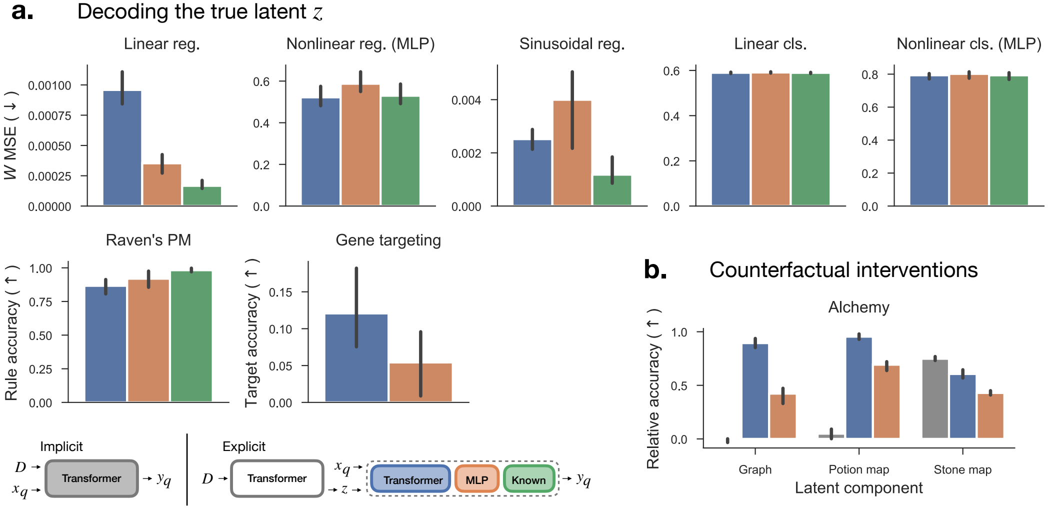
a.
Decoding the true latent z
Linear reg.
Nonlinear reg. (MLP)
Sinusoidal reg.
Linear cls.
Nonlinear cls. (MLP)
W MSE (↓)
0.00100
0.00075
0.00050
0.00025
0.00000
0.6
0.4
0.2
0.0
0.004
0.002
0.000
0.6
0.4
0.2
0.0
0.8
0.6
0.4
0.2
0.0
Raven's PM
Gene targeting
Rule accuracy (↑)
1.00
0.75
0.50
0.25
0.00
Target accuracy (↑)
0.15
0.10
0.05
0.00
b.
Counterfactual interventions
Alchemy
Relative accuracy (↑)
1.0
0.5
0.0
Graph
Potion map
Stone map
Latent component
Implicit
D
x_q
Transformer
y_q
Explicit
D
Transformer
x_q
z
Transformer
MLP
Known
y_q