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Politicians don't just walk like apes, they talk like them too, study suggests

Politicians such as Donald Trump and Hillary Clinton adopt a tone of voice designed to convey 'authoritarian charisma' when speaking to their peers

Ian Johnston Science Correspondent | Wednesday 25 May 2016 | [19 comments](#)



Republican presidential candidate Donald Trump speaks at a fundraising event in New Jersey on 19 May *Reuters*

Politicians are well known for using body language to convey the impression of power such as George W Bush's infamous 'gorilla walk' – palms facing backwards and arms stuck out from the sides.

But an academic study of the voices of four contenders to become US president – Democrats Hillary Clinton and Bernie Sanders, and Republicans Donald Trump and Carly

Fiorina, who has since dropped out -- has revealed they also change the way they speak depending on the social status of the listener.

And the researchers believe they do so in a way that dates back so far in our evolution that similar behaviour may be found among the great apes today.

In casual chat show-style settings, the politicians were found to speak as they would to a member of their family, but when addressing a large audience of supporters their voices took on an almost sing-song quality, using a range of different pitches from high to low.

But perhaps the most profound change was when they talked to people of a similar status – in these settings they adopted a deeper voice and removed any high notes.

Researcher Dr Rosario Signorello, of University of California at Los Angeles's School of Medicine, said there appeared to be similarities in the "vocalizations" by humans in leadership positions, regardless of whether they were male or female or what language they were speaking.

"The results are cross-cultural and cross-gender," he told The Independent, adding that its widespread nature supported the idea that the voice of a leader was developed long ago in human evolution.

He said previous studies had shown that many animals, including humans, interpret a deep voice as being a sign of a "big vocaliser, a big speaker ... as a speaker with dominance".

They now plan to study chimpanzees to see if they communicate in similar ways to the humans as they rise in social status.

"We're going to record primates such as chimps and see how the vocal pattern of the established leader changes, acoustically speaking, and how an individual's vocal behaviour changes as soon as the individual takes or wants to take over the leadership," Dr Rosario said.

A statement about the study issued by the American Institute of Physics (AIP), ahead of a presentation at the [Acoustical Society of America](#), said that all four US politicians used a "very wide fundamental frequency range" when addressing political rallies, a style of speaking that the researchers have previously found is "key to being perceived as charismatic".

But when they addressed people they considered to be their peers -- such as Ms Clinton addressing the United Nations Commission on the Status of Women, Mr Sanders speaking to the US Senate, and Mr Trump and Ms Fiorina appearing at the New Hampshire Leadership Summit -- they all “varied their pitch from very low to medium, eschewing high frequencies altogether”.



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Dr Signorello added; “This vocal profile seems to reflect leaders’ use of vocalizations to display dominance while addressing speakers of the same social status. They use voice to convey their authoritarian charisma.”

On non-political late-night talk shows, their tone changed to what was described as a more “healthy” or “normal, non-varying” voice that they might use when speaking to their family.

According to www.primates.com, silver-back and large black-back male gorillas give a call known as a roar that is "low in pitch and is an outburst of sound through the open mouth". "This call is given when the individual is under stress or threat, and the individual may give false charges and short lunges. The group hides behind the silver-back when hearing this," it adds.

While most people do not pay too much attention to their body language or the tone of their voice, politicians are acutely aware of the importance of such matters.

Mr Trump has even criticised Barack Obama for failing to adopt a suitable walk in public. “The way President Obama runs down the stairs of Air Force 1, hopping and bobbing all the way, is so inelegant and unpresidential,” Mr Trump tweeted.

Emma Serlin, director of the London Speech Workshop, which trains people how to speak in public, said she disagreed that politicians were trying to be dominant when speaking to their equals in a lower tone.

In these situations, they are largely speaking to a “captive audience” who did not need to be “entertained” in the same way that a large public audience needed to be, so this meant the speaker’s voice did not need to range from high to low to maintain their interest. And, instead of asserting dominance, they were more likely to be trying to appear like someone who should be taken seriously.

“It’s about coming across as heavyweight and expert. They need gravitas ... they need to be seen as the real deal – ‘we are experts, we know what we are talking about,’” she said. “It’s more about saying ‘we’re bona fide and should be in the room.’”

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