3D Print of Human Speech

S.R. Johnston¹, J.B. Imgrund¹, D. Fries¹, R. Lozano-Hemmer², S. Schulz², K.C. Johnson³, J.T. Bolton³, C.J. Clifford³, B.S. Thurow³, E. Fonda⁴, K.R. Sreenivasan⁴, D. Ranjan¹ Georgia Institute of Technology, ²Antimodular Studio, ³Auburn University, ⁴New York University



In 1860, Édouard-Léon Scott de Martinville recorded the song "Au claire de la lune" on the phonautograph, making the first recording of human speech. Here the phrase is depicted as a sculpture to be viewed, rather than heard. Breath exhaled from speaking is 3D scanned to form a solid, which is later printed. Words, phrases, and sounds become moving clouds of vapor, containing layers of complex folds and vortices. This piece is inspired by Charles Babbage's theory that spoken words have an everlasting impact on the universe. The *Atmospheric Memory* work by Rafael Lozano-Hemmer is part of a series of collaborations between artists and scientists working within the *Creative Turbulence* project.



