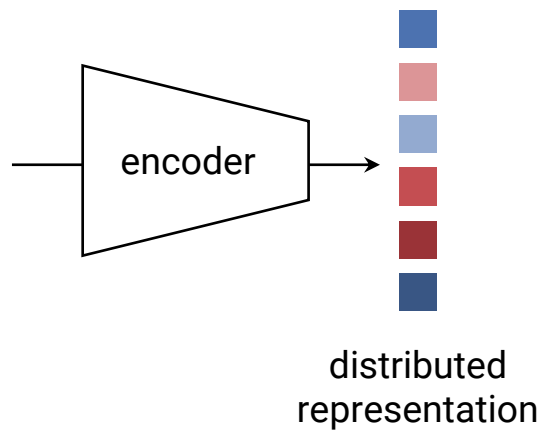




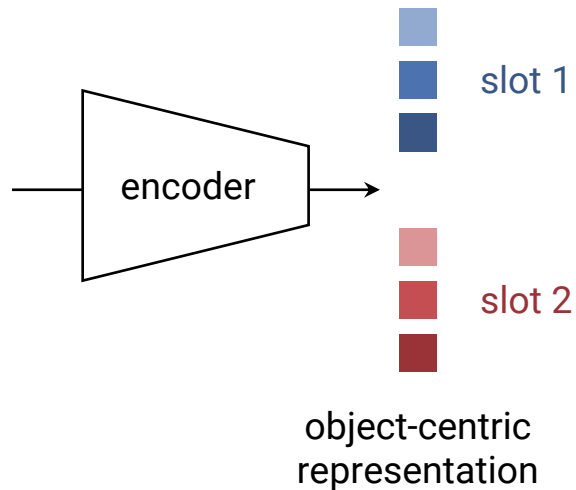
Provable Compositional Generalization for Object-Centric Learning

Thaddäus Wiedemer*, Jack Brady*, Alexander Panfilov*, Attila Juhos* Matthias Bethge, Wieland
Brendel

Object-Centric Representations



Object-Centric Representations



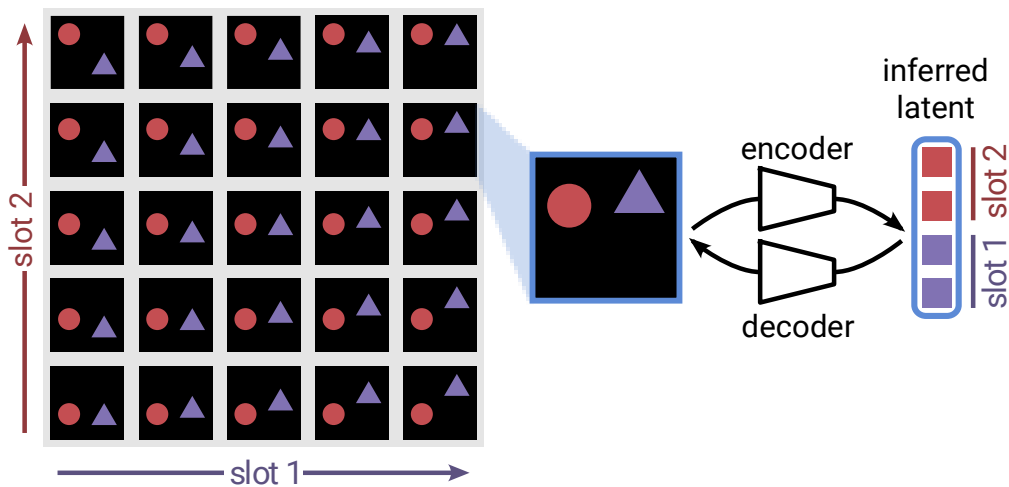
Compositional Generalization



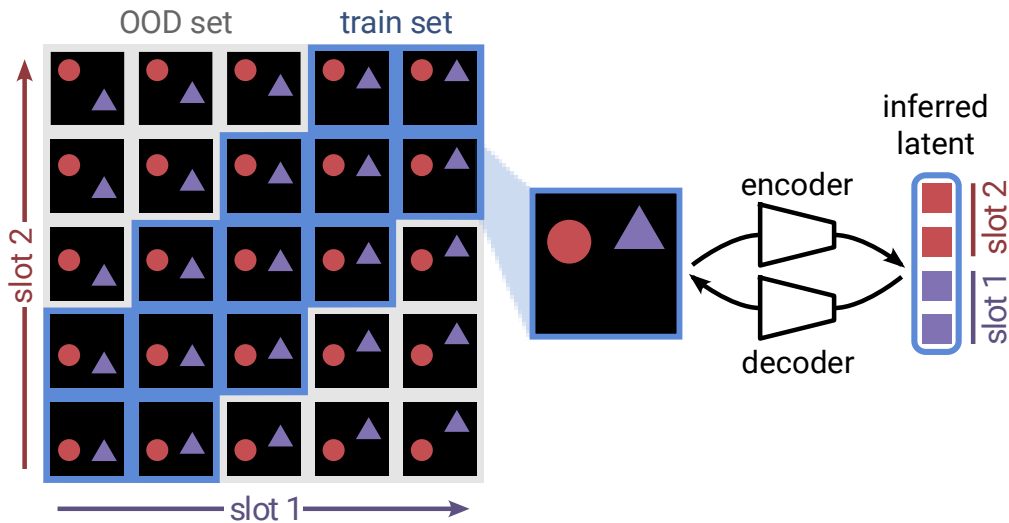
observed concepts

novel combination

Slot Identifiability

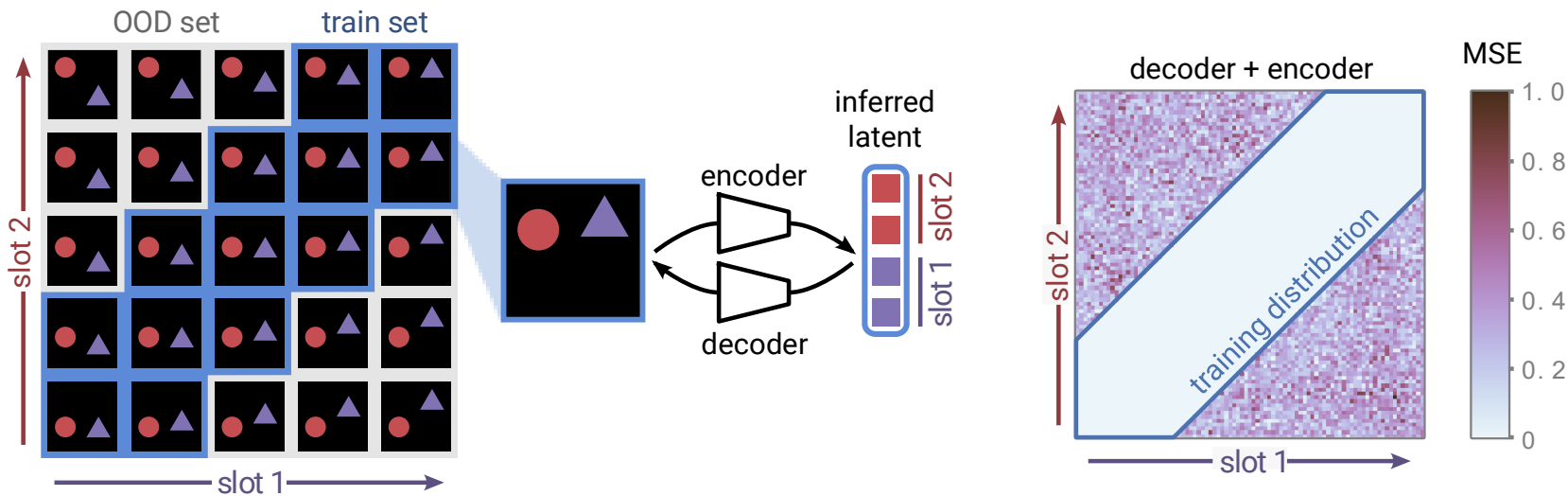


Slot Identifiability



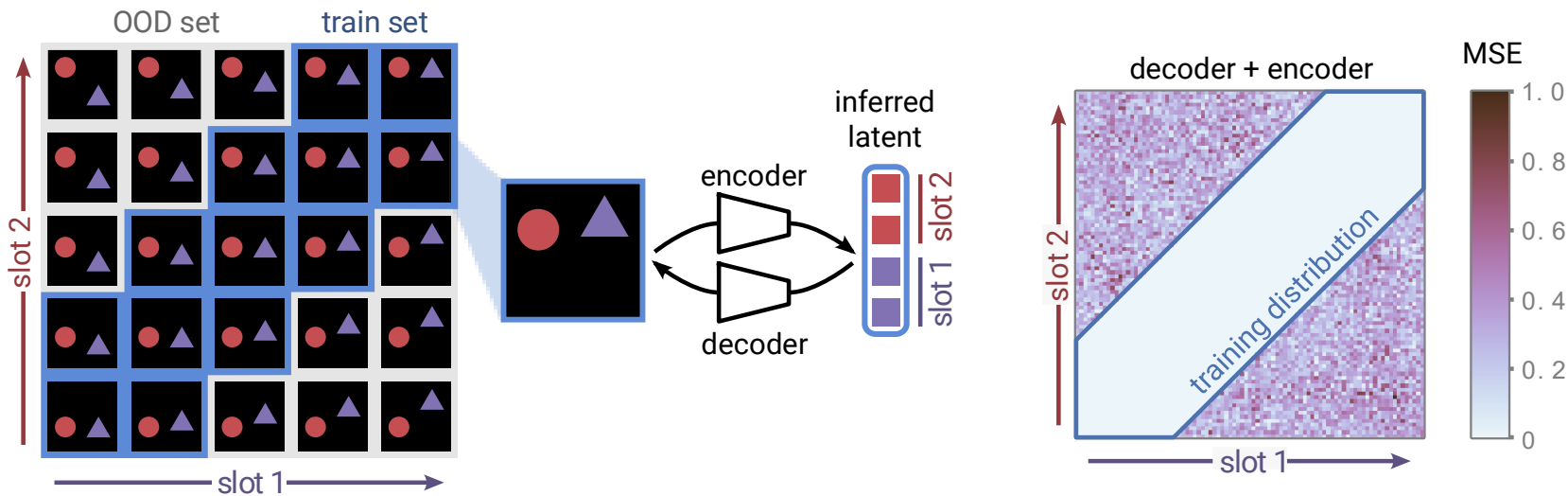
Contribution 1: Theorem Slot Identifiability on a Restricted Training Set

Slot Identifiability

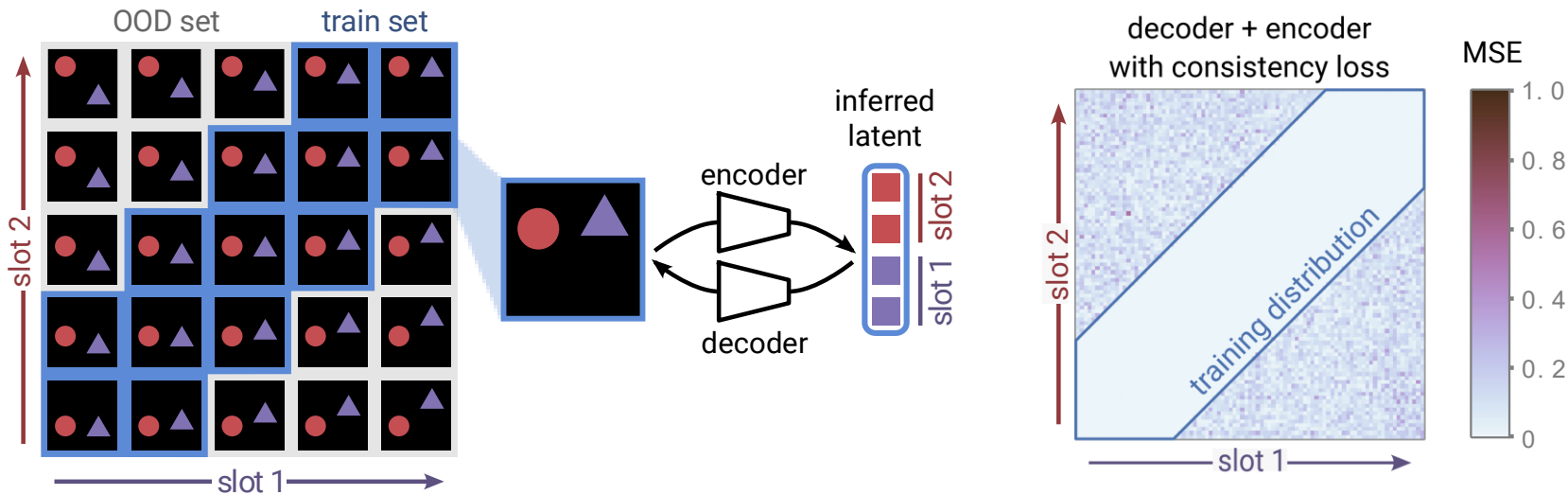


Contribution 1: Theorem Slot Identifiability on a Restricted Training Set

Compositional Generalization



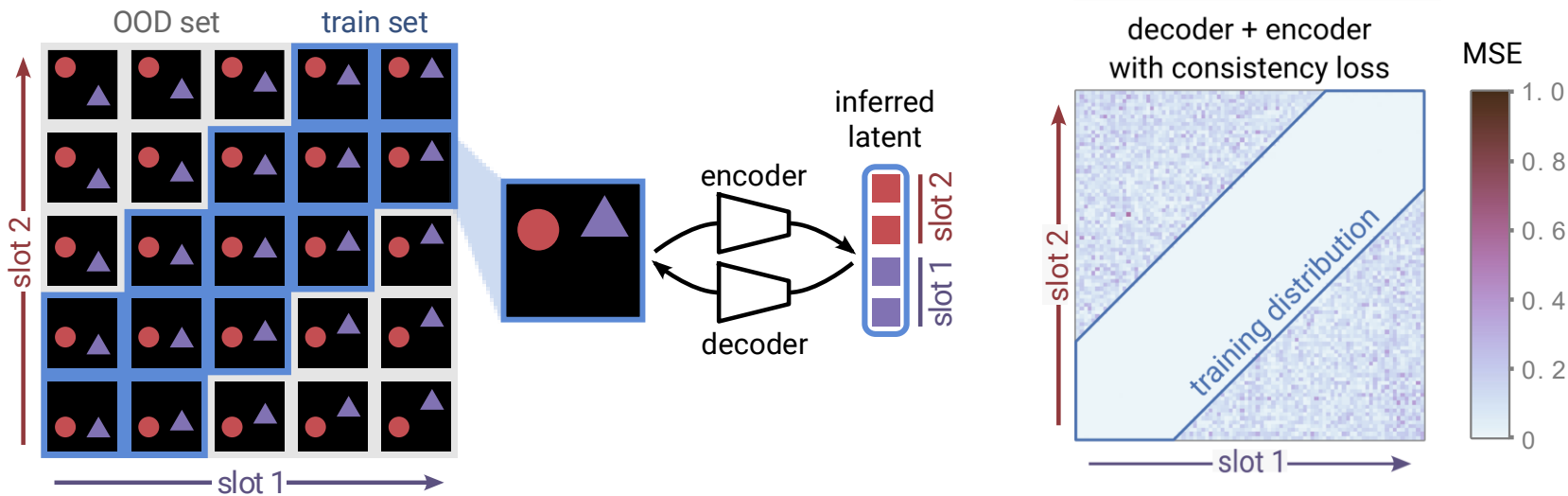
Compositional Generalization



Contribution 2: Method

Compositional Consistency Regularizer

Compositional Generalization



Contribution 2: Method

Compositional Consistency Regularizer

Contribution 3: Theorem

Compositional Generalization