Teleshadow: Feeling Presence in Private Spaces

1. Teleshadow

Teleshadow is a light for private spaces which enables the user to feel presence of other person over remote spaces. People communicate by talking to someone or by giving some gestures. These communications which signals are made intentionally to tell something are not the only style of human communication. There is another style which communicates by behaviors and appearances. For example, when our friend caught a cold we can notice his condition if we stand just next and saw his coughing. In this communication style our friend never has to tell us that he caught a cold. Actions such as “coughing” are embodied messages. These do not have intentioned meanings but they will be an enough signal to tell some meaning to other people. But in present telecommunication media such as telephone and letters, user have to make signals intentionally to establish communication.

Teleshadow creates presence of other person who stays in different places by using shadows which are embodied messages. Shadow is a phenomenon of reality. If there is meaning in the action, there is same meaning in the shadow and will be able to carry to someone else. On the other hand, shadow reduces private information which we don’t want to be conveyed. When a person reading a book, the shadow enables us to notice that the person is reading a book but never convey what book he is reading and how the room is messy. In the Japanese culture, shadow is used in various scene of daily life. Japanese architecture has a paper door called shoji which is made by Japanese paper. Shoji mirror the shadow of the person who stays in next room, and it will be able to feel the person’s presence.

2. Design / Architecture

The system of Teleshadow is constructed by two parts, the Kagefuda and the Andon. The Andon is designed as furniture in the motif of andon, a Japanese traditional light, to fit with the human’s daily life. Besides using as a light, andon is used to show the shadow picture and it produces deep stories in Japanese culture. Four faces of the Andon are made by Japanese paper and the front side is a screen and able to reflect the shadow with the projector and the mirror which are put in. The front screen has a touch-panel behind the Japanese paper and able to make various interactions. Andon has a camera to take the shadow and a turntable to put the Kagefuda on.

Kagefuda is a card related with a user ID and user will exchange their Kagefuda with other person. To see friend’s shadow, user connects Kagefuda with the turntable and rotates it to select him/her friends. By touching the shadow, user can talk with friends.

3. Related Works

Some interactive media such as ShadowGarden[Simpson 2002] uses shadow for human communication. Video Whiteboard[Tang and Minneman 1991] and Shadow Communication[Miwa and Ishibiki 2004] used shadow as a communication tool. These works communicate to tell or to send some message by shadow with actions such as painting. Teleshadow is not a media to exchange messages. It is a media to feel other person’s presence in private spaces. Other media create a new space for communicating by shadow. Teleshadow is designed as furniture to aim to bring the new shadow communication for private spaces.

4. Vision

Telephone and e-mail became popular but still there is a differential in intimacy between telecommunication and face to face communication. It’s absolutely essential that the very intimate telecommunication over private places. Family which faces long separation wants to take care of each other as they live in the same house. Video chat gives the user an intimate communication in different places. But it does not fit in private context because it gives to much information that we don’t want to be known from others. Shadow is the best suited signal to have intimate communication in private spaces.

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References

