Subliminal Wiretapping

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ABSTRACT

Subliminal Wiretapping is a subtly interactive artwork that utilizes random number generation modified through mind-matter effects to supply a continuous stream of words. Frequent, personal connections emerge from participants interpreting the stream as the words appear.

Author Keywords

mind-matter, random event generator, random number generator, psyleron, interactive, subtle, listen, wiretap, automatic writing, ouija, REG, RNG.

ACM Classification Keywords

J.5. Art and Humanities: Fine Arts. H.5.2. User Interfaces: Input Devices and Strategies.

General Terms

Design, Experimentation.

DESCRIPTION

Subliminal Wiretapping has three primary visual components: a random number generator, a display, and a printer (see below). The random number generator acts as the input device. The display gives participants real-time feedback. The printer creates a permanent record. The participant is free to interact with the system on a conscious or unconscious level.

INTENTION

The object of the artwork is to utilize the psyleron as a listening device [5]. The psyleron taps into the conscious and subconscious streams of those participants aware of the device. The participants influence the letter choices that ultimately create words. *Subliminal Wiretapping* then becomes a mix of ouija board and automatic writing.

A sequence of words can generate meaning similar to a montage or collage. These surrealist-like combinations provide a listening post into the potential alternate realities that exist elsewhere in our personal holograms of time and space.

RECORDED ACCOUNTS

Personal Accounts

The following are a few patterns, events, and observations that I noticed in the psyleron's behavior while making, testing, and exhibiting *Subliminal Wiretapping*.

Base State - No Interaction: *Subliminal Wiretapping* produces what appears to be a mundane selection of words. Inextricably words will repeat, which is surprising and seemingly improbable.

Active State – Interaction: The created words can seem relevant or humorous to the social setting. Also, when active, the sequence of words almost never contains duplicates.

I've noticed that the dialect or types of words generated change based on who is within subliminal reach of the psyleron. Oftentimes, several participants will be trying to figure out what a particularly long or obscure word means when someone new walks by and immediately defines the word. It appears as though the new person's dialect was influencing the psyleron in a premeditated fashion.

First Hand Accounts

Subliminal Wiretapping commonly brings to the surface a word pertinent to the events surrounding it. The following are accounts told to me first-hand from those who experienced and observed them.

Account 1

During a winter art camp at the art gallery, some children were interacting with an adjacent artwork. This adjacent artwork was comprised of a touch screen interface that allowed the children to create procedural, line-based images. When I turned to look at *Subliminal Wiretapping* the word "redraw" had just completed.

Account 2

I was sitting at the reception desk working on a difficult crossword puzzle. Needing a break, I took a quick look around the gallery. That was when I noticed the word "confused" on the *Subliminal Wiretapping* display. I returned to the crossword and worked on it a while longer. After finding myself stuck again, I looked up at *Subliminal Wiretapping* and saw the word "puzzled."

Account 3
The morning prior a fund-raising reception, the galley was waiting for the beer delivery. I glanced at *Subliminal Wiretapping* and saw the word "beer."

Reported Accounts
Reporter Doug Gruse from the Post Star in Glens Falls, NY wrote a review of the exhibition, *Art Machine*. The following is an excerpt from the review describing part of his experience.

On a recent afternoon, the REG [psyleron] appeared to be picking up some vibes from the gallery of visitors. A gray haired man, who seemed to have been dragged to the exhibit by a female companion, reluctantly walked up to a high-tech installation. 'What the hell is that?' he muttered as he glanced at the screen. Seconds later, the word "geriatrics" appeared [1].

TECHNICAL DETAILS
Hardware
The psyleron is a random number generator. It samples the voltage of a proprietary noise circuit and compares the value to a ground voltage. If the voltage is high then a binary 1 is returned. If low then a binary 0 is returned.

As described by Psyleron Inc: "Psyleron is a company and research organization that explores the connection between the mind and the physical world. Discoveries made at the Princeton Engineering Anomalies Research (PEAR) laboratory have shown that human intention and group dynamics can influence the behavior of quantum electronic devices known as Random Event Generators (REGs). Psyleron was founded by PEAR scientists and associates with the purpose of conducting continued research, developing products and applications based on its findings, and facilitating public exploration of mind-matter effects."[5]

Software
Subliminal Wiretapping is comprised of two applications: a word building program and an audio-visual program.

Word Building
The start of every word requires scrambling a specialized alphabet from psyleron data. This alphabet has duplicate letter entries based on the starting letter frequency of words in the English language. For the remaining letters of a word, a second psyleron scrambled alphabet is used. The second alphabet has duplicate letter entries based on overall letter frequency in the English language; although, only if those letters could make a word with the currently active letter sequence. Take for example a letter sequence "qu." Several letters (a, i, o) would be added to the secondary alphabet; but not the letters: b, c, d, etc. Additionally, if the current letter sequence is an existing word, then spaces are added, which are used as end characters. Consider the situation of plurality: chair and chairs.

At each temporary or final letter selection. The word builder application sends the current random number count, current word, and current potential letter to the visual and audio application. This data is sent via the Open Sound Control protocol [3].

Visual and Audio
The visual and audio application was built in the Unity3D game engine [6]. It receives data from the word builder application and appropriately updates the display and audio as needed. The red bars in the top horizontal space represent the most recent counts from the psyleron. Zero is to the left, 128 in the middle and 256 to the right. This visualizes the current internal standard distribution curve. The active word is just below the red bars. The right most letter changes to represent letter possibilities. The remaining words are the five most recently finished words. When a word finishes at the top, each word pushes down one row. The animation is designed to look similar to a mechanical train departures board. See below.

FUTURE WORK
Subliminal Wiretapping is based on others' research results using random number generation, and more specifically the psyleron. Interchanging the psyleron for other random number generators seems to fall within a reasonable expectation of observing similar results and accounts.

ACKNOWLEDGMENTS

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