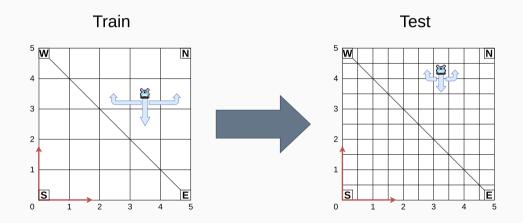
DRL experiments plan

Andrea Pierré

July 29, 2024

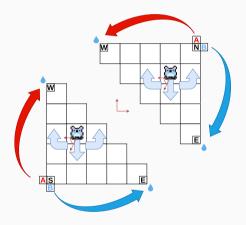
1) Does the network learn a coordinate system?

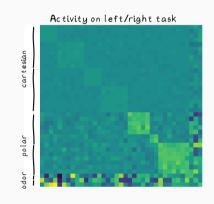
- Redundant spatial input? Only Cartesian/ polar input?
- Expected → Same performance on the discretized version with zero shot learning
- Expected \rightarrow Discretized policy looks similar

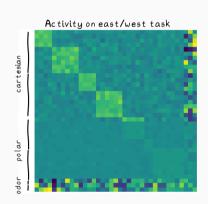


2) How the constraints of the task impact the representations learned?

- Where to put the coordinate systems?
- How many coordinate systems?







3) Does having redundant spatial input make the agent more robust in a noisy environment?

- Conflicts with experiment 2?
- Train with noise?
- May need another architecture to solve this task (Generative Adversarial Network? Denoising Autoencoder?)
- Expected \rightarrow Robust but degraded performance

