

AS lecture 3.1 - ~~Robotics~~ Cybernetics ①

- Intro into cybernetics
- it will continually crop up throughout the course

Cybernetics recognises how many systems
Neg feedback can be applied to

Everything on this module is influenced by
cybernetics

Like AS, it is cross disciplinary

Cybernetics led to AI & Robotics, control theory,
systems thinking, management science, info theory, fuzzy logic,
neural networks

Norbert Wiener = father of cybernetics

- named it, Book

Weiner → Bigelow → Rosenbluth

1943, Rosenbluth, Wiener; Behaviour, Purpose & Teleology

Attempt to provide a Behaviouristic account of what it means to have a purpose

"All purp behavior may be considered to require negative feedback"

"A uniform behaviouristic analysis is applicable to both machines & living organisms, regardless of the complexity of the behaviour"

Neural Networks - created by Warren McCulloch & Walter Pitts

"A logical calculus of the ideas immanent in nervous activity"

William Ross Asby

- Adaptive systems
- lectures about later