Extended Reading List for Module 6 (with annotations)

- M. Blokpoel, T. Wareham, P. Haselager, and I. van Rooij. Deep Analogical Inference as the Origin of Hypotheses. The Journal of Problem Solving. 2018.
https://docs.lib.purdue.edu/jps/vol11/iss1/3/
(Claim for analogy as the basis of Inference to the Best Explanation)
- R. W. Gayler and R. Wales. Connections, Binding, Unification and Analogical Promiscuity. Advances In Analogy Research: Integration Of Theory And Data From The Cognitive, Computational, And Neural Sciences. 1998.
https://www.researchgate.net/publication/215991875_Connections_Binding_Unification_and_Analogical_Promiscuity
(Claim that analogy is at the core of cognition, following from system design decisions that follow VSA principles)
- D. J. Chalmers, R. M. French, and D. R. Hofstadter. High-level perception, representation, and analogy: A critique of artificial intelligence methodology. Journal of Experimental & Theoretical Artificial Intelligence. 1992.
https://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.95.4008
(Claim for perceptual representations to be context sensitive and constructed on the fly via analogical mechanisms)
- H. Gust, U. Krumnack, K.-U. Kühnberger, and A. Schwering. Analogical Reasoning: A Core of Cognition. KI - Künstliche Intelligenz. 2008.
https://portal.ikw.uni-osnabrueck.de/~ai/analogies/analogies/publications/gust_KIThemenheft.pdf
(Claim that analogy is at the core of cognition and a more "traditional" brief review of analogy)
- D. R. Hofstadter. Analogy as the core of cognition. Stanford Presidential Lecture. 2006.
https://www.youtube.com/watch?v=XQjBGT3Cq1k
(Another claim that analogy is at the core of cognition - a really entertaining lecture)
- T. A. Plate. Analogy retrieval and processing with distributed vector representations. Expert Systems. 2000.
https://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.20.7332
(Structural similarity of hand-crafted static VSA representations)
- T. A. Plate. Distributed Representations and Nested Compositional Structure. PhD Thesis. University of Toronto. 1994.
https://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.48.5527
(The previous paper is derived from Plate's Chapter 6)
- T. Mikolov, W. Yih, and G. Zweig. Linguistic Regularities in Continuous Space Word Representations. Proceedings of NAACL-HLT 2013, 2013.
https://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.353.6683
(Claim that semantic vectors show analogy relations)
- A. Rogers, A. Drozd, and L. Bofang. The (too Many) Problems of Analogical Reasoning with Word Vectors. Proceedings of the 6th Joint Conference on Lexical and Computational Semantics (*SEM 2017). 2017
https://aclanthology.org/S17-1017/
(Disputes the claim of the previous paper)

- P. Kanerva. What We Mean when We Say "What's the Dollar of Mexico?": Prototypes and Mapping in Concept Space. Quantum Informatics 2010: AAAI-Fall 2010 Symposium on Quantum Informatics for Cognitive, Social, and Semantic Processes.. 2010.
  https://redwood.berkeley.edu/wp-content/uploads/2020/05/kanerva2010what.pdf
  (Analogical mapping by hand-crafted VSA substitution operator)
- P. Kanerva. Large Patterns Make Great Symbols: An Example of Learning from Example. Hybrid Neural Systems. 2000.
  https://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.53.2037
  (Learning VSA substitution operators from examples)
- B. Emruli, R. W. Gayler, and F. Sandin. Analogical mapping and inference with binary spatter codes and sparse distributed memory. The 2013 International Joint Conference on Neural Networks (IJCNN). 2013.
  https://ltu.diva-portal.org/smash/get/diva2:1014251/FULLTEXT01
  (Analogical mapping by VSA substitution operators accumulated in a memory)
- B. Emruli and F. Sandin. Analogical Mapping with Sparse Distributed Memory: A Simple Model that Learns to Generalize from Examples. Cognitive Computation. 2014.
  https://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.1075.7989
  (Expanded version of previous paper)
- S. D. Levy and R. W. Gayler. "Lateral inhibition" in a fully distributed connectionist architecture. In Proceedings of the Ninth International Conference on Cognitive Modeling (ICCM 2009). 2009
  https://www.academia.edu/182937
  (Interpretation of the multiset-intersection component of the focus paper as implementing lateral inhibition)