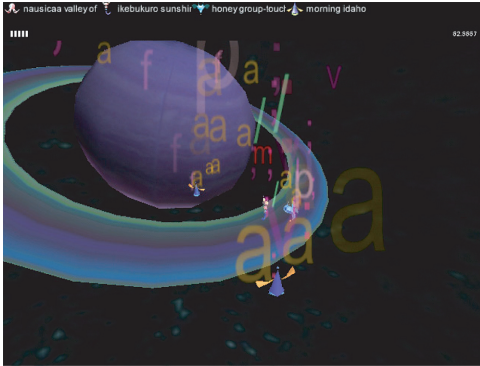# Rhythm Engine

Hidenori Watanave
PHOTON, Inc.
derin@photon01.co.jp

A Spatial Communication Tool

"Rhythm Engine" (REg) is a spatial communication tool with "Music" and "visual effects" beyond the space time. "REg" proposes an ideal way of new un-simultaneous communication to the current web-world where mainly "exchanging words" on "real time" is getting more focused.

1 Introduction

The world of web used to be based on un-simultaneous communication as e-mail communication indicates of its method for instance. Broad-band-ization in recent years tends to promote to pursuing of simultaneity (Real-time) connection. However, real-time communication is pursued how hard, the delay never becomes zero. Endless pursuing of convenience conceives some risks of producing a savage world. We now should re-appraise furthermore about the potential of the web, which gives us the connection with others and succession of emotion even over time and location. Through the "Rhythm Engine," we suggest, "the session which is inherited from the past to the future using place as an agent" and "music and image communication which has rich emotion" to the Web-world.

2 Techniques

We are successful to open a public sphere in which a non-realtime session can be occurred by re-playing the conduct log of the player's who are logged in the system from the different time and location at same time on the "Reg" server. We studied "BBS System" and reconstruct the logic to add on "Agent log recording" and use the code measuring the key-insert timing as a score for the sound playing.

2.1 Structure

Play in the Rhythm Engine sphere;
Select a character and fill in the blank; handle-name, location and e-mail address for logging in the "REg" world. See Figure 1 that some characters have been already floating freely in the "Reg public sphere." These characters are not been operating by computer program or also not been controlling by someone who stays in front of their PC accessing at the same time=real time. Conduct log of the ex-player's character (= log records of the operation of measuring the key-insert timing) of the character has been recorded in the server and all those logs are playing back simultaneously in the "REg" space. It means that one of the characters floating in the "Rhythm Engine space" could be someone who played in ANYtime ANYwhere. There is also a possibility of being yourself of several days ago. There exist different space-time as many as characters at the same time in the "REg public sphere."

2.2 Session

Encounter with someone;
When the session begins (= encounter with any other character), the partner character hums with blowing out colorful letters. The player makes own music to communicate with others by typing keyboard. Sounds correspond to each key. See Figure 2, for example, when you type

"HELLO," the letter objects of "H" "E" "L" "L" "O" appear overhead of the character as "visual effect" and you hear the sounds that corresponds to each key. It means that you play "the phrase" of "HELLO." It is also able to describe that the player can leave his sound and image (could be message) to the future. All players inherit a melody from the past, and leave it for the future, and those melody lines spin forever. image (could be message) to the future.

For The Sounds

A variety of sounds of those the gradation of phrase in a certain famous movies, which has theme of "communication with Extraterrestrials," was analyzed are allotted to each key. Moreover, each character has different timbre of musical instruments. Percussion instrumental sound is for the octopus or synthesizer sound is for the doggy, etc.

Start a session with one person/character (duo), you continue moving then you encounter to the other character accidentally intentionally, the session will be with two people (trio). In this way, steadily the session member keeps increasing as trio, quartet and the quintet, finally up to 10 (Windows version) or 6 (Macintosh version) members possible to increase as session partners.

3 Future Observation

Development as a composition tool
The "Rhythm Engine" could be a composition tool to create music with yourself in the future or past or with someone on the net in the future or past wherever the person be. When the program system would be possible outsourcing the session log to score or making notes automatically indicated at the time of typing, there is a potential of new composition method opens.

Convert to the actual space
(Augmented Reality Technology)
It is possible to superpose "Rhythm Engine world" on real world using portable terminal like PDA that has the position information system such as the GPS (the Global Positioning System). In this case, the player is not to operate the character with the cursor keys but to walkout and move outside and uses the button of the portable terminal to play music and image. You can enjoy the session with anyone at anytime on the road, which always you pass, and with someone who has been passing by the place in the past.

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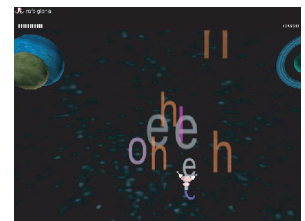ACO "H" HASHIMOTO (PHOTON) 2002. Team management

Figure 1: characters floating in the "REg public sphere."

Figure 2: Colorful letters.