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The Stranger - .... . ... - .. . - - . . -

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Figure 1: Automated vintage typewriter installation. It recognize the audience's speech and transcribes into Morse code with glitches.

ABSTRACT
This interactive art installation creates a strange feeling as if you are speaking to yourself in a soliloquy while having the presence of an invisible entity that might be you or not. The automated typewriter recognizes your speech and translates it into Morse code, excluding the words 'I' and 'you' and those letters. It creates a new perception of distance and captures the moment of losing authority over your own thoughts. Even if you see the typewriter transcribing what you just said with Morse code, the resulting sentences composed of dots, dashes, 'T', and 'You' on the paper seem to respond to your speech with a completely new and seemingly encrypted meaning, as if they are talking back to you. This can result in the loss of the speaker's original intention and can also represent the ephemeral aspect of either inner or outer voice.

CCS CONCEPTS
• Human-centered computing → Interaction design theory, concepts and paradigms; • Applied computing → Media arts; • Hardware → Sound-based input / output.

KEYWORDS
Art, Typewriter, Interactive Art, Monologue, Installation, Speech

ACM Reference Format:

1 INTRODUCTION
Can you ever be what you say and say what you are?
Can your speech genuinely represent yourself and convey your thoughts and meaning? Does your speech hold your thoughts and intended meaning?

Every word spoken out loud can lose its original intent and meaning once it departs from your mouth and is transferred to any media to be heard, leaving you with a sense of detachment when you hear your recorded voice.

Sometimes, I (the first author of this work) feel disconnected from myself when I hear what I have just spoken out loud. Is that really what I wanted to say? Is that truly what I have been thinking? Have I ever even thought about this before? Once your voice is out, it no longer belongs to you.

This interactive art installation creates a strange feeling as if you are speaking to yourself in a soliloquy while having the presence of an invisible entity that might be you or not. The automated typewriter recognizes your speech and translates it into Morse code, excluding the words 'I' and 'you' and those letters. It creates a new perception of distance and captures the moment of losing authority over your own thoughts.

Even if you see the typewriter transcribing what you just said with Morse code, the resulting sentences composed of dots, dashes, ‘T,’ and ‘You’ on the paper seem to respond to your speech with a completely new and seemingly encrypted meaning, as if they are talking back to you. This can result in the loss of the speaker’s original intention and can also represent the ephemeral aspect of either inner or outer voice.

2 INSPIRATION

As a Korean-born artist living in the U.S., I have struggled with language barriers. However, I have come to realize that this is not solely due to the language I speak, but rather to the way in which humans process and convey their thoughts. Whether speaking out loud or writing on paper in any language, I know that I lose some level of control and authority over the message I am trying to convey. There is no guarantee that others will understand my intended meaning, and there is no way for me to confirm whether they have absorbed my thoughts accurately. Often, I feel as though speaking in any language makes me feel like a different person and detached from myself. Through this installation, I aim to capture these feelings and moments of disconnection.

Moreover, the novel “The Stranger” [1] by Albert Camus has had a significant impact on my thoughts regarding the relationship between myself and the world, and it accelerated the realization of my concept of losing authority over one’s thoughts and self-detachment. Additionally, the typewriter works [4, 5] by Dom Sylvester, such as his typestracts and visual poems, have also inspired this work. I find that the typewritten paper artifact with some glitches created by this automated typewriter installation (Fig.2) reminds me of his beautiful work.

In this sense, my artwork suggests that resilience is not just about bouncing back or adapting to challenges, but also about questioning and rethinking the ways we perceive and express ourselves. The theme of distributed agency and enlivened accountability relates to the interactive aspect of this artwork, where the audience is invited to engage and participate in the creation of meaning, leaving a
typewritten trace of their monologue process dissolved into the sequence with others on the almost endless roll of paper.

## 3 MEDIA AND COMMUNICATION TECHNOLOGY AND ITS REPLACEMENT OF HUMAN HAND [2]

By using a vintage typewriter as the main medium to convey my inspiration and concept, I aimed to reflect on the history of mediated communication and information transmission technology. This history begins with human hand transcription, electrical telegraphy, and the creation of Morse code as its language, and has progressed through the development of phonography, the telephone, the typewriter, the teletypewriter, and today's computer keyboard systems, as well as voice command technology for transcribing and transferring messages. Through the metaphorical representation of this evolution, I automated the vintage typewriter to transcribe speech in the historical language of Morse code, which ironically represents the current voice command technology.

## 4 MATERIAL

Olivetti Valentine Typewriter, Arduino, p5.js, p5.js serialcontrol [6], p5.js-speech [3], Microphone, Microphone Boom Arm, Laptop, Aluminum extrusion profile, Plywood, Car door lock actuators, Stepper motor, DC motor, Rubber bands, Mirror, 20x04 LCD.

## 5 ARTIST BIOGRAPHY

Kyung Yun Choi (Yun) is a multidisciplinary artist and Human-Computer Interaction (HCI) researcher. She explores the dynamics of communication through interactive kinetic installations and mixed-media paintings to create a new perception of distance and detachment. Yun has developed tangible and haptic interfaces to promote self-awareness and interpersonal communication through tactile interactions, and presented her works at various conferences, including IEEE ICRA, and ACM TEI, C&C, UIST, CHI, and IMWUT. Yun is currently a PhD candidate at Tangible Media Group, MIT Media Lab and a 2022 LEGO Papert Fellow. Her previous works have won a design award from FastCompany and have been featured in IEEE Spectrum. She holds a B.S in Mechanical Engineering from Yonsei University (South Korea, 2013), a M.S in Aerospace Engineering from the University of Illinois at Urbana-Champaign (2017), and a M.S in Media Arts and Sciences from MIT Media Lab (2019).

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## REFERENCES