

Plenary Speaker

Making Use: Scenarios and Scenario-Based Design

John M. Carroll
Virginia Tech

Scenarios of human-computer interaction help us to understand and to create computer systems and applications as artifacts of human activity as things to learn from, as tools to use in one's work, as media for interacting with other people. Scenario-based design offers significant and unique leverage on some of the most characteristic and vexing challenges of design work:

Scenarios evoke reflection in the content of design work, helping developers coordinate design action and reflection. Scenarios are at once concrete and flexible, helping developers manage the fluidity of design situations. Scenarios afford multiple views of an interaction, diverse kinds and amounts of detailing, helping developers manage the many consequences entailed by any given design move. Scenarios can also be abstracted and categorized, helping designers to recognize, capture, and reuse generalizations, and to address the challenge that technical knowledge often lags the needs of technical design. Finally, scenarios promote work-oriented communication among stakeholders, helping to make design activities more accessible to the great variety of expertise that can contribute to design, and addressing the challenge that external constraints, designers, and clients often distract attention from the needs and concerns of the people who will use the technology.

John M. Carroll is Professor of Computer Science, Education, and Psychology, and Director of the Center for Human-Computer Interaction all at Virginia Tech. He has written more than 250 technical papers, more than 20 conference plenary addresses, and 12 books, including *Scenario-based design: Envisioning work and technology in system development* (Wiley, 1995), *Design rationale: Concepts, methods and techniques* (Erlbaum, 1996, with T.P. Moran), *Minimalism beyond The Nurnberg Funnel* (MIT Press, 1998), and *Making use: Scenario-based design of human-computer interactions* (MIT Press, 2000).

He serves on 9 editorial boards for journals and handbooks, and, in 1999, served on 6 conference program committees. In 1994, he won the Rigo Career Achievement Award, from ACM (SIGDOC) for contributions to research in documentation, and in 1998, received the Silver Core Award from IFIP. He manages a research project on networking tools for collaborative learning activities supported by the US National Science Foundation, the US Office of Naval Research, and the Hitachi Foundation. Currently, he is a visiting scientist at Xerox Research Centre Europe, in Cambridge, England.