# **Basic Psychology**

DR. ADAM DIERCKX
CONSULTANT MEDICAL PSYCHOTHERAPIST
&
DR. OLIVER WILKINSON
CT3 IN PSYCHIATRY

#### Overview

- For what is it a 'basic' foundation?
- An understanding of...
  - General Mental Disorder
  - Mental Health
  - Therapies
- Background study

# Today

• Session 1:

**Learning Theory** 

• Session 2:

Perception, Memory & Information Processing

Session 3:

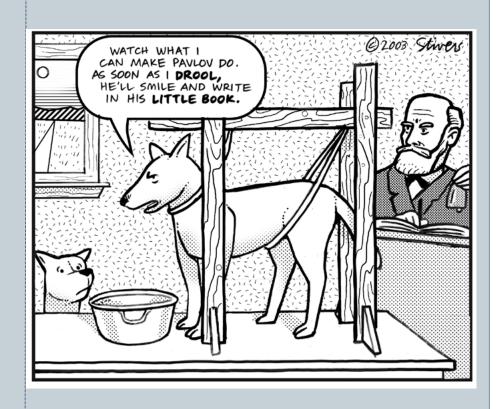
**Emotion & Motivation** 

# Learning Theory

- Classical Conditioning
- Operant Conditioning
- Aversive learning and Punishment
- Control & cognition

# Classical conditioning

- Stimulus & Response
- (UCS/CS) & (UCR & CR)
- Trial
- Acquisition
- Reinforcement
- Extinction & Recovery



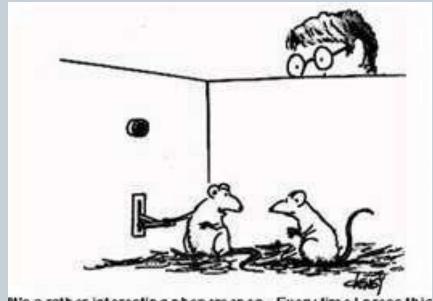
# Classical Conditioning (2)

- Second order conditioning
- Generalization/ Discrimination
- Conditioned fear

- Predictability & Cognitive factors
  - Contiguity
  - Predictability
  - Redundancy / blocking
  - Emotional factors
- Models of conditioning
- Constraints

# **Operant Conditioning**

- Learning that a behaviour (response)
   OPERATES on the environment
- Thorndike's Law of effect
- BF Skinner
  - Pigeons
  - Skinner box



It's a rather interesting phenomenon. Every time I press this lever, that post-graduate student breathes a sigh of relief.

# **Operant Conditioning**

#### Basic OC

- Baseline
- Reinforcement
- Extinction
- Discrimination
- Rate of response

#### Advanced OC

- Shaping
- o Reinforcers (1º / 2º)
- Generalization
- Schedules

### Aversion & Punishment

- Aversive conditioning
- Punishment
- Escape learning
- Avoidance learning
- Expectations

# Control & Cognition

- Seligman's dogs
- Contingency learning
- Biological constraints
- Complex learning

## Perception

- Terminology
- Gestalt
- Object constancy
- Depth Perception
- Perceptual set
- Psychopathology

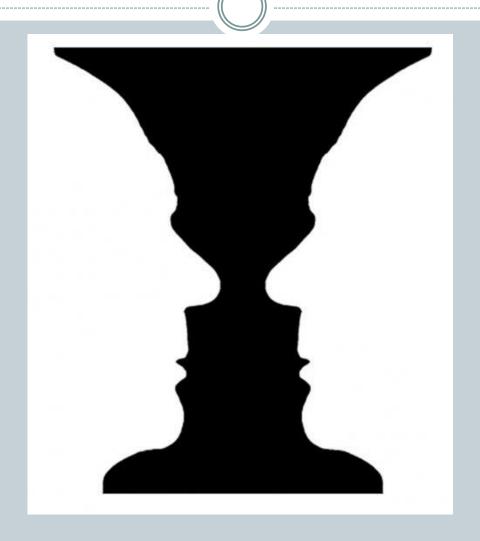
# Perception: Terminology

- Absolute threshold
- Difference threshold
- Weber's law / Fechner's law
- Signal detection theory

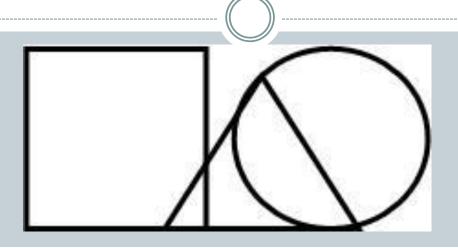
# Perception: Gestalt Psychology

- Whole different from sum of parts
- Simplicity
- Closure
- Continuity
- Similarity
- Proximity
- Figure Ground differentiation

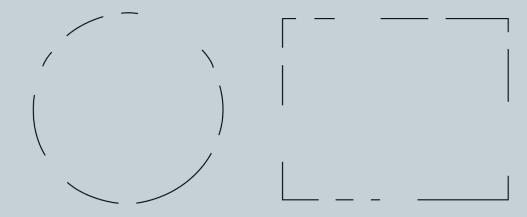
# Figure – Ground differentiation



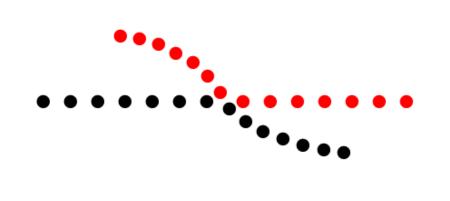
# Simplicity - 'Pragnanz'



# Closure



## **Continuity**



# **Similarity**

#### 

# **Proximity**



# Perception: Object constancy

- Shape
- Size
- Light / Colour
- Location

# Perception: Depth Perception

- 2x 2D images lead to 1x 3D perception
- Convergence
- Relative size / brightness
- Parallax
- Interposition
- Perspective

# Perception: Perceptual Set

- Motivational state
- Perceptual stimuli perceived according to expectation

# Perception: Psychopathology

- Misperceptions
- Intersubjectivity

# **Information Processing**

- Data driven processing
- Concept driven processing
- Attention
  - Selected
  - Divided
  - Sustained
  - Controlled
  - Automatic

### Memory

- Encoding
- Storage
  - Sensory memory
  - Short term (working) memory
  - Long term memory
- Retrieval
- Forgetting

## Long Term Memory

- Declarative
  - Episodic
  - Semantic
- Non-declarative
  - Procedural
  - Emotional

### Memory

- Encoding
- Storage
  - Sensory memory
  - Short term (working) memory
  - Long term memory
- Retrieval
- Forgetting

#### Motivation

- Extrinsic motivational theories
  - Drive reduction
- Intrinsic motivational theories
  - Optimal arousal
  - Cognitive dissonance
  - Attitude discrepant behaviour
  - Need for achievement
- Hierarchy of need...

# Maslow's Hierarchy of need

Selfactualisation

Aesthetic

Cognitive

Esteem

Belonging

Safety

Physiological

#### **Emotion**

- Theories of Basic Emotion
  - Early theorists
  - Plutchik
  - Panksepp
- Purpose of emotion
- Clinical Implications

#### Theories

- Early theories
  - o James-Lange
  - o Cannon-Baird
  - Schachter-Singer
- Plutchik
- Disgust-Angry-Anticipating-Joy-Accepting-Fear-Surprise-Sad
- Panksepp

# Panksepp

- Basic Emotion Control Systems x7
- SEEK
  - CURIOSITY; LUST; PLAY
- FEAR
- PANIC
  - SEPARATION DISTRESS; CARE
- RAGE

#### **Emotion**

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# Summary

- Basic Psychology topics
- Application to Psychiatry
- Caution...

• Any Questions?