Tao Zhang Agent-based modeling in philosophy Dr. Bert Baumgaertner March 24th, 2014

Summary

- Agent-based models are computational tools that can be used to study the emergence of population level patterns from interactions between individuals.
- Dr. Baumgaertner shows us the population-level patterns. Some patterns are unique to collections of individuals: flocking, the wave, segregation, evolutionary processes, norms, distributed coordination/intelligence. There are several agent-based model:
 - individual or 'agents'
 - crivtuall environment
 - rules for how agents interact with each other and the environment.
- Philosophers are interested in:
 - Consciousness and how it emerges from the brain.
 - Rationality and how it is shaped by evolution.
 - Norms and the emergence of conventions, esp. Languages.
 - Division of cognitive labour (the social aspects of science)
 - Spread of opinions, belief, and knowledge.
- Dr. Baumgaertner says that they should preserve (even encourage) dissenting opnions. Not just for the sake of individuals, but for the sake of the whole. Diversity of opinions helps them get to the truth, and get to the future.