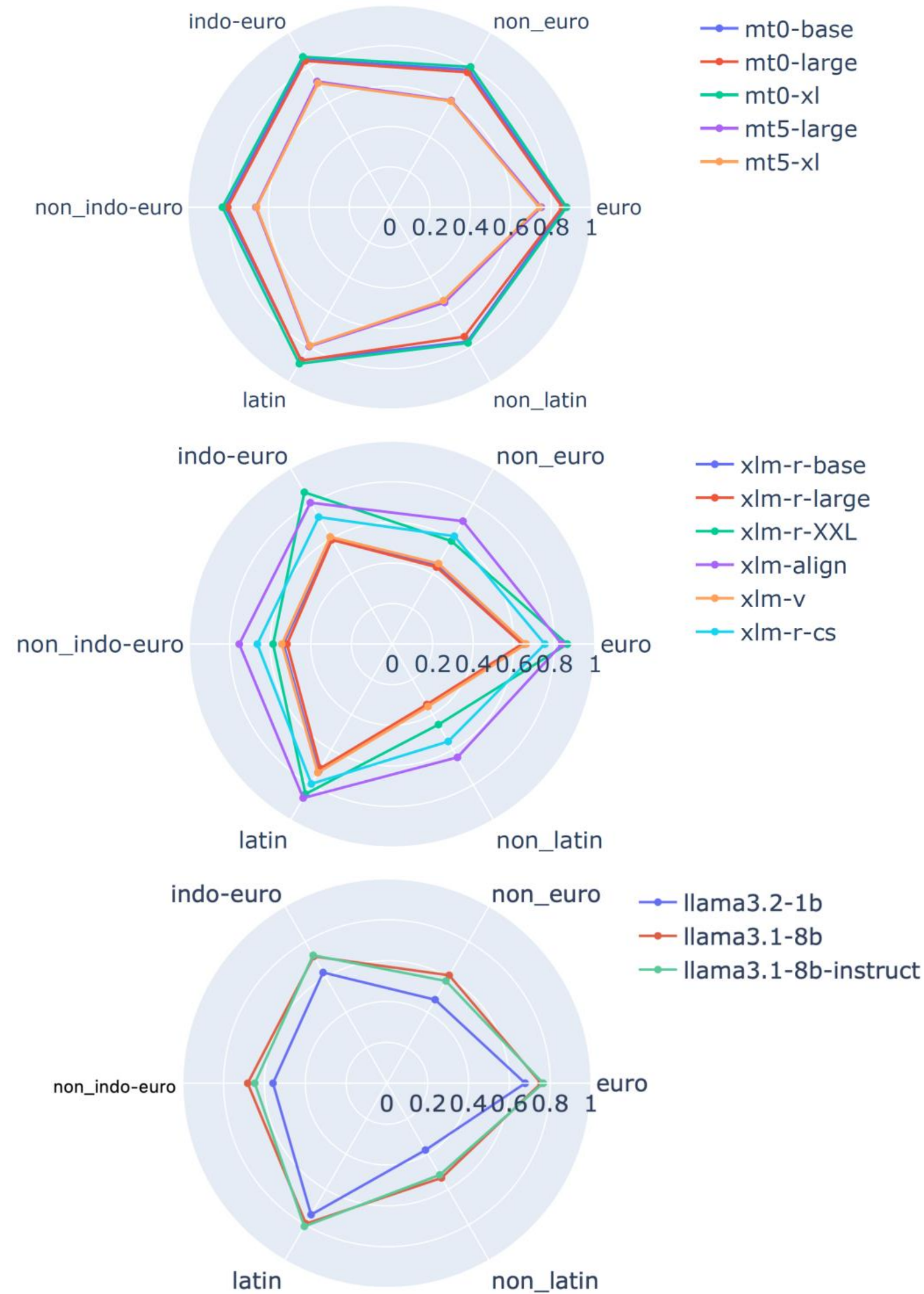


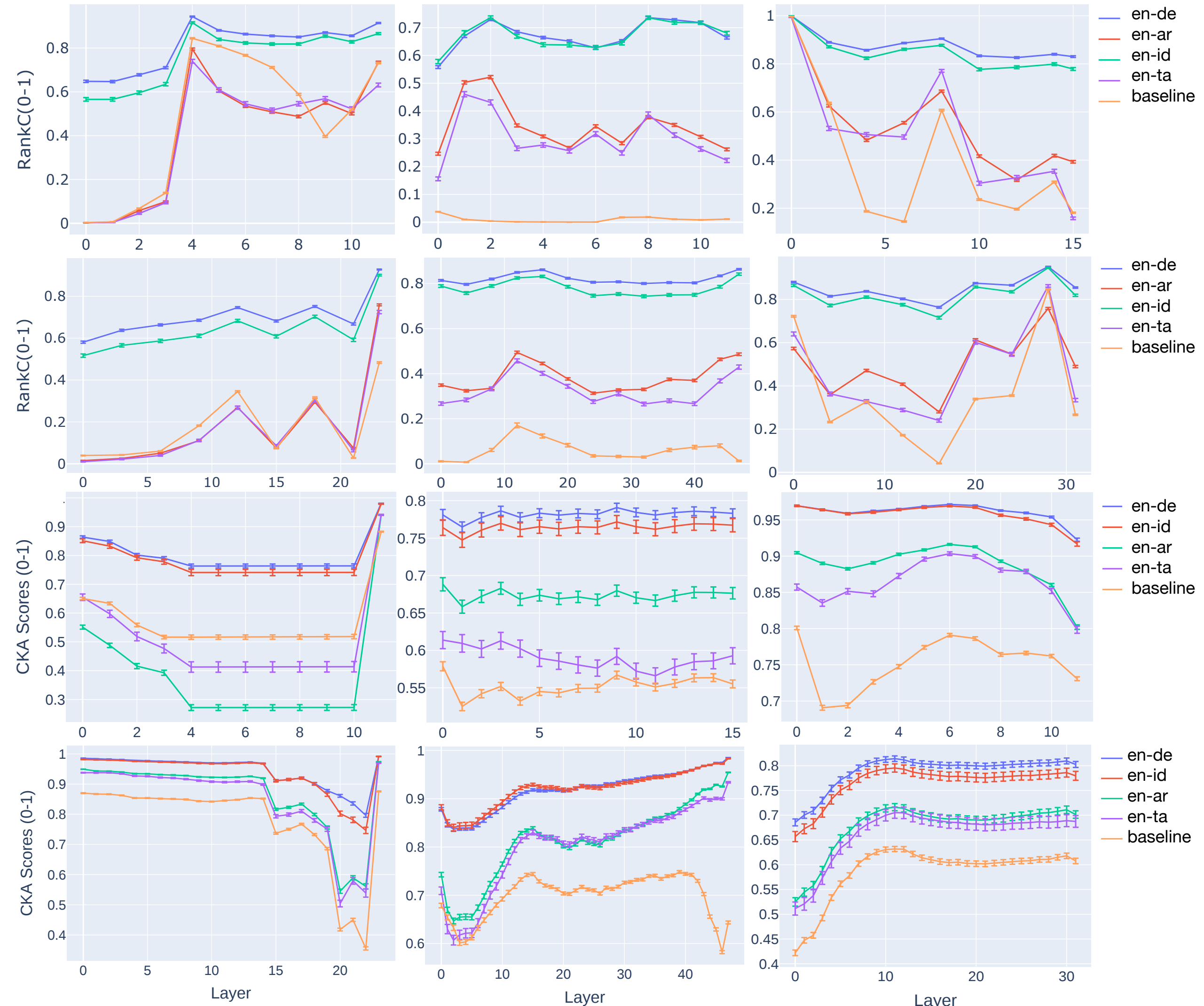
Findings

Consistency bottlenecks and issues tied to language characteristics, scripts, and training biases through layer-wise analyses and interpretability approaches, which potentially prevent cross-lingual consistency improvements and gains from scaling.

Consistency vs Language characteristics and scripts



Consistency evolution over layers(L: Encoder, M: Encoder-Decoder,R: Decoder)



Method: we compute the consistency metrics for each layer's representation and organize the results from the final output into 6 bins.