Configuring awareness is a practice whereby participants within an information environment can understand where others' attention is directed and where they can intervene to 'configure' others' awareness of information. They may wish to attract their attention and make them aware, for example, by pointing to a particular item of information. Or, they may wish to withhold information from certain individuals or groups. Configuring awareness can be a means of managing information politics.

Guiding Questions

How can users understand and control the flow and visibility of information within a common information space? How can they know what is revealed, when, to whom, in which form?

How can a common information environment allow participants to make their movement and orientation within the environment knowable, as well as the focus of their attention?

How does the common information environment support them in being aware of others in this way?

How can participants selectively and subtly render their actions and activities visible to others?

Further Information

Heath et al (2002) use the concept of configuring awareness to describe how situation awareness is not just a 'state' of shared understanding of a particular situation dependent on availability of accurate information, but a continuous social process that relies on people being able to – often very subtly – highlight different aspects of a situation for themselves and for others who need to know. Configuring awareness might include, for example, the subtle practices of colleagues who while working independently remain sensitive to each other's conduct. In moments requiring coordination, this can make visible specific actions in a given space or network that are relevant to one's own without being disruptive to those actions. In material information environments, such as a control room or an office, understanding others' attention is easier than in a virtual information environment, where access, attention and copying are disembodied.

Politics of information brings two requirements into conflict: 1) to enable a cooperative working division of labour, people must, be able to see (as well as hear, feel) relevant information; 2) but at the same time they must be able to keep some information invisible to

others to be able to control its spread in line with their interests:

> the visibility requirement is moderated by the divergence of interests and motives. A certain degree of opaqueness is required for discretionary decision making to be conducted in an environment charged with colliding interests. Hence, visibility must be bounded. The idea of a comprehensive, fully exposed and accessible database is not realistic. A worker engaged in cooperative decision making must be able to control the dissemination of information pertaining to his or her work: what is to be revealed, when, to whom, in which form? Deprive workers of that capability, and they will exercise it covertly…a common information space must be 'peopled' by actors who are responsible for the information (Schmidt & Bannon, 1992, p. 16-19)

The sensitivities, practices and skills involved in knowing who needs to know what, paying attention when it matters, and assembling information to make meaning can be undermined by new technologies such as common information spaces (Bannon and Bødker 1997). While a necessary element for collaboration and coordination of activities and information, such awareness is not easy to design or govern for. This is because when taking into account the range of demands of disaster management, in particular, it is possible to see that solutions which attempt to specify what awareness focuses on in advance will likely not properly support the specifics of the situation.

Examples

In a study of a wastewater plant, Bertelsen and Bødker (2001) found that, peripheral awareness and 'at a glance' overviews are important practices used to build a shared sense of a scene needed for cooperative work. They studied a wastewater plant specifically because there is no central place in which to do such things as side-glances or sharing a screen, and thus all sharing (or holding back) has to be conscious by all parties. As the authors explored how these types of acts can be done over a distance, they identified that the type of information the workers need and what they do with it changes depending on where they are in the plant, who they are interacting with, and what they are responsible for doing. What they need to be aware of cannot be pre-defined or standardised. Workers needed distributed sampling and looking (at surroundings and information) as they passed by. Specific to the wastewater plant they studied, common situational awareness emerged from a mixture of directed searches for faults, analysis of troublesome trends based on an understanding of how processes within the plant *normally* proceed, and random browsing through what happens to be available to see *in situ*.

Resources

Bannon, L. and Bødker, S. (1997). Constructing Common Information Spaces. In J. Hughes (Ed.), *Proceedings of the Fifth European Conference on Computer Supported Cooperative Work* (pp. 81–96). Kluwer. [Link]

Bertelsen, O. W., & Bødker, S. (2001). Cooperation in massively distributed information spaces. In *ECSCW01 Proceedings of the seventh conference on European Conference on Computer Supported Cooperative Work* (pp. 1–17). Kluwer Academic Publishers. [DOI]

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