



# In on the Joke: Do Dogs Laugh?

Shelly Volsche, PhD, CPDT-KA  
APA Webinar | Dec. 14, 2023

"Who says dogs can't laugh?" by [Lansun](#) is licensed under [CC BY-NC-ND 2.0](#).





# Who am I?

Assistant Professor,

Department of Animal and Food Science

University of Wisconsin – River Falls

Companion Animal Science/Management

Applied Ethology and Anthrozoologist

Prior Experience as a Professional Dog Trainer

Dog “Mom”



# Do Dogs Laugh?

That is the question...

# Tinbergen's Four Questions

<b>Mechanism</b>	<b>Ontogeny</b>
<b>Function</b>	<b>Phylogeny</b>



Portrait of Niko Tinbergen c.1970 [MS/924/1/1/001]

# Defining Laughter

**mechanism** – diaphragm contracts to create bursts of exhalation that are associated with arousal.

**function** – a signal that induces or continues a play state while signaling a lack of malintent.

# Defining Laughter

**mechanism** – diaphragm contracts to create bursts of exhalation that are associated with arousal.

**function** – a signal that induces or continues a play state while signaling a lack of malintent.

# Defining Laughter

**mechanism** – diaphragm contracts to create bursts of exhalation that are associated with arousal.

**function** – a signal that induces or continues a play state while signaling a lack of malintent.

# Patricia Simonet

**play pant** – domain-specific vocalization in dog-dog play.

“forced, breathy exhalation” → diaphragm/mechanism





# Patricia Simonet

Simonet, P.R., Murphy, M., & Lance, A. (2001). Laughing dog: vocalizations of domestic dogs during play encounters. Paper presented at the Animal Behavior Society Conference in Corvallis, OR.

Simonet, P.R., Versteeg, D., & Storie, D. (2005). Laughing dog: Reduction of stress related behaviors in shelter dogs using recorded playback. Paper presented at the 7th International Conference on Environmental Enrichment in New York, NY.

# Patricia Simonet

Simonet, P.R., Murphy, M., & Lance, A. (2001). Laughing dog: vocalizations of domestic dogs during play encounters. **Paper presented at the Animal Behavior Society Conference** in Corvallis, OR.

Simonet, P.R., Versteeg, D., & Storie, D. (2005). Laughing dog: Reduction of stress related behaviors in shelter dogs using recorded playback. **Paper presented at the 7th International Conference on Environmental Enrichment** in New York, NY.



# Participants

## Humans

- 18+ years of age
- living with dogs for at least one year

***N* = 16**

***n* = 14**

## Dogs

- not people reactive
- likes to play
- not in estrous

# Methods

## Audio and Video Recordings

- Human – wireless mic pack
- Dogs – harness w/wireless mic pack

## Three interactions:

- Training
- Play
- Timed, shared rest



# Results

Nearly all play pants occurred during play

- One-Way ANOVA
- $F(2, 39) = 5.897, p = 0.006$

Near perfect correlation/play pant

→ play behaviors, activities, or direct contact between person + dog.

- Two-tailed Pearson's rho
- $r_s(42) = 0.998, p < 0.001$

# Results





BIOLOGICAL  
REVIEWS

*Biol. Rev.* (2023), **98**, pp. 421–433.  
doi: 10.1111/brv.12912

Cambridge  
Philosophical Society

421

## Centring individual animals to improve research and citation practices

Shelly Volsche<sup>1</sup> , Holly Root-Gutteridge<sup>2,\*</sup> , Anna T. Korzeniowska<sup>3,4</sup>  and Alexandra Horowitz<sup>5</sup> 

<sup>1</sup>*Department of Anthropology, Boise State University, Hemingway Building, 1910 University Drive, Boise, ID, 83725, USA*

<sup>2</sup>*University of Lincoln, Joseph Banks Laboratories, School of Life Sciences, Brayford Pool Campus, Lincoln, LN6 7TS, UK*

<sup>3</sup>*School of Psychology, University of Sussex, Falmer, Brighton, BN1 9QH, UK*

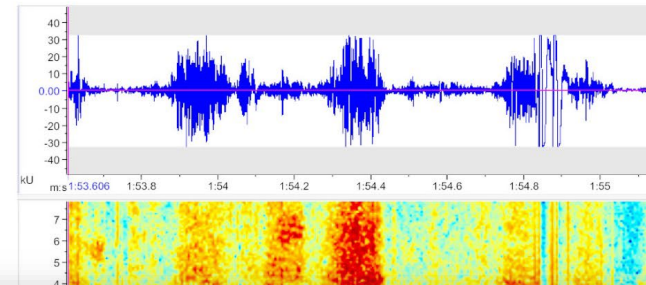
<sup>4</sup>*School of Psychology, University of Surrey, Guildford, GU2 7XH, UK*

<sup>5</sup>*Psychology Department, Barnard College, 3009 Broadway, New York, NY, 10027, USA*

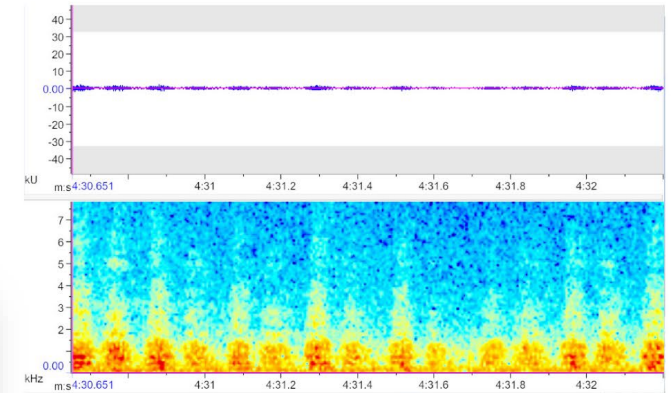
### ABSTRACT

Modern behavioural scientists have come to acknowledge that individual animals may respond differently to the same stimuli and that the quality of welfare and lived experience can affect behavioural responses. However, much of the foundational research in behavioural science lacked awareness of the effect of both welfare and individuality on data, bringing their results into question. This oversight is rarely addressed when citing seminal works as their findings are considered

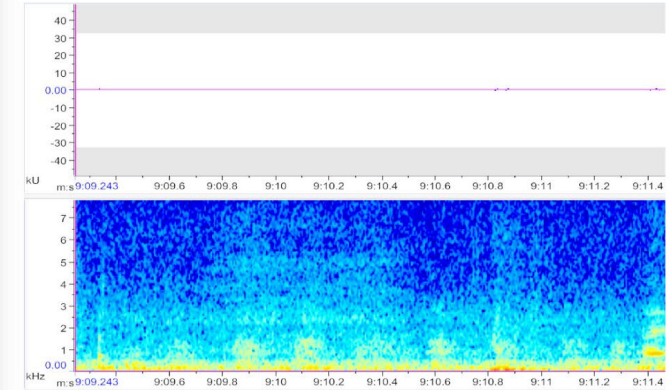
Toldi: Play Pant



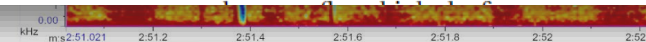
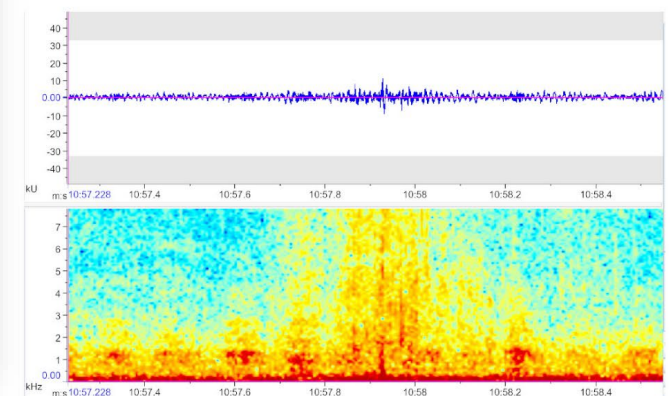
Toldi: Resting Pant



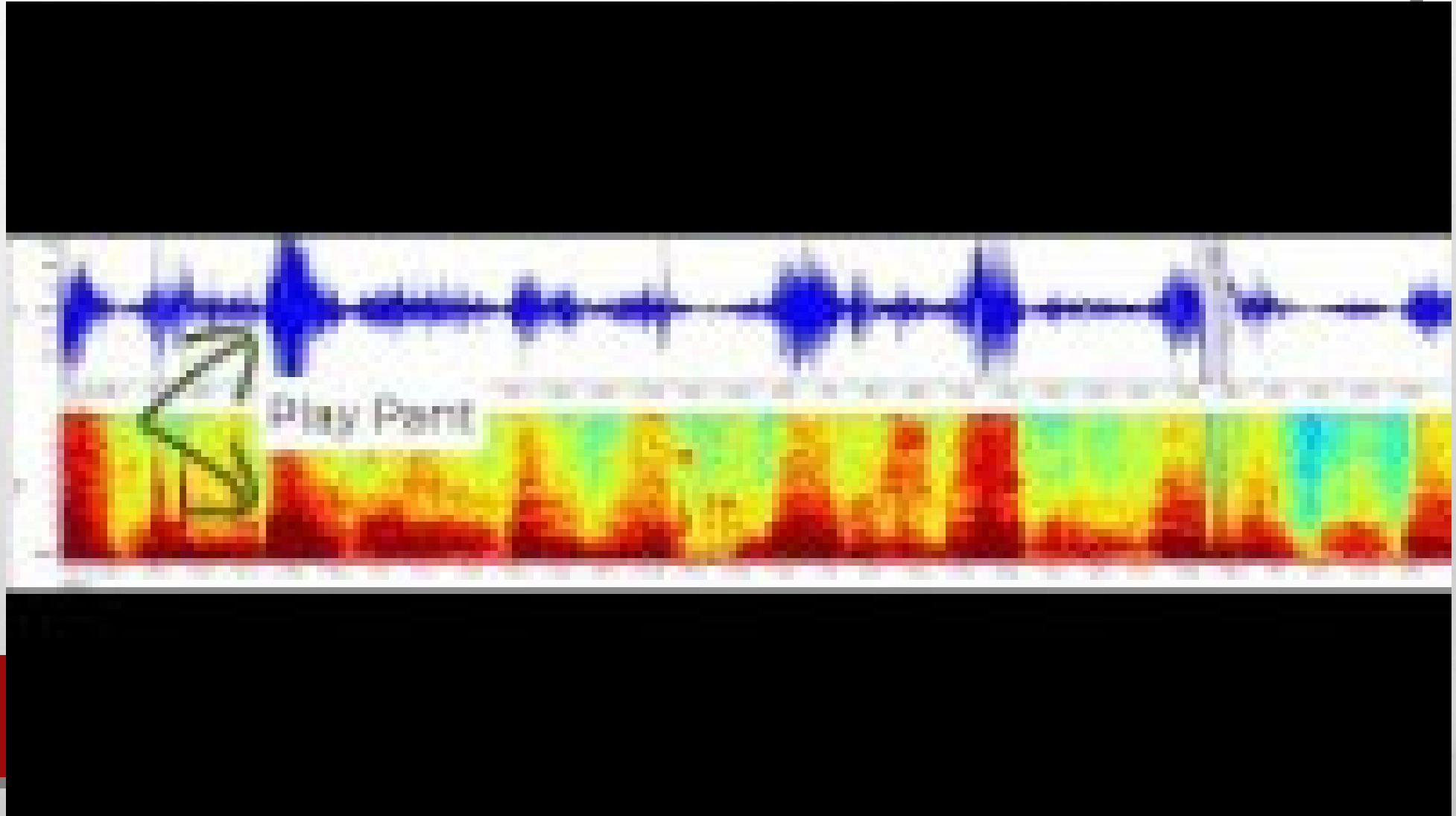
Tula: Resting Pant



River: Resting Pant



# Sample





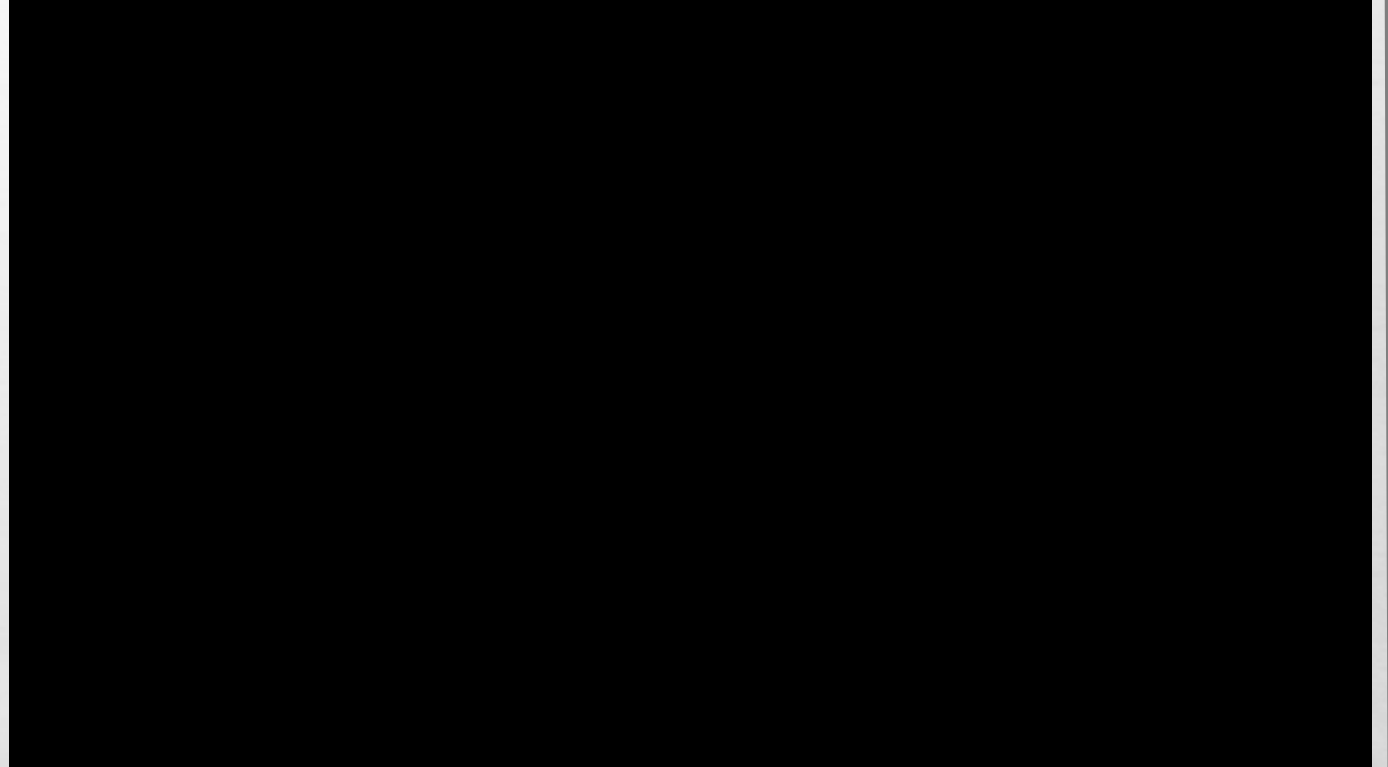
# Shelter Dogs

## Humans

- Research assistants
  - primarily undergrads
- Unfamiliar to dog

## Dogs

- not people reactive
- 6+ mos of age
- Min. 7 days post-op



# Shelter Dogs

- Data collection is paused → harnesses didn't work for many
- Changes planned in recording → no harness, different mic
- Preliminary supports findings in the bonded partners  
→ though certainly less frequent
- Seeking funding for ManyDogs-esque project

# Do Dogs Laugh?

- Data says → they play pant → mechanism
- Observation says → humans can induce the pant with our behavior  
→ function (? – Maybe)
- The play pant definitely suggests they are enjoying themselves

# Play Pant in Clinic

- Animal Assisted Play Therapy
  - One more indication of whether dog is enjoying the interaction
  - Can possibly induce a more positive affect in humans
  - Marker of welfare?
- If audio playback helps calm dogs, does it help us?
  - Is this the next “Zen”?

# Play Pant in Broader AAI

- Teach subtle social attention in children?
- Play with courthouse dogs?
- Psychiatric service dogs? Is this part of why they help?
- The list of questions goes on...

# Play Pant in Broader AAI

Dogs are individuals, like us!

Be sure you have someone suited to the job.

Learn the signals – play pant is just one of many!





# Thank you!

- Questions?

## **my contact info:**

E: [shelly.volsche@uwrf.edu](mailto:shelly.volsche@uwrf.edu)

T: @ShellyVPhD

F: @shelly.volsche