

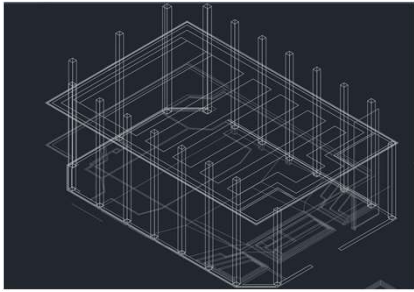
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## Music at the MET: A study in multi-functional acoustics

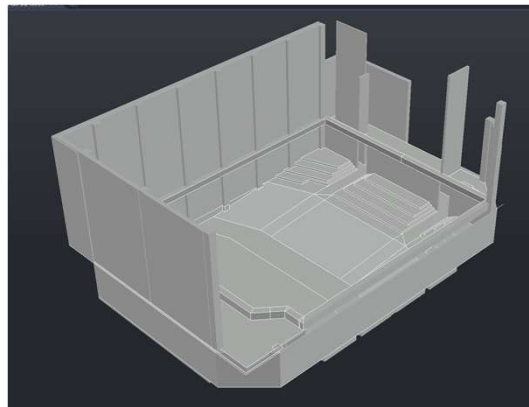
### Objectives

The goal of this project was to model and assess the role of the Martha Ellen-Tye Recital Hall in Music Hall at Iowa State University. The hall serves as a venue for a variety of music performances, from solo recitals to full ensemble concerts, by students, faculty, and guests.



### Methods

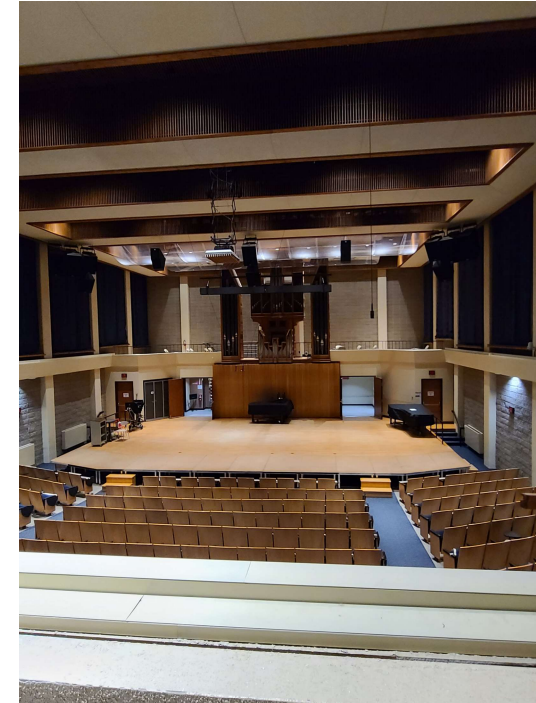
Autodesk AutoCAD software was used to create a virtual 3D model of the recital hall. References for this model include blueprints and floor plans provided by Mr. Curry. Evaluation of the practicality of the space was based on personal experiences of my own as a performer and as an employee, as well as from observations and discussion with Dr Zach.



### Results

Acoustically, the hall performs well for most ensembles, but especially well for small ensembles. The reverberation and projection audible in the hall can be fine tuned by adjusting the banners, walls, and ceilings, and an even tone is achieved across the seats in the audience.

Functionally, the hall has some disadvantages. The backstage area of the hall is narrow, making it difficult to navigate large groups of people, especially with at least one, if not two pianos taking up space. Access to the organ loft is limited because of the steep, narrow staircase, making it difficult to move people and instruments. The stage itself is barely large enough to hold the large ensembles.



### Conclusions

This recital hall performs well in the conditions it was designed for. However, as the music program expanded and the use of the hall broadened, the hall has not held up as well to the new expectations.

Ideally, a concert hall (as opposed to a recital hall), would make a significant contribution to the music program. A space designed for large ensembles would be put to good use. However, the hall can be made to suit the department's current needs.

