CRITICAL REFLECTION

TASTE YOUR EMOTIONS: AN EXPLORATION OF THE RELATIONSHIP BETWEEN TASTE AND EMOTIONAL EXPERIENCE FOR HCI

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Github repository URL: https://github.com/Liu-WenYue/cart360-2019

Not like other senses in the human five senses, the taste is still in developing and exploring stage in the current human-computer interaction world. By transmitting light and sound waves into signals, we can easily communicate and transfer visual and sound data with our machine. However, the current technology not yet supports us to transfer or digitize our taste or smell. It's because these two senses use receptors that respond to chemicals from the objects we smell or eat [1] to distinguish different smells and tastes. Moreover, emotions are another aspect that is not addressed often in the human-computer interaction context. It is interesting to see how does the relationship between the taste and emotion changes under the human-computer interaction, and the possible outcomes from this experiment.

The author experimented in a scenario-based context. He/she designed four different scenarios based on real-life events - product rating, sport match result, experience vignette, and website usability. 3D printed tastants in different levels of sweetness and bitterness were provided at each scenario, and the participants were asked to match the tastants with different levels of emotional states. As a result, the author found that the data outcome aligned with their hypothesis, the sweet taste is correlated with positive emotions while the bitter taste is correlated with the negative emotions. The results from the 16 participants showed that people turn to have an accurate match at the extreme ends. However, the data showed more variation for the in-between levels. This suggests that taste sense and emotion states are very personal, and it may change under different contexts, so it is very difficult to quantify taste and emotion.

There is one result that I found very interesting. In Table.5, under the scenario of the sport match results, there are 5 out of 32 samples rated the big victory as very bitter. This resembles what was mentioned in the article An Exploration of Taste–Emotion Mappings from the Perspective of Food Design Practitioners, "emotional response is positive for most levels of intensity but becomes negative for the lowest intensity level (i.e. bland foodstuffs) and the highest. For example, too much sweetness was described as negative" [2]. Human emotion is very complicated as it does not follow the rule all the time.

The main purpose of this study is to study the relationship between taste and emotional experience under the human-computer interaction context, it provided an insightful discussion about the embodiment of emotional experience design. And now we can communicate our feelings and emotions with tastes. Moreover, I think how the author created the stimuli was very

meaning, it used a 3D printer that is able to print liquid, and the liquid reacts with the base material to form a gel-like structure. One of the other findings in this article is that taste is related to memories, so these tastants can be used to save memories for people to reminisce at their old age.

I think overall this experiment is well-conducted, there are small details that were taken into consideration, like providing participants with water in between every single test. This work met its purpose as it found a correlation between taste and emotion under four different scenarios. However, the taste is similar to our eyesight and hearing ability, people may have different sensitivity levels to taste and emotion. I believe doing a pre-test to the participants to set a standard for sweetness and bitterness can be helpful to further evaluate the results [3]. And from this experiment study, I see potential in the field of taste experience design in the human-computer interaction context.

Bibliography

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