

Moving toward design

theoretical explorations

common vocabulary and conceptual apparatus for thinking about design opportunities and design features

understand the relationship between the different elements of embodied interaction

- relationship of body to task
- configurability of space
- physical constraints

Computation is a medium

- exploit computer's ability to represent and convey information
- apply for direct and indirect channels of communication
- a medium can be modulated
- is the carrier of meaning
- visibility
- awareness

not only through a system but also through the practices that surround it

Meaning arises on multiple levels

- iconic/symbolic
- object/action

relationship between the representation and whatever it represents  
distinguish between representation of object and representation of actions.

interface metaphors are the conventional face of interaction

embodied interaction adds to existing representational practice the understanding that representations are also themselves artifacts

artifacts may carry multiple meanings for users according to the different ways they are used

set of principles that shape and define the design of new artifacts

Users, not designers, create an communicate meaning.

Users, not designers, manage coupling

- in designing software systems we need to be alert
- designers may suggest a coupling (connection that arises in the course of interaction), they cannot actually make one (only users can)

- designer's stance
- designer's activity

conception of what the designers is doing and his/her role in an interaction between the user and the artifact.

Embodied technologies participate in the world they represent

- doesn't denote physical reality, but participative status
- technological representation
- human-readable representation

instead of designing ways for the artifact to be used, the designer needs to focus on ways for the user to understand the tool and how to apply it to each situation

operate on entities at different levels

address visibility

- with them
- through them

awareness as an element in the coordination of work emerged first from field studies of collaborative work

shared feedback approach

- interface
- artifact

how the system displays information to me, how the application is responding to my actions

the artifact to which the application gives me access; my actions are transforming the artifact, and I can see that transformation take place.

awareness mechanisms in collaborative systems allow people to coordinate their activity as an ongoing feature of their work

Embodied interaction turns action into meaning

- intentionality
- ontology
- intersubjectivity

meaning is not inherent to information; information is made meaningful

how we understand the structure of the domain

the way in which meaning arises as a collective phenomenon

practice

community of practice

determines the shared systems of meaning and values

social computing

a process of continual response to the circumstances within which it was being produced

the evolution of practice

around technologies

over time

within a community