

METHODS FOR RE-IMAGINING SOCIAL TOOLS IN NEW CONTEXTS

Clare J. Owens, David E. Millard, Andy Stanford-Clark,
University of Southampton & IBM, UK

Introduction

Digital exclusion refers to a lack of access to technological facilities, including the blossoming arena of social interaction. People without mobile phones or PCs cannot access email, SMS or social networking websites; this includes many groups, such as the elderly, who can become vulnerable without good social contact. These people could partake in such interactions if we could enable multimodal access to social networks through a wider variety of communication channels (for example, television and telephone). By better understanding social technology, we can more effectively provide social functions via novel interfaces.

Actor-Network Theory

Actor-Network Theory (ANT) is a sociological approach to understanding network growth [2]. ANT models the flow of interactions and processes between 'actors' (which may be people, artefacts, text or graphics), and includes four 'translation moments':

- 1. Problematisation:** the primary actor becomes interested in an issue, and identifies a possible solution.
- 2. Interessement:** the focal actor convinces other actors that the issue is relevant to them. They consider involvement and possible roles.
- 3. Enrolment:** other actors join the network.
- 4. Mobilisation:** enrolled actors take action to resolve the issue.

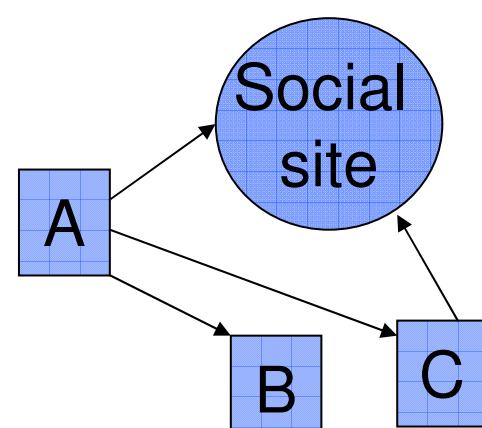
Example: Sign-up to social sites

1. Problematisation: Bob wants to advertise an event, or share wedding photos, or contact a friend whose email address he has lost.

2. Interessement: Bob contacts friends to tell them the material is online. Friends weigh up costs and benefits of joining the social site.

3. Enrolment: friends begin to sign up to the site. The more mutual friends, the greater the benefit of joining.

4. Mobilisation: friends on the site access shared information.



Lessons learned

ANT appears most relevant when considering overall network growth, as above, or specific goals such as "share photos with many people", "get publicity for my event" or "advertise my campaign". ANT is less useful for modelling individual use, because people use social websites holistically [3] and 'hang around', rather than solving specific problems.

Experience Deconstruction

This technique, developed by Dix [1], aims to facilitate deep understanding of an interaction or tool such as photo sharing or blogging. The process is thus:

- 1. Describe the functionality** and the experience of using it
- 2. List surface elements** of the experience (e.g. 'simple' or 'easy')
- 3. List experienced effects** of the experience (e.g. 'anticipation of responses', 'openness' or 'uncertainty')
- 4. Consider how to translate** the surface elements and experienced effects to the new modality

Example: Deconstruction of microblogging

1. Description: Microblogging involves posting succinct text updates.

2. Surface elements:

- Quick and easy (a text box and a button to post the text)
- Communicating (one to many)

3. Experienced effects:

- Reaching out, broadcasting information
- Presence — consolidate online identity
- Openness about current experiences
- Anticipation of responses
- Uncertainty about responses and audience

4. Reconstruction would include a very simple design allowing composition and posting of microblogs, with clarity about the audience. One reconstruction might see the microblogger wearing a t-shirt which incorporates a scrolling text display displaying their most recent post.

Lessons learned

Themes uncovered by deconstructing aspects of social networking included communication and sharing. Deconstruction makes re-imagining experiences easier: the step from 'microblogging' to 'a scrolling display on a t-shirt' is large, but moving from 'microblogging' to 'brief one-to-many communication' to 'a scrolling display' is more logical. Finally, deconstruction helps designers account for all aspects of experiences, including emotional implications, such as the expectation of replies.

Conclusions

Understanding social tools helps us better translate digital experiences into new contexts, such as novel pervasive channels. In parallel to this work, the authors have prototyped a messaging infrastructure which could carry this social data: this system decouples information from its original modality, for example allowing an email to be printed, vocalised or displayed onscreen. By re-imagining social systems and building them on top of a multimodal messaging infrastructure, we hope to provide the basis for a fully-fledged Social Fabric that could improve technology access, and help a wider range of people benefit from social technologies.

References and Further Information

1. Dix, A. 2003. Deconstructing Experience – Pulling Crackers Apart. In Funology: From Usability to Enjoyment, M Blythe, K. Overbeeke, A. Monk and P. Wright, Eds. Kluwer, Dordrecht, the Netherlands, 165-178.
2. Callon, M. 1986. Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay. In John Law (ed.) Power, Action and Belief: A New Sociology of Knowledge (Routledge).
3. Hart, J., Ridley, C., Taher, F., Sas, C., Dix, A. 2008. Exploring the Facebook Experience: A New Approach to Usability. In Proceedings of NordiCHI 2008, ACM Press, 471-474.