# **Door:** The Evolution of Messenger and Analogue Emotion

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Figure 1. Demonstration of Door

#### 1. Introduction

Door is an interactive art within an emotional technology, and it has been studied about human communication in modern cities through the symbolic meaning of the door. Today, an instant messenger or a mobile phone is a general way for conversation, and we are familiar with such methods of communication. Digital technology has made life dramatically easier for us to talk to others immediately. Nevertheless, this type of relation with people is not likely to last long because an instant messenger has emphasized the importance of giving information without an emotional exchange. This new type of human network has been made in virtual world with extremely limited human touch. Door is an excellent alternative to overcome the limitations of digital technology.

**Door** is tracing patterns of electronic communication in major urban conurbations. This installation bridges the space gaps of virtual and real world. We have designed an inventive form with the small door with physical computing and network technology. We materialized the method of communication in an architectural way after a careful research for interface between human and machines. In this installation, voices were visualized by material media such as the door. Architecture as the door has the dual knowledge that links up and blocks out the space. If you will open a door, it means that you want to connect the spaces and you are ready to move on to the next stage for communication. This work converts from the digital method to the analogue such as knock and open the door. Door is created to give people the warm emotion and more humane communication.

### 2. Technical Details

A potentiometer is embedded in the upper edge of Door part and a servo motor is established in Door part on the bottom. The middle of Door part, a piezo sensor and a RFID reader are inserted in. If Door opens, the potentiometer sends a revolved angle value of Door part to other Doors' servo motor though Arduino(opensource single-board microcontroller) which are embedded under the bottom part of the work.

The piezo sensor gets signals when a spectator knocks his/her Door, and then the sensor value is sent to another Door and it plays a knocking sound. Finally, there is "Do not disturb" card that has RFID chip in it. If the card is hung on one of Doors handle, the RFID reader sends computer a signal to have Door temporary dormant.

## 3. Experience scenario and Conditions

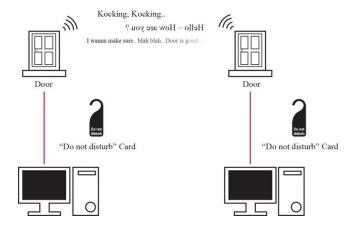


Figure 2. Installation conditions

- If you want to talk to "door pal", turns your handle last and turns on the light in the upper edge of Door. Now, you are ready to move next step for communication.
- You have to knock on the door before communication and wait. If door pal answers to your knocking, you can open the door.
- Pal's door is opened simultaneously with yours.
- Now, You can have an everyday conversation.
- After talk, don't forget to close the door.

Moreover, you can use Door as a special decoration with romantic lighting and personal speaker.

## 4. Results and Conclusions

It is not difficult to find out the metaphor of a door when we actually encounter it, which has simple function: Open and Close. Door's interface has noticed an affordance within the door. And this project poetically represented user's voices and explored a way to facilitate the interaction and communication between people. Door shows the visible, which conceals the invisible layers (Electronic signals for human communication). And this installation gives body to "user-centered experience" As invisible layers become visualized, the concept of space can be expanded in our lives.

### References

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