It probably won a prize

- Aim
  - To be able to analyse and compare the designer and the user models of devices

Technological aspects of
Donald Norman:
The Design of Everyday Things
by
Jens Kaasbøll

1

Qualities of devices

- Aesthetic
  - Pleasing to look at and sense in general
- Technologic
  - Adhering to accepted principles of good technical solutions
  - Simple manufacturing
- Learnability
  - Promotes quick learning
- Usability
  - Causing desirable effects
- Durability
  - Tolerates long term intended use
- Robustness
  - Tolerates improper use
- Safety
  - Not causing undesirable effects

2

3

	Formen og strukturen	Materialet og overflaten	Mekanikken og sammenføyningene
Estetisk			
Teknologisk			
Lærbarhet			
Brukbarhet			
Varighet			
Robusthet			
Sikkerhet			

4

When simple things need instruction, it is a certain sign of poor design

- Visibility
  - The shape of the device signals its proper use
  - What about blind people?
- Mapping
  - Immediately understandable relation between symbols and operation
  - Iconic symbols
    - Visual similarity
  - Conventional symbols
    - Learned system of representation
    - Arbitrary letters and shapes
- Feedback
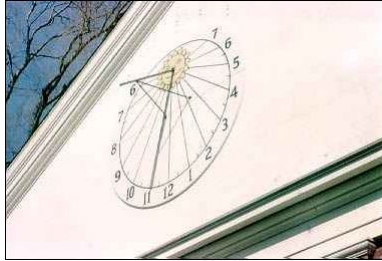 - The device signals the result of the operation

5

Mappings should be unambiguous

6

Mappings (clockwise)

7

Preventing the user from making mistakes

- Lockin
  - Keeping a process going
  - Preventing prematurely closure
- Lockout
  - Prevents an event from occurring

8

Interlock
Forcing a
sequence

- Open cover
- Unscrew lid
- Insert nozzle in tank opening
- Hang up nozzle
- Insert lid
- Close cover
- Start engine and drive away

No interlock

- Open cover
- Unscrew lid
- Put tank lid on car roof
- Insert nozzle in tank opening
- Hang up nozzle
- Close cover
- Start engine and drive away

9

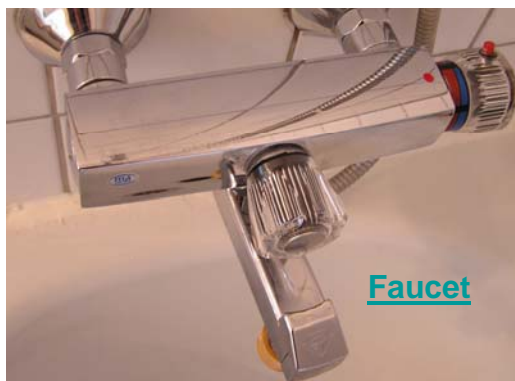# How does an ATM guard against user errors?

10

Controlling temperature

Freezer

- Designer and user models
- Mappings
  - Type of symbols
- Lockins – lockouts
- Interlock

Fridge

Faucet

Iron

Washing machine

11

12