

HPS203 NOTES TRIMESTER 1 2014
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HPS203 TOPIC 1: INTRODUCTION AND RECOGNISING OBJECTS

Define Cognitive Psychology and list the cognitive processes included

- **Cognitive Psychology**: the scientific study of the acquisition, retention, and use of knowledge

Explain the advantages and disadvantages of introspection and behaviourism

Introspection

- William Wundt and Edward Bradford Titchener- main researchers
- 'Introspect'- to look within
 - To observe and record the content of our own mental lives and the sequence of our own experiences

Behaviourism

- Uncovered a range of principles concerned with how behaviour changes in response to various stimuli (including 'rewards' and 'punishments')
- John B Watson – prominent behaviourist, focused on learning and learning histories, was intrigued by babies' behaviour and learning e.g. grasp reflex

<i>What did behaviourists measure?</i>	
Behaviour	Observable in the right way- objective data
Stimuli	Also measurable, recordable, physical events- objective data
Learning history	Stimuli experienced day after day and behaviours produced each day can be recorded → record how pattern of behaviour changes with passage of time and with accumulation of experience

	<i>Advantages</i>	<i>Disadvantages</i>
Introspection	We need to talk about the mental world if we hope to explain behaviour	Some thoughts are unconscious- introspection is the study of <i>conscious</i> events and can tell us nothing about <i>unconscious</i> events Testability of claims is often unattainable with introspection- not acceptable for the purposes of science
Behaviourism	Measures behaviour and stimuli- objective data	By late 1950s psychologists were convinced that a lot of behaviours could not be explained in objective terms → The way people act and feel are guided by how they interpret/understand the situation, and not by the objective situation itself → we might regularly misunderstand why people are doing what they're doing We need to understand subjective entities if we want to understand behaviour

Describe Kant's Transcendental Method

- Immanuel Kant (1724-1804)
- **Transcendental Method**: you begin with the observable facts and then work backward from these observations
 - How could these observations have come about?
 - What must be the underlying causes that lead to these effects?
- 'Inference to best explanation'

- Visible effects from an invisible cause

Describe the working memory system and its components

- **Working memory**: the storage system in which information is held while that information is being worked on.
 - All indications are that working memory is a system, not a single entity, and that information is held here via active processes, not via some sort of passive storage
 - Formerly called 'short-term memory'
 - Instant availability of information is promoted by the working memory's size- small capacity
- **Working memory system**: a system of mental resources used for holding information in an easily accessible form
 - The *central executive* is at the heart of this system, and the executive then relies on a number of low-level assistants, including the *visuospatial buffer* and the *articulatory rehearsal loop*
 - Proposed by Baddeley and Hitch
 - **Central executive**: the hypothesised director of the working-memory system. This is the component of the system needed for any interpretation or analysis. Helped out by a number of low-level 'assistants' which provide storage.
 - **Articulatory rehearsal loop**: draws on subvocalised (covert) speech, which served to create a record in the phonological buffer
 - Requires two elements: subvocal speech and the phonological buffer
 - **Subvocalisation**, in turn, creates a representation of these numbers in the **phonological buffer** – an auditory image is created in the 'inner ear'- this image will fade away after 1-2 seconds, but subvocalisation can be used again to create a new image → sustaining the material in this buffer

Explain how span tasks tell us about the capacity of working memory and how the errors that we make tell us about its nature

- **Span test**: a procedure used for measuring working memory's holding capacity
 - Generally people start making errors with sequences of seven or eight letters
 - Confirms hypothesis that working memory is limited in size
 - We get similar sound-alike confusions if the letters are presented visually