

Cognitive Architecture Lite for Social Simulation

William G. Kennedy

Center for Social Simulation &
Department of Computational Social Science
Krasnow Institute for Advanced Studies
wkennedy@gmu.edu

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Plans

- ◆ Cognition in social simulations currently hand coded
- ◆ Current cognitive architectures too heavy
 - ◆ Soar, ACT-R, & others focus on 1 to a few agents.
 - ◆ Social simulations deal with 1Ks to 1Ms agents simulating months to years to centuries of decision-making.
- ◆ Need: cognitive architecture *lite*
 - ◆ A basic architecture implementing rule set(s?)
 - ◆ Limited numbers and types of variables involved
 - ◆ Activation-based memory with threshold for forgetting
 - ◆ Reinforcement learning
 - ◆ Individual cog parameters, sensory input, & memory
 - ◆ Fast & small

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