How do you say "Hello"? Acoustic-based modulation of voice personality impressions

Pascal Belin

Institut de Neurosciences de la Timone, UMR7289, Centre National de la Recherche Scientifique & Aix Marseille Université, France ; Département de Psychologie, Université de Montréal, Canada

pascal.belin@univ-amu.fr

Research in face perception shows that robust personality impressions—stable in time and consistent across observers (although not necessarily accurate)—emerge within less than a second of exposure to novel faces, and that these impressions are well summarized by a 2-D Trustworthiness-Dominance 'Social Face Space'. Here I present studies showing that a similar phenomenon exists in the voice domain. Our results indicate that exposure to a single 'Hello' is sufficient to elicit robust personality impressions in listeners, and that these impressions are accurately summarized, for both male and female voices, by the same Trustworthiness-Dominance 'Social Voice Space' as for faces. Acoustical manipulations based on voice morphing effectively modulate these impressions, while reverse-correlation techniques successfully predict the optimal acoustical pattern for each impression, opening the door to a principled-based 'vocal make-up' –modulations of perceived voice personality in real or synthetic voices.