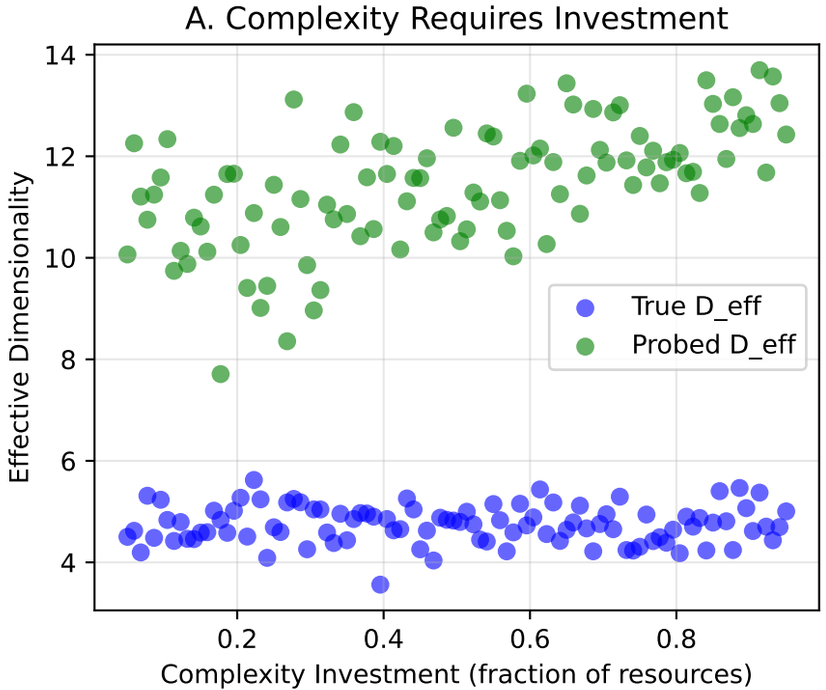
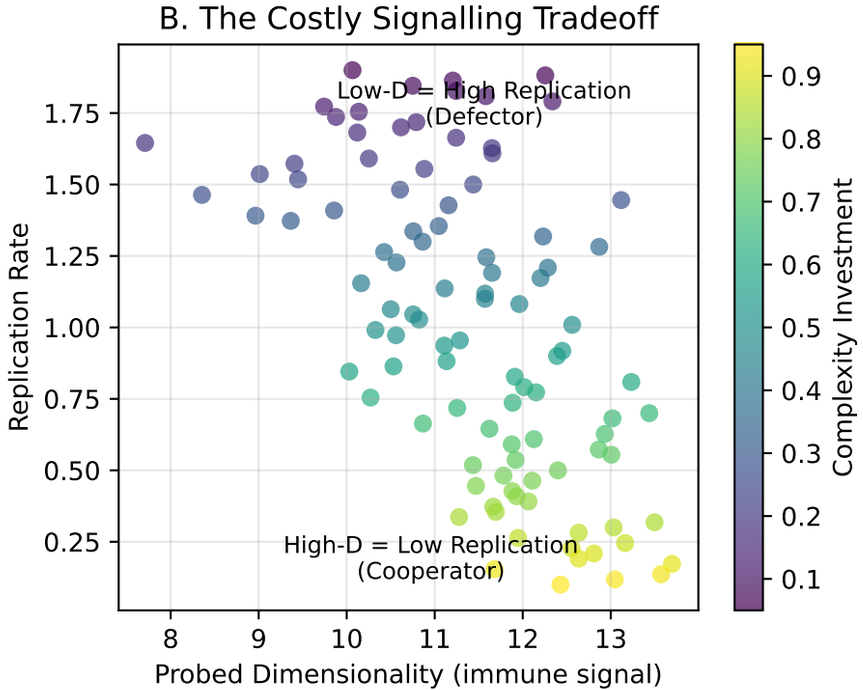
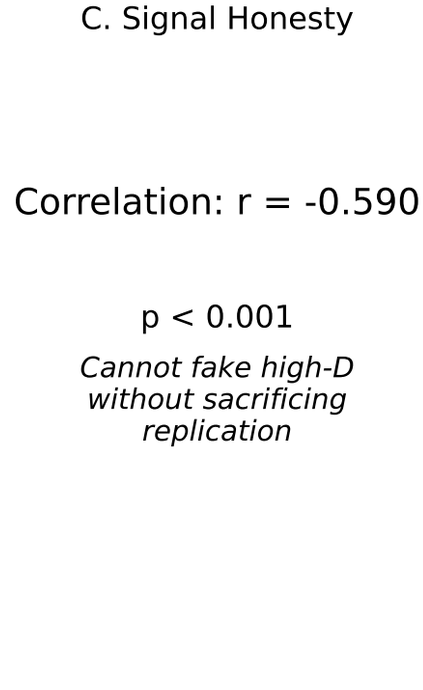

A. Complexity Requires Investment
Effective Dimensionality
Complexity Investment (fraction of resources)
True D_eff
Probed D_eff
14
12
10
8
6
4
0.2
0.4
0.6
0.8


B. The Costly Signalling Tradeoff
Replication Rate
Probed Dimensionality (immune signal)
Complexity Investment
Low-D = High Replication
(Defector)
High-D = Low Replication
(Cooperator)
1.75
1.50
1.25
1.00
0.75
0.50
0.25
8
9
10
11
12
13
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1


C. Signal Honesty
Correlation: r = -0.590
p < 0.001
Cannot fake high-D
without sacrificing
replication