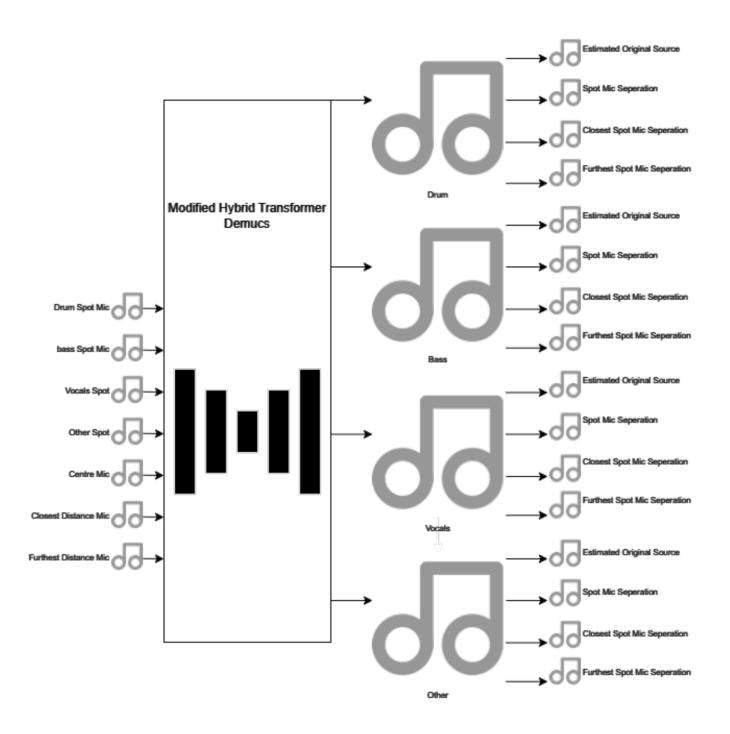
Informed source separation for multi-mic production

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Finding

One key finding from my PhD is that source separation approaches can be effectively adapted to perform multimodal tasks, including both separation and transcription of drum sounds. This demonstrates the potential of these models to leverage shared features and capabilities, enhancing their utility in music information retrieval and broadening their scope.

Question

An open question in my research is how using multiple microphones as inputs can enhance source separation capabilities. I am exploring whether spatial information can improve separation accuracy and effectiveness, and subsequently, how this approach might also be leveraged for drum transcription and used for gain control or acoustic contrasting in a mixture.

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