



Securing Your Web World



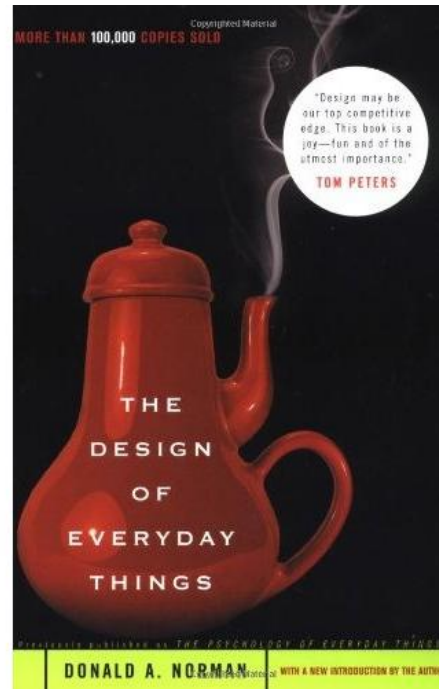
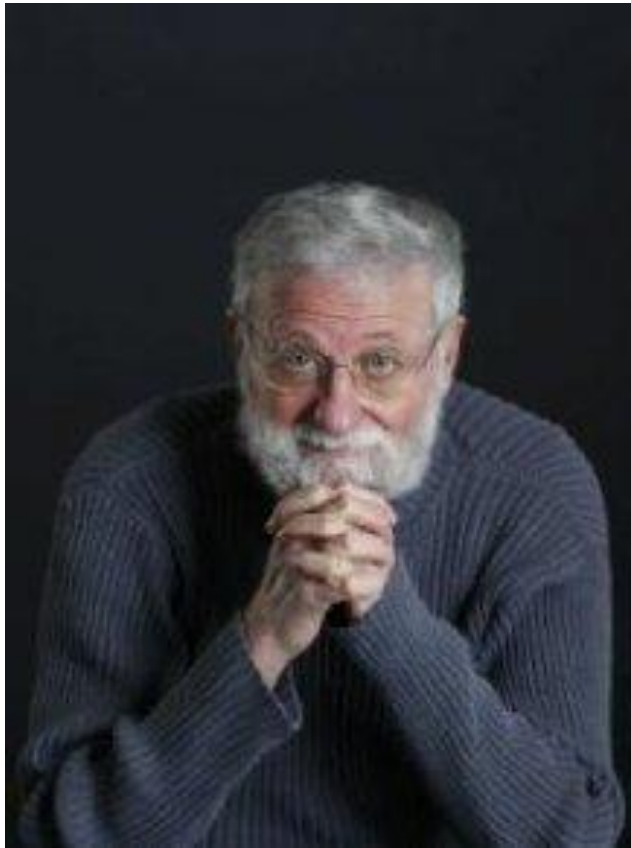
The Design of Everyday Things

Byron Li

It's Not Your Fault



Donald A. Norman & His Book



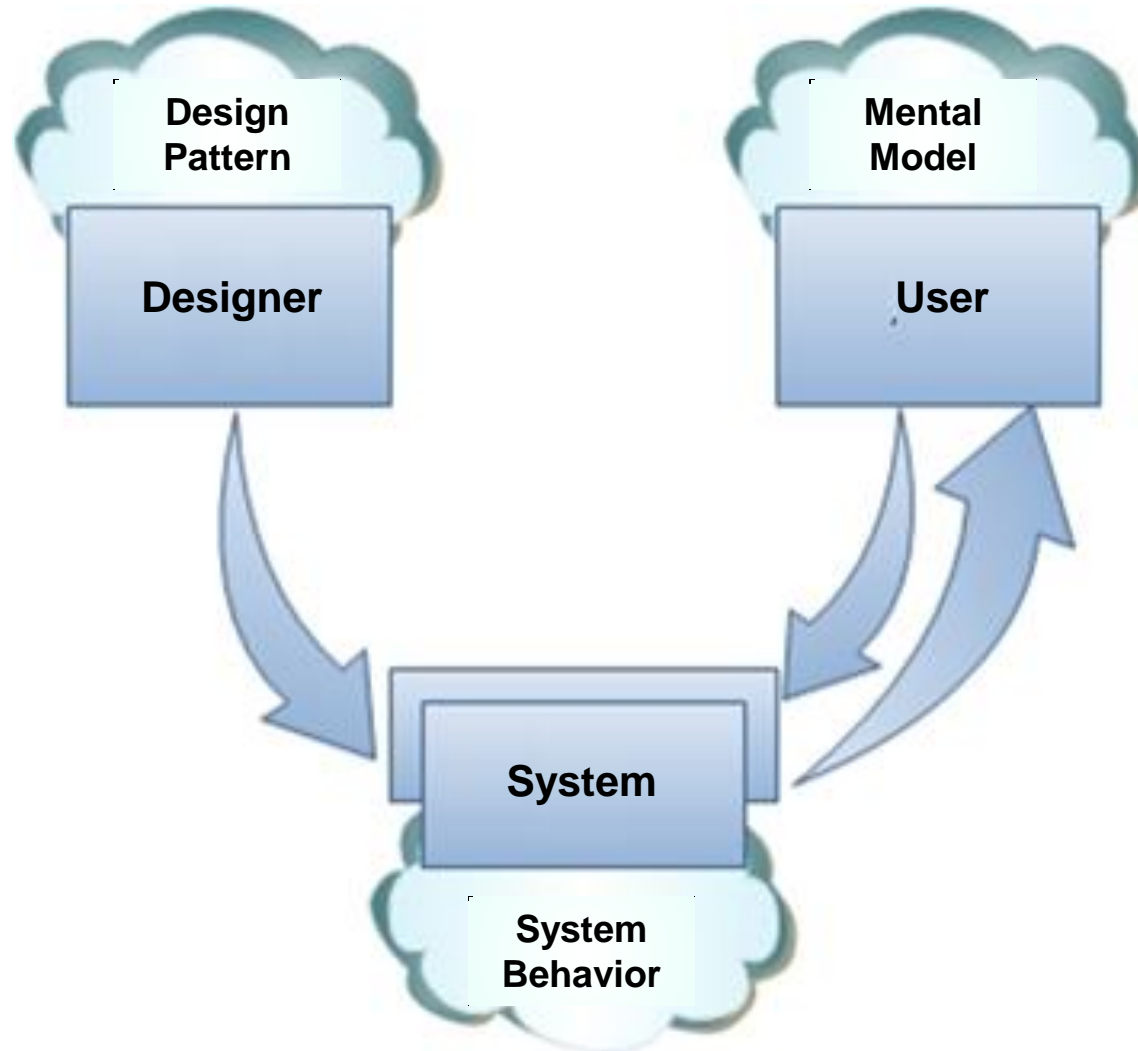
Norman Door



Why

- Learn to think from different aspects
- Contribute to our product design
- Improve our customer insight
- It's interesting

Conceptual Model



Case Study

正常状态

调低冷藏室温度

把冷藏室温度调至最低点

调低冷冻室温度

调高冷藏室温度

关闭状态

C 和 5

C 和 6-7

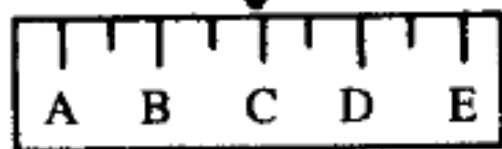
B 和 8-9

D 和 7-8

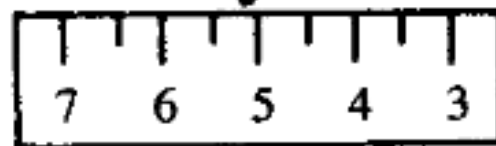
C 和 4-1

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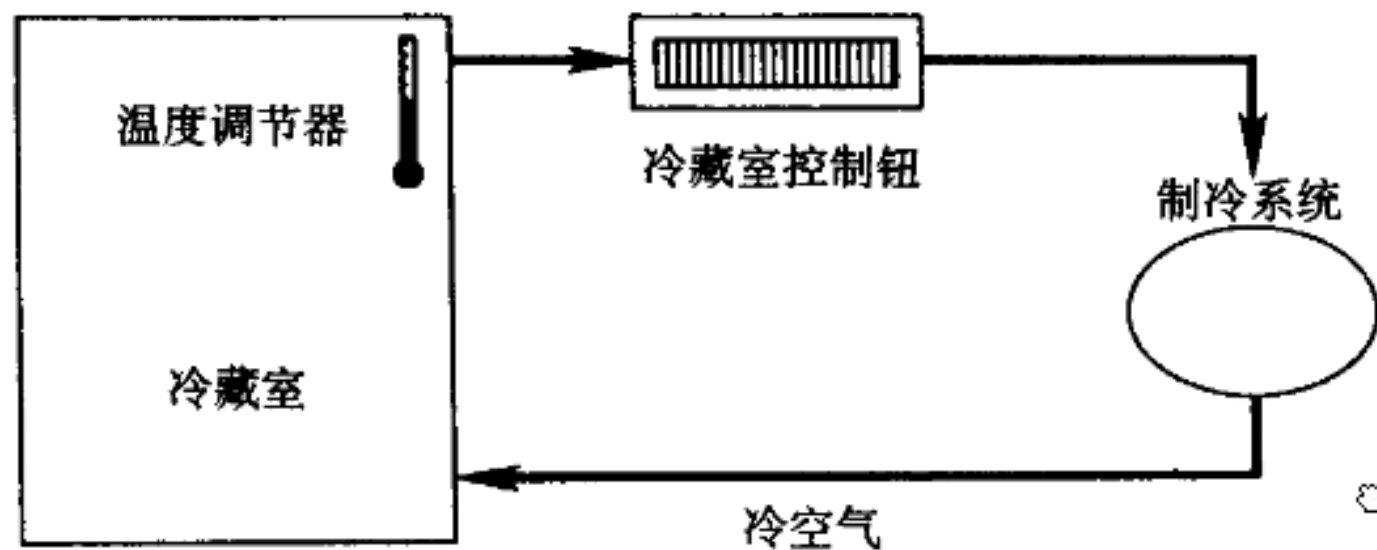
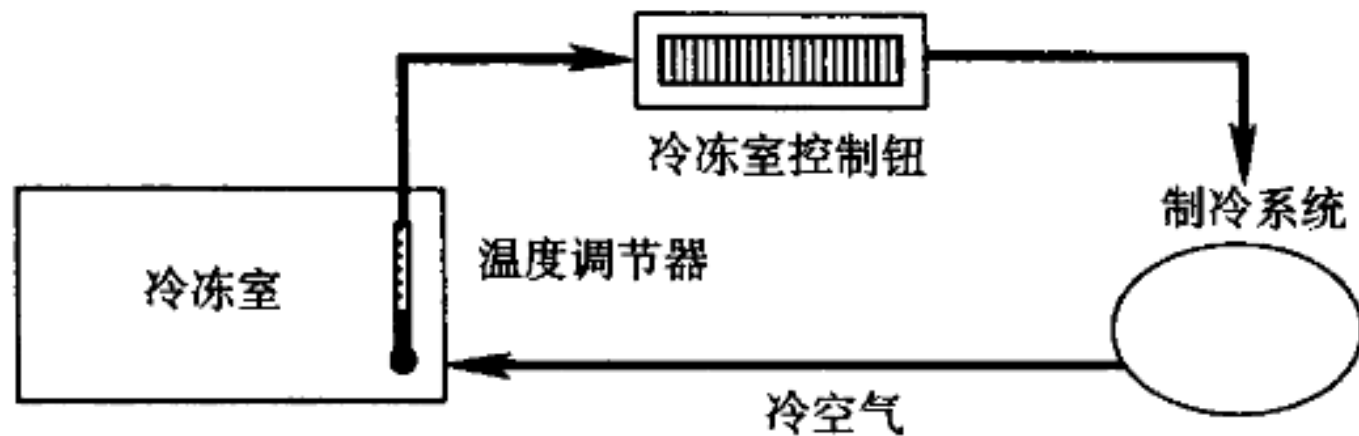
1. 需要调节两个控制钮
2. 需24小时，电冰箱的工作状态才能稳定下来



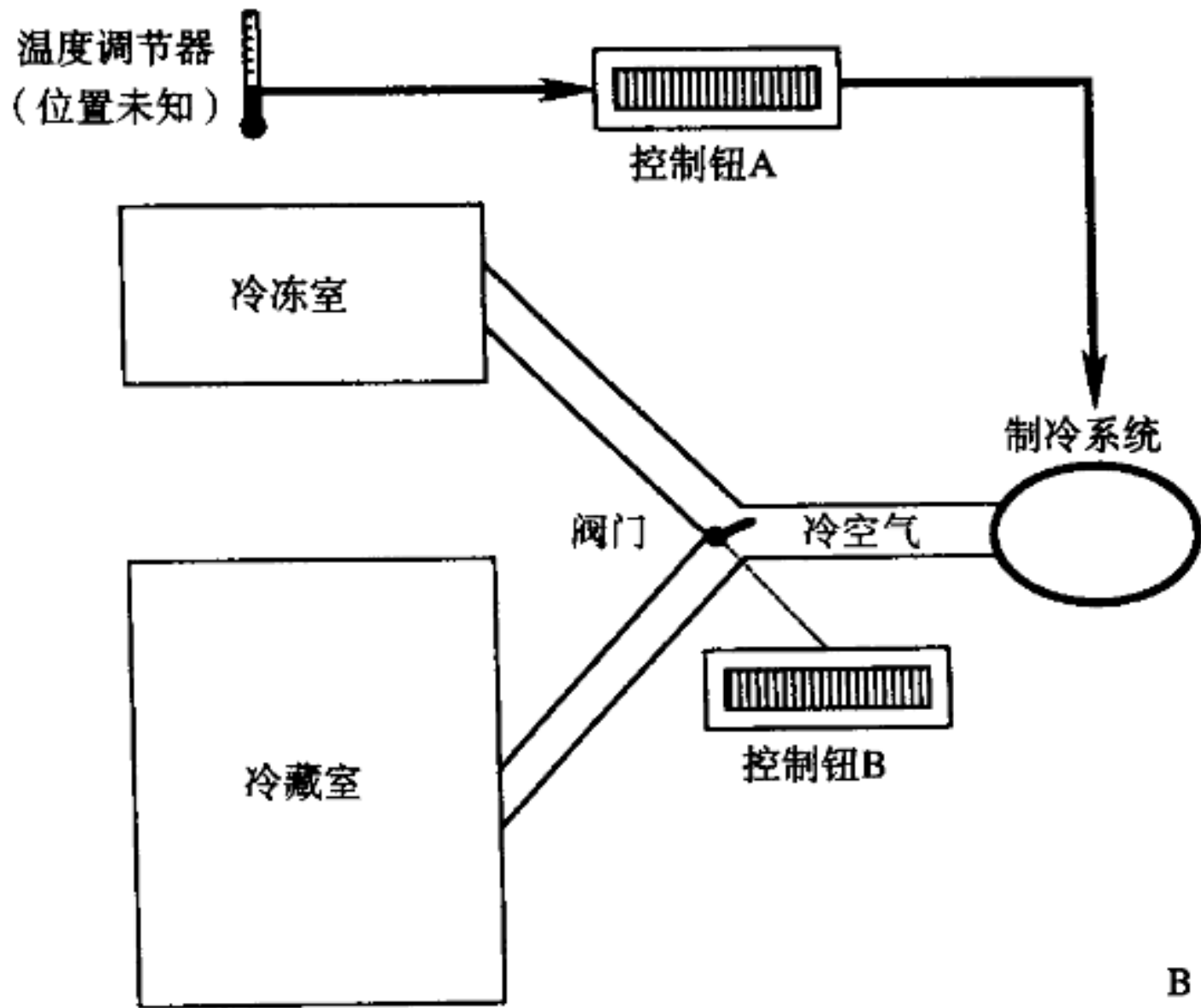
冷冻



冷藏



A



B

Seven Stages of Action

- Forming the goal
- Forming the intention
- Gulf of execution ---
- Specifying an action
- Executing the action
- Perceiving the state of the world
- Interpreting the state of the world
- Gulf of evaluation ---
- Evaluating the outcome

Feedback & Visibility

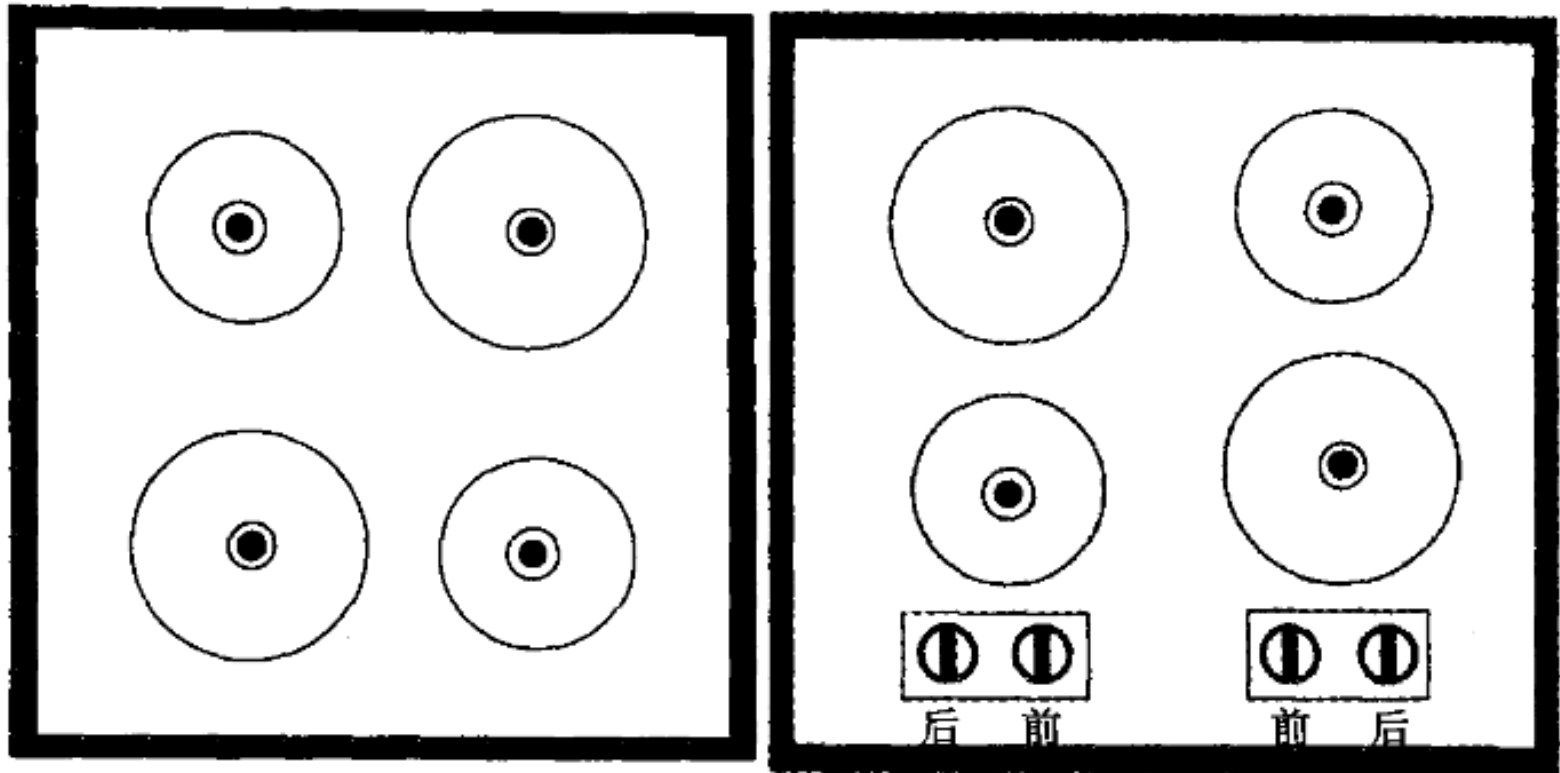
- Telephone vs. car
 - Control panel of a VCR
 - Shutter release button of a digital camera
-
- Important for solving the gap between evaluation and execution

Item	功能	操作步骤
1	拨总机	拨 101
2	拨外线	拨 0 – 外线号码
3	拨分机	拨 分机号
4	预约外线 取消预约	拨 0 – 忙音 – 转接键 – *0 – 挂机 拨 #0 – 挂机
5	预约内线 取消预约	拨 分机号 – 忙音 – 转接键 – *0 – 挂机 拨 #0 – 挂机
6	代接电话	听到铃声 – 拨 *7
7	电话转接	通话中 – 转接键 – 转接分机号 a. 听到回铃音 – 挂机 b. 听到忙音 – 转接键接回来
8	三方通话	通话中 – 转接键 – 拨 第三人号码 – 通话后 – 转接键
9	录制个人问候 语方法	拨号“7003”
10	收听电话留言	拨7000

Human Being & Knowledge

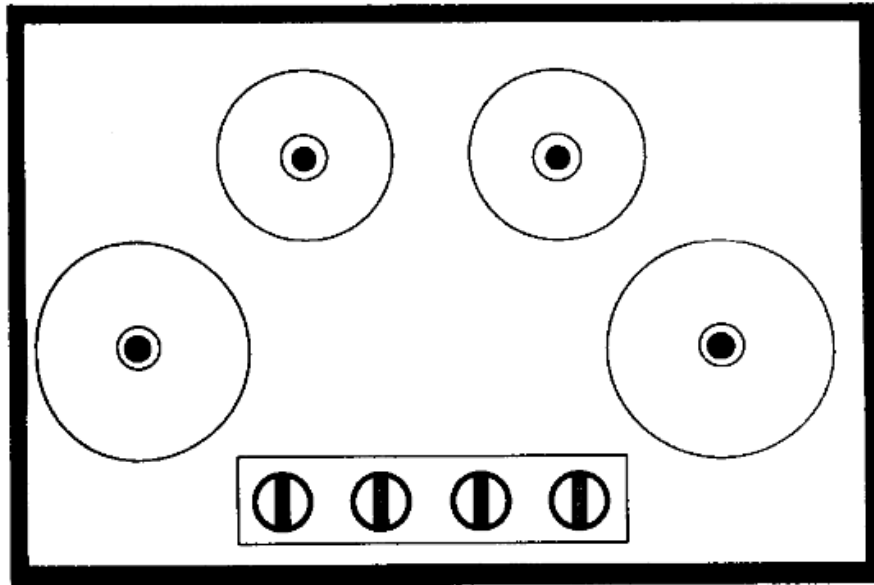
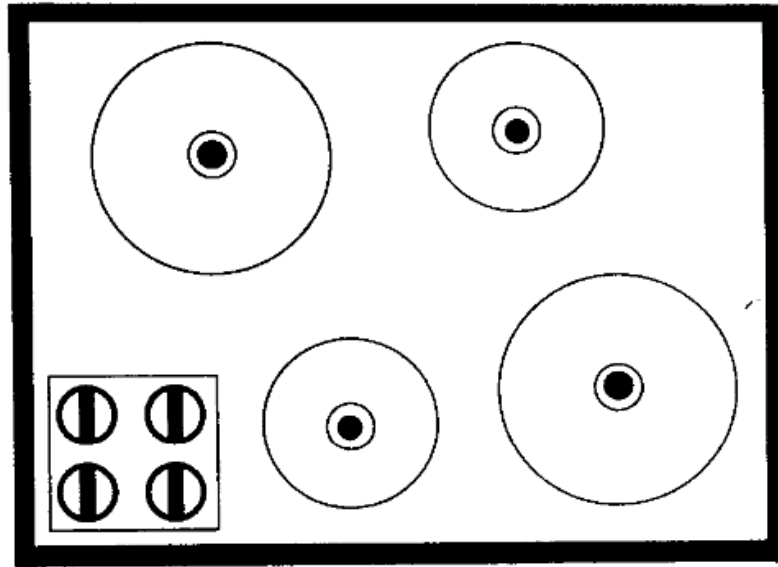
- Information exists in the world
 - Declarative knowledge
 - Procedural Knowledge
- Human does not recognize information exactly
- Memory is the knowledge stored in the head
 - Arbitrary information
 - Associated information
 - Memory by understanding

Mapping



后右 前左 后左 前右

Mapping



Affordance

- **Perceived** and **actual properties** of a thing, primarily those fundamental properties that determine just how the thing could possibly be used
- Affordances provide strong clues to the operation of a thing
 - Knobs are for turning
 - Slots are for inserting things into
- Provide a good conceptual model and make things visible

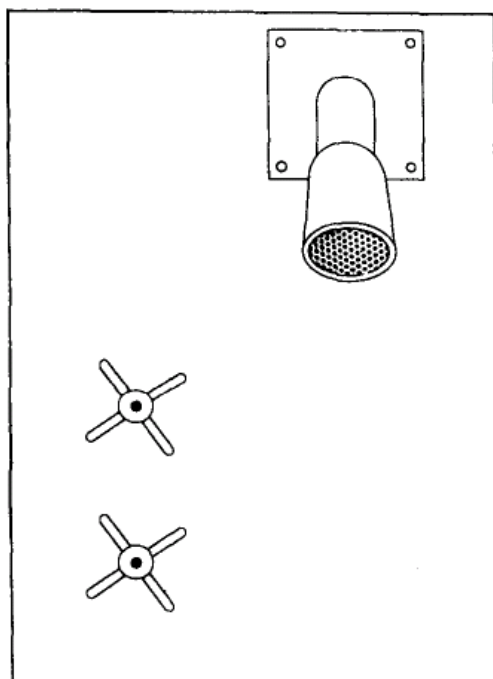


Feb 24

Comment

- Twitter - Public

我非常讨厌冷热水分开设计的龙头, 刚才洗完澡又先关了冷水龙头, 然后, 又他妈的被烫熟了!



Errors

- Capture errors – end up doing something quite different from what you initially intended
- Description errors – The intended action has much in common with other possible actions
- Data-driven errors
- Associative activation errors
- Loss-of-activation errors
- Mode errors
- Error in finding the error

Design for the Error

- Avoid errors
 - The emergency button in the elevator in the hotel in Maanshan
 - Forcing functions
 - Car keys, ATM, shelf in the rest room
- Undo the error
 - Recycle Bin

Challenges in Design

- Beauty and usability
- Designer and user
- Complexity in design
 - Cost
 - Special user
 - Selective attention
 - Standardization
 - Culture
- Temptation
 - Functionalism
 - The worship of appearance

Ways of Making Mistakes

- No enough prompt
- Unclear instructions or operations
- Inconsistence
- Messages are difficult to understand
- Impolite to the end user
- Pitfalls in operation

User Centered Design

- Use knowledge inside and outside
- Make the task structure easier
- Pay attention to visibility
- Create correct matches
- Make use of natural and human limitations
- Consider the possibility of making errors
- Consider to use standardized solution

Usability Testing

- 用户根本不看文档，看文档的用户很难找到文档中的重点。
- 用户不看屏幕的提示，看提示的用户记不住自己做过的事情和屏幕上的信息。
- 当用户第一次失败时，他会认为是自己的错误，如果连续两次失败，他会对产品失去信心。
- 如果用户的相关经验可以指导他直接完成任务，事情会很顺利。如果他的经验无法让他直接得到正确的结果，他完成任务的效率会比没有经验的更差。
-

Everyday Things vs. Enterprise Product

- Everyday Things
 - Used by ordinary people
 - Use it day to day
 - Should be easy to use
 - A lot of design patterns
- Enterprise Product
 - Used by skilled professionals
 - Configuration features are seldom used
 - “Should” not be too easy to use
 - Need to design out of box
- Don't use these “differences” as excuses for your bad design.

What we have learnt from this book?

- Design Principles
 - Visibility
 - Good conceptual model
 - Good mapping
 - Feedback
- Insight
 - How human being learn and understand knowledge of the world
 - The way of making & avoid mistakes
 - Common problems in design

UCD China

- A community about User Centered Design in China. Focus on user experiences research and product design, especially for the web.
- Offline salon – 14:30 on the third Sunday of each month, no registration required.
 - Nanjing: 3rd Floor, Building 6,
No. 6, Changjiang Houjie. Tuniu.com



References

- 设计心理学 ISBN 9787508619156
- 情感化设计 ISBN 9787121009402
- 怪诞行为学 ISBN 9787508622187
- <http://ucdchina.org>
- <http://www.baddesigns.com>

THANK YOU!



TREND
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