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Whoa, Check Out the Acoustics In Here

An interview with **Brady Peters**, Professor, Architecture
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Often sound, unfortunately in architectural design, is something that's not necessarily considered. People think about the aesthetic dimensions, the programmatic dimensions, the functional dimensions of the room far before they think about sound. As architects we're very familiar with visualizing space, to create visualizations, but we can also create auralizations.

Sound has actually been really carefully designed for things like concert halls and opera houses, and so forth. I'm actually interested more in more common spaces, shall we say. Things like meeting rooms and classrooms, hallways, and how do we design for sound in these types of spaces? Can we use that same kind of thought process that we have learned through our work in concert halls and opera houses to actually design better classrooms?

How do you design architecture for sound?

There's three basic mechanisms by which sound can interact with a surface. And we know about two of them really well: that is sound absorption, the ability to absorb sound energy by a surface, and sound reflection, so we can reflect sound off a wall and we can aid in the walls and ceilings so that we can get optimal reflection. But the third mechanism is sound diffusion, which is the scattering of sound, not only into many different directions, but over time as well. And this is the third important criterion for sound.

