

4-21-2023

Canine Play Pant: Bioacoustics Project of ECHOS Lab

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Abstract

Vocalizations in animals are an expression of an internal state. In canines specifically, they produce what is called a play pant. A play pant is defined as a "forced, breathy exhalation", and happens as a by-product of exertion. This is observed when dogs are playing, and can function similar to human laughter. It signals that pleasure is being received and for the play to be continued. For our research, we video and audio record a human-dog pair while playing. We then analyze the audio recording in RavenLite through a spectrogram and waveform, using specific parameters. This research branched from previous research done by Simonet et al. to confirm her work. We hope to continue this research and find more influences of these vocalizations such as dogs' life histories and evolution.

CANINE PLAY PANT

BIOACOUSTICS PROJECT OF ECHOS LAB



Do dogs laugh?

The play pant is observed through a spectrogram and wave form.

WHAT IS A PLAY PANT?

By-Product of Exertion

The play pant will occur in bouts within the dog's regular pant. It is defined as a "forced, breathy exhalation".

"Functions" Similar to Laughter

Usually signals that pleasure is being received and for the play to be continued. We are currently looking for a call and response. After all, laughter is contagious.

WHAT WE DO IN THE LAB:

Set up both the dog and human with a microphone that is connected to a receiver in which we record the audio.

We then play with the dogs to extract the play pant, which usually is accompanied by a play behavior.

Three Phases of Play:

- Training Phase
- Play Phase
- Shared Rest Phase

FUTURE RESEARCH

As of April 1st, we have been bringing bonded partners onto campus. This allows us to look at other factors of the dog's life history that influence how they play.

We also might have the chance to see if wolves (in captivity) express this form of play. Then, we can look at the canine play pant from an evolutionary perspective.

Simonet et al. (2001, 2005) Volsche et al. (2023)

