Title: FaceType: Expressing Our Spoken Expression

Artists: Kevin Maher, fan xiang, Liang Zhi

Software: Python, Tensorflow, LeonSans, D3.js, Pixi.js, Microsoft Azure

Hardware: Camera, microphone, projector, canvas, lcd screen

Dimensions: 3.6 meters by 1.4 meters

Short:

We designed the installation FaceType so that visitors could perform Chinese calligraphy, “writing” English letters that document emotion, cadence, and emphasis in audience expression. Letter shape, brush stroke, spacing and speed are “data-ink” giving viewers a sense of how their emotion had been expressed over time.

Long:

In the installation FaceType, visitors experience the emotion, cadence, and emphasis in their speech in vivid generated type. FaceType connects our facial expression with Chinese calligraphy, using dynamic emotional changes as a common point between these strangely different means of expression.

Letter shape, brush stroke, spacing and speed as to perform “data-ink” reflecting audience speech in a live process. Intuitive mapping of these factors were developed for a non-Western audience in mind, one versed with understanding of how calligraphy is used for expression. The strokes of the font were developed in collaboration with Chinese calligraphers, whose work often incorporates emotion-laden brush strokes.

During the installation showing, nearly half of the audience interacted with the work through the microphone and camera. FaceType takes the emotional intensity and valence of facial expressions as well as the emphasis and cadence in visitor speech to “write” animated strokes documenting their spoken expression.