Perturbation experiment

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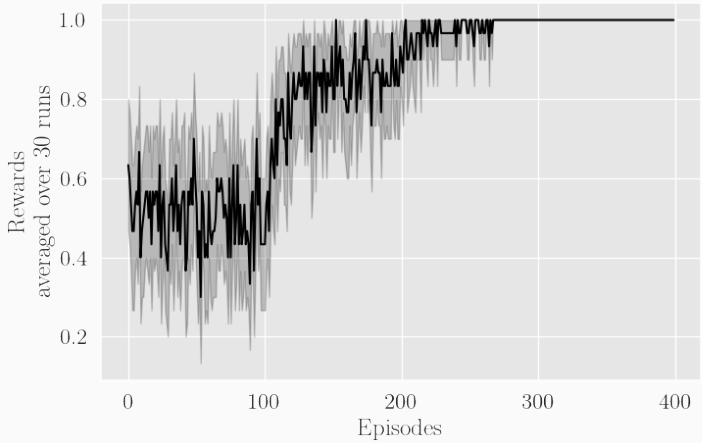
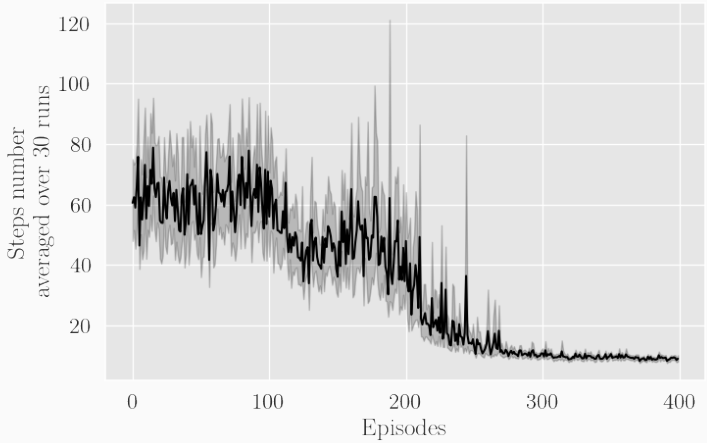
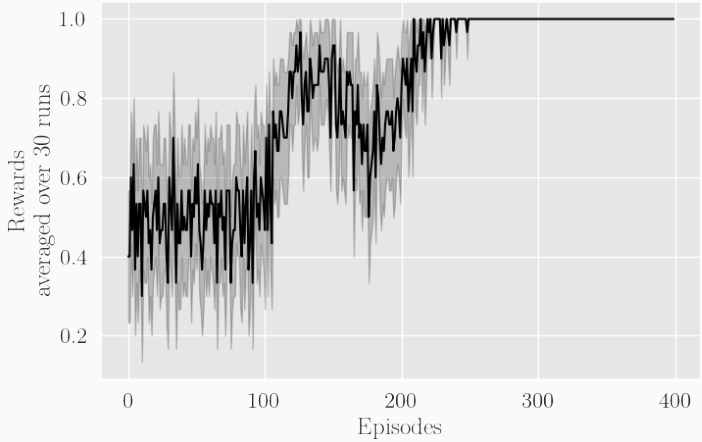
Training (for reference)

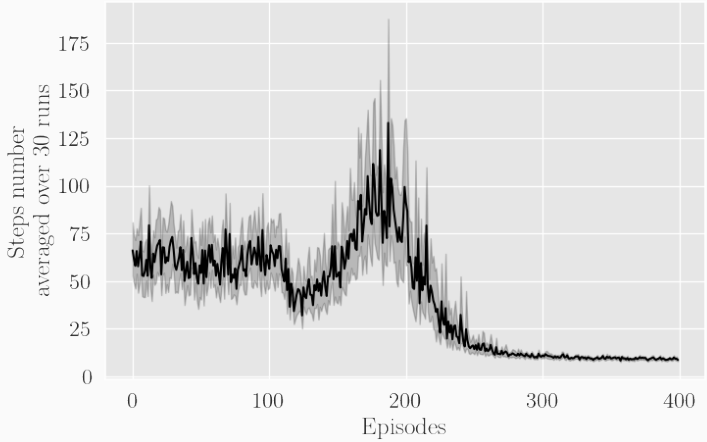
Left/Right





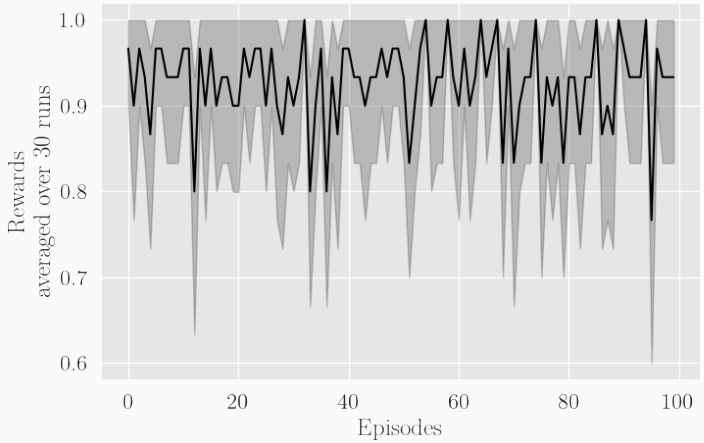
East/West

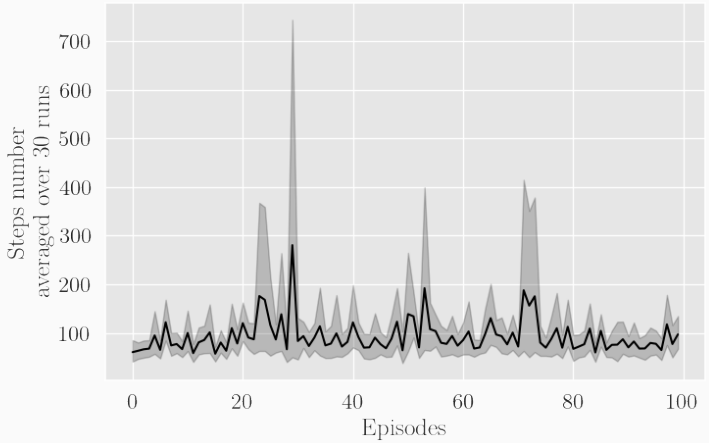




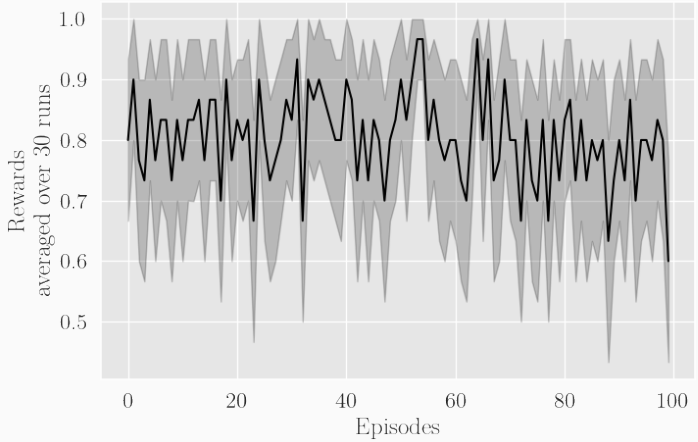
Randomized Cartesian inputs

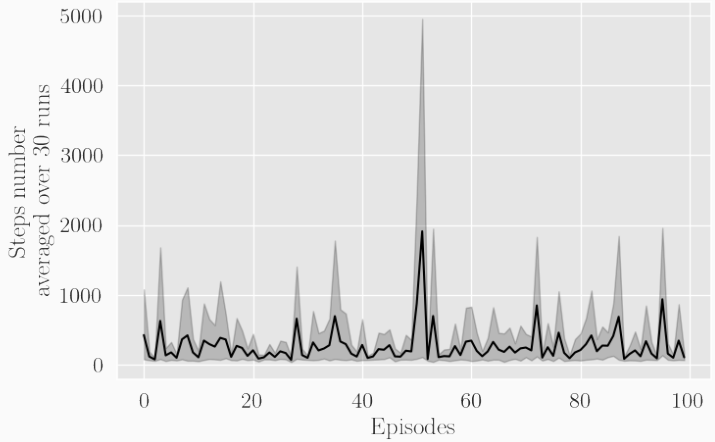
Left/Right





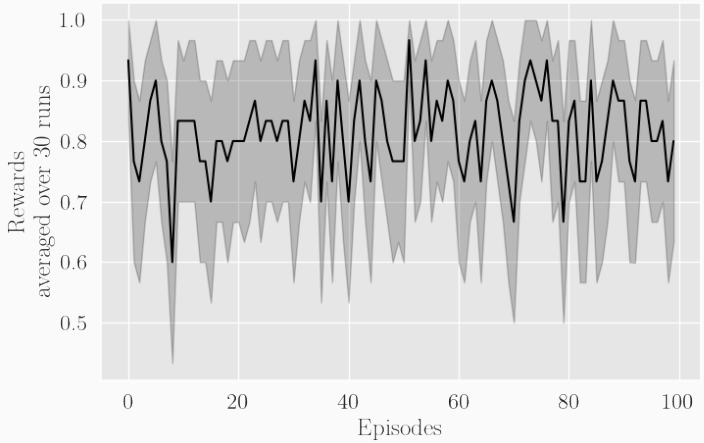
East/West

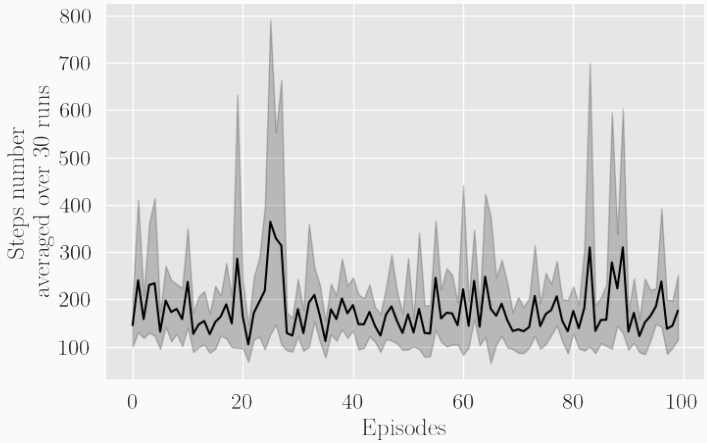




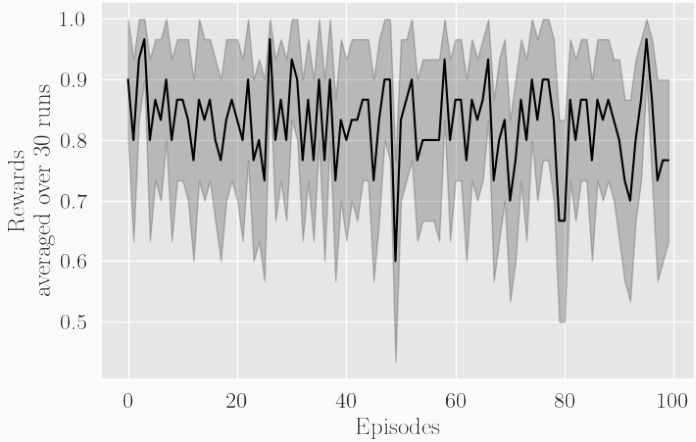
Silenced Cartesian inputs

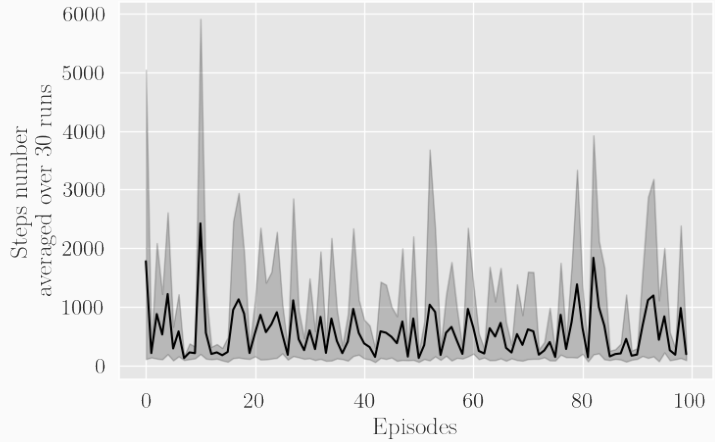
Left/Right





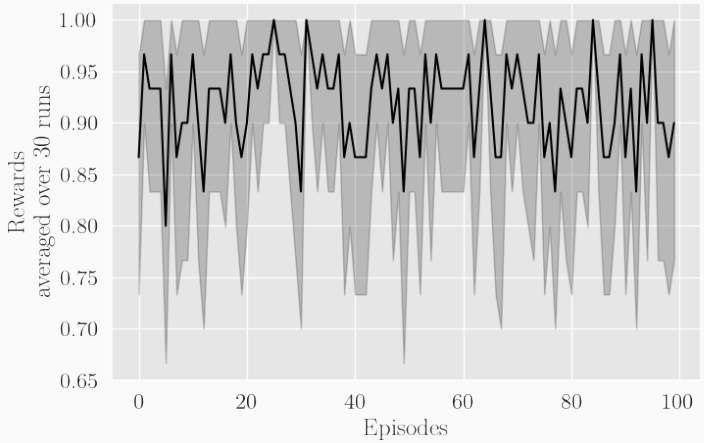
East/West

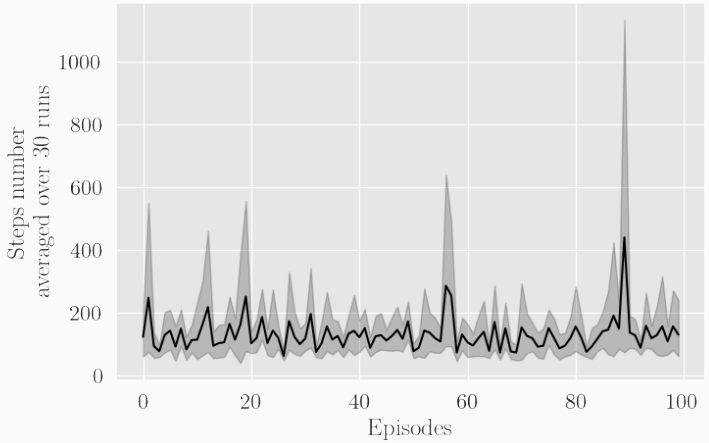




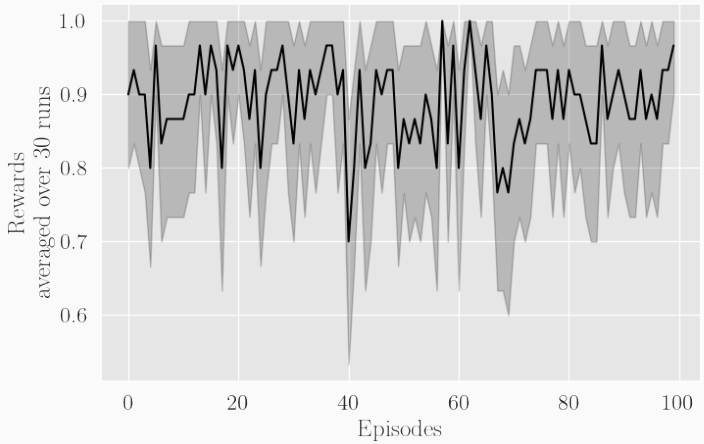
Randomized polar inputs

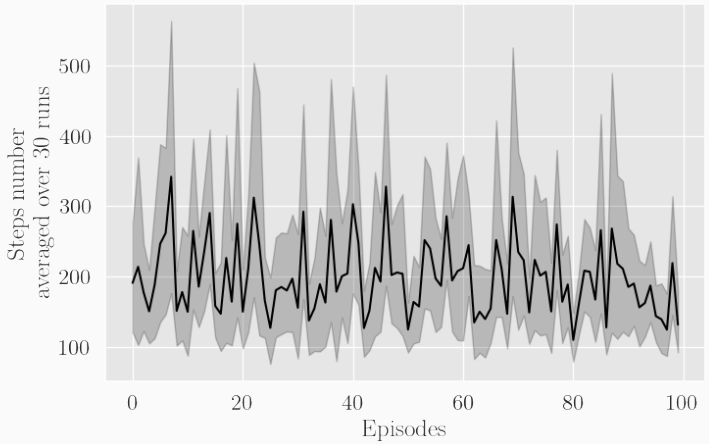
Left/Right





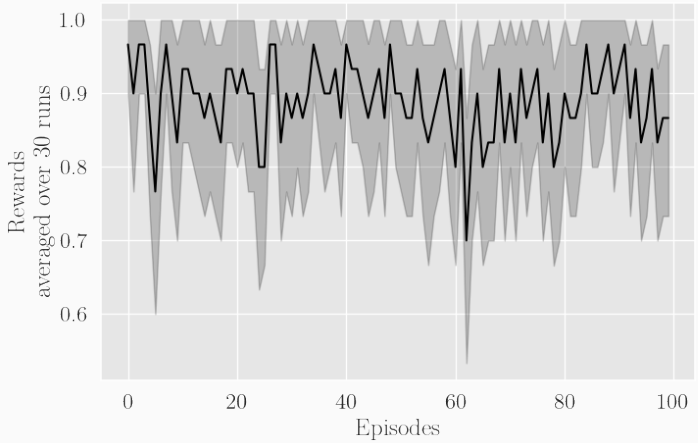
East/West

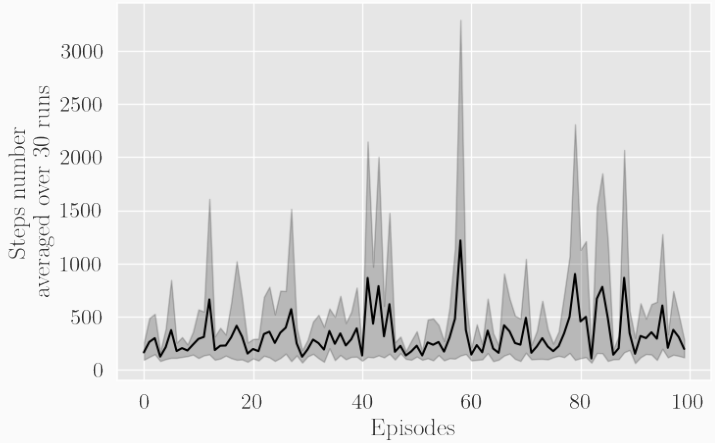




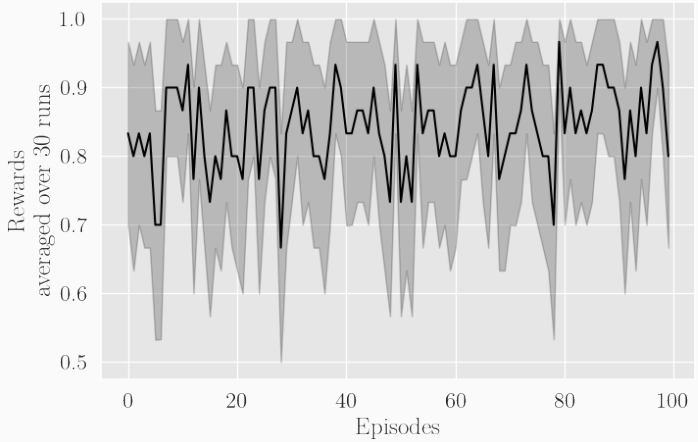
Silenced polar inputs

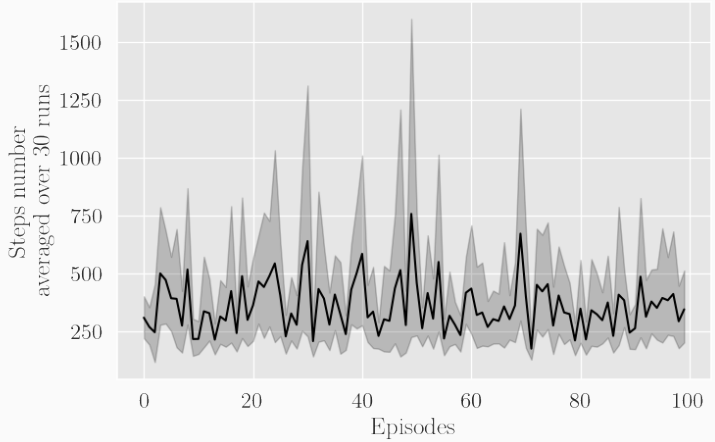
Left/Right





East/West





Conclusion

- Results not as expected $\rightarrow$ performance is degraded but the agents are able to solve the task most of the time even if part of their inputs are perturbated
- Changes from lab meeting:
  - One-hot encoded cue
  - 256 neurons/layer instead of 512