2023_AAAI_Jointly Learning of Global and Local User Spreading Behavior for Fake News Early Detection
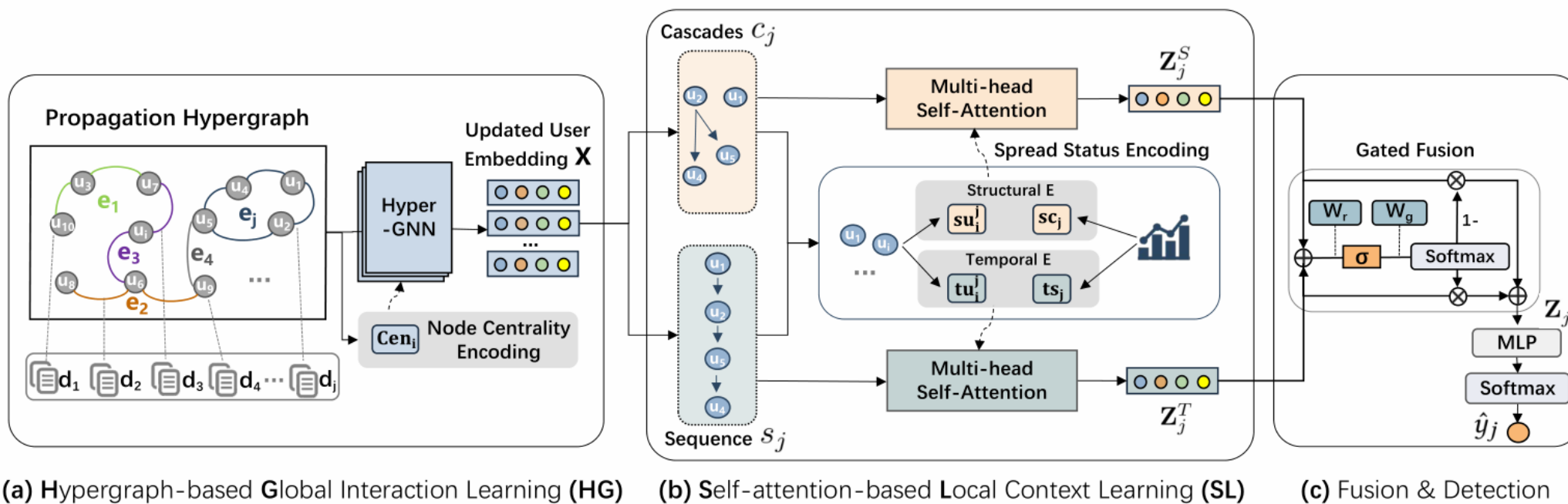

Figure 2: An overview of the architecture of HG-SL which consists of three major components: (1) Global interaction learning module uses hypergraph neural networks and node centrality encoding to learn the global relations of users, (2) local structural and temporal features are learned in local context learning module through multi-head self-attention mechanism and spread status encoding, and (3) in fusion & detection module, news propagation representations from structural and temporal aspects are merged for detection through gated fusion mechanism.

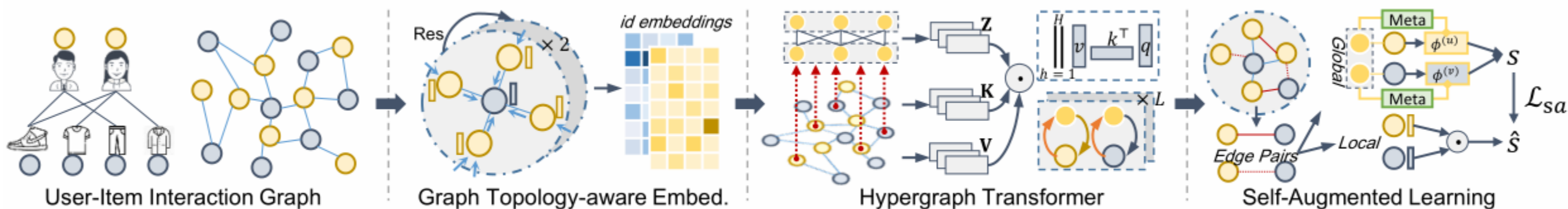2022_KDD_Self-Supervised Hypergraph Transformer for Recommender Systems

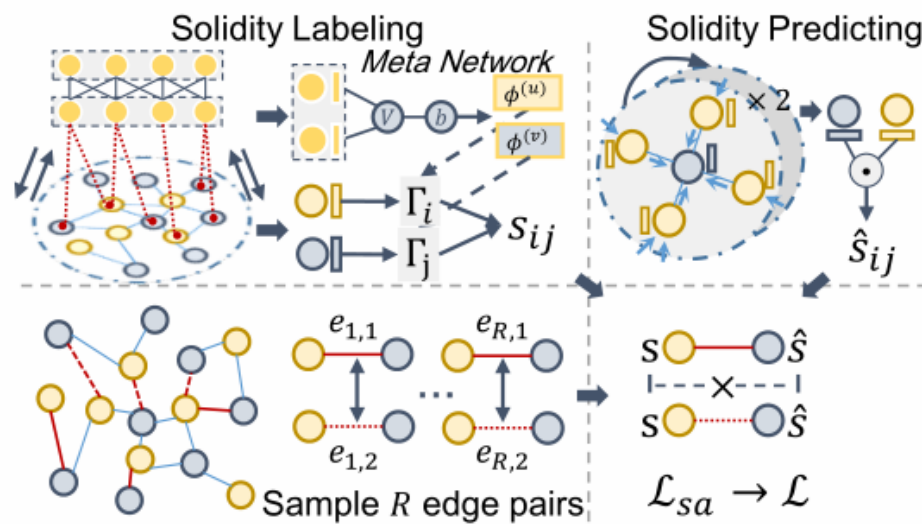Figure 1: Overall framework of the proposed SHT model.

Figure 2: Workflow of the self-augmented learning.

2022_KDD_Multi-Behavior Hypergraph-Enhanced Transformer for Sequential Recommendation
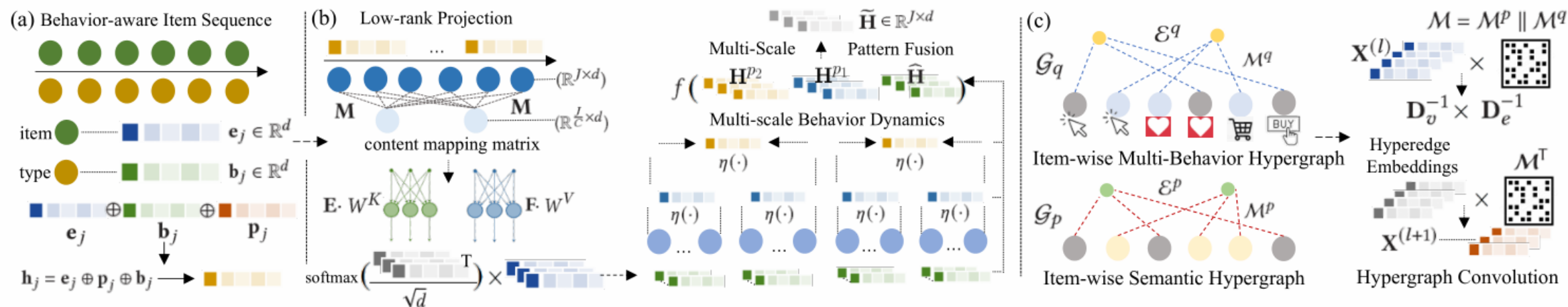

Figure 2: MBHT's model flow. (a) We inject the behavior-aware interaction context into item embeddings $h_j = e_j \oplus p_j \oplus b_j$. (b) Multi-scale transformer architecture to capture behavior-aware transitional patterns via low-rank self-attention and multi-scale sequence aggregation. Scale-specific behavior patterns are fused through the fusion function $\widetilde{H} = f(\widehat{H} \parallel H^{p_1} \parallel H^{p_2})$. (c) We capture the global and personalized multi-behavior dependency learning with our hypergraph neural architecture over $\mathcal{G}$.

2022_AAAI_Memory-enhanced Sequential Hypergraph Attention Network for Information Diffusion Prediction