Scientists Record 3,000-year-old Music; No Time Machine Required

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Long before Louis Armstrong picked up a trumpet, or Slide Hampton wrapped his lips around a trombone, ancient Peruvians made music within stone ceremonial chambers. Their instrument of choice? The pututu, a bugle created from the galeatus, a marine conch.

Recently, a team of scientists recorded the ancient instruments’ tones, allowing us to eavesdrop on these pre-Incan musicians for the first time. The researchers say that by knowing what the pututu sounded like, we can better understand its role in this 3000-year-old culture. They reported their results this month at the Pan-American/Iberian Meeting on Acoustics.

A group of brass, digeridoo and musical-shell stylists played 19 Strombus shells, which archaeologists found in 2001 in Chavín de Huántar, a labyrinthine ceremonial site in the Peruvian Andes. By placing microphones within the musicians’ mouths, inside the shells, and around a small room at a research facility, the scientists recorded the different notes each pututu made.

Like a bugle, the pututu can only produce two tones: a lower tone, and a higher 1st overtone. But the musician can alter these sounds by dipping his hand into the open lip of the coiled conch, called the bell. To modern ears, the music may sound coarse or grating.

To make the pututus, the ancient Peruvians carefully modified and decorated the large Strombus shells. They severed and polished the small pointed ends of the shells to create an ideal musical mouthpiece, and adorned them with paint and etchings. They also fitted the shells with v-shaped notches, which the researchers think could have made it easier for the ancient musicians to dip their hands into the bell. Or, it could have enabled the musicians to play their instruments while marching through their eerie hollows.

You can hear the spooky sounds of the pututu and learn more about the Chavín site here, on Discovery News.
About Anna Rothschild

Anna Rothschild is a journalist based in New York City. She reports on everything from science to music to urban legends.

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