Understand the user or and not everyone is the same and people are creates of habit.

Cannot remove 7+ 2 of what they can remember.

* low things @ once
* creatures of habit
* make ui look like it does what it should and make it easy for the user to do : aka affordances.
* Use existing knowledge.
* Strengths + limits
* **User subconscious thought -> important**

theory -> pratice -> repeat

effect of task on attention

different types of loads on the mind ecl -> cl - >ctcl

**Usability engineering**

## False affordances[[edit](https://en.wikipedia.org/w/index.php?title=Affordance&action=edit&section=3)]

William Gaver[[17]](https://en.wikipedia.org/wiki/Affordance#cite_note-17) divided affordances into three categories: perceptible, hidden, and false.

* A **false affordance** is an apparent affordance that does not have any real function, meaning that the actor perceives nonexistent possibilities for action.[[18]](https://en.wikipedia.org/wiki/Affordance#cite_note-18) A good example of a false affordance is a [placebo button](https://en.wikipedia.org/wiki/Placebo_button).[[19]](https://en.wikipedia.org/wiki/Affordance#cite_note-19)
* A **hidden affordance** indicates that there are possibilities for action, but these are not perceived by the actor. For example, it is not apparent from looking at a shoe that it could be used to open a wine bottle.
* For an affordance to be **perceptible**, there is information available such that the actor perceives and can then act upon the existing affordance.

**Mental Models**

Designing to what the user knows or expects how it works. Volume up bottom turns up the volume.

* Learning time
* Likely Errors
* and the relative ease of tasks
* The oven example, based on what you know gives you a different idea of how it finishes

**Structural Modes**

If I see something I can predict the output. A bike without the chain on i know it wont work.

**Car machinic , can work on a car but cannot drive**

**Perceived Affordances**

Utility : looks like it can do stuff, links to the bottom one.

functionality (sound up and down)

usability : getting the message across

**Mapping :**

**example : volume controls going from L to R or bottom to top; cooker example.**

**cause a**

**Cues to cause effect relationsho[**

**prescance cause before effect**

**time cause immed effect**

**s/w feedback ghard**

Causuality :

Timing before/after

timing immediate

Believable

promial

feedback give gives the right idea

Repeat 2015 question b

Link between rules.

Speaking the users langue

Logic and natural order

Memory, easy to notice it then to look back. example an name

The ten laws

Prod and cons

Cheat

intuitivee

useable in early in development process

finds many problems

finds both major and minor problems

### The Magical Number Seven, Plus or Minus Two

Chunks , encoding = learning

00 - 353 - 21 - 433 - 5064

went from 13 to -> 5 times (learning)

Usability Attirbutes

Learnanlilty

Efficency

Memorability

Error Rate

Subjective Satisfaction

Try to say the ideas.

Paper learning :

http://mcom.cit.ie/staff/Computing/prothwell/hci/web4/Paper%20Summaries/Hollender.pdf