## Consciousness the hard problem

when our cognitive systems [process] visual or auditory information, we have visual or auditory experience - the quality of deep blue or the sensation of middle C? How can we explain why there is something it is like to entertain a mental image or to experience an emotion?

So this is about *Qualia*, right?

#### Part 1

visual or auditory **experience** - the **quality** of deep blue or the sensation of middle C? . . .why there is **something it is like** to entertain a mental image or to experience an emotion?

Qualia – limited function contingent nature not a **central** problem

that experience arises from a physical basis,

ie isn't itself physical?

Why should physical processing give rise to a rich inner life?

ie subjective not objective

#### Part 2

that experience arises from a physical basis, Why should physical processing give rise to a rich inner life?

Sensory experience is physical,

reliable, predictable, objective

Why is it that . . .?

It seems objectively unreasonable

He can't see why

#### Part 3

Why is it that . . .?
It seems objectively unreasonable

Our mode of perception and conscious activity generally confers an evolutionary advantage

#### Part 1: Importance of Qualia

```
No qualia in
```

Getting information

Planning

Problem solving

Making something

Communicating

Remembering (unless of perception)

Just in sensory perception

But emotion?

Not a stage in a process (eg vision)
But a state

being angry  $\equiv$  feeling angry

But emotion?

being sad  $\equiv$  feeling sad

When strong

But otherwise – an attitude, no quale

## Dear Linda, I am very sorry to hear

Why, there's Baretti, who is to be tried for his life to-morrow, friends have risen up for him on every side; yet if he should be hanged, none of them will eat a slice of plum-pudding the less.

Sir, that sympathetick feeling goes a very little way in depressing the mind.

Samuel Johnson

#### But emotion? a state **being** angry **≡ feeling** angry

And easily explicable physically a surge of chemicals

Alcohol or Adrenaline Cortisone or cocaine

#### Qualia

Light waves register as Vision

Air waves register as Sound

Physical contacts register as Touch

Chemicals register as Taste, Smell











## Sight and Sound

and Mating



Qualia – shmalia

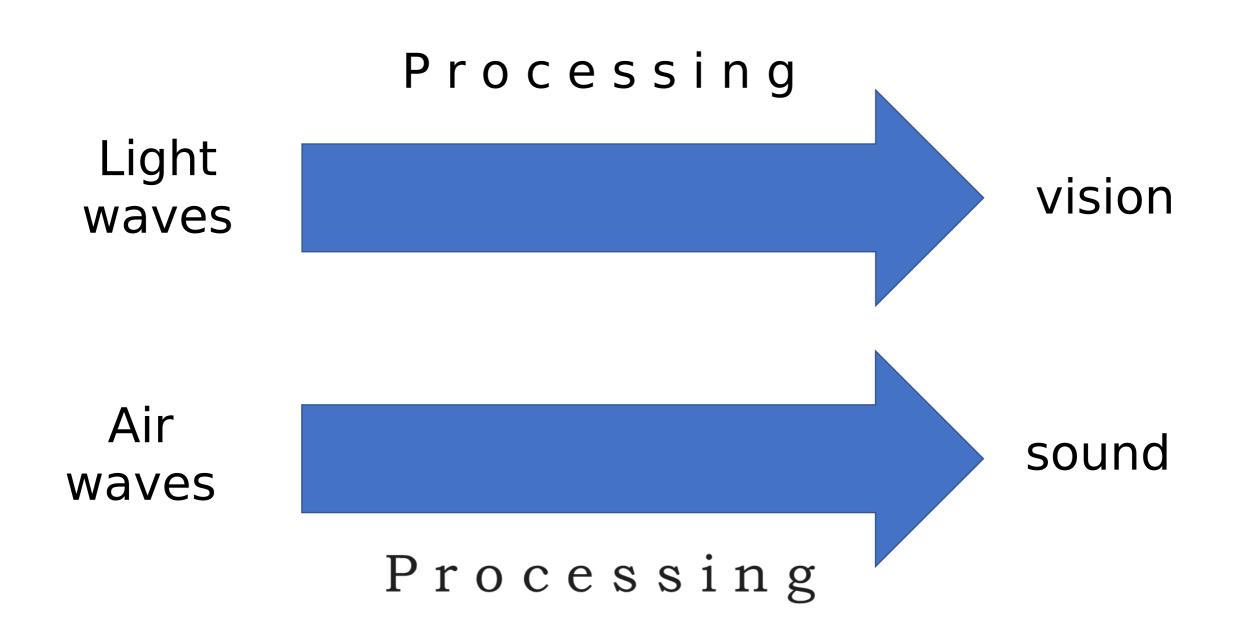
no big deal!

(end of part 1)

#### Part 2 Status of Sensory Experience

a physical process

If not, **what?**And how interacting with matter?













































(end of part 2)

#### Part 3

Why is it that . . .?
It seems objectively unreasonable

Our mode of perception and conscious activity generally confers an evolutionary advantage





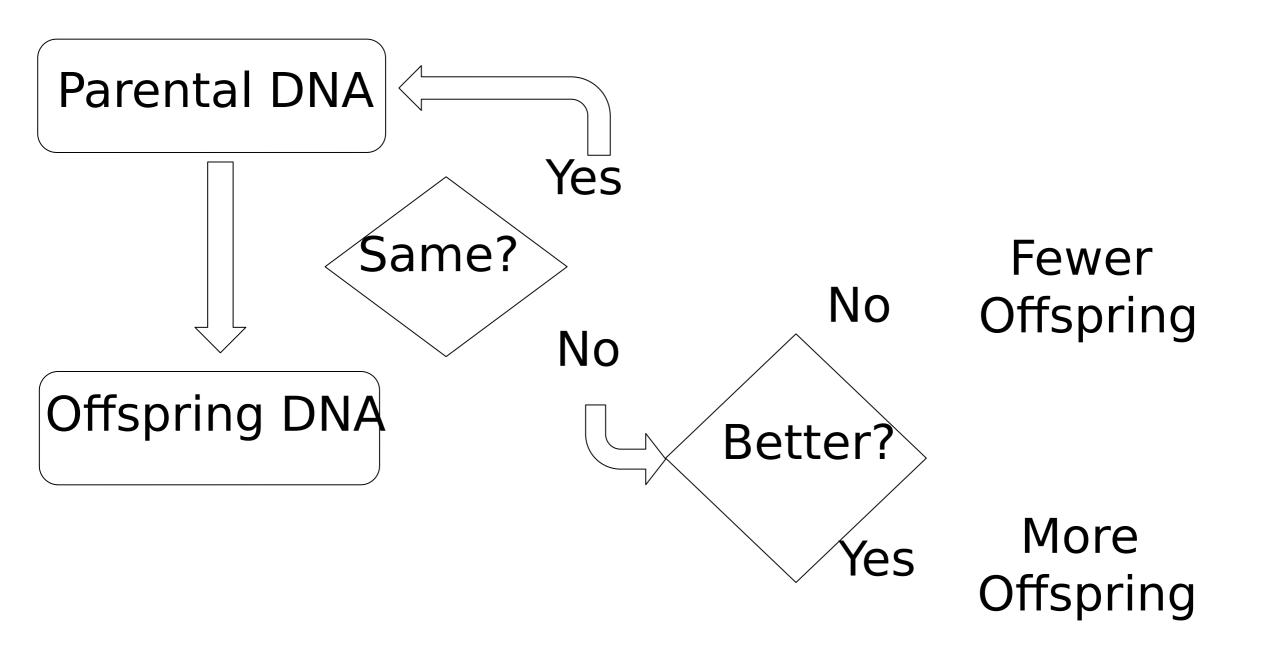


#### Why?

How come?



What for?





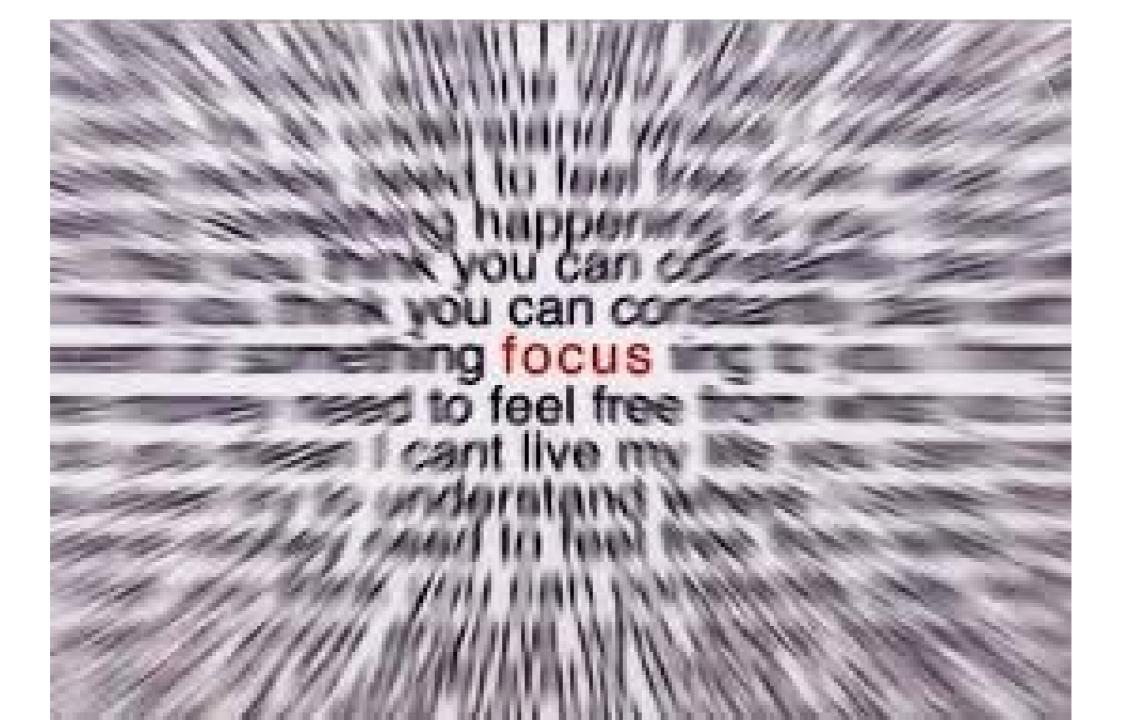
Whenever x, do y again

**Un**conscious processing and response

#### Selected focus

on

Edited version



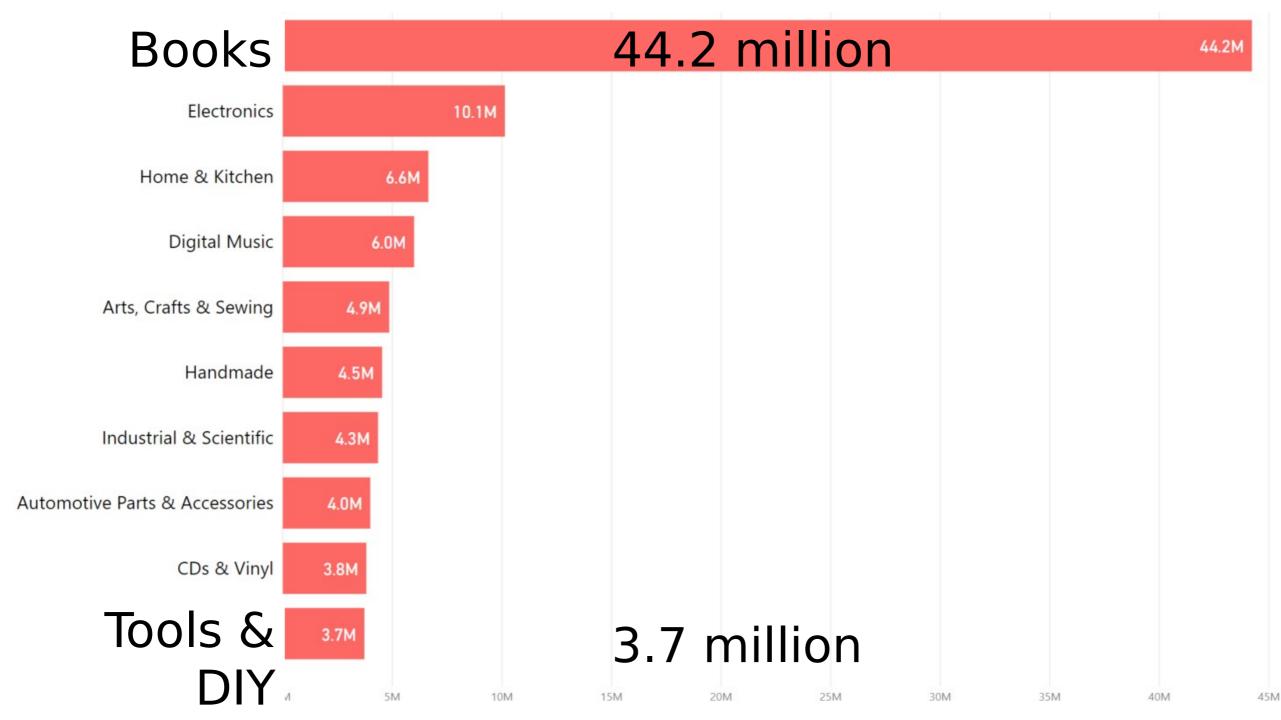




take this sequence of precisely one hundred characters and using only the english alphabet and space take this sequence of precisely one hundred characters and using only the english alphabet and space

## Ignoring case and punctuation, 27 options per place

136,891,479,058,588, 000,000,000,000,000 000,000,000,000,000, 000,000,000,000,000 000,000,000,000,000 000.000.000.000.000. 000,000,000,000,000 000,000,000,000,000 000,000,000,000,000, 000,000,000





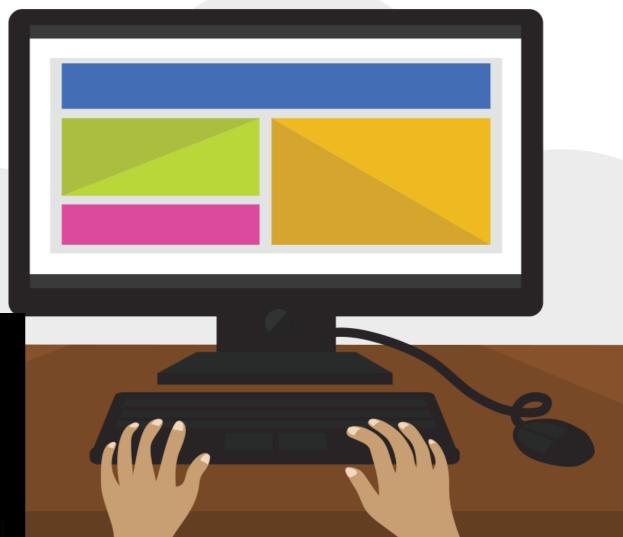
In time ✓
Last time?✓
Price✓
Shareable?✓



Colour X
Insurance X
Packaging X
Shape X
Weight X

#### **User Interfaces**





#### **Conscious** processing and

response Consider factors *a,b,c* and plans *p, q, r* And **this** time . . .

Neural network

Whenever x, do y again

**Un**conscious processing and response

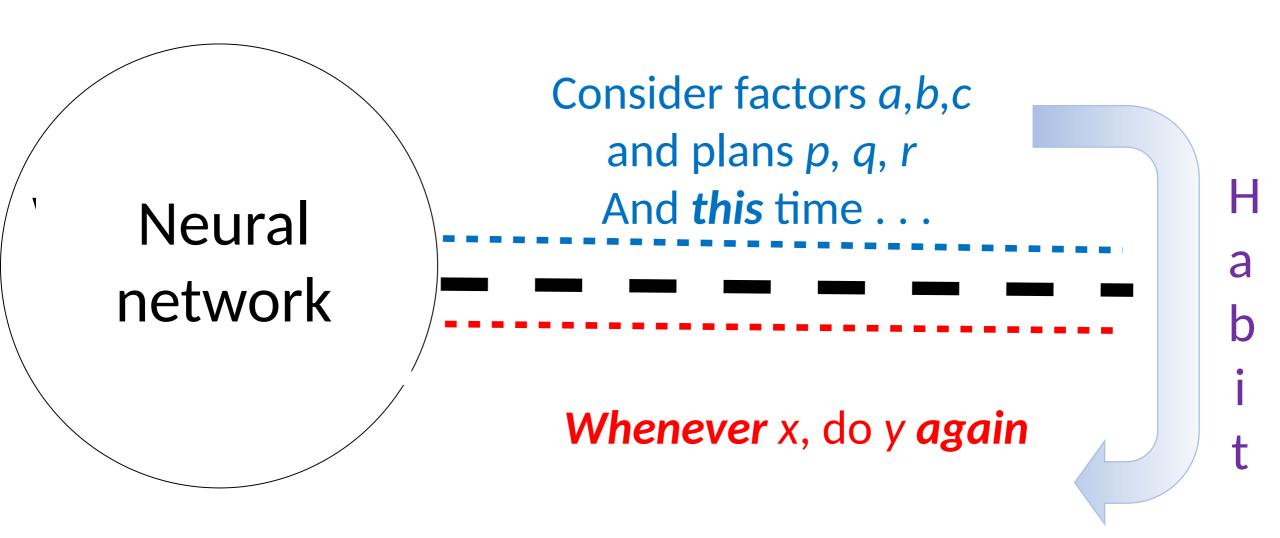
### Consciousness -

Marvel not Mystery

# Consciousness the hard problem

i.e?

#### Conscious processing and response



Unconscious processing and response