

Big Words Don't Come Cheap

Project CyberSym I

An Agent-Based Simulation of Multi-Stage Production Processes

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Stafford Beer (1959)

All viable systems are necessarily
adaptive and self-regulating

Management Cybernetics

1



Salvador Allende (1970)

First elected socialist President of Chile

Nationalization of Industry

2



2

Salvador Allende (1970)

First elected socialist President of Chile

Nationalization of Industry



3



Project CyberSyn (1971)

Name from its main concepts:
Cybernetics and **Synergy**

4



Project CyberSyn (1971)

Name from its main concepts:
Cybernetics and **Synergy**

Cybernet. A network of telex machines

Cyberstride. Real-time statistical evaluation

CHECO. Economic Decision System



Project CyberSyn (1973)

Military Coup: The government is toppled, Allende is killed and the scientists working on CyberSyn are imprisoned

5



Project CyberSyn (1973)

Military Coup: The government is toppled, Allende is killed and the scientists working on CyberSyn are imprisoned

Project CyberSym: Under which parameter settings will an Agent-Based Simulation of Multi-Stage Production Processes adopt an optimal resource distribution network?

5



APPLE

Project CyberSym

Cybernetics and **Symbiosis**

Multi-Stage Word-Building



A



E



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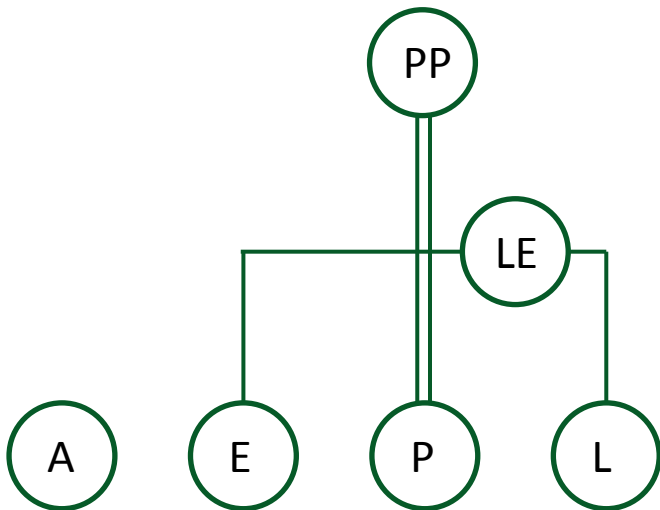
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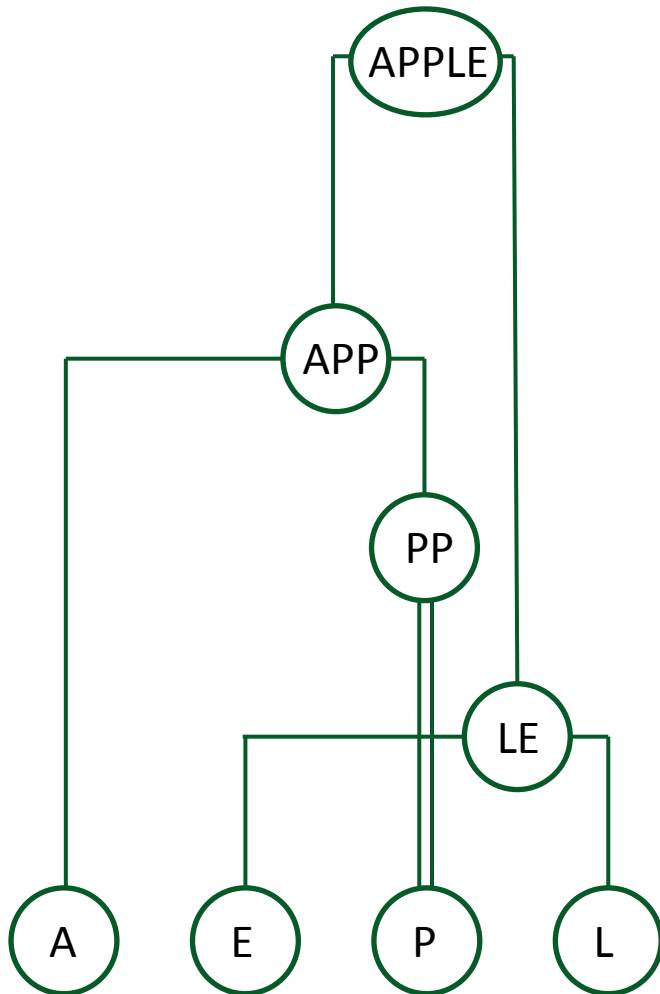
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Project CyberSym

Cybernetics and **Sym**biosis

Multi-Stage Word-Building

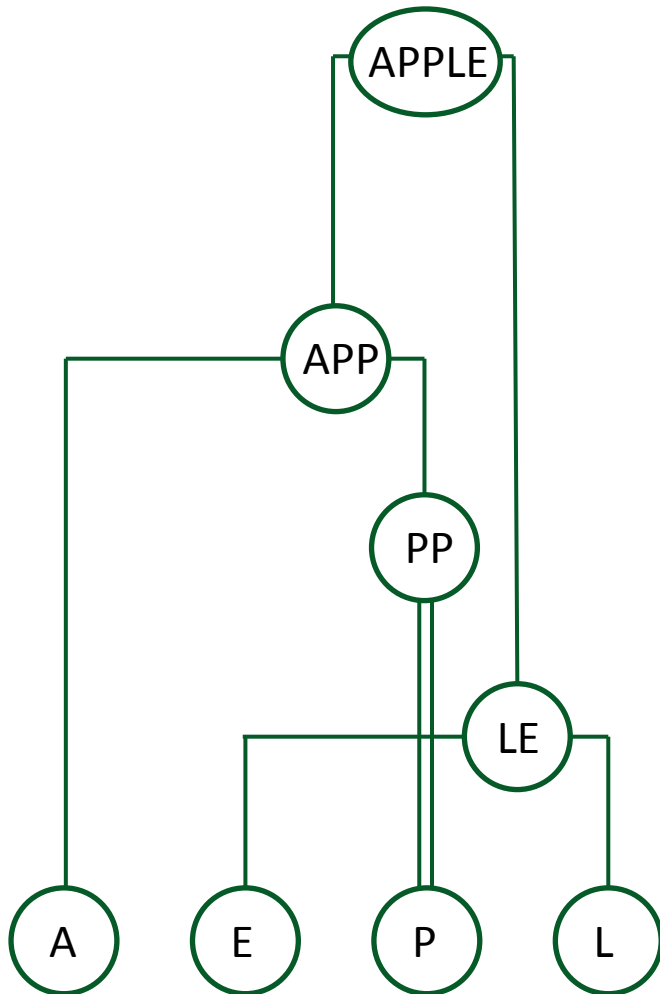




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Cybernetics and Symbiosis

Multi-Stage Word-Building

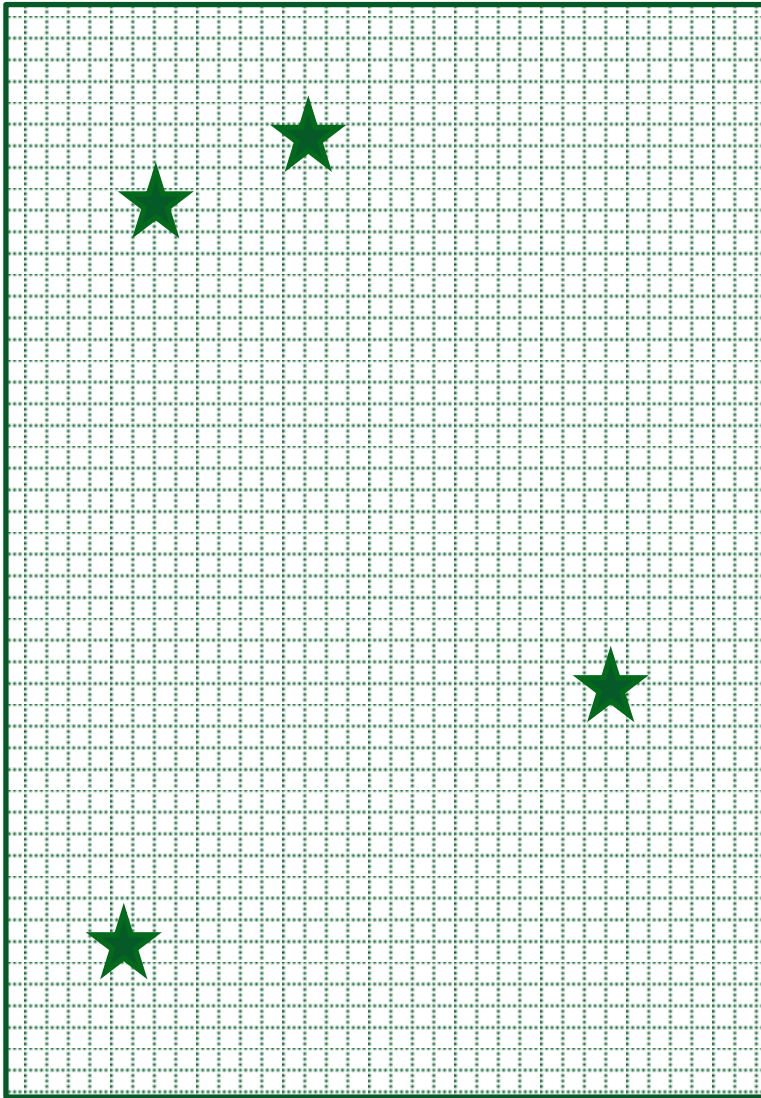


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Cybernetics and **Symbiosis**

Multi-Stage Word-Building

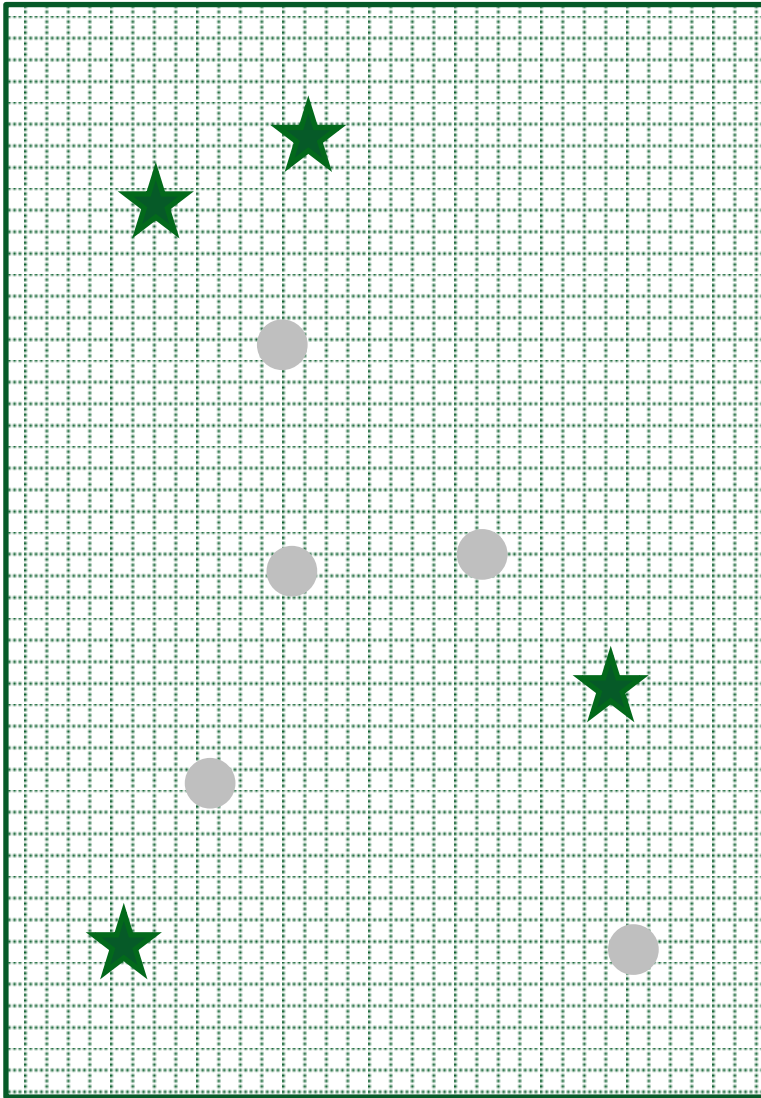
Agent-Based Simulation



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Cybernetics and Symbiosis

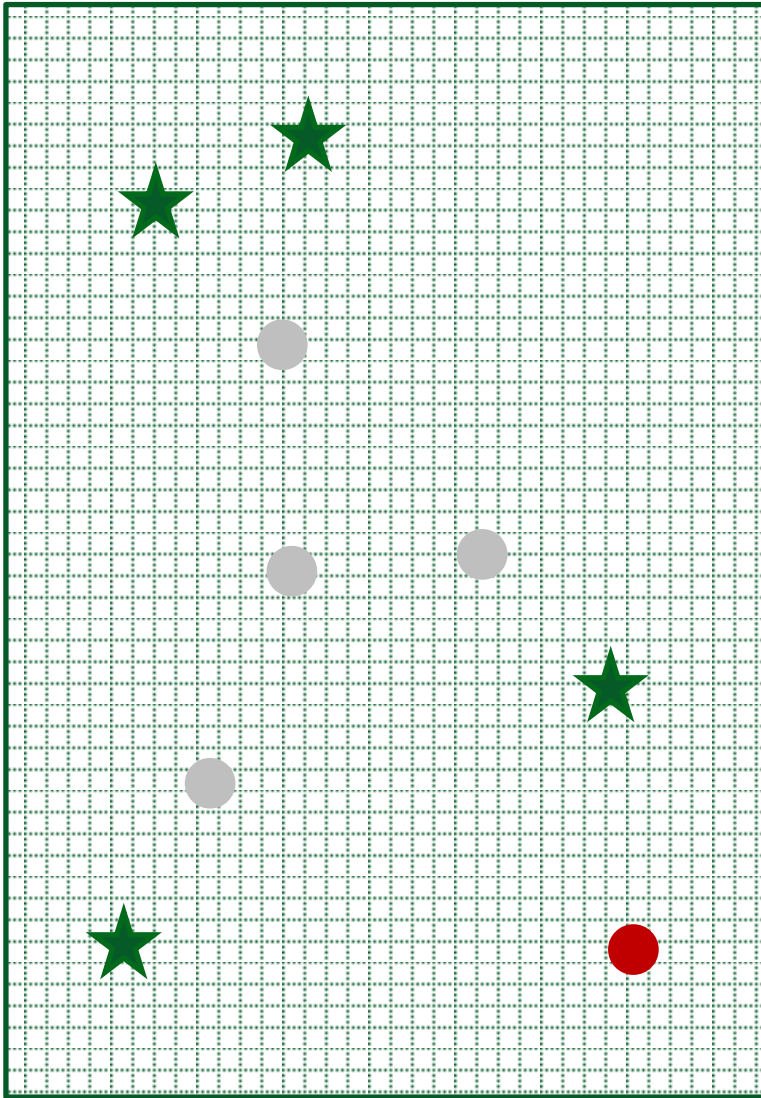
1) Environment with Resources



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Cybernetics and Symbiosis

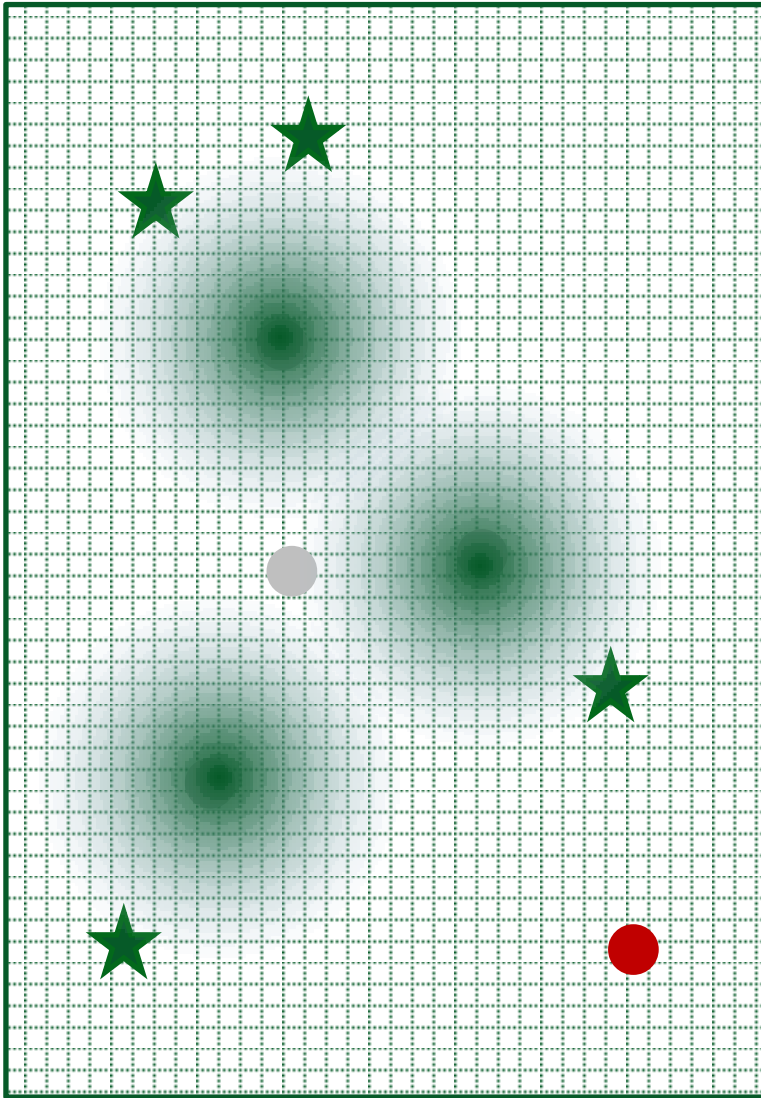
- 1) Environment with Resources
- 2) Agents



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Cybernetics and Symbiosis

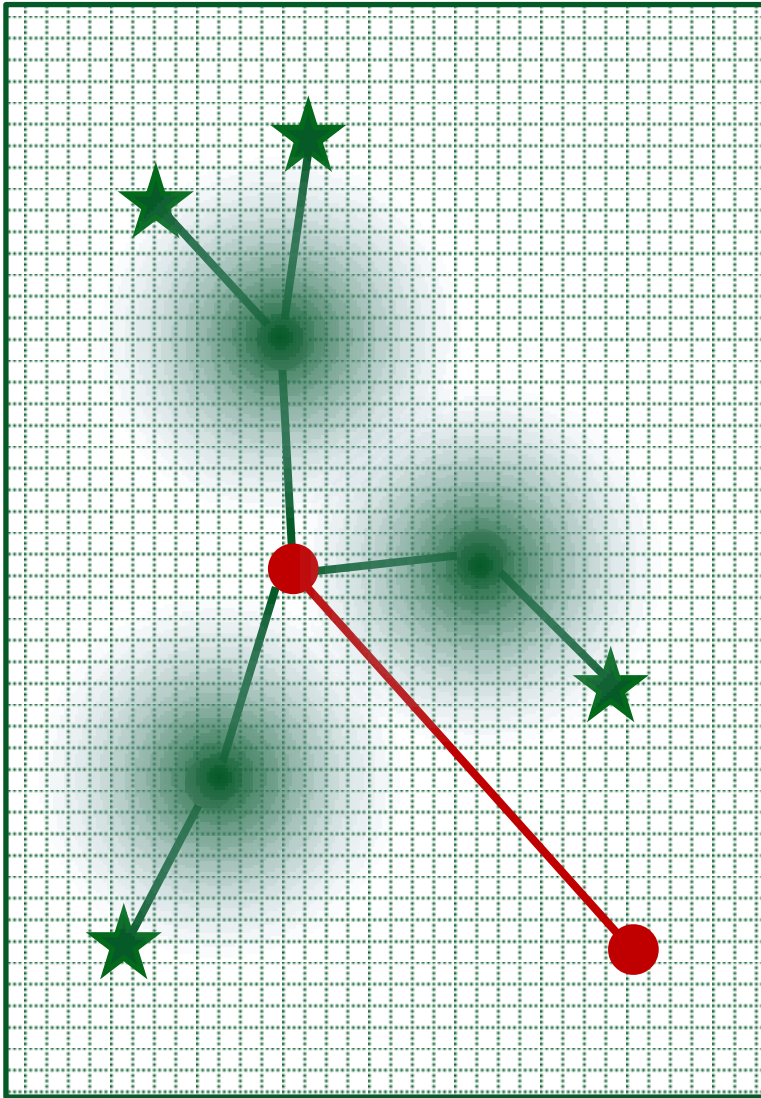
- 1) Environment with Resources
- 2) Agents
- 3) Demand



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Cybernetics and Symbiosis

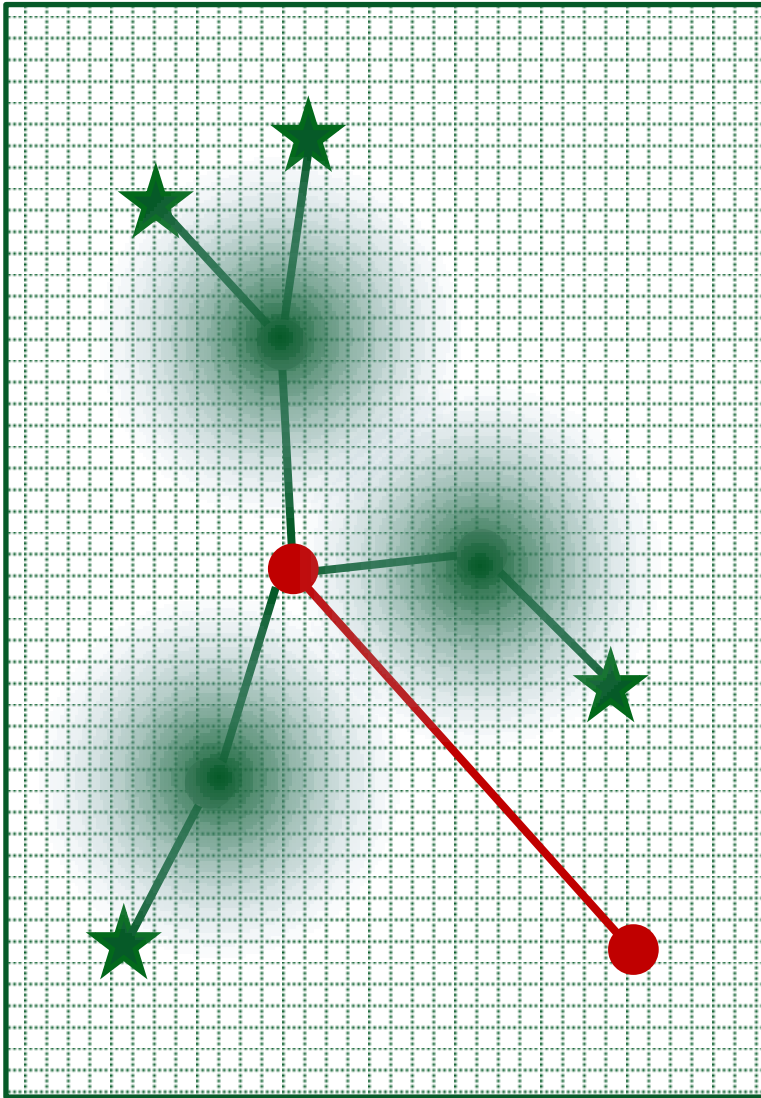
- 1) Environment with Resources
- 2) Agents
- 3) Demand
- 4) Supply



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Cybernetics and Symbiosis

- 1) Environment with Resources
- 2) Agents
- 3) Demand
- 4) Supply
- 5) Collaboration



Project CyberSym

Cybernetics and Symbiosis

- 1) Environment with Resources
- 2) Agents
- 3) Demand
- 4) Supply
- 5) Collaboration
- 6) Evaluation

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Project CyberSym I

Main research question: Under which parameter settings will an Agent-Based Simulation of Multi-Stage Production Processes adopt an optimal resource distribution network?



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Image Sources

- 1) http://www.vanityfair.fr/uploads/images/201506/dc/vf_stafford_beer_2180.png
- 2) http://www.sbs.com.au/theother911/images/c7333e7d.allendeElection_800x554.jpg
- 3) http://img3.wikia.nocookie.net/_cb20110317013600/althistory/images/b/bf/Map_Chile_DD.png
- 4) <http://proyectoidis.org/wp-content/uploads/2013/07/Project-Cybersyn051.jpg>
- 5) <http://www.hindustantimes.com/Images/2011/5/113a350f-15d0-4e13-9ff6-0e20f20b0456HiRes.JPG>