Connected, Not Chained: Towards Adequate Connectedness

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Abstract

In this position paper we motivate our interest in this CHI 2010 workshop on Social Connectedness. We start with our view on connectedness, glance at our own work, and raise questions that we would like to address during the workshop.

Author Keywords

Computer-Supported Cooperative Work; Connectedness; Awareness.

ACM Classification Keywords

H.5.2 [Information Interfaces and Presentation]: User Interfaces — Graphical User Interfaces, User-Centred Design; H.5.3 [Information Interfaces and Presentation]: Group and Organisation Interfaces — Computer-Supported Cooperative Work.

Position Statement

Humans are social beings and want and need to connect with other humans [3, 9]. In ancient times humans stayed together and had face-to-face connections to each other. With industrialisation distance and mobility of individuals improved—also among relatives and loved-ones who want and need to stay in touch [10].

Consequently, there has been an increasing need for technology to bridge geographic distance and provide connectedness. Social connectedness (sometimes also referred to as human connectedness) was defined as: "a short-term experience of belonging and relatedness, based on the satisfaction with one's social situation. This satisfaction involves the experienced quality and the satisfaction with the quantity of one's social relationships and interactions" [11].

In recent years several technical solutions explicitly addressing connectedness were developed and published (e.g., the results of the research group on Human Connectedness at the MIT Media Lab [1, 2]).

At the same time computer-supported cooperative work research produced a broad range of awareness technology capturing information on team members and distributing it to other team members in order to maintain connection and mutual orientation in teams. Gross et al. [7] provide a broad overview of awareness technology.

Despite this technical and conceptual progress, there are still several challenges and need for further research. There is still the permanent and fundamental double trade-off between connecting users and providing information about each others' where-abouts and so forth versus their need to have privacy as well as between connecting users and increasing availability versus their need to focus on their current situation without disruption [7, 8].

In our own work we developed the PRIMI platform for research on instant messaging [5]. We used this platform to develop several user-centred concepts for sophisticated connectedness through selective information disclosure, selective availability, and selective communication (e.g., PRIMIFaces [6]). Our concepts depart from frameworks in social science (e.g., Goffman's presentation of the self [4]).

Connectedness can be viewed from a social interaction perspective, where interesting questions about the nature of the "short-term experience" arise. For instance, what is the trigger of the experience—is it a user who sends a short greeting, or can it be automated? Is it synchronous or asynchronous? If it is synchronous, how much reaction should be possible for the recipient, and consequently where is the border between the short-term connectedness and the initiation of a conversation? And how does the experience fit into the recipient's current social context?

Connectedness can also be viewed from a methodological perspective, where questions about its concepts and evaluation emerge. For instance, due to the fact that connectedness has affective aspects, what roles play design and especially arts? How standardised or individualised does it need to be designed? How symmetrical or asymmetrical should it be designed? And with respect to evaluation challenges about empirically studying affective inter-subjective technology emerge—and how can evaluation methods yield to precise results without influencing the subjects? How generalisable are such results? And, what durations do such studies need to take? Also, when looking at connectedness in close relationships the interaction of the effects of connectedness technology and other means of exchange among the subjects in their everyday life needs to be considered and how can it be considered?

Biographical Information

Tom Gross is professor for Computer-Supported Cooperative Work and head of the Cooperative Media Lab at the Faculty of Media of the Bauhaus-University Weimar, Germany. His research interests include Computer-Supported Cooperative Work, Human-Computer Interaction, and Ubiquitous Computing. He holds a doctorate degree in Applied Computer Science from the Johannes Kepler University Linz, Austria.

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References

[1] Agamanolis, S. At the Intersection of Broadband and Broadcasting: How ITV Technologies can Support Human Connectedness. In Proc. of the European Conference on Interactive Television - EuroITV 2006 (May 25-26, Athens, Greece). 2006. pp. 17-22.

[2] Agamanolis, S. Human Connectedness. MIT Media Lab, http://web.media.mit.edu/~stefan/hc/, 2010. (Accessed 6/1/2010).

[3] Dey, A.K. and De Guzman, E.S. From Awareness to Connectedness: The Design and Deployment of Presence Displays. In Proc. of the Conference on Human Factors in Computing Systems - CHI 2006 (Apr. 22-27, Montreal, Canada). ACM, N.Y., 2006. pp. 899-908.

[4] Goffman, E. The Presentation of Self in Everyday Life. Doubleday Anchor Books, N.Y., 1959.

[5] Gross, T. and Oemig, C. PRIMI: An Open Platform for the Rapid and Easy Development of Instant Messaging Infrastructures. In Proc. of the 31st EUROMICRO Conference on Software Engineering and Advanced Applications - SEAA 2005 (Aug. 30-Sept. 3, Oporto, Portugal). IEEE Computer Society Press, Los Alamitos, 2005. pp. 460-467.

[6] Gross, T. and Oemig, C. From PRIMI to PRIMIFaces: Technical Concepts for Selective Information Disclosure. In Proc. of the 32nd EUROMICRO Conference on Software Engineering and Advanced Applications - SEAA 2006 (Aug. 29-Sept. 1, Cavtat, Dubrovnik, Croatia). IEEE Computer Society Press, Los Alamitos, 2006. pp. 480-487.

[7] Gross, T., Stary, C. and Totter, A. User-Centered Awareness in Computer-Supported Cooperative Work-Systems: Structured Embedding of Findings from Social Sciences. International Journal of Human-Computer Interaction 18, 3 (June 2005). pp. 323-360.

[8] Hudson, S.E. and Smith, I. Techniques for Addressing Fundamental Privacy and Disruption Tradeoffs in Awareness Support Systems. In Proc. of the ACM 1996 Conference on Computer-Supported Cooperative Work - CSCW'96 (Nov. 16-20, Boston, MA). ACM, N.Y., 1996. pp. 248-257.

[9] Rettie, R. Connectedness, Awareness, and Social Presence. In Proc. of the 6th Annual International Workshop on Presence - Presence 2003 (Oct. 6-8, Aalborg University, Denmark). Online Proc., 2003.

[10] Toennies, F. Gemeinschaft und Gesellschaft (Community and Society; in German). Wissenschaftliche Buchgesellschaft, Darmstadt, 1963 (first appearance 1887).

[11] Visser, T., Dadlani, P., Van Bel, D. and Yarosh, S. Designing and Evaluating Affective Aspects of Sociable Media to Support Social Connectedness. In Extended Abstracts of the Conference on Human Factors in Computing Systems - CHI 2010 (Apr. 10-15, Atlanta, GA). ACM, N.Y., (to appear).