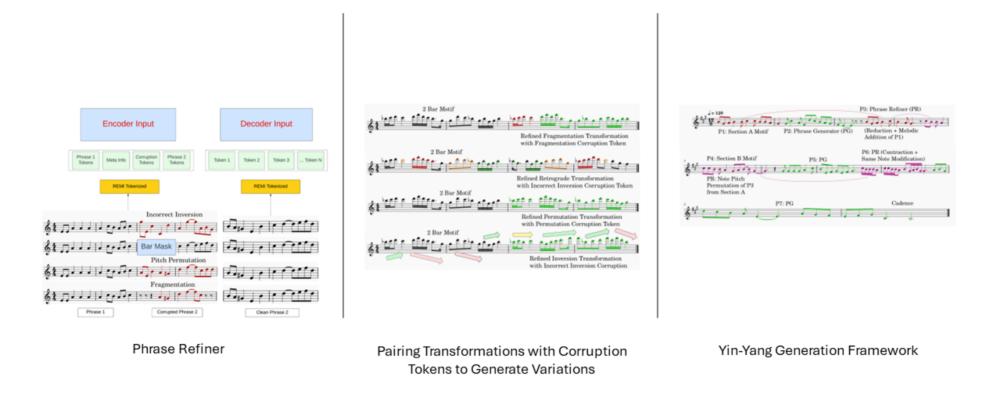# Neuro-Symbolic Automated Music Composition

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YIN-YANG: A NEURO-SYMBOLIC FRAMEWORK FOR DEVELOPING MOTIFS WITH LONG-TERM STRUCTURE AND CONTROLLABILITY

Phrase Refiner

Pairing Transformations with Corruption Tokens to Generate Variations

Yin-Yang Generation Framework

## Finding

Sub-task decomposition using a neuro-symbolic framework can lead to generations of melodies with long term structure while infusing domain knowledge into the process. This allows for a semi-interpretable generative approach with the flexibility of human controls and intervention.

## Question

Self-similarity matrix (SSM) is a graphical representation of similar sequences in a data series. In music, SSMs can yield useful information on musical structure and interactions between various elements. Could incorporating SSMs as inputs into the generative framework improve the global structure of the generations?

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