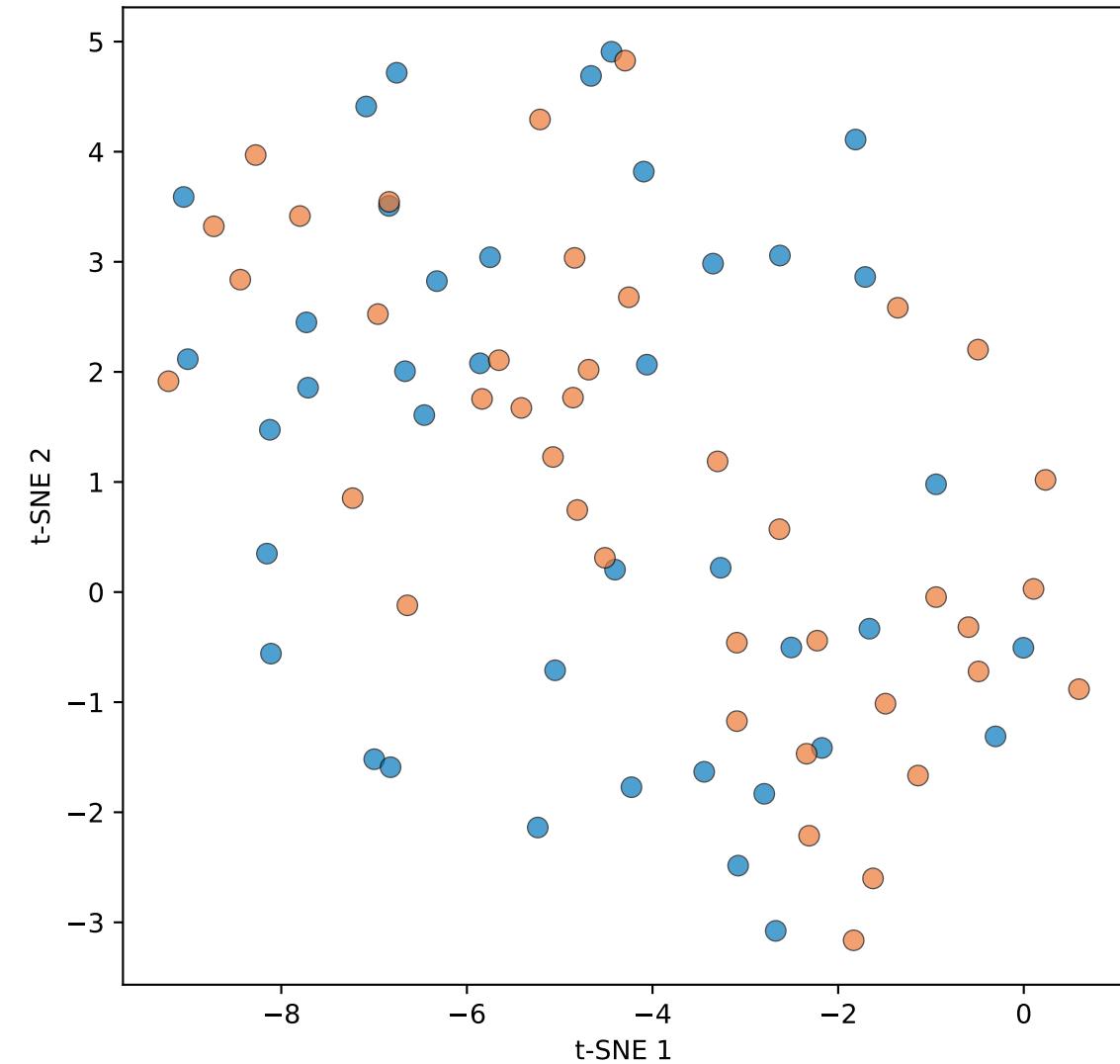
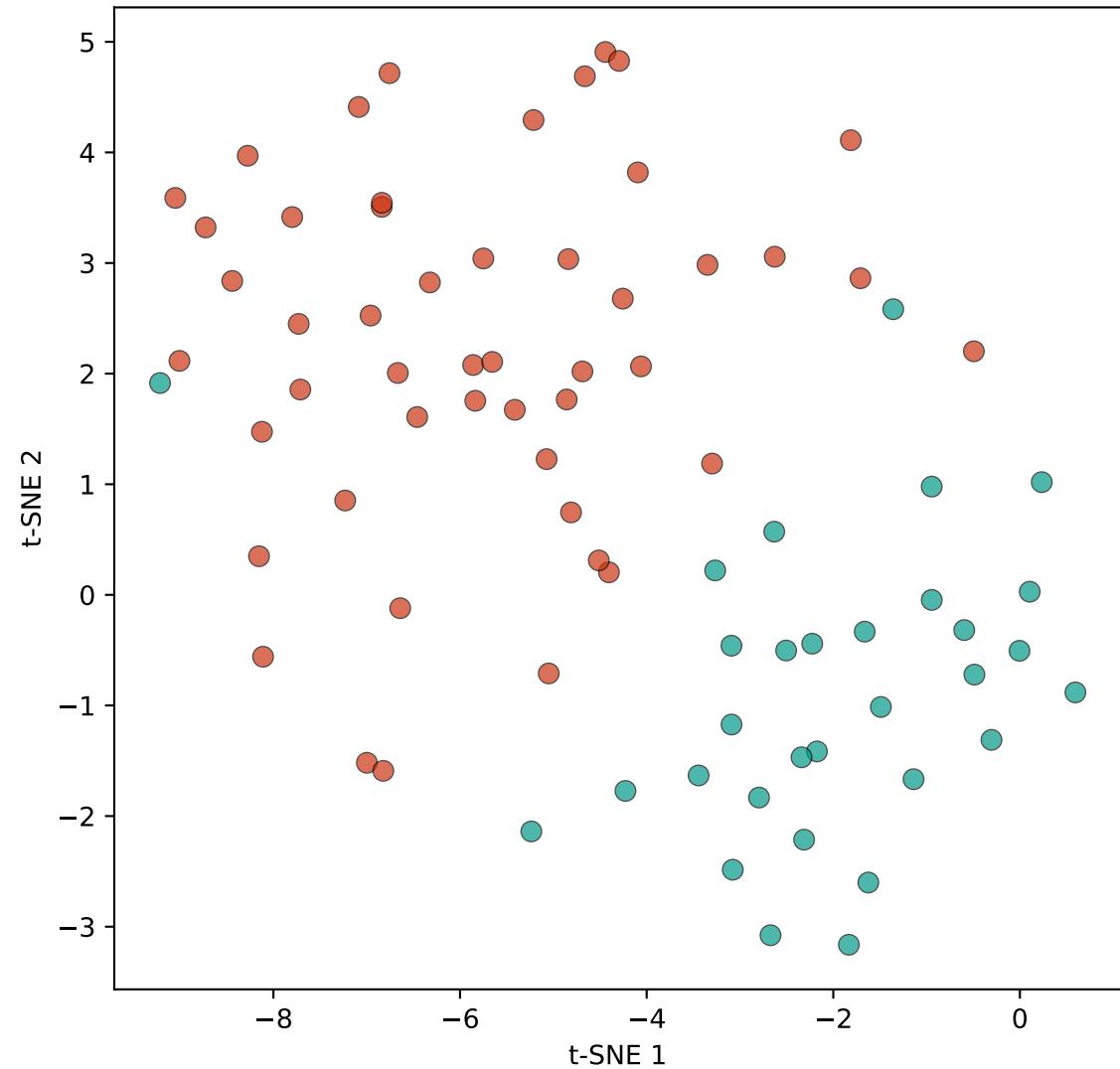


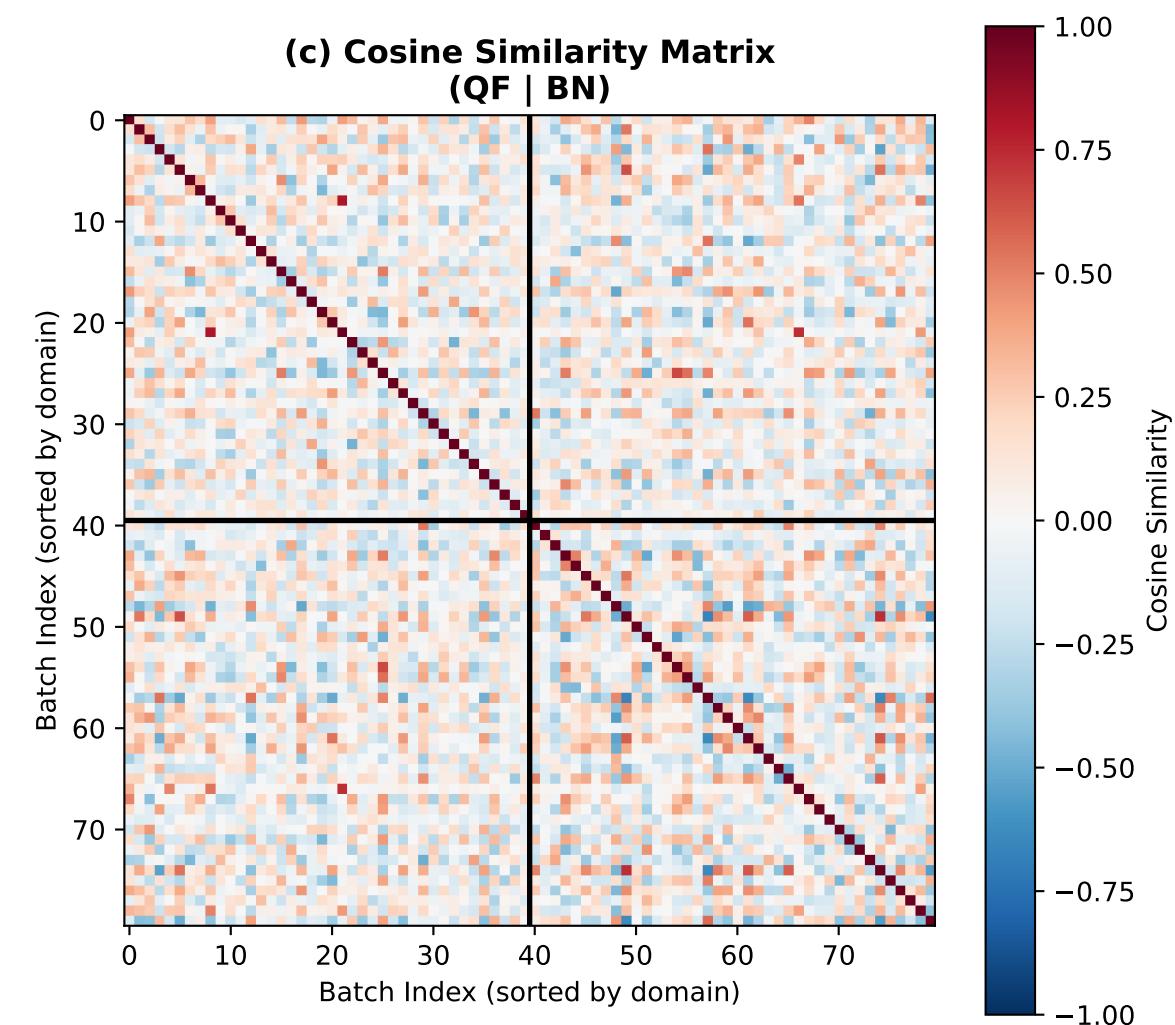
(a) Gradient Space (True Labels)
Blue=QF, Orange=BN



(b) Discovered Clusters (Spectral)
Cluster 0=QF, Cluster 1=BN



**(c) Cosine Similarity Matrix
(QF | BN)**



GRADIENT-BASED DOMAIN DISCOVERY

Method:

- Domain-specific reward signals
- Cosine similarity clustering
- Best: Spectral

Data:

- 40 QF batches
- 40 BN batches
- 60 steps per batch

Results:

- Silhouette: 0.119
- Adjusted Rand Index: 0.004
- Average Purity: 56.6%

Confusion Matrix:

	True QF	True BN
Cluster 0	27	22
Cluster 1	13	18

CONCLUSION:

✗ Weak separation