# Design of Physically Grounded Communication System

Michita Imai

### Physically Grounded Communication System

- What communication can a system assist?
  - Human-Human
    - CSCW (Computer Supported Cooperative Work)
  - Human-Computer/Human-Environment
    - HCI(Human Computer Interaction), Ubiquitous, Wearable
  - Human-Agent/Human-Robot
    - CG agent, Avatar, Robot

### Physically Grounded Communication System

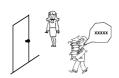
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### Human-Agent/Human-Robot Interaction

• Sharing Communicative Intention

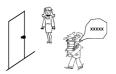
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## Human-Agent/Human-Robot Interaction

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- · You can learn
  - What is "intention" or "intended action"







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  - How a system expresses its intention
  - The effect of local viewpoint in sharing





#### **TOPIC**

- SHRDLU Terry Winograd
- Subsumption Architecture R.Brooks
- Intention Is Choice with Commitment
  Philip R. Cohen
- Joint Attention
- Situation Semantics
- Interactive Sharing X

#### **TOPIC**

- · What is "intention" or "intended action"
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  - Subsumption Architecture
  - Intention Is Choice with Commitment
- How a system expresses its intention
  - Joint Attention
- The effect of local viewpoint in sharing
  - Situation Semantics
- Applications
  - Interactive Sharing X

#### Task and Evaluation

- Several short questions in the class
- One report
  - Survey and design an intentional agent
  - July

#### Lecture webpage

- http://www.ayu.ics.keio.ac.jp/~michita/ realworld2013
  - Not in service still now