INTERACTION

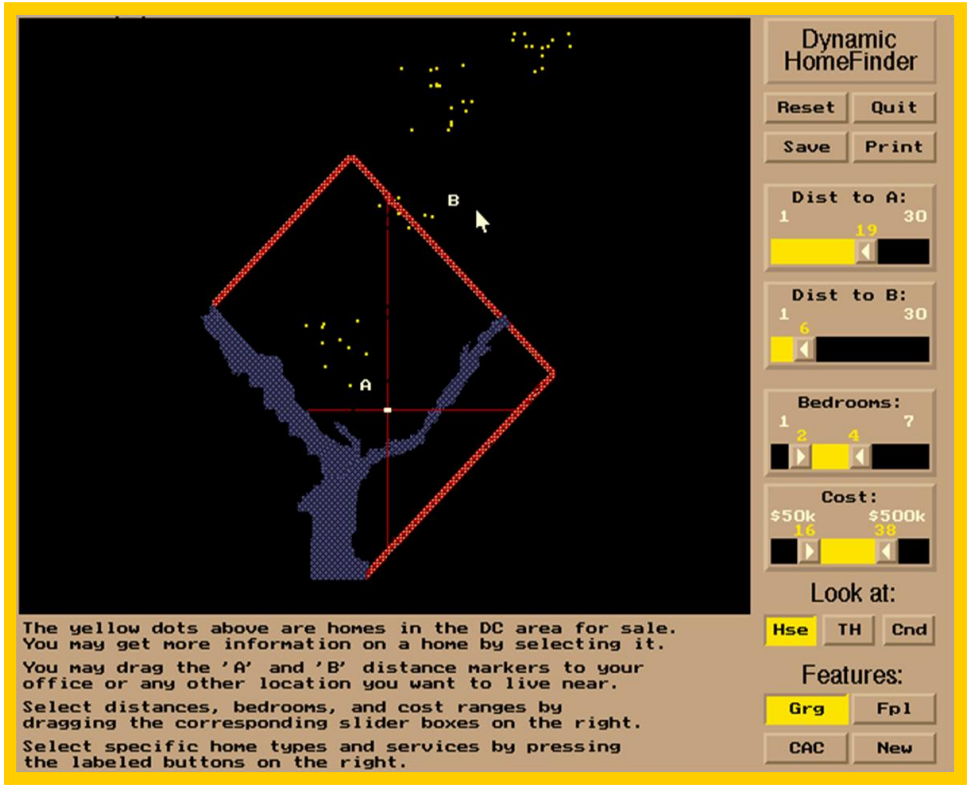
TUTORIAL (&MINI LECTURE)

Petra Isenberg

informatics mathematics
Inria

WHAT DO GOOD INTERACTIONS LOOK LIKE?

SKETCHING



HOMEFINDER WILLIAMSON AND SCHNEIDERMAN 1992

DYNAMIC QUERIES ARE USUALLY GLOBAL

BUT WHAT IF I WANT TO SELECT USING DIFFERENT CRITERIA IN DIFFERENT AREAS?

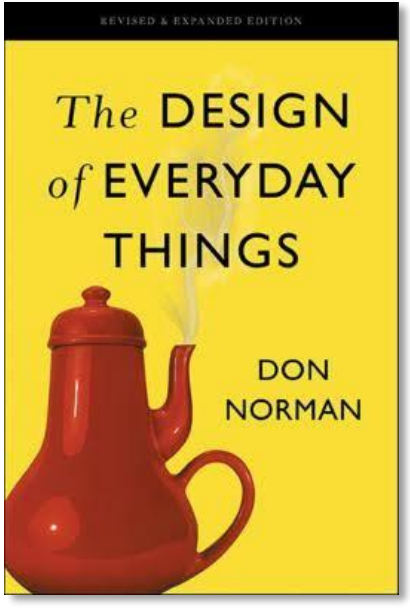
TASK: SKETCH AN ALTERNATIVE INTERFACE THAT LETS YOU DO THIS.

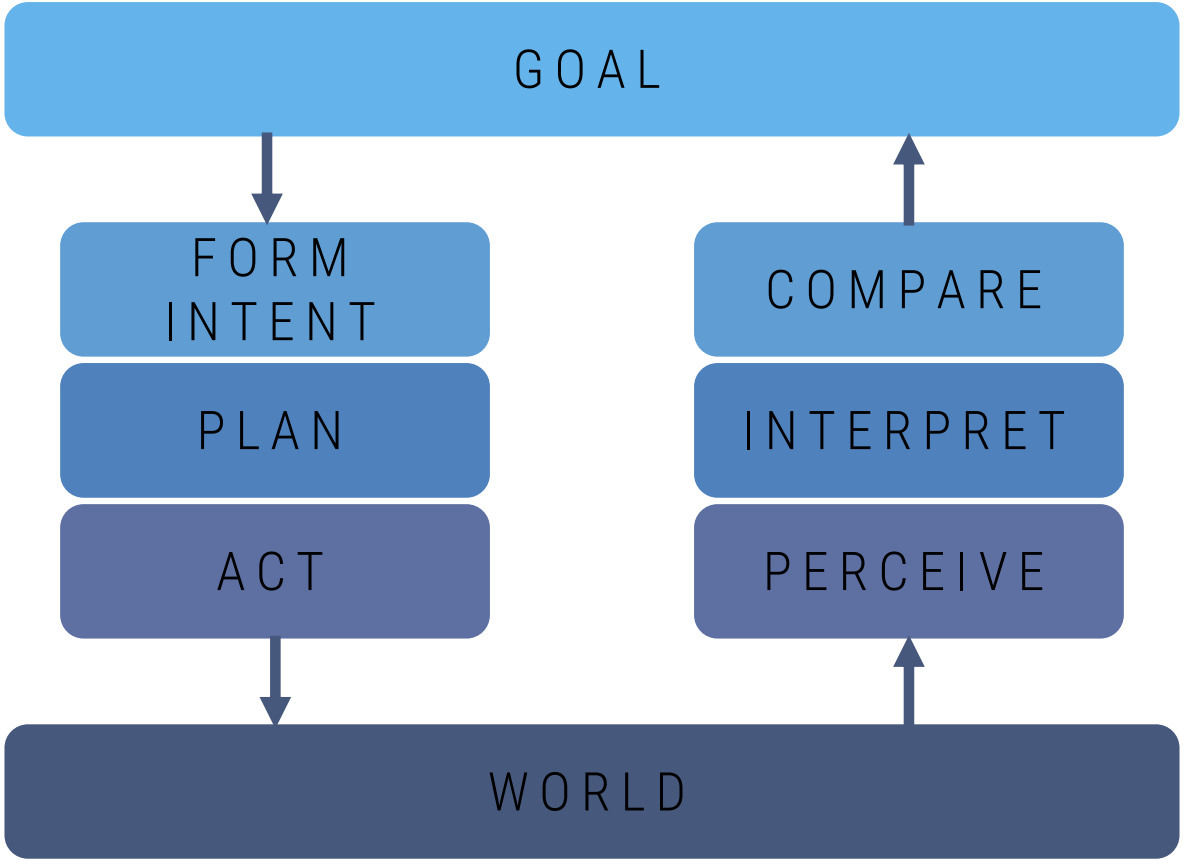
GROUPS OF 3 (~20 MINUTES)

WHAT DOES GOOD INTERACTION LOOK LIKE?

NORMAN'S STAGES OF ACTION

DON NORMAN

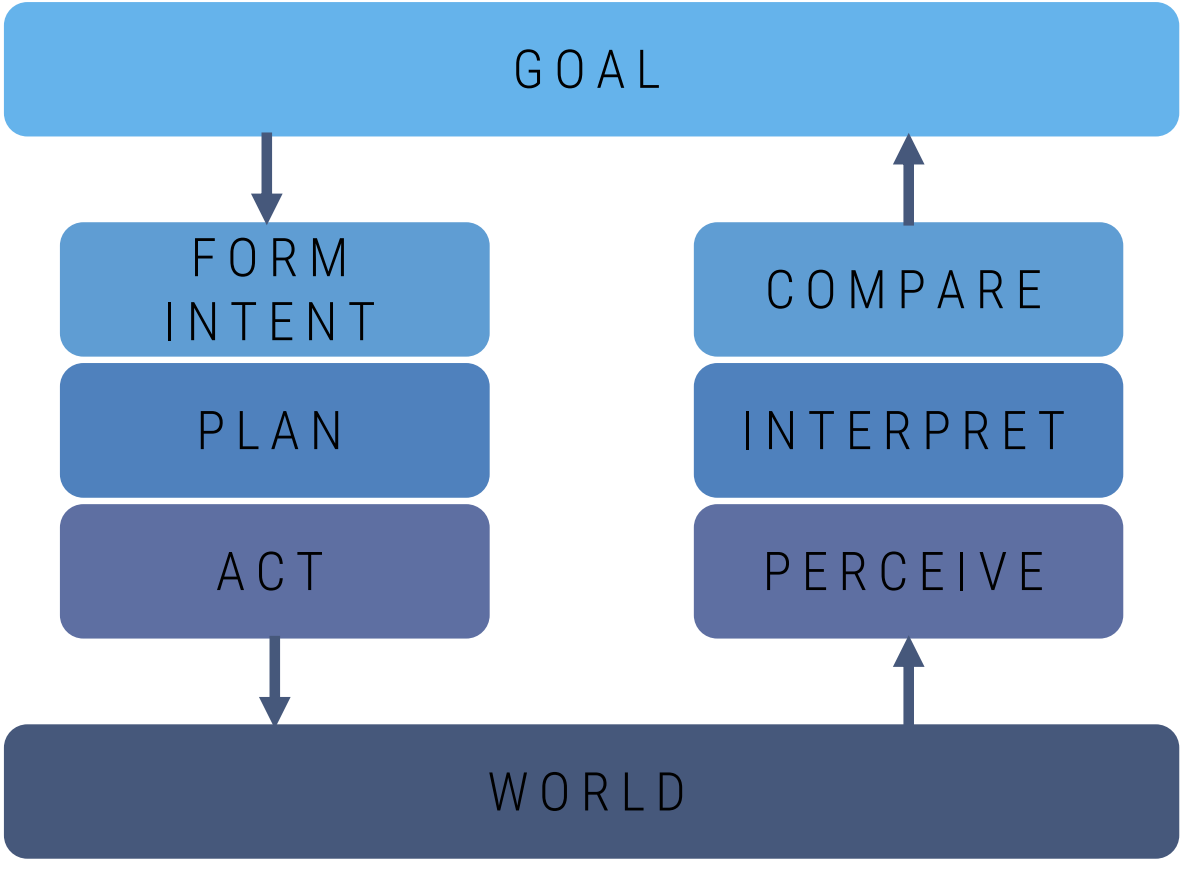


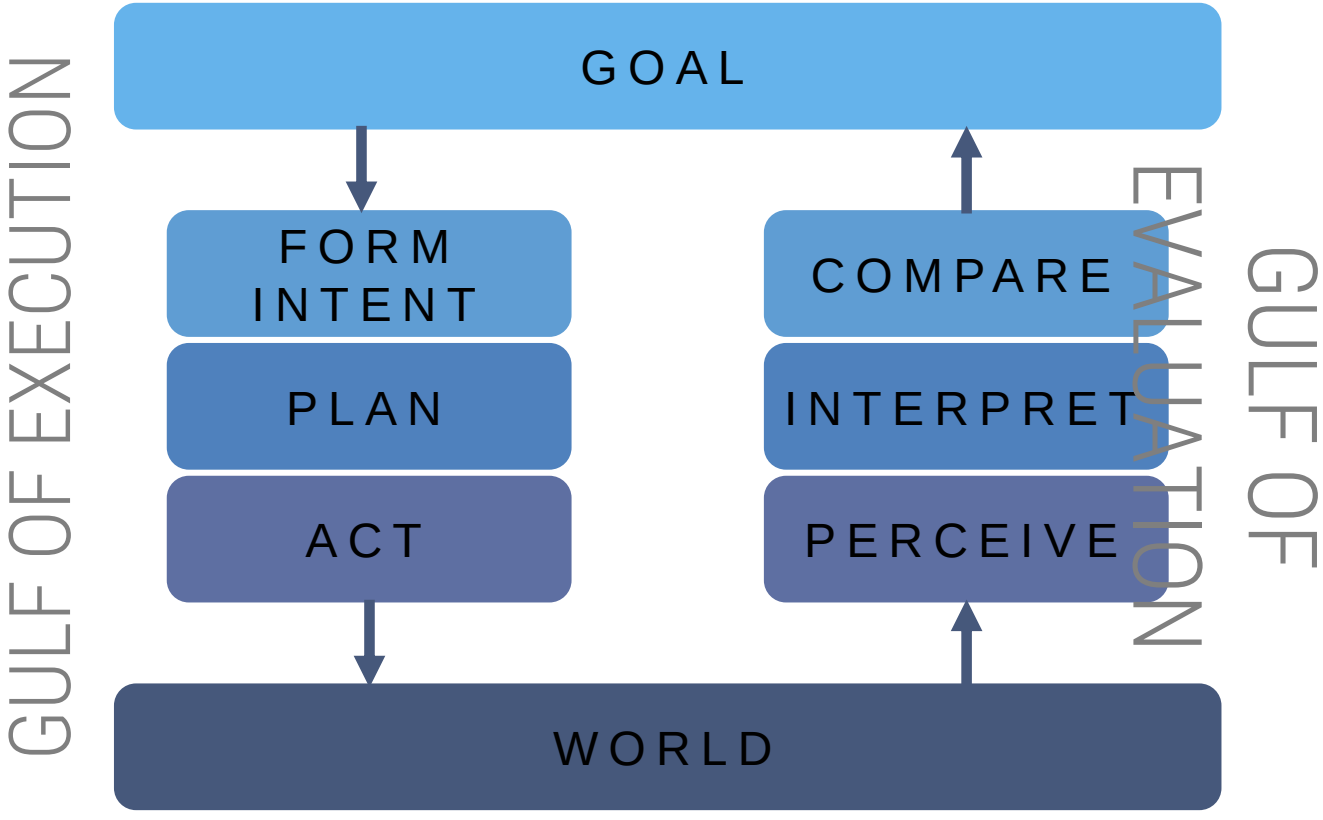

GOAL
FORM INTENT
PLAN
ACT
COMPARE
INTERPRET
PERCEIVE
WORLD

WHAT CAN I DO?

HOW CAN I DO IT?

GULF OF EXECUTION





WHAT CHANGE HAPPENED?

IS THIS WHAT I WANTED?

GULF OF EXECUTION

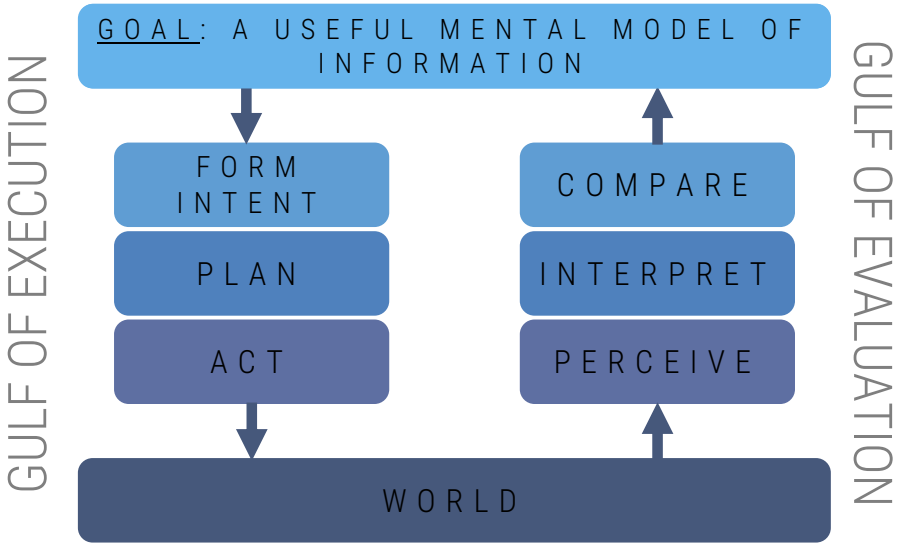
The difference between the user's intentions and the allowable actions.

GULF OF EVALUATION

The amount of effort that the person must exert to interpret the state of the system and to determine how well expectations have been met.

WHAT CAN I DO WITH THE DATA VIS?

HOW CAN I DO IT?



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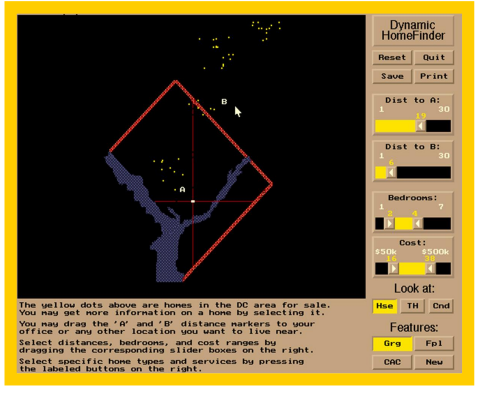


TALK ABOUT YOUR SKETCH!

- CAN USERS TELL WHAT THEY CAN DO AND HOW TO DO IT?
- CAN THEY MAKE SENSE OF THE RESULT?
- HOW COULD YOU CHANGE THE INTERACTION TO MAKE THESE CLEARER?

EXAM

- 2h, Dec 8th
- bring a pencil
- questions from lectures (at least 1 per lecture)
- some creativity questions
- some questions about assessing visualizations
- every student gets individual exam sheet

+1/1/60+

Introduction to Human-Computer Interaction **Exam on 23/03/2016**

- Time period: 8:00 – 11:00
- Duration of the exam: 180 min
- Number of pages: 8
- Materials allowed: Pencils, erasers

Please write your answers directly on the exam paper.

☐0 ☐0 ☐0 ☐0 ☐0 ☐0 ☐0 ☐0
☐1 ☐1 ☐1 ☐1 ☐1 ☐1 ☐1 ☐1
☐2 ☐2 ☐2 ☐2 ☐2 ☐2 ☐2 ☐2
☐3 ☐3 ☐3 ☐3 ☐3 ☐3 ☐3 ☐3
☐4 ☐4 ☐4 ☐4 ☐4 ☐4 ☐4 ☐4
☐5 ☐5 ☐5 ☐5 ☐5 ☐5 ☐5 ☐5
☐6 ☐6 ☐6 ☐6 ☐6 ☐6 ☐6 ☐6
☐7 ☐7 ☐7 ☐7 ☐7 ☐7 ☐7 ☐7
☐8 ☐8 ☐8 ☐8 ☐8 ☐8 ☐8 ☐8
☐9 ☐9 ☐9 ☐9 ☐9 ☐9 ☐9 ☐9

← Encode your student number here, and write the student number again as well as your given name and family name below. If you cannot remember your student number, use the number X you see at the top of the exam sheet in this code +X/Y/Z+.

Student number:
.....
Given name:
.....
Family name:
.....

- The questions with the symbol ♣ can have none, one, or more than one possible correct answers. All other questions have exactly one correct answer.
- Please answer the questions like this: ☒; use a **pencil** (hardness HB), and make clear marks. To correct, clearly erase the wrong mark and put a new one (if needed). If you cannot erase because you did not bring a pencil, make the incorrect box completely black.
- All multiple-choice questions are worth one point. For it to be counted as answered correctly, all correct answers and no incorrect answer have to be selected.
- Do not fold the answer sheet(s), do not write on the back.

Question 1 Student did **NOT** bring a pencil. Do **NOT** fill out yourself.

☐ Student brought a pencil.
☐ Student did not bring a pencil.

Multiple-Choice Questions:

Question 2 Driving to the supermarket but ending up at work is an example of which type of error

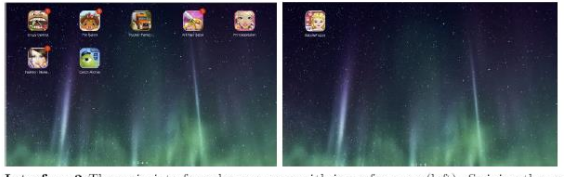
☐ description error
☐ a mistake
☐ capture error
☐ none of the above
☐ mode error

+1/5/56+

Controlled Experiments

You are a designer for a mobile phone company and are trying to decide which method you want people to use for opening apps in future versions of your mobile UI. You are planning to go with either a single page with folders (Interface 1), or multiple scrolling pages and no folders (Interface 2). The choice needs to be made based on which interaction technique allows the user to open an app the fastest. You decide to run a controlled lab experiment to find out.

Interface 1: The main interface shows a single page with folders of icons (left). Clicking on a folder, opens up the folder to show its contents (right).



Interface 2: The main interface shows a page with icons for apps (left). Swiping the page to the side shows a second page with more icons for apps (right).

Question 21 Write an appropriate **hypothesis** for this study (1 point): ☐w ☐c *Reserved*

.....
.....

Question 22 Continuing with the example from the previous question: Write an appropriate **null hypothesis** for this study. ☐w ☐c *Reserved*

.....

EXAM

- best way to mark a box: ☒
- unacceptable way to mark a box: •☐ ☐ ☐ ☐
- if you make an error – erase your answer

- if you forgot your eraser, mark the box like this ■

ACKNOWLEDGEMENTS

Slides in were inspired and adapted from slides by

- Eytan Adar (University of Michigan)
- Wesley Willett (University of Calgary)