

TOPIC 2: Perception

LI: What factors affect our perception?

Starter

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| 1. What are depth cues called that use one eye? | |
| 2. Name two binocular depth cues. | |
| 3. What type of illusion is the 'Necker Cube'? | |
| 4. What is a fiction illusion? | |
| 5. What monocular depth cue looks at items that block other items? | |
| 6. Who said that perception is innate? | |
| 7. Who said that perception comes from past experiences? | |

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1. What are depth cues called that use one eye?	Monocular
2. Name two binocular depth cues.	Convergence, Retinal Disparity
3. What type of illusion is the 'Necker Cube'?	Ambiguity
4. What is a fiction illusion?	See something that is not there
5. What monocular depth cue looks at items that block other items?	Occlusion
6. Who said that perception is innate?	Gibson
7. Who said that perception comes from past experiences?	Gregory

Factors that affect our perception

There are several factors that can affect our perception of something at any one time. We are going to look at just a few, but there are lots.

- 1) Culture
- 2) Perceptual set
- 3) Expectation
- 4) Emotions
- 5) Motivation

Learning Intentions

4/5 (All) – List some factors that affect our perception.

6/7 (Most) – Explain how these factors can affect a person's perception.

8/9 (Some) – Provide evidence and evaluation for each of these factors. Link these factors to perception theories.



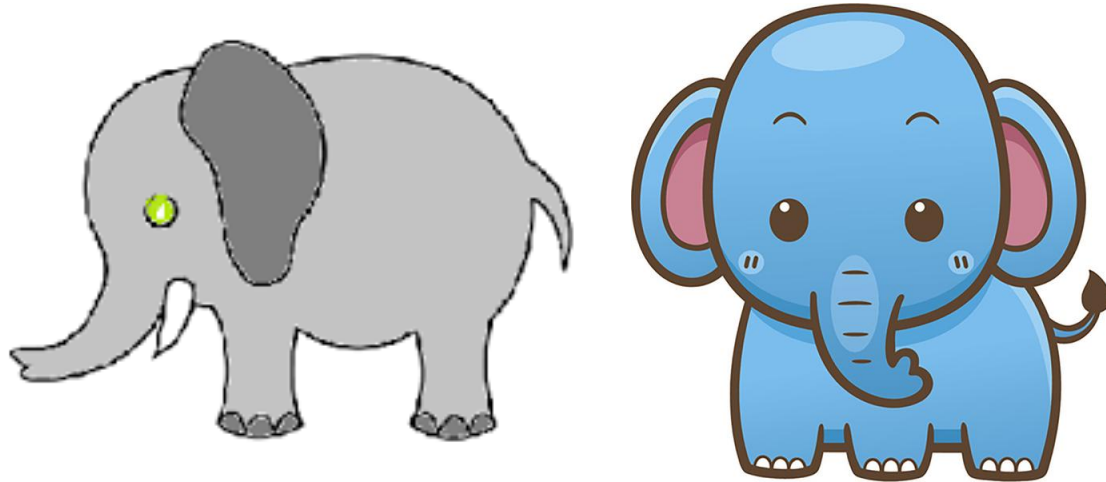
What is your initial confidence towards the LIs?

1. Culture and perception

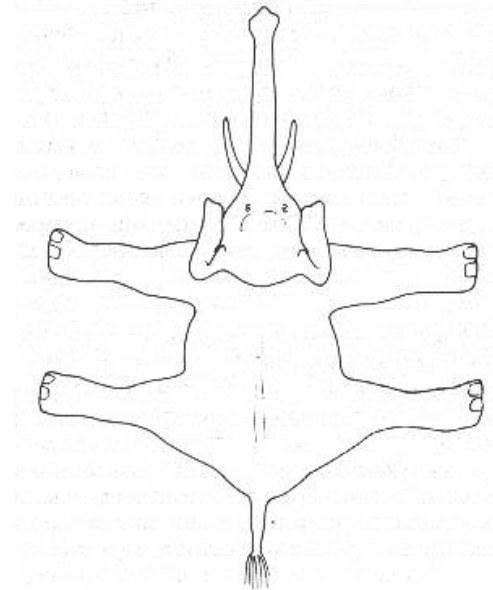
Culture – a person's traditional upbringing which changes based on where they are from.

When asked to draw an elephant, people draw different things. Why?

British children draw it like this!



African children draw it like this!



Explaining the Pictures

English children draw a 2D, cartoony, unrealistic elephant because we live in a modern Western society where we grow up with lots of 2D line drawn cartoons on TV and in books. So, based on your culture and experience, this is the correct way to draw an elephant.

A child from a traditional African tribal society will have drawn it differently as they do not have picture books or cartoons. They normally draw the animal out flat as they perceive the whole animal – 4 legs, 2 eyes, 2 ears etc.

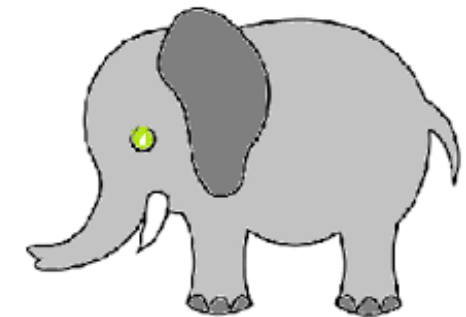
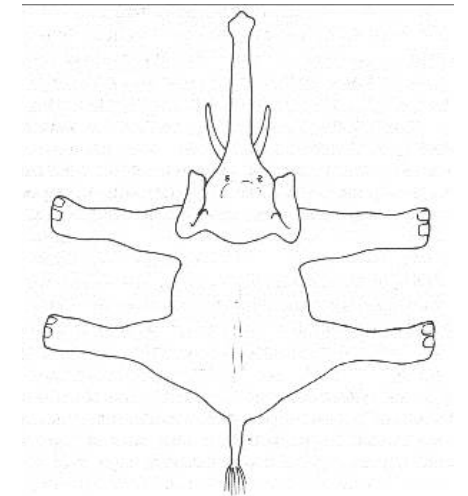
So, our perception has been shaped by nurture and experiences.

That sure sounds familiar... Gregory!



Culture and Perception Task

1. Draw the two elephants
2. Label who would draw each elephant.
3. Explain why they would draw an elephant like this.
4. Explain whose theory this idea supports and why.



Academic Vocabulary

Culture

Upbringing

Experiences

2. Perceptual Set and Expectation

Perceptual set

The state of being ready to perceive certain objects rather than others.

E.g. being in a bad mood can make us more ready to remember unpleasant things.

How was perceptual set used in the study?

Expectation

The beliefs we have about what we are going to see/experience.

E.g. if shown lots of pictures of old ladies, we are more likely to view an old lady in the illusion.

How was expectation used in the study?



Bruner & Minturn (1955)

Aim

To see if our expectations can affect perception

Method

24 students. Experiment based on 'recognising numbers and letters'. Letters or numbers were flashed onto a screen very fast. Students had to write the letter/number ASAP. The key stimulus was the broken B/13.

Results

When Pps were expecting a number, they perceived a 13.

When they were expecting a letter, they perceived a B.

Conclusion

Our expectations directly affect what we will perceive.

Try this study on someone at home!

- Make a quick PowerPoint or get lots of paper.
- Make lots of numbers flash up. Then flash up the Broken B/13.
- Then make lots of letters flash up. Then flash up the Broken B/13 again.
- Get one participant for each condition and see what they think the B/13 is!
- Did it work?



Understanding Bruner & Minturn (1955)

- 1) Draw the broken 'B/13' and label it with what happened in the study.
- 2) Label why this happened – **perceptual set** and **expectation**.
- 3) When expecting a number, 22 out of 24 perceived a 13. How would you calculate this as a percentage?
- 4) How would you evaluate this study?



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Challenge

Explain which perception theory this study supports and why.

Evaluation Answers!

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Highly controlled so we know what caused the change in perception.

Supports Gregory's Perception theory that past experiences influence perception

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Low sample size – cannot generalise these results to everyone.

Low ecological validity. Not a natural task so behaviour may be unnatural.

Create your own study:

Based on the study by Bruner and Minturn, we could run lots of similar studies. Plan and create a similar study for the following image:

What stimuli will you need?

How will you run the study?

What do you expect to happen?

Create your study and run it on someone at home!

Did their experiences, perceptual set and expectation affect their perception?



3. Emotions and Motivation

Emotions

The moods or feelings a person is experiencing.

E.g. being in a bad mood can make us more ready to perceive the bad things in life.



Motivation

The drives and needs that cause a person to act in a particular way.

We have lots of different motives that affect our behaviour perception. What motivates your behaviour and perception?

Gilchrist & Nesberg (1952)

Aim

To investigate how motivation (hunger) affects our perception.

Method

26 student volunteers. Lab experiment where they had to either:

- 1) Eat no food for 20 hours.
- 2) Eat normally for 20 hours.

Each Pp was shown 4 colour images of meals for 15 seconds each. Then they saw them again, but the brightness had changed.

They had to adjust the brightness so it was the same as the original image.

They were tested after 6 hours, and after 20 hours.

Results

Those who didn't eat, judged the pictures to be brighter as they got hungrier.

After 6 hours – brighter

After 20 hours – even brighter

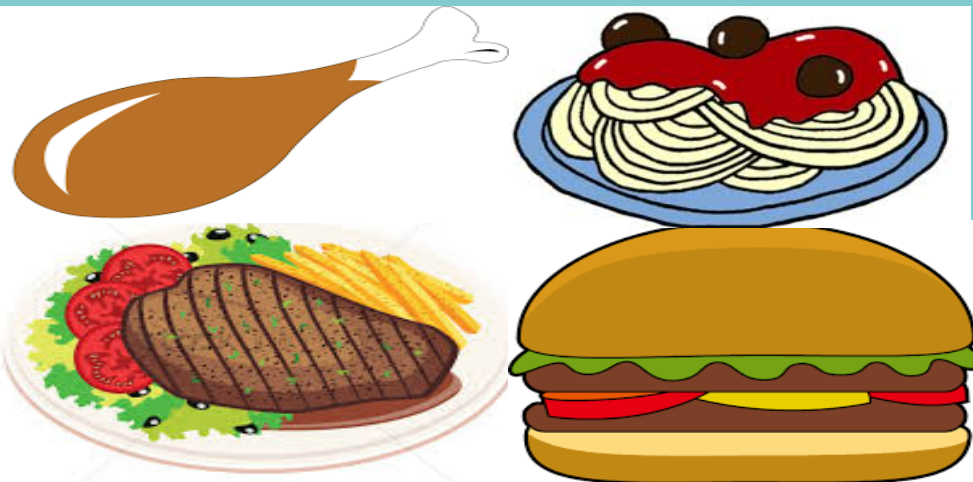
Conclusion

Hunger (motivation) can affect the way we perceive things.

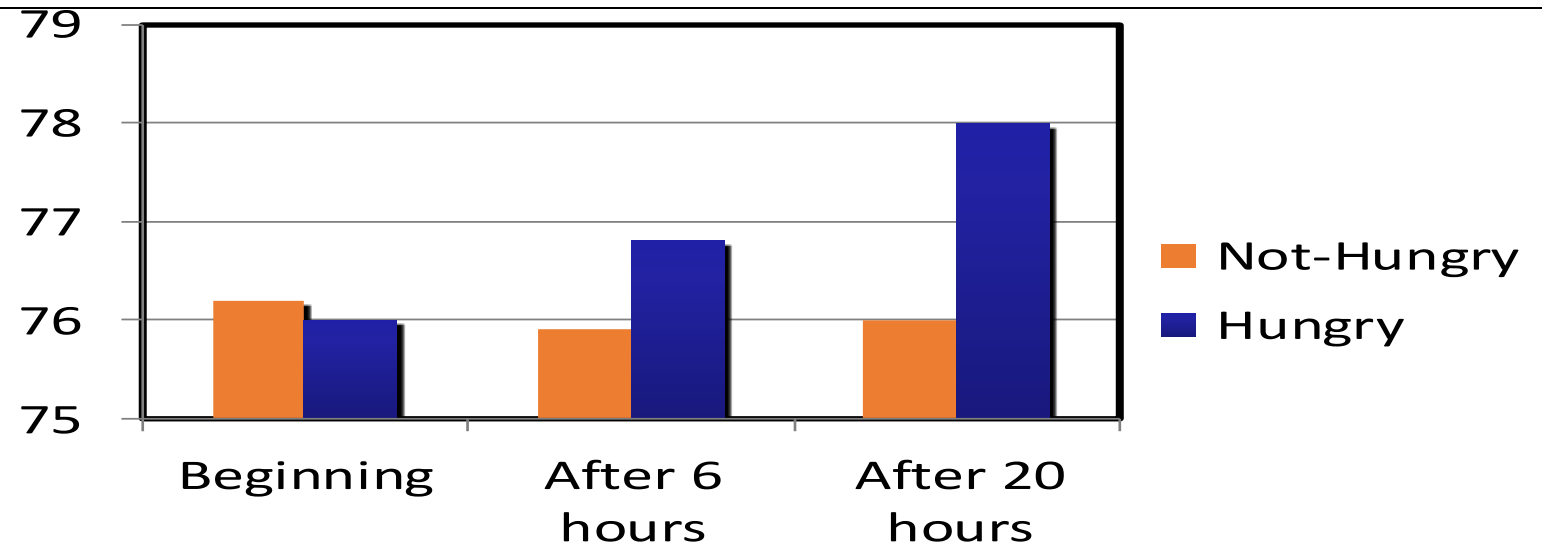
Understanding Gilchrist & Nesberg (1952)

- 1) Draw the 4 meals that were shown to the Pps and label what happened to the brightness.
- 2) Copy the bar chart onto graph paper and stick it into your book.
- 3) How would you evaluate this study?

Challenge
Identify as many things as you can that the psychologist should have controlled to keep the study fair and standardised.



A graph to show the change in brightness perception between hungry and not-hungry Pps.



Evaluation Prompts

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Why did the task have ecological validity?

Lab studies are good because...

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But did the setting have ecological validity?

Sample?

Exam Questions

Download the exam questions document from the perception section of the website and work through these to practise your perception learning!

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Consolidation Tasks

1. Create a poster for each of the key studies to revise what happened in each study.
2. Create a mind map that summarises your learning on the 5 factors that affect perception.

Make sure that you are using your academic vocabulary

Academic Vocabulary

Factors
Perception
Culture
Perceptual set
Expectations
Emotions
Motivation
Upbringing
Experiences

Extra Perception Work

Focus on the exam questions to ensure you are confident on:

- The difference between sensation and perception
- Monocular and binocular depth cues
- Gibson's theory (and evaluation)
- Visual illusions
- Gregory's theory (and evaluation)
- Five factors that affect perception