



Terry Winograd

Terry Winograd, HCI Pioneer

Terry Allen Winograd is currently Professor Emeritus of Computer Science at Stanford University. He has been at Stanford since 1973, beginning his academic career focused on artificial intelligence and natural language, programming computers to interact with and imitate people.

Winograd moved away from AI and natural language as he began to understand that the fundamental goal is to create computer interactions that support and enhance human experience. He then founded the influential Stanford Human-Computer Interaction Group where he still directs HCI research and teaching programs.

He is also the founding faculty member of the Hasso Plattner Institute of Design at Stanford (the "d.school") and he is on the faculty of the Center on Democracy, Development, and the Rule of Law (CDDRL). Winograd was a founding member and past president of Computer Professionals for Social Responsibility.

Education

- 1970 MIT, PhD Applied Mathematics
- 1967 University College, London, Linguistics
- 1966 The Colorado College, BA Mathematics

Key Awards

- 2011 ACM SIGCHI Lifetime Research Award
- 2004 Elected to CHI Academy (ACM SIGCHI)
- 1999 Rigo Award for lifetime contributions to Computer Documentation (ACM SIGDOC)
- 1996 Founders Award, Computer Professionals for Social Responsibility

Associated Theories

Hermeneutic Constructivism is the art and science of text interpretation, where language is contextualized and changed by context, culture, and past experiences.

Speech Act Theory is used to model conversations for automated classification and retrieval. In the 1987 text, *Understanding Computers and Cognition*, Winograd and Flores developed a "Conversation for Action" where two parties attempt to coordinate action with one another regardless of whether the agents involved might be human-human, human-computer, or computer-computer.

Activity Theory is understanding the mental capabilities of a single individual, while seeing isolated individuals as insufficient unit of analysis, therefore analyzing the cultural and technical aspects of human actions. Activity theory is often used to describe actions in a socio-technical system through related elements of a conceptual system expanded by more nuanced theories.

Activity Theory Connections

The work that Winograd and the academics below did in the 1980s and 90s led to new applications of activity theory to human computer interactions.

- **Yrjö Engeström**, professor of education and communication at the University of Helsinki is noted for Activity Theory and Theory of Expansive Learning.
- **Susanne Bødker**, professor of HCI at the University of Aarhus in Denmark is noted for Activity Theory.
- **Lucy Suchman**, professor of anthropology at Lancaster University, UK, is noted for developing the Theory of Situated Cognition, and early contributions to Activity Theory.

Noted Students

- **Larry Page**, Google Co-founder
- **Sergey Brin**, Google Co-founder
- **Jake Wobbrock**, UW iSchool, MHCI+d
- **Alan Borning**, UW CSE, iSchool