

Experiment 1

Examining the effects of learning history on Behaviour

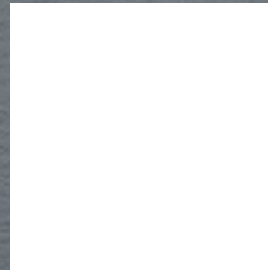
Biological System



Objectives

Design a specific history of interacting with the environment and then present stimuli in a test to see what happens.

Biological System



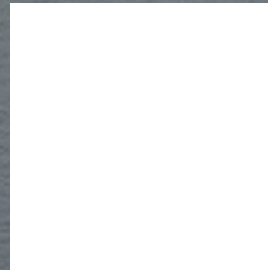
Add a Visual Stimulus

Record changes in physiology

Biological
System



What colour?



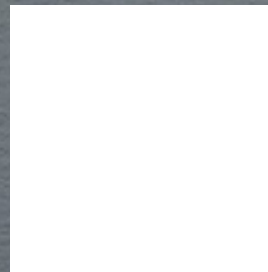
And an Auditory Stimulus

Record changes in physiology

Biological
System



What colour?



+

“WHITE”

Record changes in Verbal Behaviour

Voluntary
Behaviour?

Biological System



What colour?



“BLACK”

Voluntary Behaviour?

Biological
System

TEST



What do cows drink?



“MILK”



Voluntary
Behaviour?

Biological
System



Conclusion

“**Voluntary Behaviour**” is a term that is not very useful as a scientific category.

Why?

Because it does not offer an explanation for behaviour. In fact, it creates the **illusion** of having explained something.

Biological System



Conclusion

A more exhaustive explanation is found by looking at

1 Genetic make-up which determines the kinds of physiological changes that can occur.

2 The stimuli that defined the past interaction with the environment, which in turn controlled the kinds of physiological changes that took place.

3 The stimuli present in the current environment that interact with the effects of the history of physiological changes.

Implications

What might be concluded if you don't know the history?



Current Observation

You see someone say
“MILK” when asked what
cows drink simply ‘incorrect’
They are ‘stupid’
They are behaving
‘abnormally’

a better demonstration of control!

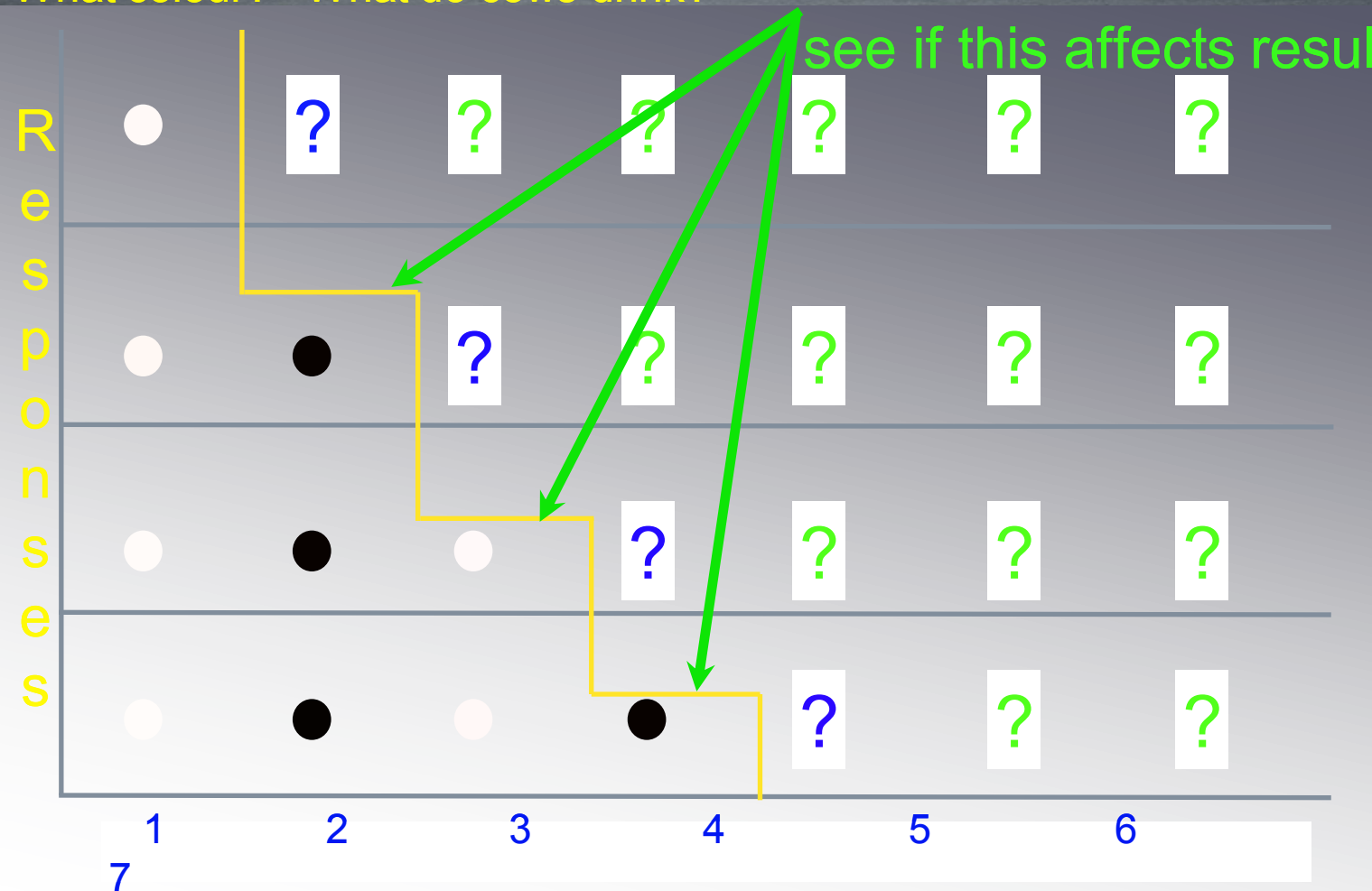
What colour? What do cows drink? Increase the number of trials to see if this affects results

Group 1

Group 2

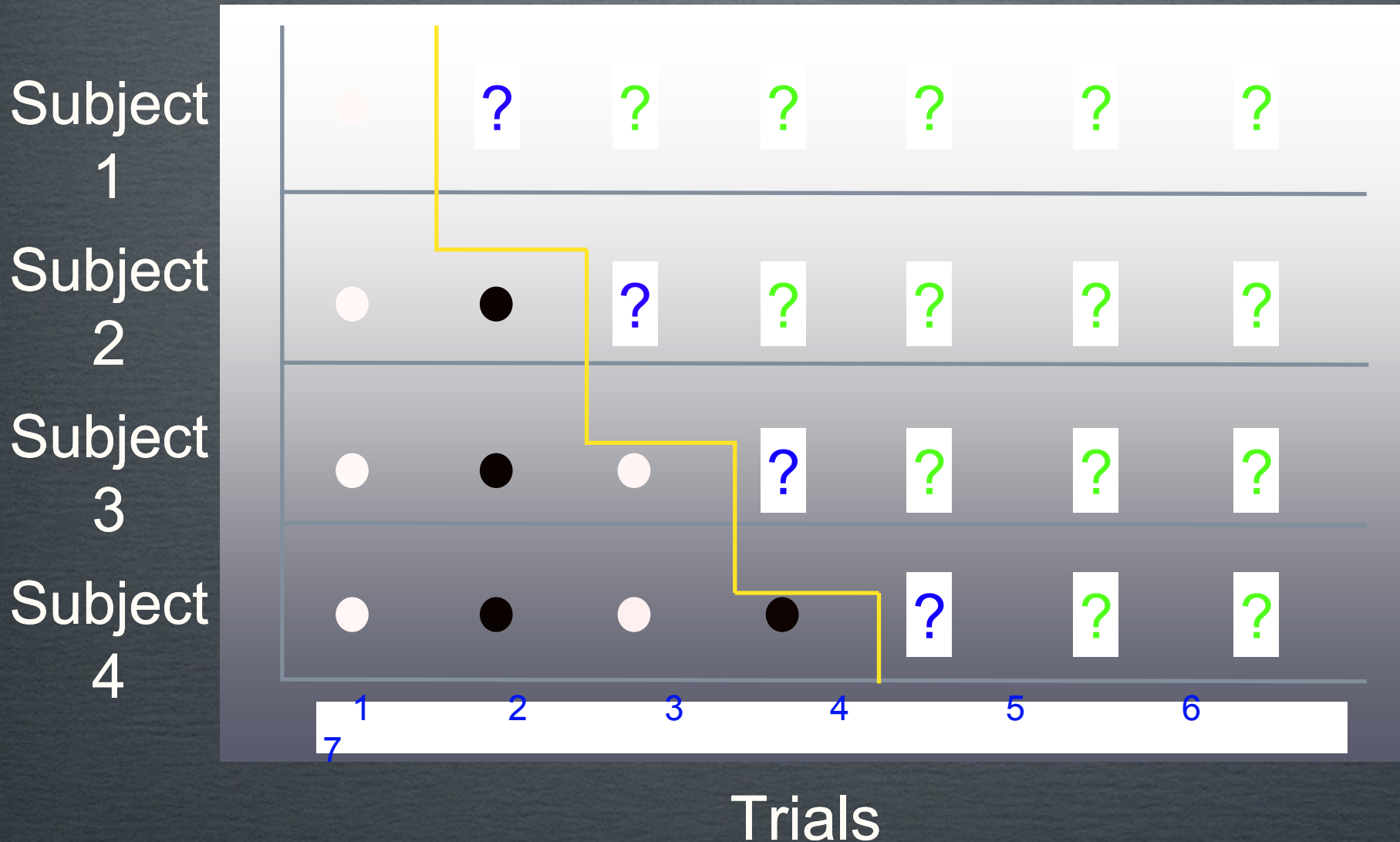
Group 3

Group 4

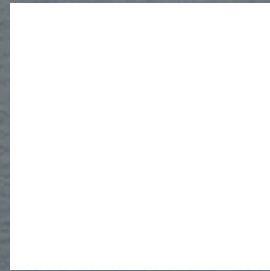


Trials

a better demonstration of control!



Biological System



We added a Visual Stimulus

Recorded changes in behaviour

Experiment 2

Examining the effects of learning history on
Behaviour

Biological
System



What would happen if we changed
the colour of the stimulus?

Record changes in behaviour again

Add a Stimulus

Biological System

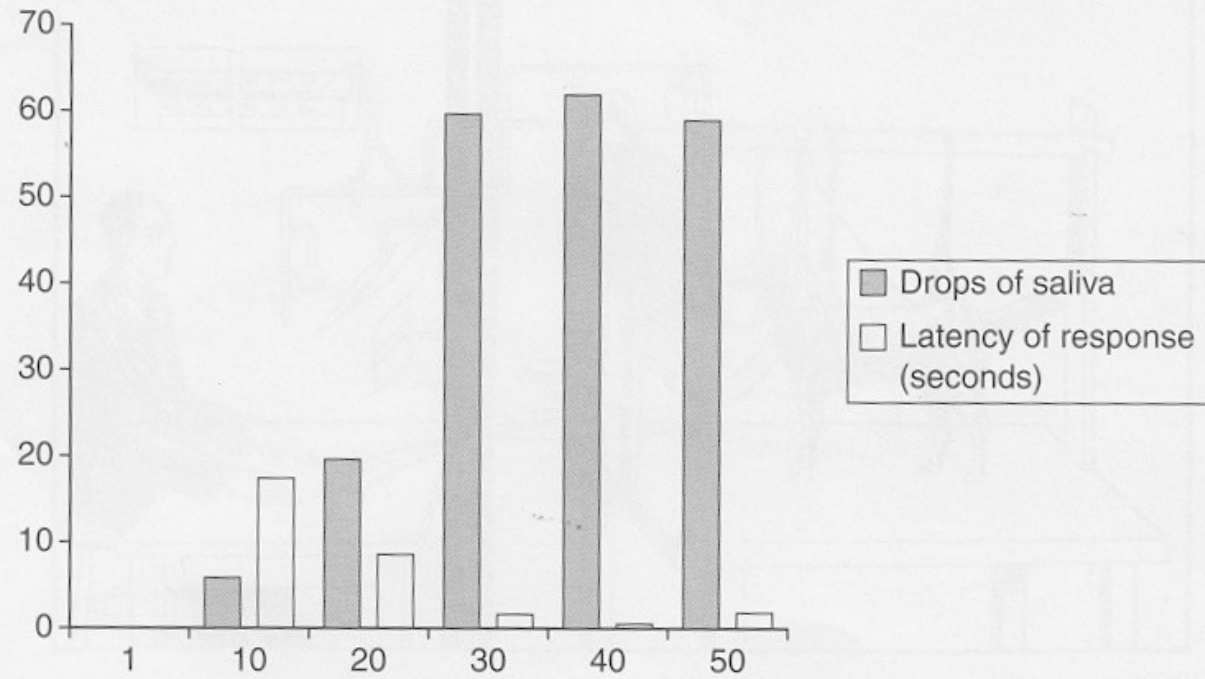


Figure 3.2 Data from Anrep's (1920) experiment: acquisition of a conditioned salivary response to a tone (see text for details of this experiment)

Record changes in physiology

Implications

Biological
System

History

Current Observation

Reflexive & Voluntary

behaviours can be studied

by learning how to control

them.

Doing this is at the heart of

the science of behaviour

analysis.



Implications

Biological
System

History

Current Observation

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