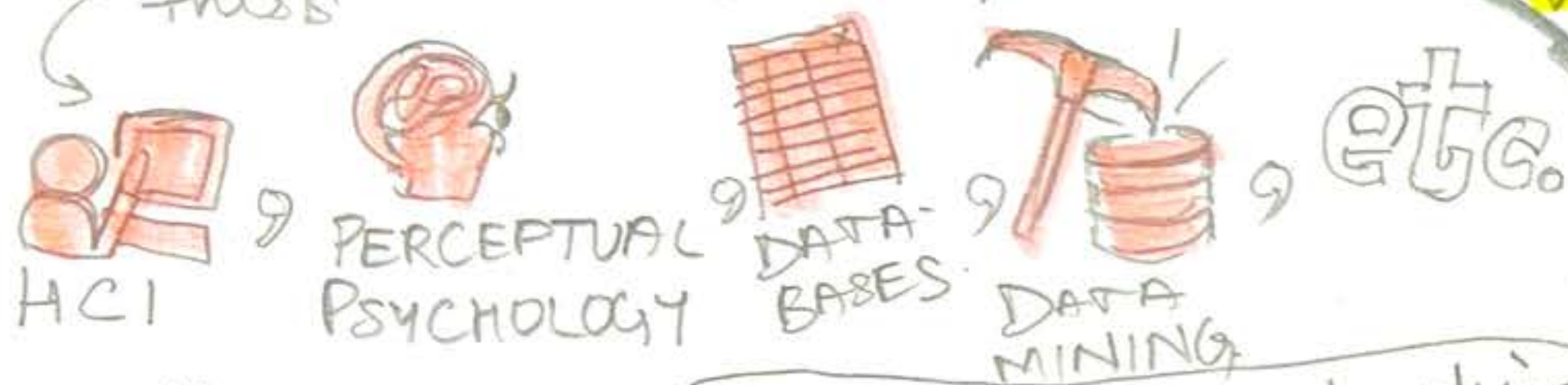


CH1 CH3 Perception? CH4 Viz Foundations.

VISUALISATION?

① A tool that is useful for analysis + communication.

PS: VIZ >>> just COMPUTER GRAPHICS.

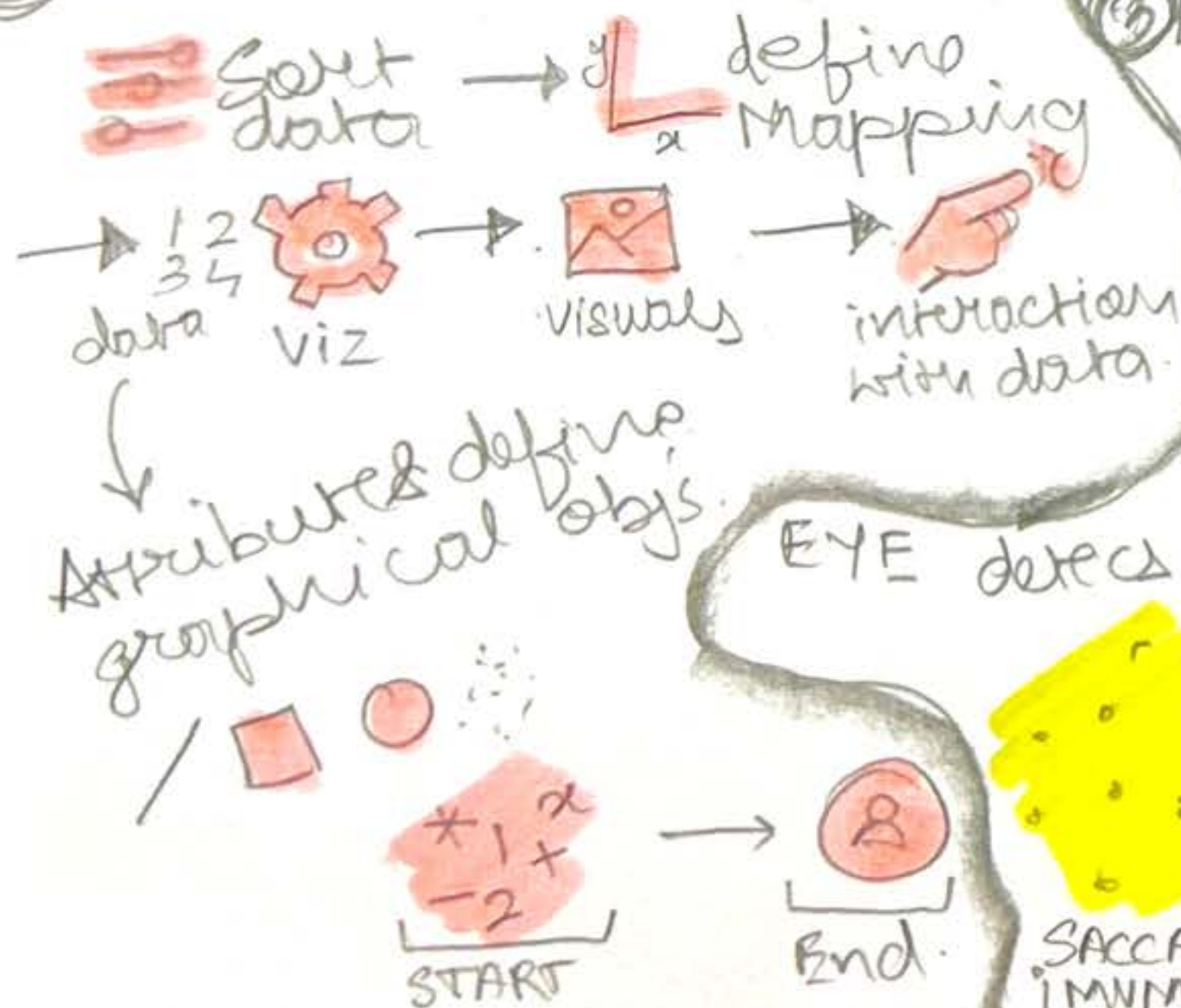


Basically...

INFO + GG =

Proper understanding in viewers

Viz Process?



① Everyone perceives things differently
different perceptions => illusions => improper relay of

PERCEPTION -> ASPECTS
WE CAN'T VIOLATE IN A VIZ.

② PHYSIOLOGY.
MAIN COMP. of vision.

PHOTORECEPTORS

Light Visible Spectrum
Anatomy of visual system.

EYE'S RETINA.

③ EYE Judges.

① SPATIAL & OBJECT PROPERTIES

④ Counting

EYE detects intensities ratio (BLIND SPOTS)

TASK OF 200-250ms

Better power to perform Relative Judgement

② TARGET

③ BOUNDARY

USEFUL FOR Dimensional data

TECHNIQUES.

2D-3D: Bar charts.
Geometric: Scatterplots
Iconic: Stars.
Dense pixel displays
Stacked displays.

② VARIABLES

- ① POSITION IN GRAPH
- ② MARK
- ③ SIZE
- ④ BRIGHTNESS
- ⑤ COLOUR
- ⑥ ORIENTATION
- ⑦ TEXTURE
- ⑧ MOTION

③ TAXONOMIES: convey classification
KELLER & KELLER v/s. SHNEIDERMAN.
Takes into consideration
Overview -> zoom -> Filter -> details -> Relationship -> History

④ CLASSIFICATION OF VIZ

⑤ Interactive techniques

① DATA PROCESSING.

RAW -> usable
=> computer-edible.
=> 0 errors
=> 0 missing data.

* MAPPING.

- Geometry
- Colour
- Sound

* EXPRESSIVENESS

$0 \leq M_{exp} \leq 1$
Mexp.

* RENDERING

Computer graphics.

* EFFECTIVENESS.



<https://www.google.com/search?q=Dense+Pixel+display&tbm=isch&sa=X&ved=2ahUKEwiUkcTbuJuAAxVybmwGHcBPDRYQ0pQJegQIDRAB&biw=1512&bih=866&dpr=2>

<https://www.google.com/search?q=treemap+visualization&tbm=isch&sa=X&ved=2ahUKEwil0l31uZuAAxWFT2wGHZHpDwgQ0pQJegQIDBAB&biw=1512&bih=866&dpr=2#imgrc=HzgRluSo-2UQYM>