

# Finding an Interpretable Feature Basis with Self-Supervised Classification

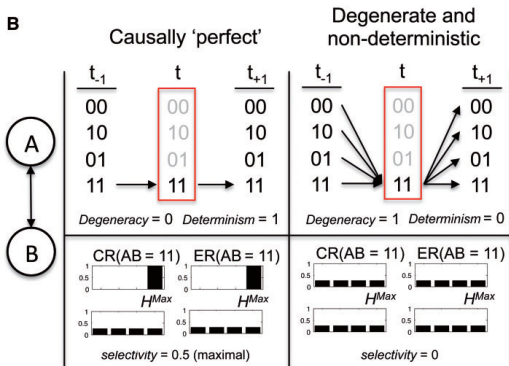
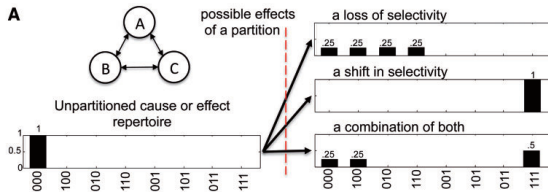
Aggregating data into maximum entropy clusters  
increases feature independence and identifies  
learned generalizations about the data

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# Effective Information & Causal Emergence<sup>1</sup>



<sup>1</sup>Erik Hoel et al. "Can the macro beat the micro? Integrated information across spatiotemporal scales". In: *Neuroscience of Consciousness* 2016 (Aug. 2016). DOI: [10.1093/nc/niw012](https://doi.org/10.1093/nc/niw012).

# Self-supervised Denoising<sup>2</sup>

TODO

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<sup>2</sup>Joshua Batson and Loic Royer. *Noise2Self: Blind Denoising by Self-Supervision*. 2019. arXiv: [1901.11365](https://arxiv.org/abs/1901.11365) [cs.CV]. 

# Outer Model

TODO

# Outer Model

TODO

# Inner Models

TODO

# References

- [1] Joshua Batson and Loic Royer. *Noise2Self: Blind Denoising by Self-Supervision*. 2019. arXiv: [1901.11365](https://arxiv.org/abs/1901.11365) [cs.CV].
- [2] Erik Hoel et al. “Can the macro beat the micro? Integrated information across spatiotemporal scales”. In: *Neuroscience of Consciousness* 2016 (Aug. 2016). DOI: [10.1093/nc/niw012](https://doi.org/10.1093/nc/niw012).

# Appendix

TODO