

# Deep learning

## 14.1. Compute Schism

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Since 2020 (Brown et al., 2020) it is known that Large Language Models such as GPTs have an extraordinary potential for zero-shot prediction.

An LLM can be seen as a knowledge base, equipped with sophisticated matching rule able to finely deal with synonymy and verb / actions / adjectives, and the ability—to some extent—to templatize and generalize statements.

These functionalities can be put to use by providing more generally as structured statistical retrieval of

- Prompts - Pre-training vs. fine-tuning - LoRas - Model merging

## References

- T. Brown, B. Mann, N. Ryder, M. Subbiah, J. Kaplan, P. Dhariwal, A. Neelakantan, P. Shyam, G. Sastry, A. Askell, S. Agarwal, A. Herbert-Voss, G. Krueger, T. Henighan, R. Child, A. Ramesh, D. Ziegler, J. Wu, C. Winter, C. Hesse, M. Chen, E. Sigler, M. Litwin, S. Gray, B. Chess, J. Clark, C. Berner, S. McCandlish, A. Radford, I. Sutskever, and D. Amodei. **Language models are few-shot learners.** CoRR, abs/2005.14165, 2020.