21M.380 · Music and Technology
Recording Techniques & Audio Production

Reading assignment 12 (RD12)
Room acoustics & reverberation

Due: Monday, November 7, 2016, 9:30am
Submit to: MIT Learning Modules ▸ Assignments
1% of total grade

1 Materials to study

Thompson, Emily Ann (2002). "The origins of modern acoustics." In: *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900-1933*. Cambridge, MA: MIT Press. Chap. 2 (excerpt), pp. 13–45. MIT library: 001096834. Available at: MIT Learning Modules ▸ Materials.

Eargle, John (2003). "Reverberation and signal delay." In: *Handbook of Recording Engineering*. 4th ed. New York: Springer. Chap. 16, pp. 232–41. MIT library: 002277189.

2 Questions to respond to

2.1 Thompson (2002)

1. Provide a list of rooms (regardless of size) whose existence you were aware of before reading this article, and indicate for each room whether you have ever visited it.

2. Which parameter that is representative of a room's acoustics did Wallace Sabine decide to measure? What is the parameter's name? Describe (in a few words) how it is defined.

3. Wherein lies the predictive power of Sabine's room acoustics measure?

4. Which aspects determine a room's acoustics according to Sabine's measure?

2.2 Eargle (2003)

1. Which problem did so-called reverberation chambers (or echo chambers) suffer from?
2. Which types of devices were developed to overcome specifically that problem?
3. Which problem did early spring delays suffer from?

3 Guidelines

- Your answers need not be very extensive (a short paragraph per question is enough), but they should demonstrate that you have actually read the article and understood its main points.
- Be concise and pay attention to form, grammar, and spelling.

21M.380 Music and Technology: Recording Techniques and Audio Production
Fall 2016