

The Intellectual Challenge of CSCW: The Gap Between Social Requirements and Technical Feasibility

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Problem space

Human activity is highly flexible, nuanced, and contextualized and that computational entities such as information transfer, roles, and policies need to be similarly flexible, nuanced, and contextualized to support these social characteristics. Ackerman explore these issues, and suggests how to study and understand the *socio-technical gap*.

Categorization: A summative and non-empirical argumentative essay

The paper is divided into 3 sections:

1. Overview of field of CSCW
 - a. review of major research findings in field
 - i. Social Activity - context plays an important role in social activities. People have situation based reaction
 - ii. Exceptions in workplace - In work place people take on different roles, and try to deal with exceptional situations in different ways
 - iii. People use shared space to guide their work, they look at the shared spaces and activities of people in that space
 - iv. Tradeoffs in sharing - exchange and sharing of information enables learning but it also throws you open to criticism
 - v. People use systems in ways which were not really anticipated by the designer
 - vi. Incentives are critical
2. Discussion of possible solutions to the Social Technical gap
 - a. Reconceptualize CSCW as a science of the artificial
 - i. science of the artificial - Simon 1991
 1. Created and maintained by human design and agency
 - ii. The new science of the artificial for CSCW

1. palliatives to ameliorate the current social conditions,
 - a. Ideological
 - i. Prioritizing needs of users
 - b. Political
 - i. Mandating Union participation to fulfill the Ideological imperative
 - c. Educational
 - i. Training designers, programmers of systems to understand the fundamental limitations (ie social technical gap).
2. first-order approximations to explore the design space,
 - a. "One approximation is to provide systems that only partially address the social requirements"
 - b. "Another approximation incorporates new computational mechanisms to substitute adequately for social mechanisms or to provide for new social issues"
 - c. The final first-order approximation is the creation of technical architectures that do not invoke the social technical gap; these architectures do not require action nor delegate it
3. fundamental lines of inquiry to create the science.