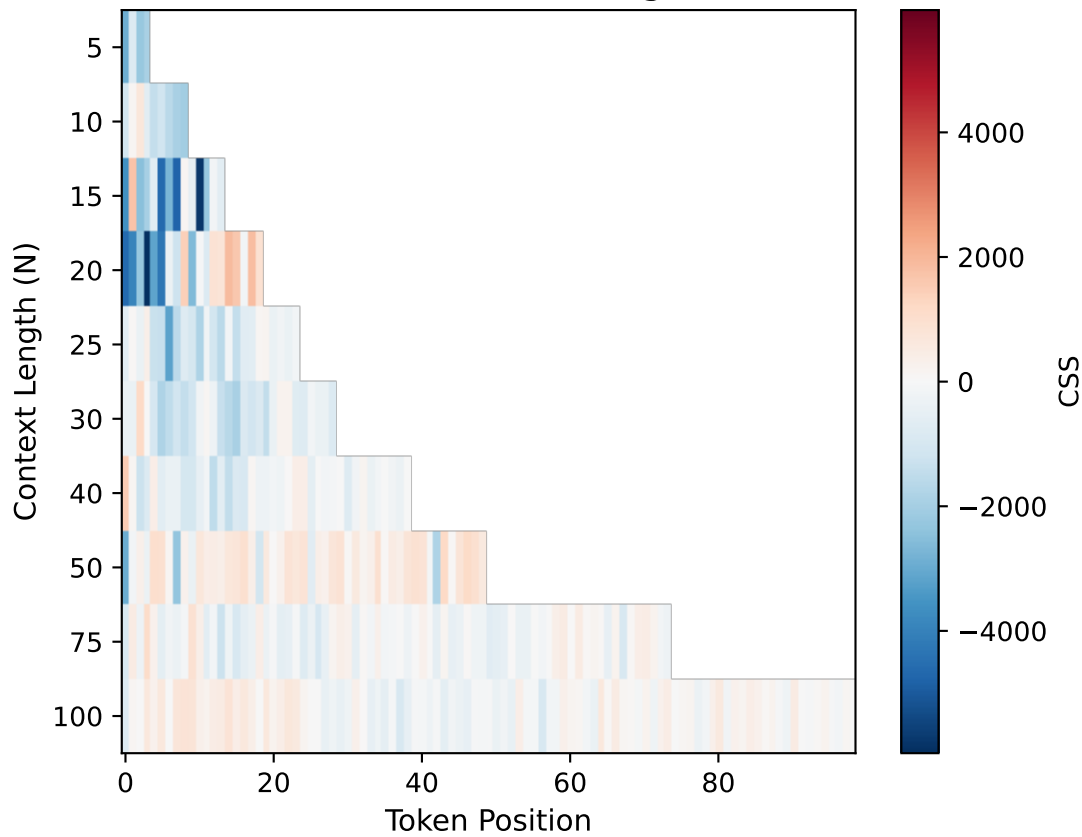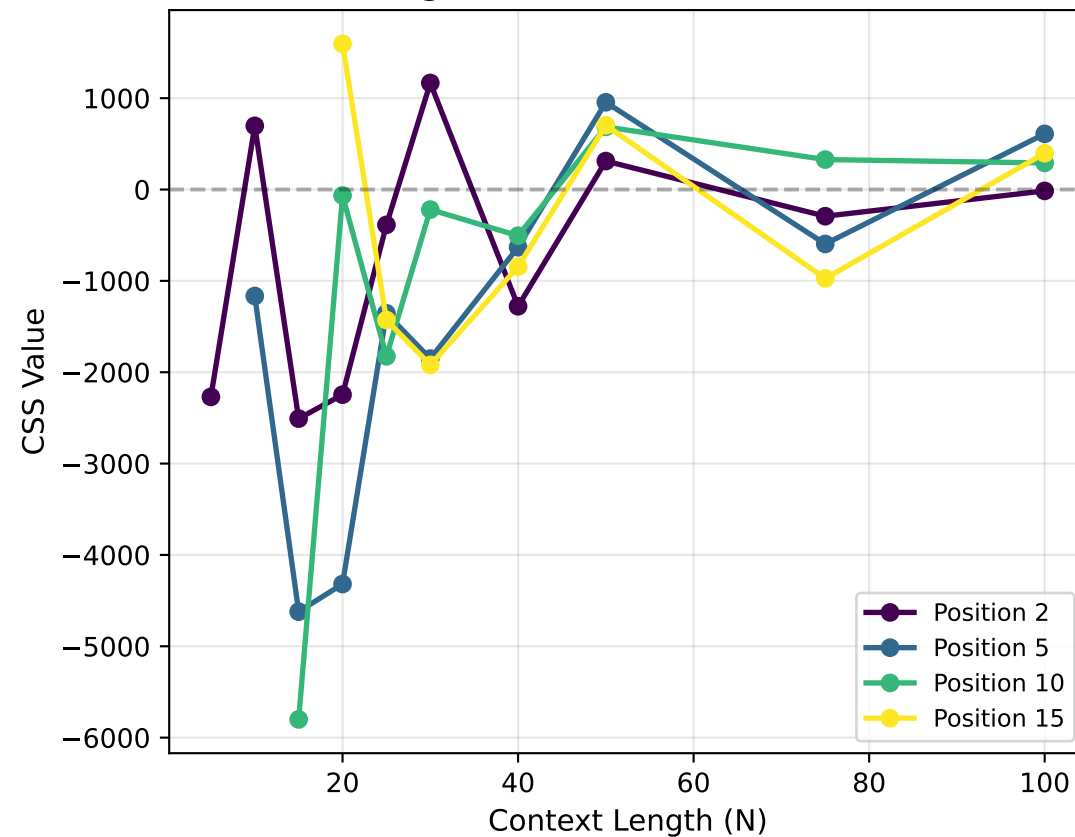**Lee et al. (2025) Replication: Influence Dynamics in ICL**
Finding: Non-Monotonic Patterns & Sign Flips in Context Sensitivity
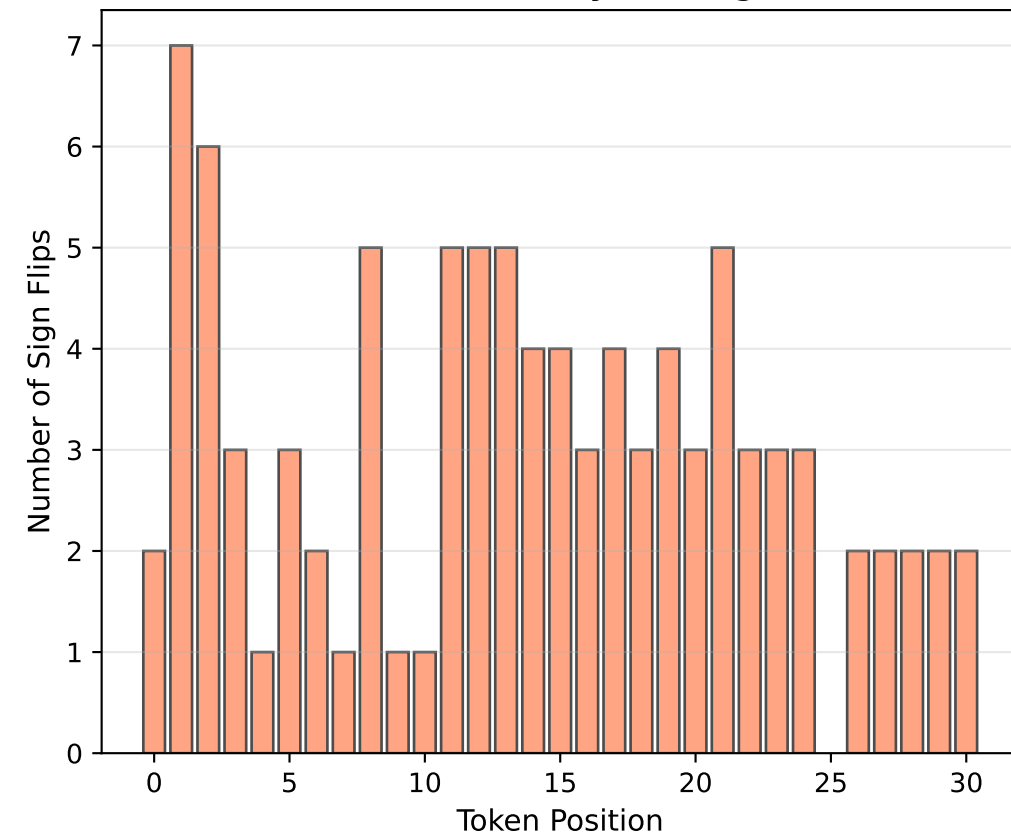
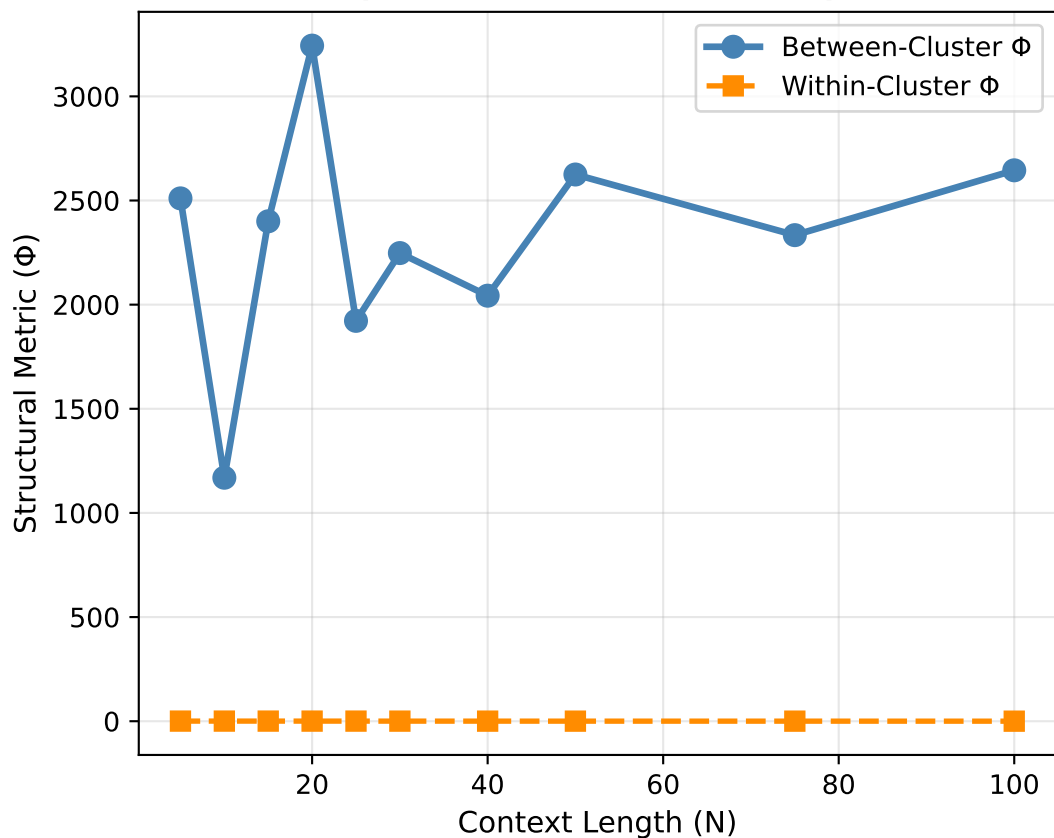**A. Position-wise CSS Across Context Lengths**
(Red=Positive, Blue=Negative)

B. CSS Trajectory per Position
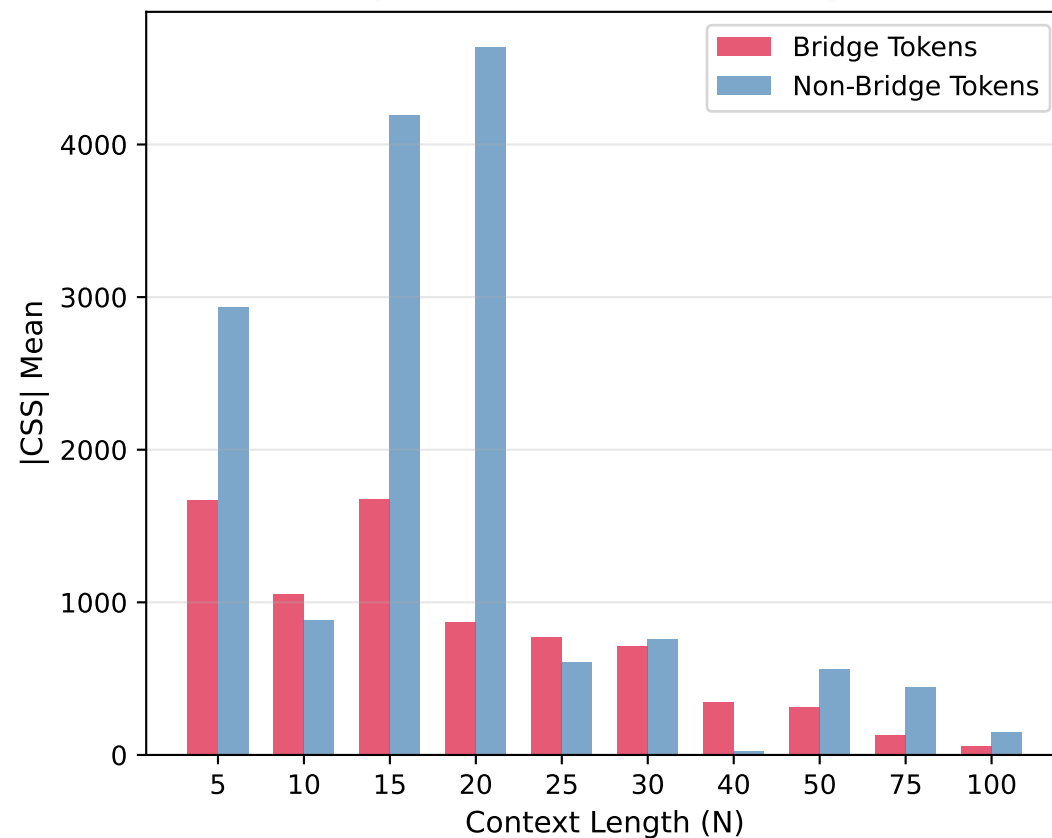**(Looking for Non-Monotonic Patterns)**

C. Sign Flips in CSS Across Context Lengths
(Lee et al. Key Finding)

D. Hierarchical Decomposition
(Global vs Local Structure)

E. Bridge vs Non-Bridge Token Influence
(Cluster Transition Points)

F. Summary

LEE ET AL. REPLICATION SUMMARY

Model: Qwen/Qwen2.5-7B
Context Lengths: 5 - 100
Samples per Length: 50

KEY FINDINGS

1. SIGN FLIPS (Lee et al. Fig 5):
   Total sign flips detected: 130
   Positions with ≥1 flip: 56

2. NON-MONOTONIC PATTERNS:
   Positions showing non-monotonic CSS: 20/20
   (Has both increases AND decreases)

3. HIERARCHICAL LEARNING:
   Between-cluster Φ at N=10: 2510.21
   Between-cluster Φ at N=100: 2644.98

INTERPRETATION

✓ Sign flips indicate changing token roles
✓ Non-monotonic CSS = influence dynamics
✓ Between > Within early = global first