

# Constraints, Discoverability & Feedback

MIS3506\*Spring 2020\*Lavin

What do you do when you have to operate something you've never used before?



# Knowledge

- In the Head



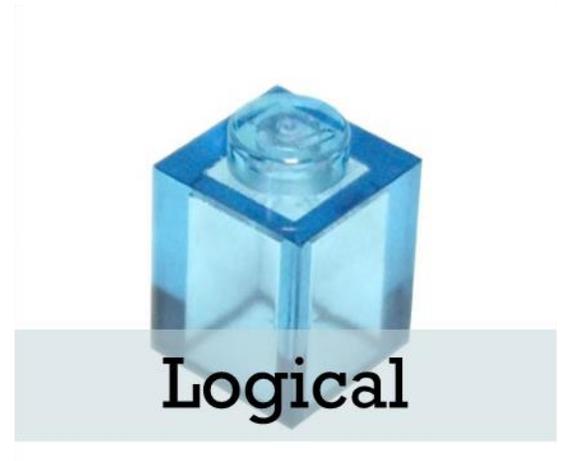
- In the World





How do you turn that into this?

# Constraints



**Constraints let people readily determine proper course of action, even in a novel situation (Norman, p. 125)**

# Constraints – some thoughts to consider



Logical – Tell a user to select 5 things & only 4 are readily visible – what does that tell the user?



Logical constraints = good conceptual model



Cultural – scroll bar on the right – what does that tell the user?



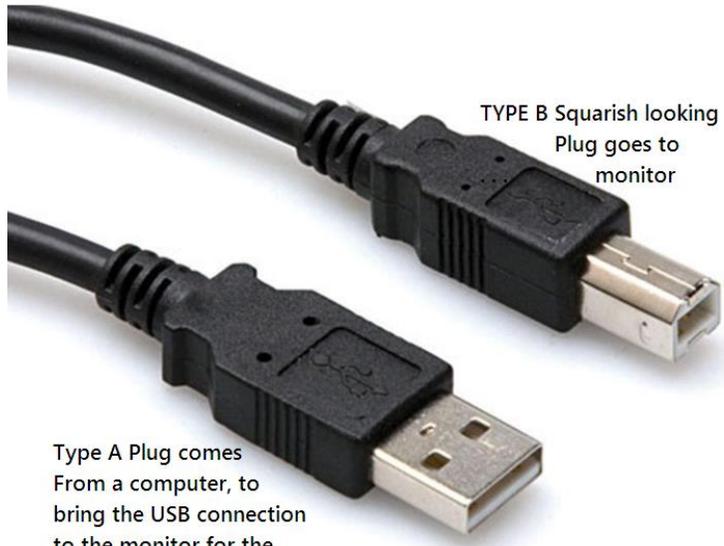
Physical constraints make some actions impossible: there is no way to ignore them.



Logical and cultural constraints are weaker in the sense that they can be violated or ignored, but they act as valuable aids to navigating the unknowns and complexities of everyday life.



Cultural constraints evolve over time



TYPE B Squarish looking Plug goes to monitor

Type A Plug comes From a computer, to bring the USB connection to the monitor for the HUB in it

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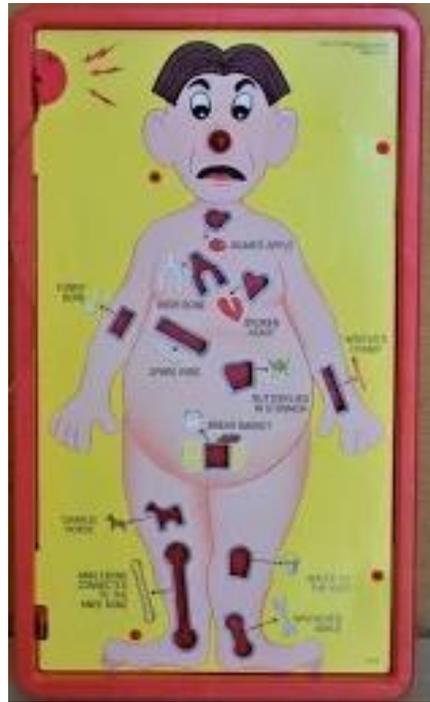
# Physical Constraints



# Cultural Constraints



# Semantic Constraints



Style 1

DOB  
Enter the date of birth

DD / MM / YYYY

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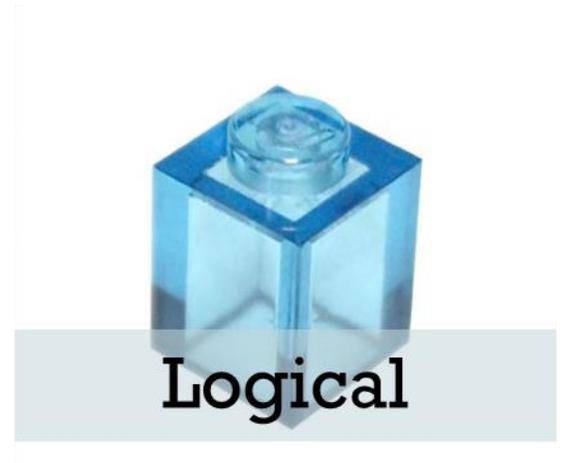
Style 2

Date of Birth  
Date format DD/MM/YYYY

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# Logical Constraints

# Constraints



**Constraints let people readily determine proper course of action, even in a novel situation (Norman, p. 125)**



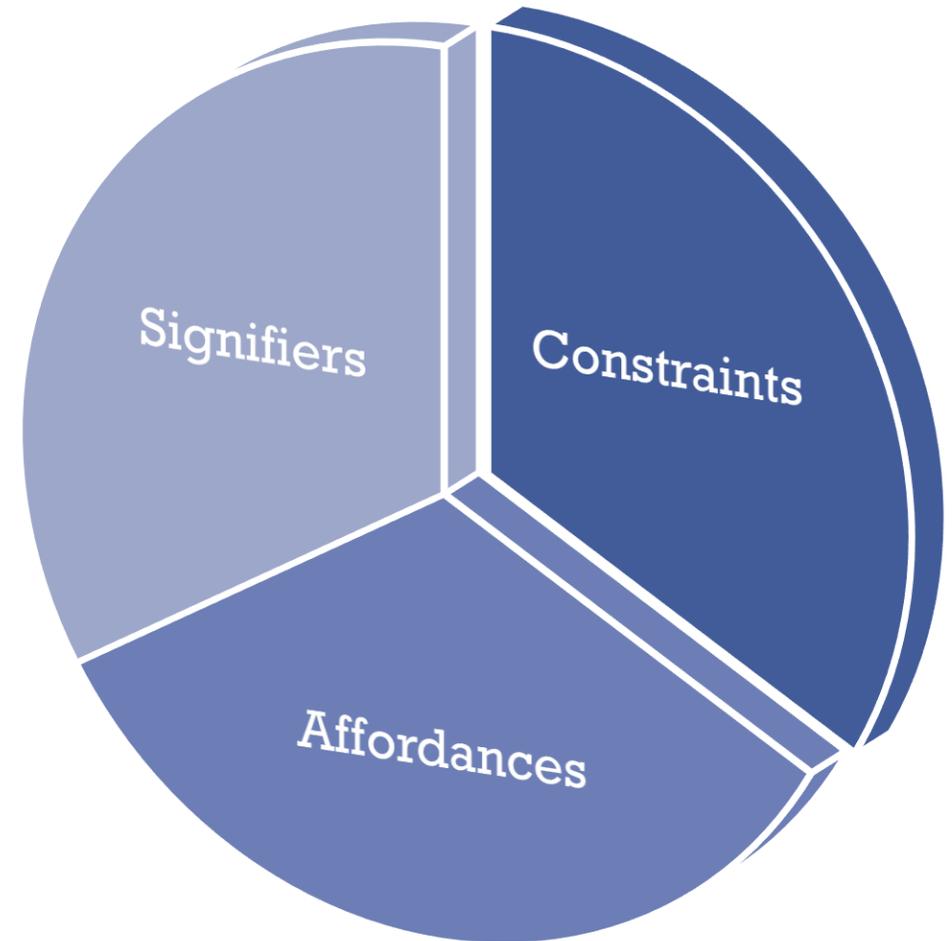
# Fundamental Principles of Interaction

## Discoverability

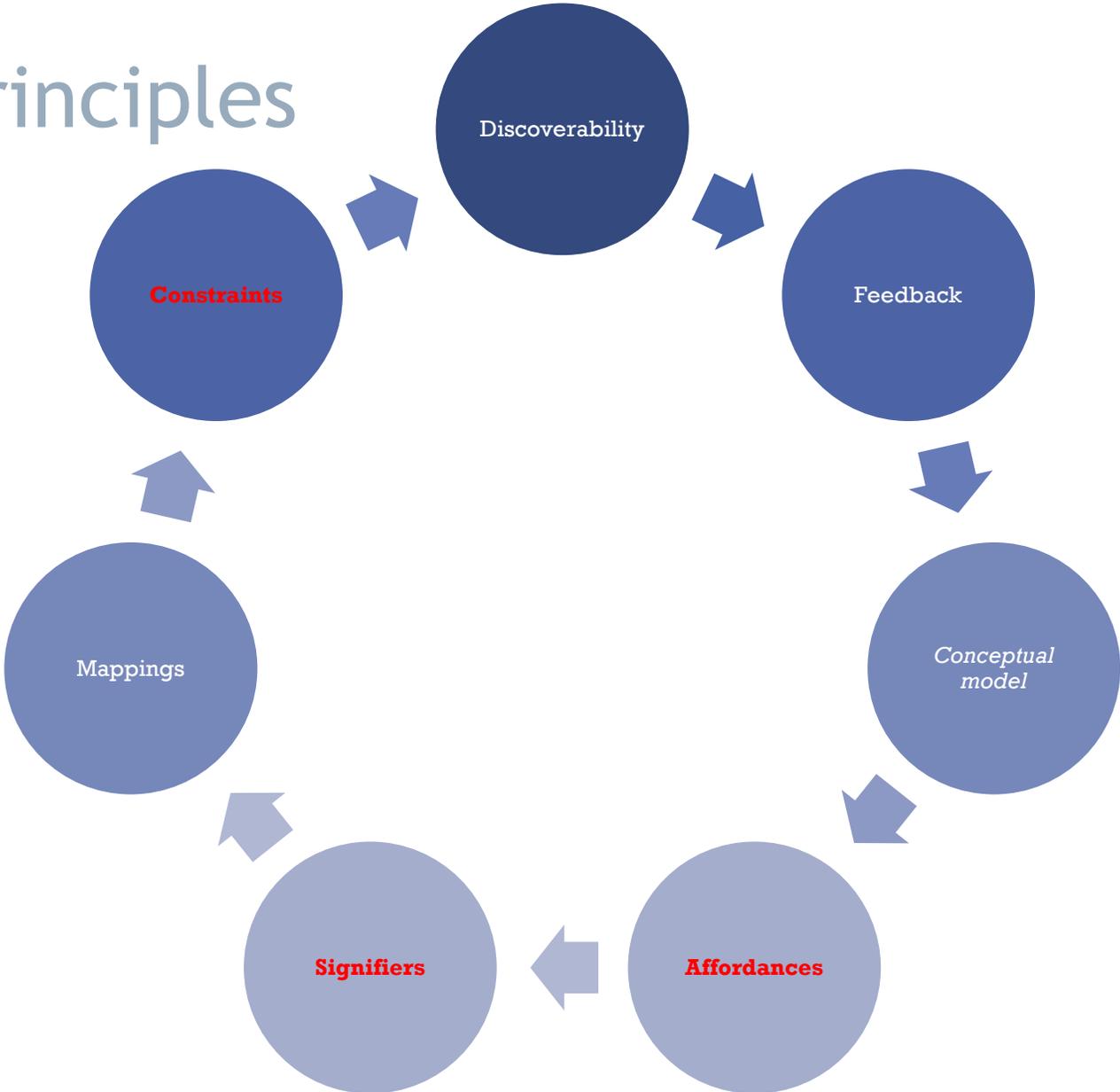
- Emphasis on needs & behavior

Successful interaction between object and user

- User understands or discovers how an object or product is supposed to work



# Design Principles



Navigate to a site you use daily

Spend a minute or two clicking around

Make a note of Constraints used:

**Physical**

**Cultural**

**Logical**

**Semantic**

What conventions are used to ensure proper behavior?

Partner up – ask that person to visit the site – do they follow the same patterns? What do you notice?

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