

Visualizing Vocal Expression

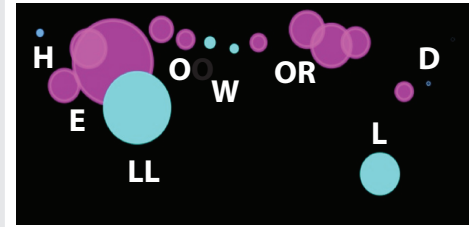
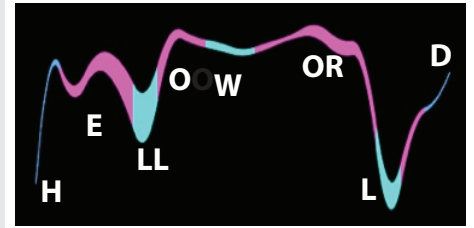


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- How well can users interpret the expression visualizations?
- Which styles do users prefer for others' speech?
- Which styles do users prefer for their own speech?
- Which variations of the elements within the styles do users prefer, and why?

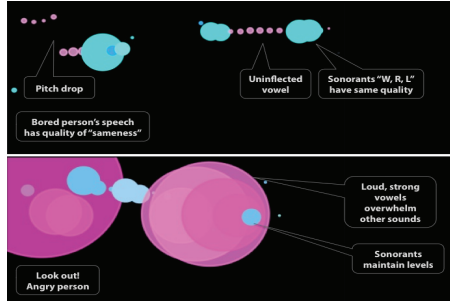
Muted **Bright**

		Vowels: e.g., key, cut, cot
		Obstruents: e.g., s, sh, ch, j, p, k
		Sonorants: e.g., n, m, l, r, w, y

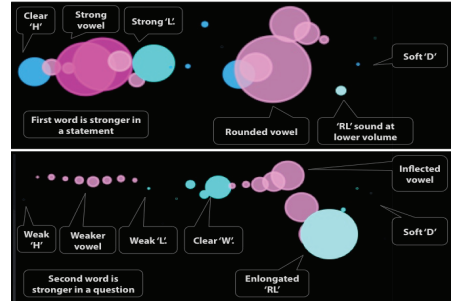


“Hello, World,” in Ribbons (top) and Bubbles (bottom). Bubble size and line thickness map to amplitude. Curve (vertical position) shows pitch contour.

Monotone



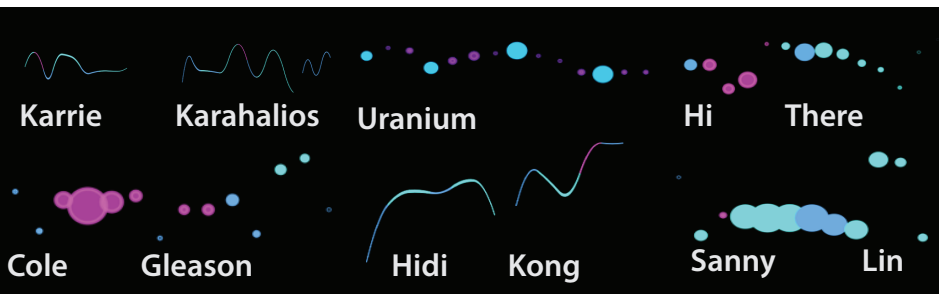
Statement



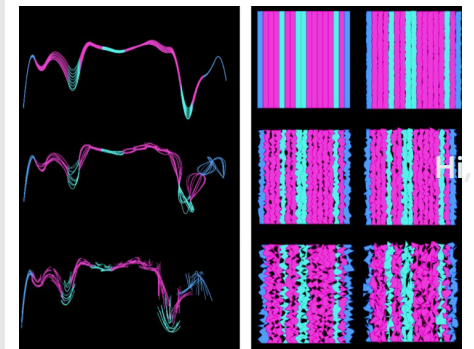
Emphasis

Same Phrase Spoken 4 Ways: “Hello World”

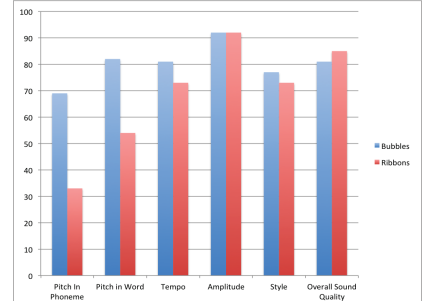
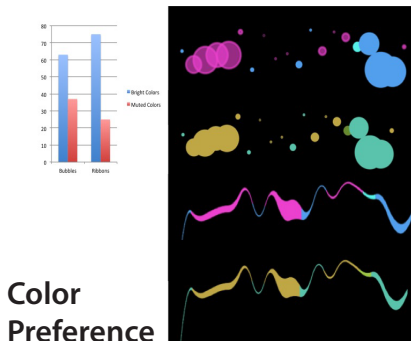
Question



Signature and Phrase Gallery



“Hello, World,” in Threads (left) and Strips (right). Shows increasing qualitative inflection.



Interpretation Accuracy: Bubble and Ribbon Visualizations

