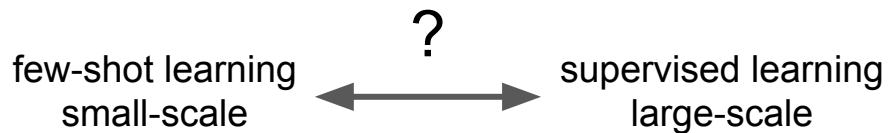


Variadic Meta-Learning by Bayesian Nonparametric Deep Embedding

Kelsey Allen, Hanul Shin*, Evan Shelhamer*, Josh Tenenbaum



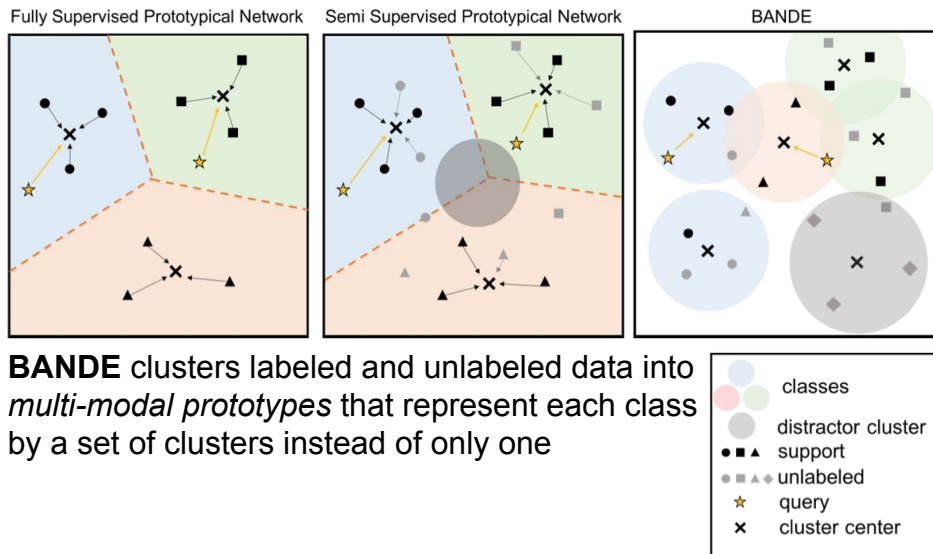
variadic meta-learning

any-shot, any-way generalization
between meta-train and meta-test
with mixed supervision

experiments:

- from **5-way to 1692-way** and from **1-shot to unsupervised** on Omniglot
- from **1-shot to 50-shot** on mini-ImageNet
- from **2-shot to 5000-shot** on CIFAR-10

with comparison of prototypes, MAML, graph nets, and good old supervised learning



multi-modal prototypes

for alphabet and character recognition

Training	Testing	Proto. Nets	BANDE
Alphabet	Alphabet	64.9±0.2	91.2±0.1
Alphabet	Chars (20-way)	85.7±0.2	95.3±0.2
Chars	Chars (20-way)	94.9±0.2	95.1±0.1