

CSCW^{Smart?}

Collective Intelligence and CSCW in Crisis Situations

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Abstract

There are potentially rich synergies between socio-technical innovation in collective intelligence and CSCW. Examples like Wikipedia, collaborative sense-making in crisis situations (Vieweg et al 2007), participatory sensing projects (Haque) and alternative reality games such as 'I love Bees' (Gurzick 2011) illustrate that collaborative work can involve many distributed people and that the results can amount to 'crowdsourced' production of intelligence *about* complex problems (Zwass 2010). On the other hand, the concept can mask problematic tendencies – far from being emergent and self-organising – some forms of collective intelligence may be the result of 'totalitarian' 'puppetmastering' (McGonigal 2006). Alternatively, sensitive orchestration of public informational practices may open up new, genuinely collaborative opportunities for public engagement. This workshop takes examples of collaborative work and collective intelligence in disasters and 'creeping' crises such as climate change to explore opportunities and challenges for socio-technical innovation.

Introduction (preliminary)

Crisis situations engender intensive information flows and need for collaboration not only between official and non-governmental emergency response agencies and the media, but also amongst members of the public. People affected by earthquakes, fires, floods, violence or slow motion disasters such as climate change or soil erosion, their colleagues, friends and relatives, and those who may have helpful knowledge increasingly use social media (Facebook, Twitter) to communicate and make sense of events, and to work together to respond to the situation. This one day workshop focuses on one particular phenomenon of social media use in crises: 'collective intelligence'.

Collective intelligence is an ambiguous and highly productive, but also potentially treacherous concept. On the one hand, the notion can highlight positive social innovation, including the collective, 'crowdsourced' production of intelligence *about* complex problems (Zwass 2010), new 'means for knowing what we are doing as a group' (Levy 1997, Malone & Klein 2007, Connected Environments), or new distributed problem-solving capabilities that are 'best understood as emergent and collective rather than orchestrated' (Vieweg et al

2007). On the other hand, the concept can mask problematic tendencies. Informational practices and content in social media can fuel confusion in crisis situations, spread simplistic messages with highly affective charge, they can be manipulated by the media or organisations seeking to maximise donations, indeed – far from being emergent and self-organising – some forms of collective intelligence in crisis may be the result of ‘puppetmastering’ to take a term from discussions about totalitarian tendencies in gaming (McGonigal 2006). Alternatively, sensitive orchestration of public informational practices may open up new, genuinely collaborative opportunities for public engagement in crisis response and provide professionals with new resources, resonating with experiences in citizen science (Hemment et al 2010).

This workshop seeks to discuss how members of the public and professionals in emergency response currently use social media to collaborate in crises. The boundaries between collaborative professional and volunteer work are blurred here. Exploiting the evocative ambiguity of the notion of ‘collective intelligence’, we explore examples of real world practices. Longer term aims are to establish an overview of relevant research, to debate opportunities and challenges for design and to identify needs for new research. Questions might include:

- Are there historical precedents/precursors?
- How is collective intelligence (CI) done in practice? What forms does it take?
- Are different forms of CI associated with different kinds of complex problems?
- What are intended and unintended consequences?
- How do collective intelligence practices evolve over the life-span of a crisis?

References

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Schedule (preliminary)

September 1, 2011	Background readings and video presentations* in a wiki
September 11, 2011	Some post extended abstracts/position papers (1-3 pages)
September 23, 2011	Dinner in town for those already here

* From a previous workshop at ZiF Bielefeld, a range of resources will be available, including the following video presentations:

Social media challenges from the perspective of professional responders – Jonas Landgren (IT University, Gothenburg, Sweden)

Puppet mastering/Community management/CI in Alternate Reality Gaming – David Gurzick (Hood College, USA)

Crisis Informatics –Leysia Palen (University of Colorado, Boulder, US)

Connecting emergency management and public use of Twitter in crisis situations – Video-Presentation by Irina Shklovski (IT University, Copenhagen)

On the day	09:00	<i>Coffee</i>
	09:30	<i>Introduction</i> – Organisers
	09:45	Pecha Kucha
	10:15	Presentations
	10:45	<i>Coffee</i>
	11:15	Presentations
	12:30	<i>Lunch</i>
	13:30	Presentations
	15:00	<i>Coffee and cake</i>
	15:30	Group Discussions (Small Groups)
	16:30	What next?
	19:00	Dinner

Post workshop Depending on our 'What next?' discussions we may continue our online collaboration.

Acknowledgements

This workshop builds on work undertaken in the *Bridge Project* (EU FP7, <http://www.sec-bridge.eu>), the *Citizens Transforming Society: Tools for Change* (CaTalyST) Project (EPSRC, UK), *Next Generation Resilience Project 'DFuse'* (EPSRC) and the *Communicating Disasters* Programme at the Centre for Interdisciplinary Studies, ZiF (<http://www.uni-bielefeld.de/ZIF/FG/2010CommunicatingDisaster/>), Bielefeld University, Germany.