

# Cognitive walkthrough: Analytical evaluation without users

9 lecture

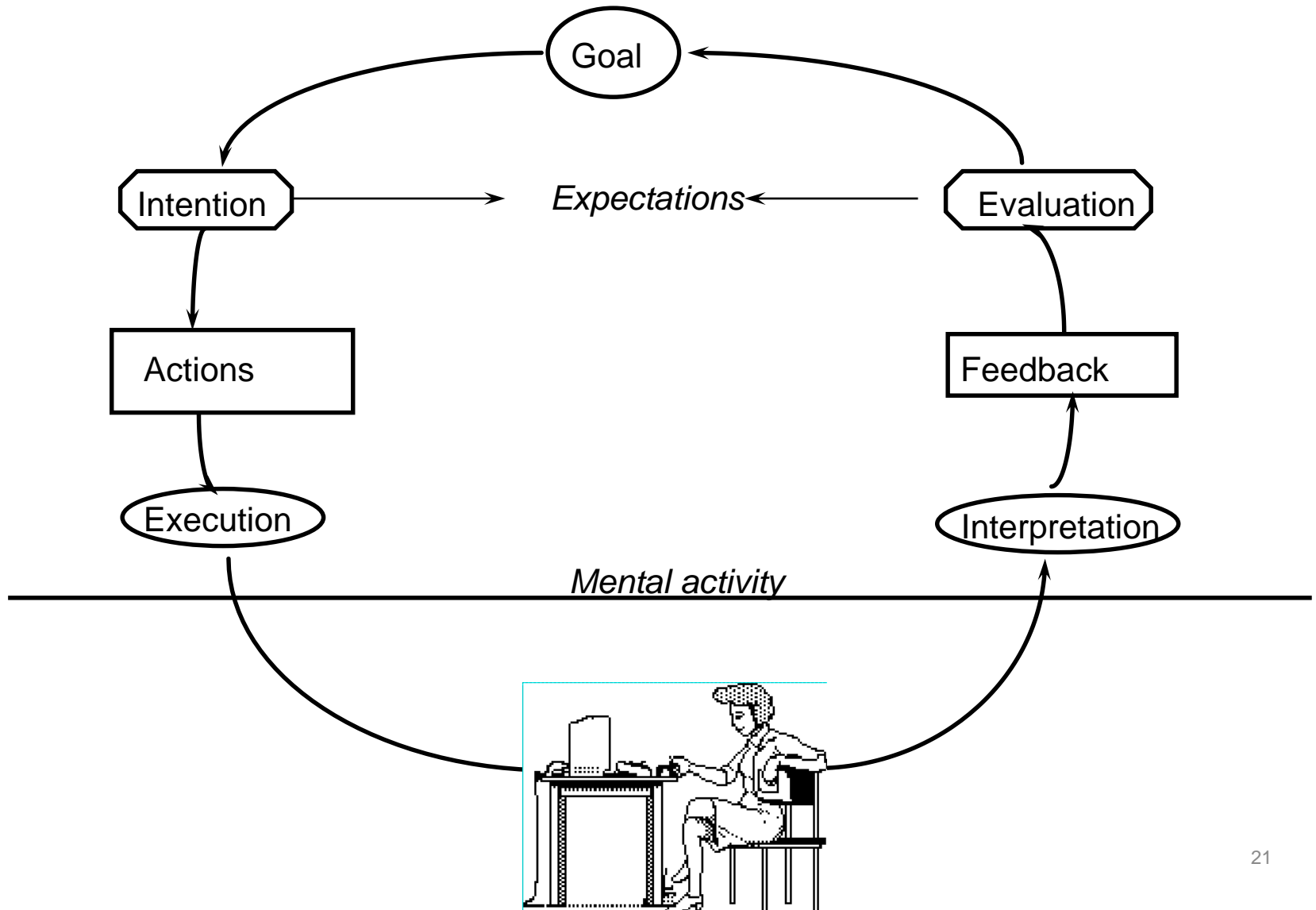
Dr. Kristina Lapin



# **Stages of interaction**

## **Donald Norman**

# Stages of interaction



# Stages of interaction

## Goal

- Things that people try to achieve

## Selection

- Searching for an appropriate action

# Stages of activity

Execution

- Clicking or typing

Interpretation

- Analysis of system feedback

# Norman impact

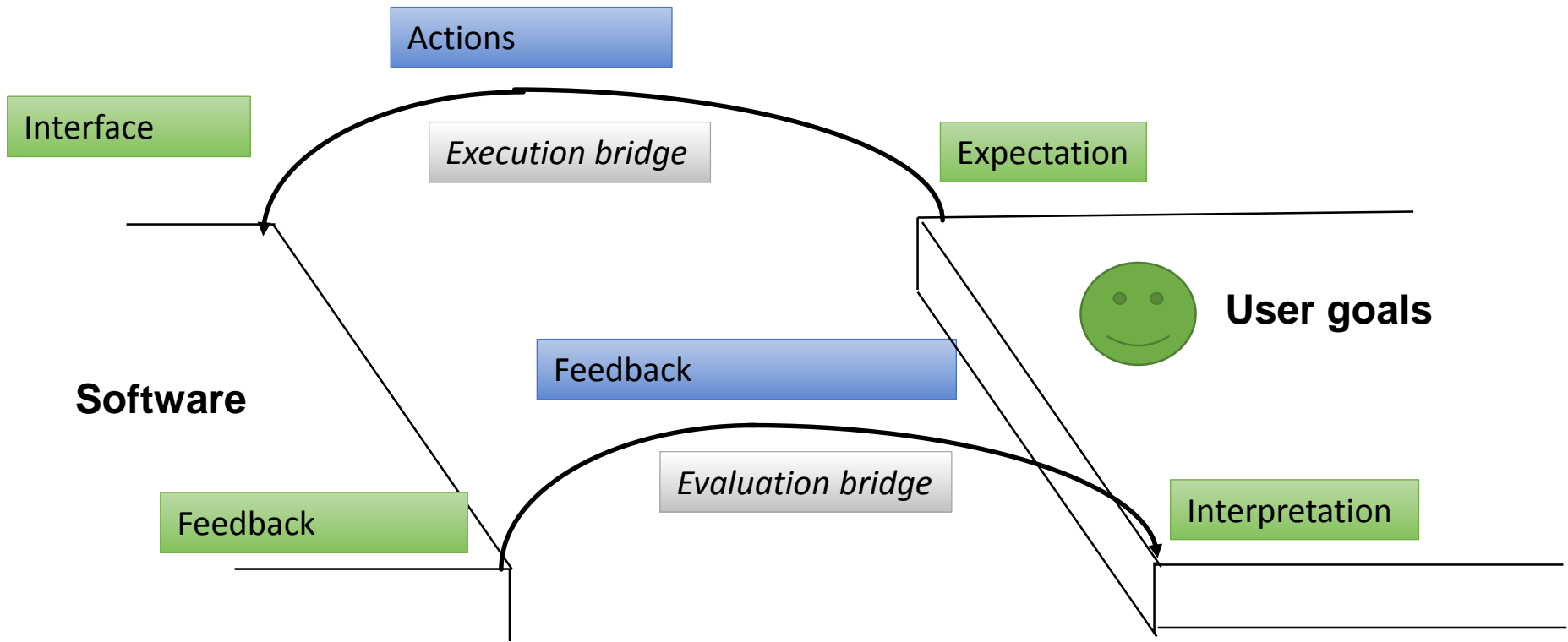
## *Gulf of execution*

- the problem of how an individual translates intentions into action

## *Gulf of evaluation*

- how an individual understands, or evaluates, the effects of actions and knows when his or her goals are satisfied

# Execution and evaluation gaps



# Cognitive walkthrough

- Is a rigorous paper-based technique for checking through the detailed design and logic of steps in an interaction.



# What to prepare?

- Description of users characteristics
- Description of task what user is to perform
- A complete list of the actions required to complete the systems
- Mockups or description of the interface

# CW: the 3 questions

- Will the correct action be sufficiently evident to the user?
- Will the user notice that the correct action is available?
- Will the user associate and interpret the response from the action correctly?

As the experts work through the scenario they note problems.

# Streamlined CW:

1. Define inputs to walkthrough
2. Convene the walkthrough
  - 2 questions:
    - Will the user know what to do at this step?
    - If the user does the right thing, will they know that they did the right thing, and are making progress towards their goal?
3. Walkthrough the action sequences for each task
4. Record critical information

# Example:

## save the file with another name

### Task steps:

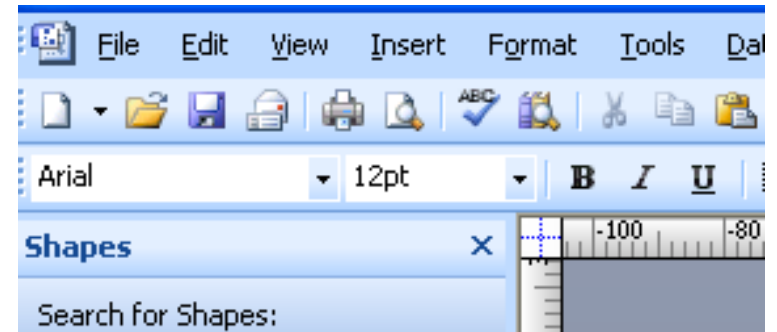
1. Choose a menu that enables to save the file
2. Select the option in a menu
3. Choose the location
4. Set the name
5. Save the file

# Example:

## save the file with another name

1. Choose a menu that enables to save the file

- Will the user know what to do at this step?
  - Yes, because menu option „File” associates with the user goal „save a file”

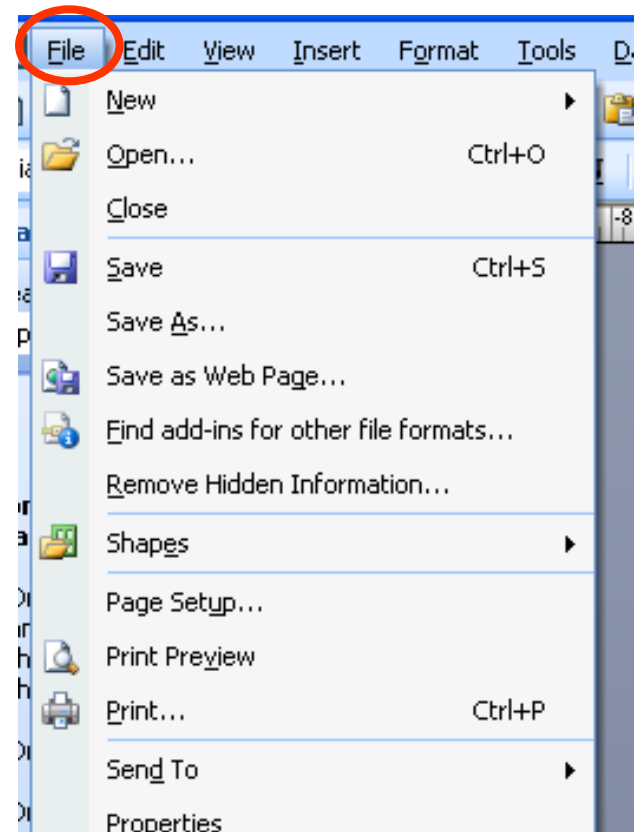


# Example:

## save the file with another name

1. Choose a menu that enables to save the file

- If the user does the right thing, will they know that they did the right thing, and are making progress towards their goal?
  - Yes, because the selected option „File” is highlighted and distinguishes from unselected options

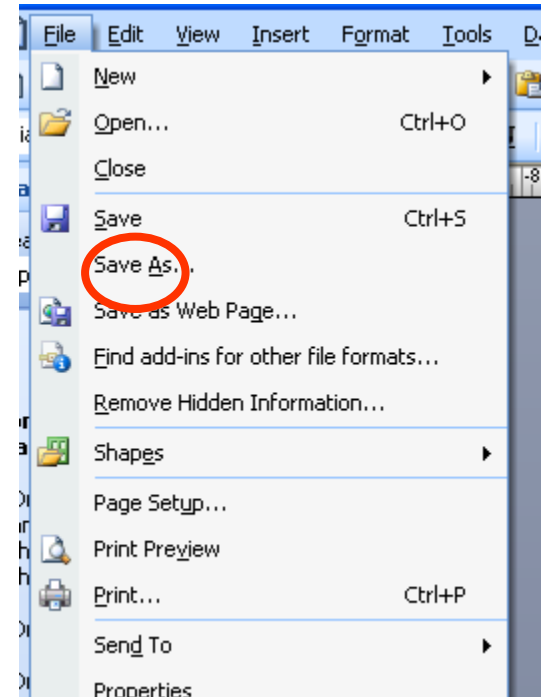


# Example:

## save the file with another name

### 2. Choose a menu option

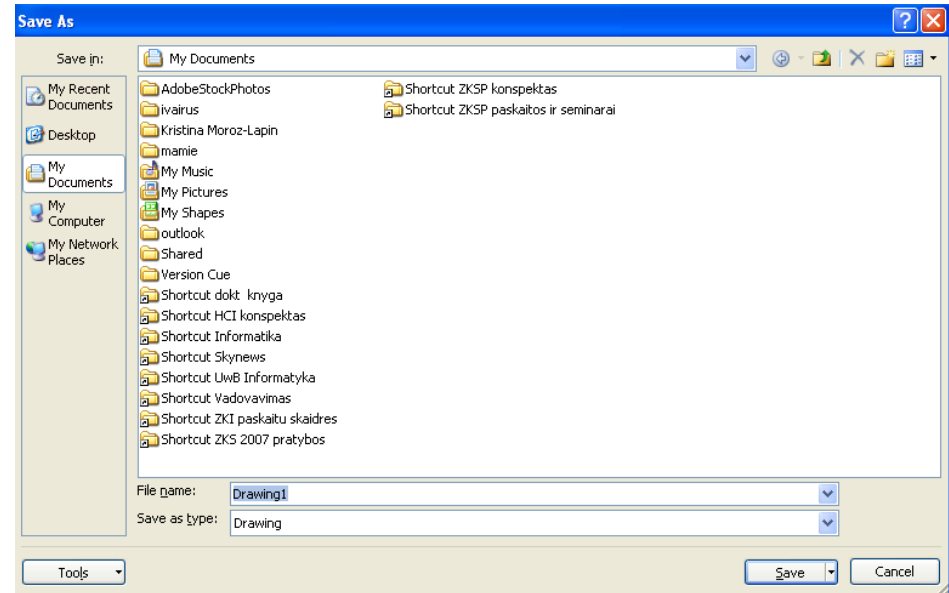
- Will the user know what to do at this step?
  - Yes because File menu options are visible and the option „save as” directly relates to the user goal



# Example: save the file with another name

## 2. Choose a menu option

- If the user does the right thing, will they know that they did the right thing, and are making progress towards their goal?
  - Yes, because the opened window title repeats the selected command name: „save as”

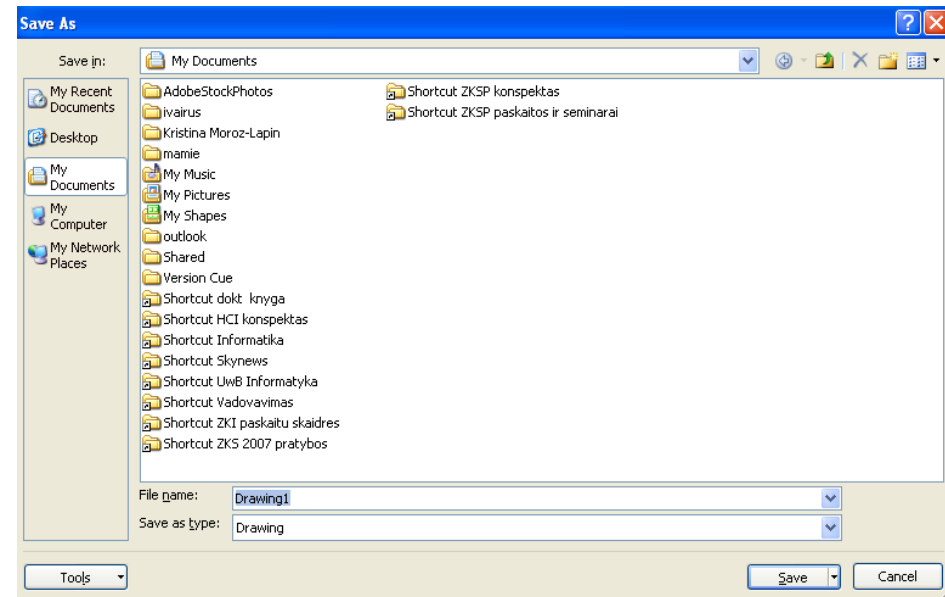




# Example: save the file with another name

## 3. Choose a location

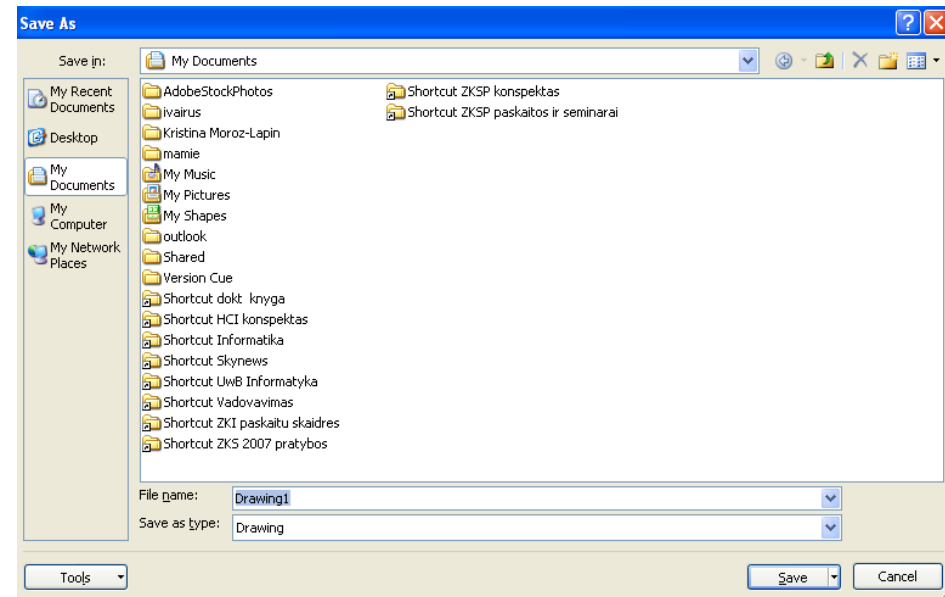
- Will the user know what to do at this step?
  - Yes because under the title bar folder choices are presented
- If the user does the right thing, will they know that they did the right thing, and are making progress towards their goal?
  - Yes, because the selected folder is shown in the „save in” box



# Example: save the file with another name

## 4. Set the new file name

- Will the user know what to do at this step?
  - Yes because under the folder location is presented the input field „file name”
- If the user does the right thing, will they know that they did the right thing, and are making progress towards their goal?
  - Yes, because while typing the name it is shown in the input box



# Example: save the file with another name

## 5. Save the file

- Will the user know what to do at this step?
  - Yes because under the fields of file name and type the button „save” is placed
- If the user does the right thing, will they know that they did the right thing, and are making progress towards their goal?
  - Yes, after clicking the button the new name will appear on the title bar.

