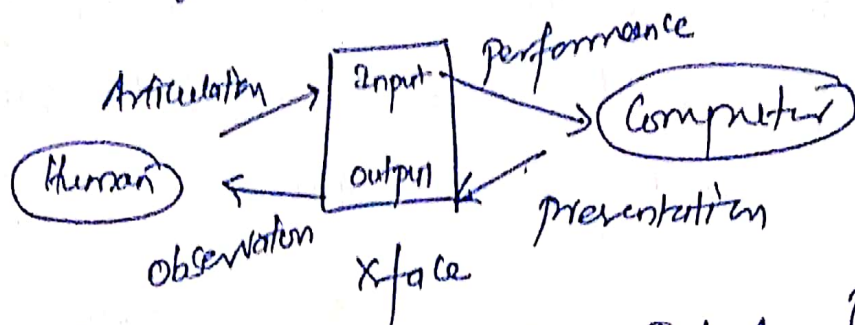


- \* Word Processor — Save / delete options → file level operations — adjacent in menu — mouse based access → Inadvertent delete instead of save
  - ↳ Conf. based delete — But also for save
- \* VCR — Recording a television programme difficult
- \* Car radio designers — Tune radio features diverts attention from road
- \* Mac OS — Task Bar (dock) — rt side — fast launch pad for apps) Trash can
  - Dock icons constantly move — accidental errors
  - ↳ Trash can keeps moving — copy / paste into Trash folder
  - ↳ Designers don't get better
  - ↳ users get better
- \* S/w → No longer pretty x faces
  - ↳ suited for task
  - ↳ easy to use
  - ↳ feedback on performance
  - ↳ display info in a format / pace adapted to the user
  - ↳ Confirm to S/w Ergonomics

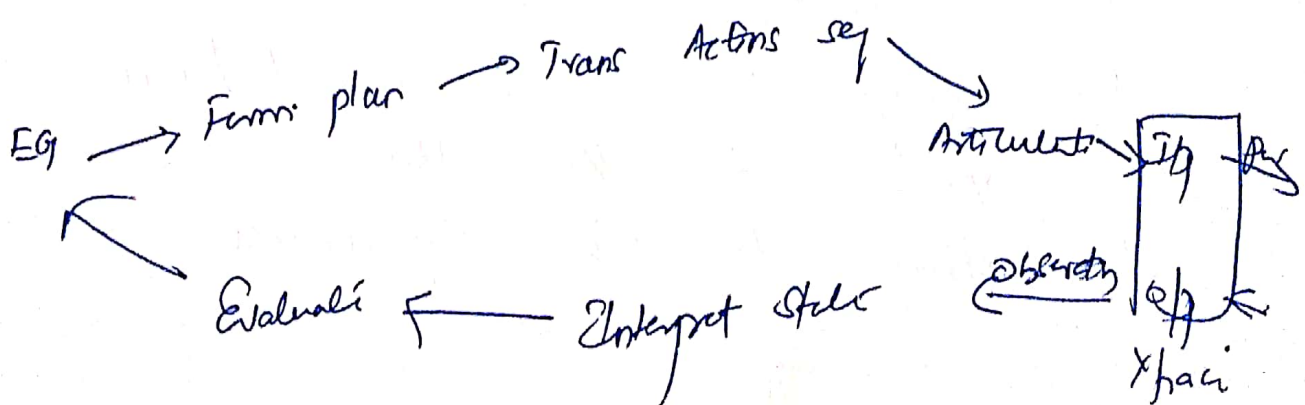
HCI → Design, Evaluation, Implementation  
 xactive Computing Systems for human  
 and with major phenomena surrounding use



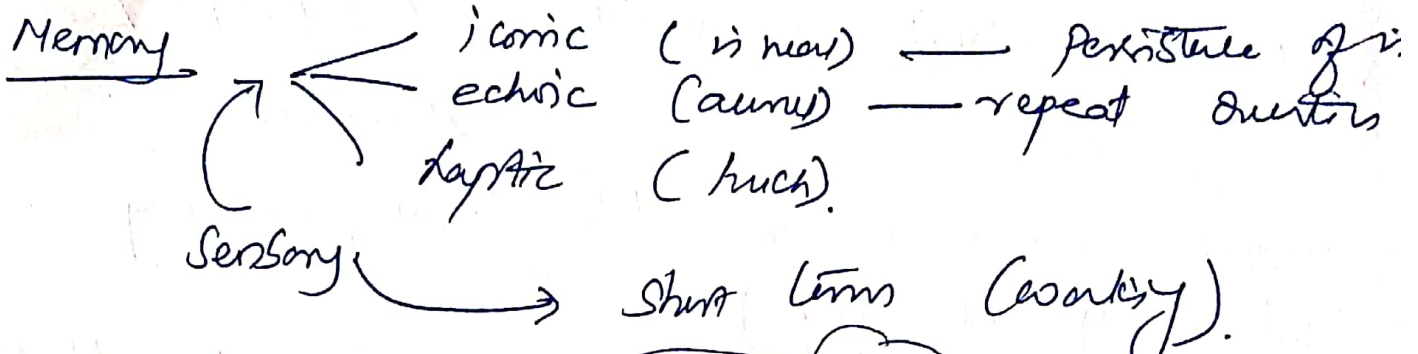
\* Human Factors, Man M/c Interface } alt names  
 { Human — Single user / Groups / seq. of users  
 { Computer — Standalone / Workstn / Website / Em. system  
 { Xn —> Comm b/w users — Comp.

\* characteristics of a usable Xface  
 { useful → Accomplishes Task  
 { usable → ease of use / scope of errors ↓  
 { Used → more people should accept

\* Norman's Model — Establish a Goal  
 Action cycle      Execute action  
                                  Evaluate action.



law  $\rightarrow$  target hit time  $\rightarrow$  fn of target size  $\textcircled{4}$   
 $\downarrow$  distance to be moved  
 $\rightarrow$  simulation diff sized circles  
 { diff area / 30 of dist / time / dia }



$$35 \times 6 \rightarrow (35 \times 2 \times 3) = 210$$

\* limited  $\rightarrow$  7  $\pm$  2 digits remembered  
 (digit span) \* Memory?  
 7  $\pm$  2 chunks. UNIT commands.

$\rightarrow$  formation of a chunk  $\rightarrow$  closure  
 closure  $\rightarrow$  ATT Example



Space for Automatic syringe.  
Car style | fixed digits

1	2	3	4
+	+	+	+
-	-	-	-

②

→  
Human

Input - output channels → Visual / Auditory / Haptic / Movement.

Memory — short term / long term / sensory  
(Emp. based) (working)


Sensory organs / Cap → sight / hear / touch / smell / taste  
Key in the

↳ Keen eye → sight / vision

↳ Ears → BEEP feedback

↳ Read Ability  $\propto \frac{1}{\text{distance from focus point}}$

Pattern to be noticed - flashing messages - edges  
detect movement (rods sensitive to outer parts)

Visual processing →  } context make things clear

↳ Capital letters difficult to read

↳ E-commerce failure for textile / jewelry industry  
— Sense of feeling lost → Hysteria  
— future research.