

Knowledge & Mapping

MIS3506 – Fall 2024

Lavin



Microsoft Bing

Images

Amy Rewards

Add Bing Chrome extension

Search bar with microphone, image, and search icons



Water colors

Will isolate at WH

Outdoor mask mandate?

Loses Soros ruling

Cemeteries swept out

'Pandemic fatigue'

Fauci warns on Trump



www.ARNGREN.net



el-biler til barn

Index

(Fra 07.11.2004)

< Frithjof i sin Fly-Bil

Search

[el-retur](#)

[Slik Betaler du](#)



Drone-Bike
Løfteevne: 8kg
kr. **19.998,-**



By
2-s
kr.

Index

- Akvarium
- Alarm
- Alkotester
- ATV (el.)
- Bildeviser
- Bil (elektrisk) gas
- Bilbane
- Conrad-elektronikk
- Digital-Kikkert
- Disko-Lys
- Dummy-Kamera
- DVD-Spiller
- Elektronikk & DAB
- EL-Scooter & Bil
- Figurer
- Golf-biler (m/skilt)
- Hobby & RC
- Hoverpod
- HP-Måler (Bil)
- Isbitmaskin
- Kamera (trådløst)
- Kino (bærbar)
- Kompass (Bil/Båt)
- Laser-Jamer (Bil)
- Luft-Jekk
- Lykt (oppladbar)
- Mobil-telefon-1, 2
- Motorsykkel-Mini
- Omformer (110V)
- Oversetter (44 sprk)
- PC-mini (9"), 2
- Rakett-Fly
- RC Produkter
- Robot-Hund
- Robot-Støvsuger

6.998,-

Solcelle-pakker

Nyhet !



Se alle våre el-Kjøretøy til Barn og Ungdom.

Norges største utvalg

el-biler til barn **Nyhet !**

12V
24V
48V

4WD

fra kr. **1.798,-**



3-hjul Cargo-el-Bike

Ingen alders-grense

el-scooter

PEDALS



Alle **Produktene** på denne siden lagerføres hos **ARNGREN** i Oslo. Se Lagerkoden etter Prisene (lev. 2 - 5 dager) :

- Er på Lager
- Kommer før 3 uker
- Lengre enn 3 uker



elsykkel

Fatbike-1500w

el-bil kr. **89.998,-**

el-ATV



- Elektriske-Kjøretøy**
- Elektrisk-ATV** - **Roboter**
- el-biler til barn/ungdom**
- Solcelle-produkter**
- Forbruker Elektronikk**
- Batterier & Ladere, etc**
- Fjernstyrte produkter**
- Disko-Lys** - **Rakett**



Roboter Elektronikk



Elektrisk-ATV
6000 watt
kr. **59.998,-**



EL-Scooter
5000 watt
kr. **29.998,-**



3-Hjuls el-sykkel



Fotball-Trener
fra kr. **2.598,-**

Styreenhet & Fordelere til Bil



Avatar-Gunship. Er d
este Helikopteret noensi



Elektrisk-Scooter
Fra kr. **9.998,-**

Elektriske Biler

El-Bil; Comarth
2WD/4WD. 2 ell
fra kr. **89.998,-**

Knowledge

- In the Head



- In the World



Knowledge



- *In the Head*

- Memory
- Efficient – Readily available
- Requires Learning
- Ease of use at first encounter is low
- Designer has freedom – better UX

Knowledge



- *In the World (Externalized)*
 - Information is Perceivable
 - Interpretation substitutes for learning
 - Less efficient if you have to stop to learn
 - Ease of use at first encounter is high
 - Can be ugly – requires a deep skillset

Knowledge



- *In the World*

- *Knowledge Of (Easy!)*

- Declarative Knowledge
 - Facts and Rules

- *Knowledge How (Not so Easy!)*

- Procedural Knowledge
 - Tacit Knowledge

Tradeoffs



If the user doesn't have it
memorized... could take a
while to interpret needs



First impression could be
tricky



Lack of freedom for the
designer

The background of the slide features several thin, curved lines in a light gray color, some solid and some dashed, creating a sense of motion and design. A large red speech bubble is positioned on the left side of the slide.

How can you as the
designer improve the
User's Experience armed
with this knowledge?

- Put cues in the design
- Effective mapping
- Understand cultural constraints
- Find the middle ground
- Signifiers, constraints and mappings
- Good conceptual model

Constraints

- In the World – Natural Constraints
 - Restrict behavior
 - Physical features
 - Right tighty/lefty loosey
- In the Head – Cultural Constraints
 - Reading in different cultures
 - Behavioral constraints/Restrictions on behavior
 - Colors

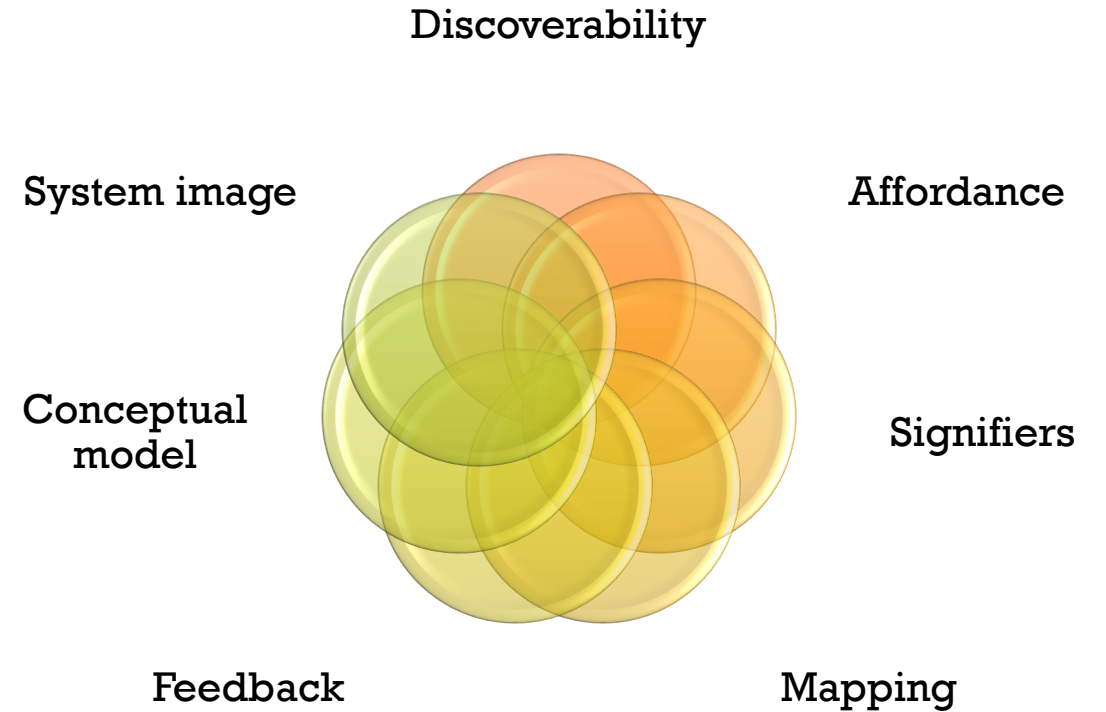
Knowledge in the world: Constraints



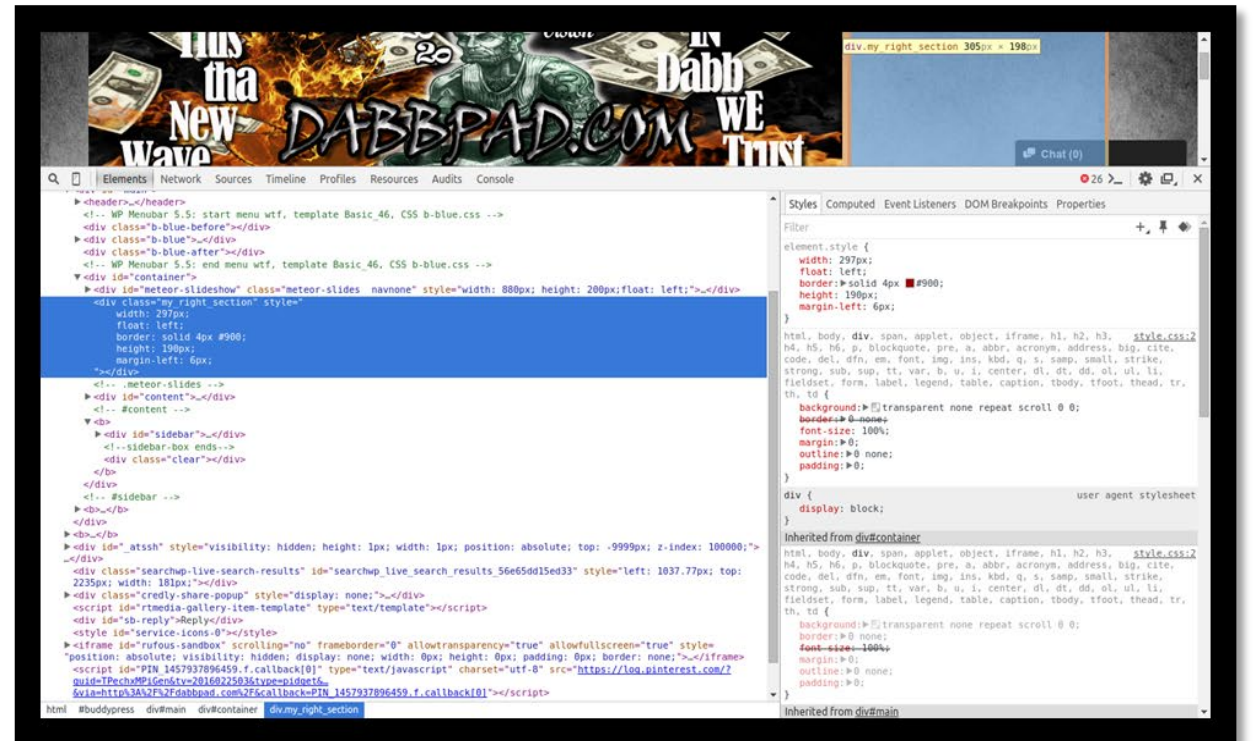
Mapping

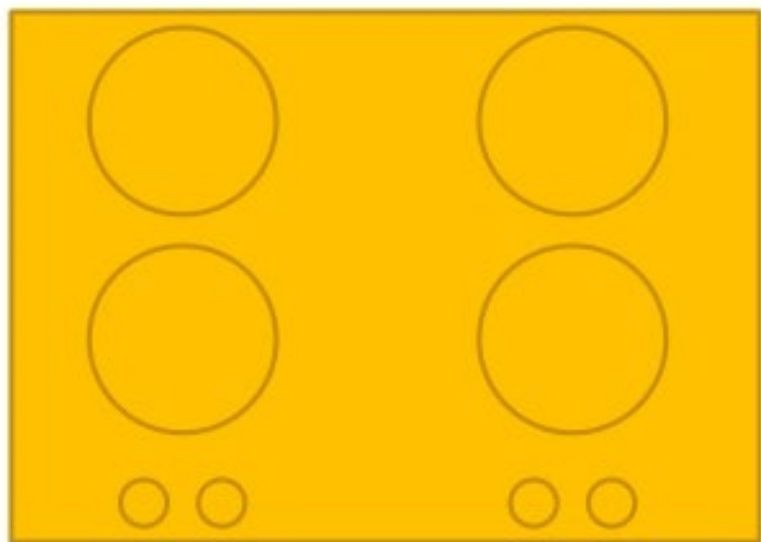
Relationship between the elements of two sets of things

A device is easy to use when the set of possible actions is visible

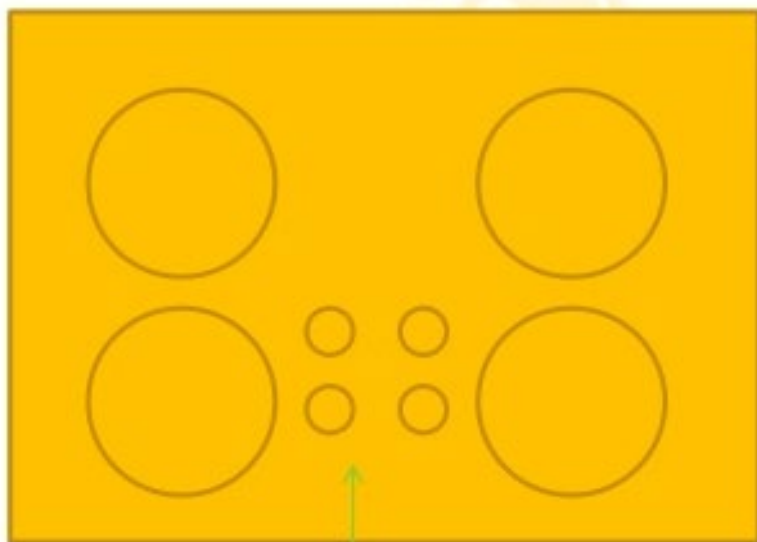


Mapping Examples



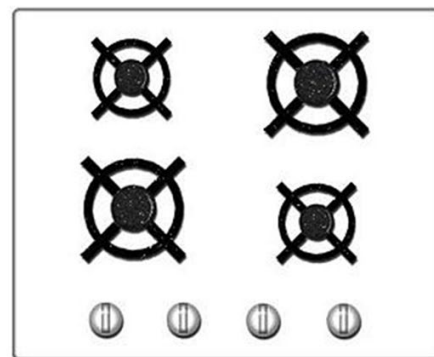


Requires memory or cognitive processing

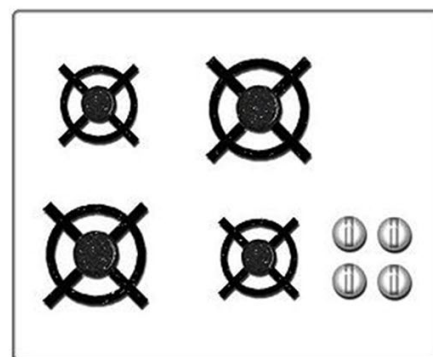


Knowledge is embedded in the interface

Poor mapping



Good mapping



Best: Controls are mounted directly on the item

Second Best: Controls are as close as possible to the object being controlled

Third Best: Controls are arranged in the same spatial configuration as the object being controlled

Mapping



Why is understanding the concept of Knowledge in the Head & Knowledge in the World critical to good design?

ICA

Exploring Knowledge Domains:

In the Head vs. In the World

Objective: The objective of this activity is to explore the concepts of "knowledge in the head" (individual knowledge) and "knowledge in the world" (externalized knowledge) through various examples and discussions. This activity aims to deepen the understanding of how knowledge is acquired, stored, and utilized both internally and externally.

1. Brainstorming Session (10 minutes):

1. Divide into small groups of 3-4 students.
2. Using index cards, brainstorm examples of knowledge in the head and knowledge in the world. Think broadly across various domains such as science, history, culture, technology, etc.

2. Sharing and Discussion (15 minutes):

1. Each group should share one example of knowledge in the head and one example of knowledge in the world.
2. Discussion around the examples provided. Discuss the advantages and limitations of each type of knowledge.
3. Consider:
 1. How does knowledge in the head differ from knowledge in the world in terms of accessibility and reliability?
 2. What are some examples where knowledge in the world enhances or complements knowledge in the head?
 3. In what situations is knowledge in the head more beneficial than knowledge in the world, and vice versa?