Mettle: Reframing Messaging as a Felt Anticipation

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Abstract. For the past few years, instant messaging (IM) has become the mainstream of social media due to its convenience and efficiency. People, however, tend to exchange message rapidly without further thinking and caring about others or environments. Hence, we develop a non-instant messaging (non-IM) model where anticipation is naturally born. To find design opportunities, we put design probing into practice and found out an emotional expression problem, and that there were still other meaningful perceptions. As a result, we made a prototype of our preliminary concepts aiming to articulate anticipation and sense of place. After the interview with users, we made an adjustment in proposed design to meet users' needs. The whole working process was done with Research through Design (RtD) method. Our work targets at optimizing this dialogical research so that everyone can create and share their personal felt experiences easier via Mettle.

Keywords: Experience design · Anticipation · Non-instant messaging · Sense of place · Emotional communication

1 Introduction

During the last decade, instant messaging (IM) has become the mainstream of social media due to its convenience and efficiency. Nardi et al. asserts that instant messaging effectively supports informal communication tasks such as quick questions, clarification, coordination, scheduling and keeping in touch with important others. These tasks usually involve rapid exchange of information [1]. In fact, there are still other meaningful reasons why people need messaging. For instance, people may want to know news, which creature it is on the flower, how to surf, why Apple is so successful, when dinosaur was extinct, how to do everyday tasks, and all kinds of treasure knowledge in this world, and most importantly, people yearn for understanding others exactly as they desire to be understood. However, not everyone can express his or her thoughts appropriately. We sometimes start an endless fight due to weak communication skills. Common solution to communication problems is to give each other some time. With time, it is easier to calm down, to cast their mind back to the event as a detached third party, to introspect, and to figure out how to say things right. In this case, we may say that slow way is more efficient in emotional expression than fast way is. Hence, we think about applying slow technology concept to messaging, which emphasizes on

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reflection instead of function [2]. In Fig. 1, the sending point and the receiving point in IM almost overlap at the same place on the timeline. We then separate them, as Fig. 2 shows, to avoid the immediate pressure in communication. The distance between the two temporal phrases can be seen as the effort of messaging.

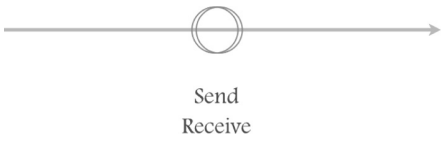

Fig. 1. The sending point and the receiving point in instant messaging.

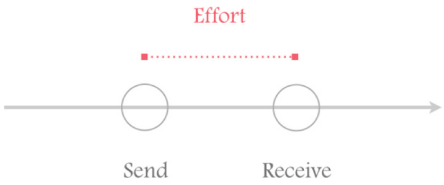

Fig. 2. The distance can be seen as effort in slow messaging.

With this effort, the whole transmitting process is limited. Since digital limitation seems to bring great possibility in designing new forms and functions as Pierce mentioned in Counterfunctional Things [3], we look forward to exploring interesting effort type in slow messaging.

Our research did a pilot test to observe people's impression on current slow messaging, and used prototypes to explore proper effort type and enter the cycle of learning, adjusting, and testing just for proposing a non-instant messaging (non-IM) model that may make people easier to express their thoughts bravely and clearly with lower pressure.

2 Case Study

FutureMe is a website for users to write e-mails to future self. It is inferred that people have their own emotion such as anticipation, passion, and fear. Furthermore, some public letters not only weave great stories in personal life but also inspire other people. Briefly, FutureMe provides a meaningful way for people to cast and review their imagination of life with the self-to-self feature in slow messaging. A similar case to FutureMe is a mobile application called Slow Message. It allows one to send emails to whomever you want. It arrives in a few days, weeks, months, or even years approximately. By quickly defining a loose timeframe to receive a message, one might be surprised by this message on an unexpected time in the future. In sum, Slow Message offers a self-to-others platform for people to send slow messages. Another case comes to be a popular website in Europe, BookCrossing. Aiming to connect people through books, this website sets up an online library to share with entire world. Readers can

follow the Label - Share - Follow steps to send a book to the wild for others to hunt, and track its current position along with new owners' feedback. By means of the sharing organism, books are vitalized and readers get more involved in sharing precious knowledge or reflective stories. The connection between people and books, in this case, emphasizes the sharing instead of the ownership. It turns out that BookCrossing gives an interesting delivering ways in slow messaging due to people's affection towards tangible object and physical environment.

Cases above show the current image of slow messaging and their influence on people. Especially in FutureMe and SlowMessage, we see that anticipation plays a good role in slow messaging. According to the definition of anticipation in Technology as Experience [4], anticipation comes into existence right after the sending moment, and goes dead once the receiving moment is met. The two cases let anticipation be the primary topic of this research.

3 Exploratory Framing

3.1 Focusing

In order to find out other design opportunities, we used cultural probes as Gaver proposes [5] and took FutureMe and BookCrossing as tools to test the interaction experiences in slow messaging.

3.2 Probing

The experiment is held in Taipei, Taiwan. There are 20 participants (9 male, 11 female) aged from 20 to 60 in this probing. They use mobile phones and computers every day, and come from different background.

In this probing, participants first need to read one public letter on the FutureMe website, and then write a letter to future self. Next, they have to prepare one book and do the Label - Share - Follow steps on BookCrossing. Material kit, which is actually an online note in Evernote, is prepared for them to record their feelings and thoughts whenever and wherever they want, and synchronize the note to us when they think the content is ready.

Participants were asked to answer the overall probing questions about their background and current use of IM on the online questionnaire. The content of one-to-one interview depends on the questionnaire outcome, the records from the material kit, and the personal experiences about messaging. They can specifically share their experiences.

3.3 Results

- All the participants are frequent users of smart phone and computer. Under this circumstance, their opinion that current IM ways cannot preserve some buffer zone for communication is very encouraging to our research.

- The statistical graph generated from the questionnaire shows that FutureMe is more interesting and enjoyable, but it is not as much interactive as the traditional E-mail is. On the other hand, BookCrossing supplies a surprising way of book exchanging, but they still prefer to go to the traditional library since the functionality is more reliable.
- Some of them were impatient at the beginning of writing the letters to future self. Not until they became more concentrated could they realize the peace and importance of facing themselves.
- Participants shared rich experiences in messaging, such as postcards sent in journey, personal diary, notes passed in class, time capsule, and the secret sign on the bulletin board in train station.
- All the participants are looking forward to further development of messaging.

3.4 Lessons Learned

Although IM enables us to communicate immediately without spatial limitation, it cannot satisfy all human needs of communication. That is, it is not empty within sending and receiving moments. Beside anticipation, subjects passionately talked about some feelings towards certain places in their personal experiences in messaging. Sense of place stands for the beliefs about the connection between self and place, or feelings toward the place [6]. As a result, our secondary topic turns out to be sense of place, and the preliminary goal targets at articulating one messaging way, which promotes anticipation and sense of place.

4 Prototype

A prototype of mobile application named Mettle was prepared for user study. Instead of website, mobile application provides a closer relationship with people, gets users location easily, and interacts with users anytime and anywhere.

4.1 System Description

Literally, Mettle is a combination of message and shuttle. In the application, the embodied message, mettle, takes off from senders' location (start point), flies along a path, and lands at receivers' location (destination point) in a constant speed. As we can see in Fig. 3, the messaging acts like a carrier pigeon flying on the map. Intuitively, we remain the non-IM feature that messaging needs an effort to reach destination to create anticipation. In other words, it requires a certain period of time for the delivery of mettles. The countdown time of the hour glass and the advancing mettles are to dynamically notify users about the remaining time and distance. After the mettle has reached the destination, users can review those received silent messages from Inbox. In order to stimulate sense of place, the whole message's journey is visualized on map. When users see the moving messages, it supplies the locational information to

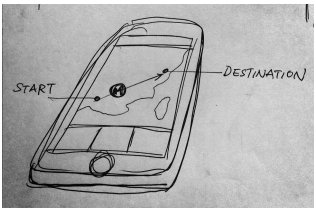

Fig. 3. Prototype of mettle

users imagination. On the other hand, each mettle may contain text, photo, video, and audio at the same time, so that receiver is capable of catching all kinds of features of certain place.

There is a noticeable absence of research dealing with the topic of exchanges in time and space. Hence, with Gamification [7] and In Situ Design [8] concepts, we trickily allow receivers to choose whether they want to wait until mettle arrives or to steal it by moving closer to it within an area called theft radius.

4.2 Preliminary User Study

To investigate the needs of users, we interviewed people with different backgrounds, and used the sketching prototype to introduce our idea. One of the feedbacks is that anticipation usually fades out as time goes by. On the other hand, theft radius game is not appealing to users as long as the threshold of the action is too high to achieve.

4.3 Interaction Adjustment

Although sense of place plays an important role in felt experience that locations and the places' impression on users are considered as anchors of the messaging, users do not perceive significant meaning in connecting places to slow messaging. To fill the gap of our research and users' desire, we target to goals that the weak anticipation part in messaging needs to be activated, and that providing a more reasonable way to get involved in the messaging should solve the frustrating problem in theft radius.

In addition to the functions in prototype, we redesigned two new ideas to make an adjustment of the interactive mechanism in order to optimize anticipation (See Fig. 4). First, Dunn et al. have discussed about the experiential quality in spending money in psychological view [9]. Since consumers would be happier if they buy many small pleasures instead of few big ones, we tried to make messages divided into tiny parts, and distribute them on various locations, which is meaningful for users on map. This design not only provides more anchors but also gives some reminders of the messaging process. Second, instead of linear pace, the mettles should slow down whenever they are near senders or receivers so that the possibilities of stealing are enhanced.

Fig. 4. Proposed Design of Mettle. One mettle starts from sender's location (red point). It goes along touchpoints and finally arrives at receiver's location (blue point) (Color figure online).

5 Discussion and Conclusion

Mettle is done with the hope that this non-IM application provides a disruptive solution to the emotional expression problem of IM. We predict that the future interview results would show that it crafts a more practical sense to imagine, expect, and remember experiences. Mettle could also be applied to other fields such as tourism, LBS games, spatio-tempral storytelling, and education. In this research, we use a dialogical method as Wright and McCarthy propose in Technology as Experience, and dedicate to qualitative research in experience design. Comparing to FutureMe and BookCrossing, Mettle reveals a possibility that anticipation can co-exist in time and space, and, furthermore, be exchanged within the two domains. The more users participate in, the more they gain. With the belief that place is a reminder of memories and time is a catalyst, we hope to continue adjusting the proposed design and optimize this dialogical research so that everyone can easily create and share their personal felt experiences via Mettle.

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