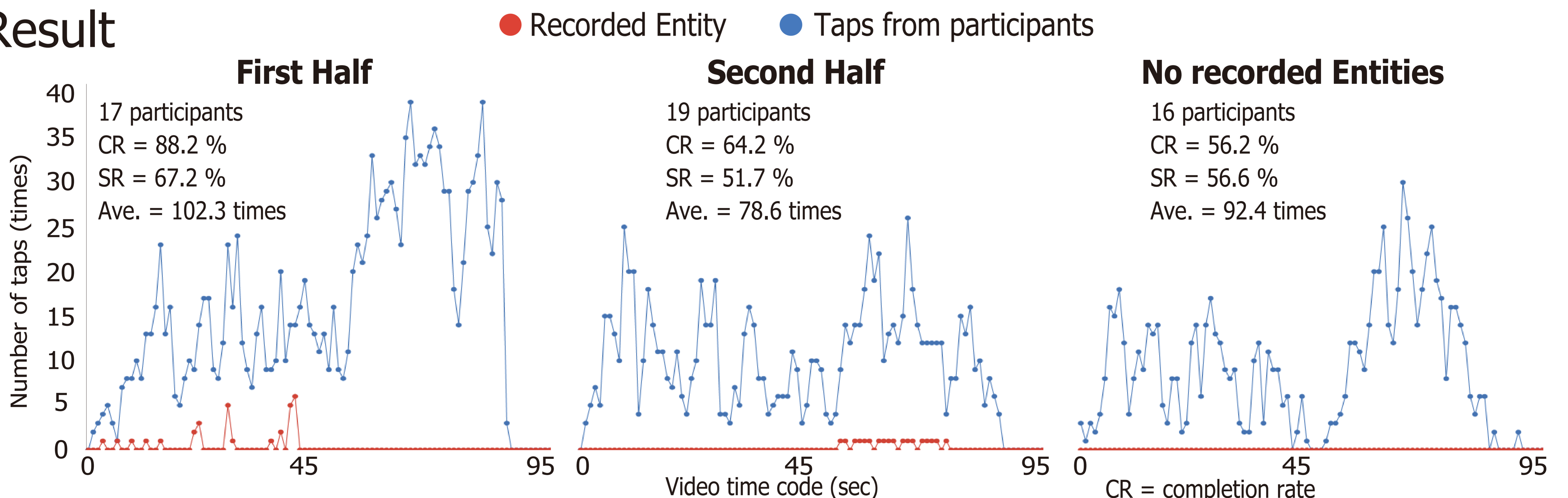
- Number of tap counts
- Completion rate (CR) : We defined "completions" as instances of participants watching the video to the end



<https://vric2021demo.herokuapp.com/>

Please try the experiment here!

## Result



Highest completion rate (CR) of First Half suggests that **the Entities that appeared in the first half probably attracted the participants and prevented them from dropping out.**

The second-half tap rate (SR) was also highest in First Half, even though there were no recorded Entities in the second half. This indicates that **the recorded Entities helped familiarize participants with the proposed experience and encouraged them to feel free to tap and enjoy making the Entities.**

These results suggest that the proposed experience, which expresses the past presence of others by Entities, even if asynchronously, positively attracts the users. We expect the pseudo real-time live system can redesign the interaction between online audiences.