

- Interaction with each other, and with the environment, leads to each individual unit interpreting what to do based on local circumstances
  - Leads to *emergence* of population-level patterns (often unpredictable or unknowable from the description of the individuals)
- Interaction unfolds over time
- Emergent dynamics have spatial variability
  - Spatial variability intersects with agent heterogeneity since what-to-do might/often is a condition of where-am-i-at?
- Entities can *learn* and *change their own behaviours* over time.

# Some models I have built

- Travellersim: a model where individuals say, 'hey, is that a nice place to visit?' Agents are settlements *and* individuals. World is early iron age Italy. The settlements keep track of how many visitors have arrived, and set their attractiveness as a function of that. Visitors decide to visit based on that attractiveness / knowledge of the world. Result is a network of connected sites. Under what conditions can a *known* network of sites emerge or areas-of-similar connectivity?
- Antonine Itineraries: a model of Roman connectivity. Agents wander along these paths. One has a 'message'; encounters lead to message transmission. What does that info-transmission curve look like in different geographic regions?