If computer capacity and functionality are increasing
If computer capacity and functionality are increasing

... human capabilities are not
Power vs. Simplicity

Balance the trade-offs:

- simplicity of execution
- power of expression

Diagram showing a curve with power on the y-axis and simplicity on the x-axis.
Power vs. Simplicity

Research challenge:
How to shift the curve?
Three interaction paradigms

Computer as tool
First person interfaces
Empower users

Computer as servant
Second person interfaces
Delegate tasks

Computer as medium
Third person interfaces
Communicate
Next Week

13h30!!

Read:


Key phenomenon: *Co-adaptation*

Users *adapt* to a new system  
they *learn* to use it

Users *adapt* the new system to their own needs  
they *appropriate* and change it

Creative activities require both  
especially when integrating physical and digital information

Create digital tools that are as intuitive, and learnable, 
as physical tools
Reciprocal Co-adaptation

People adapt their behavior to technology
  ... they learn it
People adapt the technology for their own purposes
  ... they appropriate it

Computers adapt their behavior to people
  ... machine learning
Computers adapt human behavior
  ... training