HUMAN-COMPUTER INTERACTION THIRD EDITION

DIX FINLAY ABOWD BEALE

chapter 3

the interaction

extracts for MSc/MRes AISD

Norman's seven stages

Donald Norman's model

- Seven stages
  - user establishes the goal
  - formulates intention
  - specifies actions at interface
  - executes action
  - perceives system state
  - interprets system state
  - evaluates system state with respect to goal
- Norman's model concentrates on user's view of the interface

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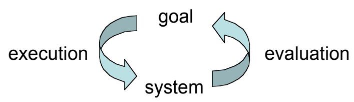
execution/evaluation loop



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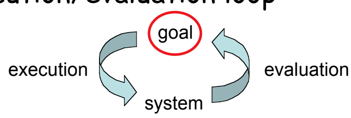

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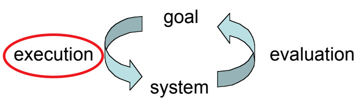

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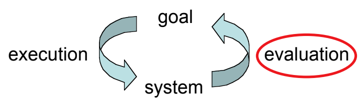

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Using Norman's model

Some systems are harder to use than others

Gulf of Execution

user's formulation of actions

≠ actions allowed by the system

Gulf of Evaluation

user's expectation of changed system state

≠ actual presentation of this state

Human error - slips and mistakes

slip

- understand system and goal
- correct formulation of action
- incorrect action

mistake

- may not even have right goal!

Fixing things?

slip – better interface design

mistake – better understanding of system