

- 1.) If a cathedral is 1000 ft. long, 100 ft wide and 175 ft. high in terms of enclosed internal volume, what is the reverberation time? (Make an assumption about the absorptivity of stone.)
- 2.) Is that like a room, or is it so large that it is like an open field?
- 3.) In an office with an eight foot high ceiling and an open office plan (nothing separating work stations except 5' high partitions) what would be the difference between using an acoustical tile ceiling and a plaster ceiling? For example, would private conversations be encouraged?
- 4.) Given a room with a reverberation time of 3 seconds, would lectures be appropriate? Would singing be encouraged? What kind of singing would work best? Would it make much difference what language was sung? Would a large musical instrument sound good? What kind of instrument, one suited to short sharp notes or one suited to long imposing ones?
- 5.) What are the arenas in the modern world like in comparison? What are the absorptivities of the seats and rear walls like? Is that good or bad?
- 6.) What are cars like in comparison? What is the background noise like? What is the absorptivity like? Given electronic amplification, what kind of music would sound best in a moving car, music with a lot of bass or music with a lot of high frequency sound? Would loud or soft music be best? Would music with a strongly discernable beat or subtle music be easiest to follow?
- 7.) Given that a room will rely heavily on electronic amplification, what should be the strategy for the design of the space?