

CS344M

Autonomous Multiagent Systems

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Good Afternoon, Colleagues

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Are there any questions?

Logistics

- Office hours

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- Reading responses

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- Resources page

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- Programming assignment
 - How's it going?

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- Talks in the department:
 - Jeff Clune, Friday at 11am (2.402)
 - Cornell University
 - “Automatically generating regular, modular neural networks with computational abstractions of evolution and developmental biology”

Logistics

- Next week's readings up
 - Multiagent Systems – an overview
 - Another overview (optional)
 - Pushing Brooks' approach to MAS

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Writing Assessment

- What did you think of these readings?
- What was good about them?
- How could they have improved?

Writing

- Direct, articulate responses
 - Thesis sentence
 - Supporting argument
 - Demonstrate that you know what you're saying

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One way that TCA departs from Rodney Brooks' design principles is that TCA employs a central control module. TCA's central component routes messages to the various connected modules and maintains control information. Brooks' designs, on the other hand, connected perception directly to actions, bypassing any form of central control and also any central representation of the world.

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- Decision based entirely on the present

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 - True of Brooks' “reactive” agents?

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Subsumption Architecture

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Subsumption Architecture

(journal article, page 2)

Merkwelt



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- *Merkwelt* \sim “perceptual world”
- Every agent has its own *Merkwelt*.

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- *Merkwelt* \sim “perceptual world”
- Every agent has its own *Merkwelt*.
- Why should robots use a representation based on our *Merkwelt*?
- Do we know our own *Merkwelt*?

Modules

“When researchers working on a particular module get to choose both the inputs and the outputs that specify the module requirements I believe there is little chance the work they do will fit into a complete intelligent system.”

Does this apply to 3T?

Could the 3T apps have used subsumption?

- Why or why not?