

Content That Connects People by Shared Experience

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Abstract

Content plays an important role in the ubiquitous society, to entertain people as well as to connect people. This paper presents 5 contents that reflect the concept of how content can be utilized to connect people through shared experience.

Introduction

In the ubiquitous society, many “smart” devices are used for accessing information as well as for communicating people. It has become important to design content that realizes a shared experience in both the virtual world and the physical world. This paper reviews 5 contents developed at *imgl, Digital Entertainment Laboratory, Keio University* that effectively show the concept of how content can control personal information and connect people by linking personal information according to “nearness” and “activity”.

1. Content “Living Map”

The Living Map is an online community for exchanging information on cities.(1) Unlike conventional forums, it uses a dynamically generated map as its interface, which changes in accordance to the user's activities.

The map is generated using locational data collected from the user's activity in the city, pre-entered data of frequented locations, and data from other users with similar activity patterns. These data are therefore a collection of user experience in the city, the physical world.

The user can then use the map to exchange information by searching for recent topics, taking photographs in the city and uploading them, or posting comments. The topics and photographs are archived in a database.

By adding their favorite or frequented locations ('spots') to their hotlist, the user can join the location-based community for that spot. The added spot information can also be used by the system for matching people with similar tastes.

The system also seeks out people with similar activity patterns using the users' shared spots. The more locations the users have in common, the closer the system decides the users are. By automatically sharing spots with similar users, the user can see where people with similar interests go, resulting in the expanding of the user's world. Groups can be formed by friends or by people of a particular interest. Spots are shared between group members, enabling easy creation of theme-based maps.

These shared experiences can be accessed both by the mobile phone while exploring the city and by the personal computer when the user is at home.



Fig.1 The mobile phone display of "Living Map"



Fig.2 Map and information displayed on PC

2. Content "Re:living Map"

Re:living Map extends the concept of Living Map.(2) In Re:living Map, GPS tracking is used to obtain a stream of GPS data to track the user's trail. Re:living Map uses three phases that allows the user to effectively experience the city with GPS tracking and photographs: Packaging, Reliving, and Sharing. In the city, users can package their own experiences through taking photographs and using the GPS tracking systems embedded in the mobile phones (*Packaging*). After returning home, they use Re:living Map system to relive their experiences (*Reliving*), and finally, to share their city experiences with others and experience those of others online (*Sharing*).

In the *Sharing* phase, the intersections of GPS tracking data between users act as starting points for the sharing of experiences. If the owner of the intersecting experience had allowed others to access them, users are able to experience them themselves using the intersections as their entryways (Fig. 3).

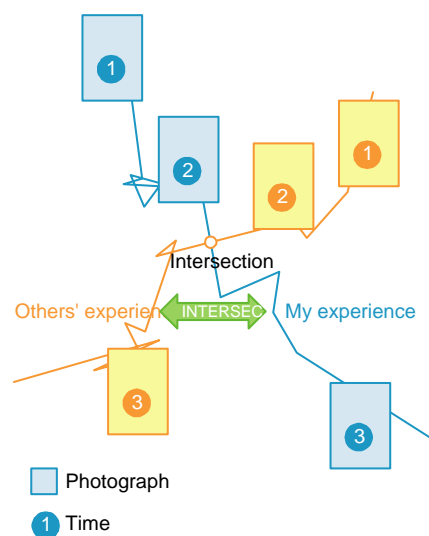


Fig.3 Shared experience using "Intersect"

The Re:living Map interface consists of three views: The *Photo View*, the *Intersect View* and the *Package View* (Fig. 4).



Fig.4 Re:living Map interface

3. Content “Café Tools”

Café Tools propose a future communication style for a public communication space in a city such as a cafe.(3) We tried to design for creating “emotional information” that supports real-time- same-place communication by constructing seamless digital environment in a daily life with an approach of smart furniture designing using embedded micro-controllers. Café Tools consist of 2 elements: Breathing Lamp and the Parabola Chairs.

3.1 Breathing Lamps

Breathing Lamps are environmental information devices for public spaces. They repeat the expanding and contracting motion periodically, according to excitements of conversation near the lamps. The breathing cycle of the lamp reflects the tempo of the conversation. When multiple breathing lamps are installed in the same room, the lamps sometimes synchronize together to unite the whole space.



Fig.5 Breathing Lamp.

3.2 Parabola Chairs

Parabola Chairs is a pair of single sofa looks like a parabola antenna. Intimate friends or couples can share vibration signals of the chair in addition to usual verbal conversation as the situation of a deck bench at park that makes peoples closer with its natural vibration of back seat. The chair vibrates to the sound of conversation.



Fig.6 Parabola Chairs

4. Content “Nokoriga”

Nokoriga is a communication tool with friends that go beyond the time. Often, communication among people ends as time goes by. Nokoriga allows one to remind one’s friend by displaying the trail in the form of “flower” as a metaphor of friendship.

The Nokoriga is a table that consists of an ID tag reader and a display. It assumes that one possesses ID tagged cell phones. When one visits the café with a new friend for the first time, the Nokoriga table requests to register the visit by placing cell phones. Nokoriga recognizes one’s ID and his or her friend’s ID as paired information, to associate one’s friendship. When one comes back to the café and put one’s cell phone on the table, the table displays the information of one’s friend as a flower metaphor. If the flower is shown as full bloom, it implies one’s friend has re-visited this café within 3 months. As time passes, the amount of flowering decreases, until it returns to the original sprout. Multiple flowers can be displayed simultaneously to show many friendships.



Fig.7 Nokoriga table displaying flowers

Inakage, M., Café Tools: Content That Connect People, Siggraph2004 Sketches

5. Conclusion

Unlike the content for mass media, content for the ubiquitous society is a vehicle for connecting people by sharing experiences in both physical and virtual worlds. In this paper, we have shown examples of communicative content that reflect the concept of content that connects people through shared experience.

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References

1. Haraguchi, Y., and Shinohara, T., and Niwa, Y., and Iguchi, K., and Ishibashi, S., and Inakage, M., "The Living Map - A communication tool that connects real world and online community by using a map," Journal of the Asian Design International Conference Vol.1, Oct., 2003, K-49
2. Niwa, Y. Iwai, T., Haraguchi, Y. and Inakage, M. "The Re:living Map –An Effective Experience with GPS Tracking and Photographs," Proceedings of Pervasive2004 Workshop on Memory and Sharing of Experiences, pp.73-77, 2004
3. Ueki, A., Iwata, Y., Ushida, Y., Watanabe, K., and