



HAL
open science

Pet-directed speech attracts horses' attention more than adult-directed speech on video-projections

Plotine Jardat, Ludovic Calandreau, Vitor Hugo Bessa Ferreira, Chloé Gouyet, Céline Parias, Fabrice Reigner, Léa Lansade

► To cite this version:

Plotine Jardat, Ludovic Calandreau, Vitor Hugo Bessa Ferreira, Chloé Gouyet, Céline Parias, et al.. Pet-directed speech attracts horses' attention more than adult-directed speech on video-projections. 29. Annual International Conference on Comparative Cognition, Comparative Cognition Society, Apr 2022, Virtual Conference, France. hal-04092036

HAL Id: hal-04092036

<https://hal.inrae.fr/hal-04092036v1>

Submitted on 9 May 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Pet-directed speech attracts horses' attention more than adult-directed speech on video-projections

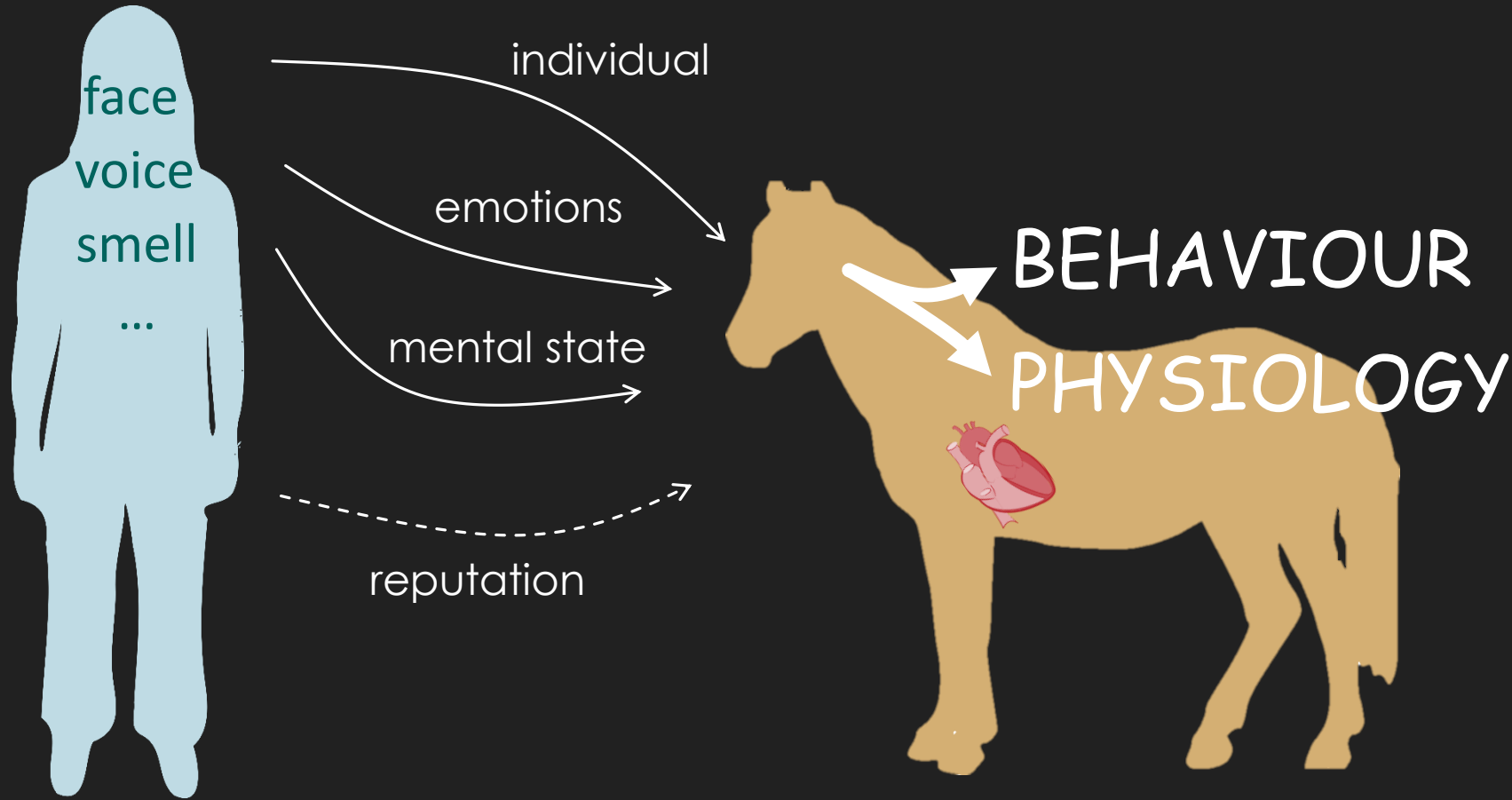


Jardat, P., Calandreau, L., Ferreira, V., Gouyet, C., Parias, C., Reigner, F., Lansade, L. Pet-directed speech improves horses' attention toward humans. *Sci Rep* **12**, 4297 (2022). <https://doi.org/10.1038/s41598-022-08109-z>



The human-horse relationship

Jardat and Lansade 2021
Proops and McComb 2010
Trösch et al. 2019
Lansade et al. 2020

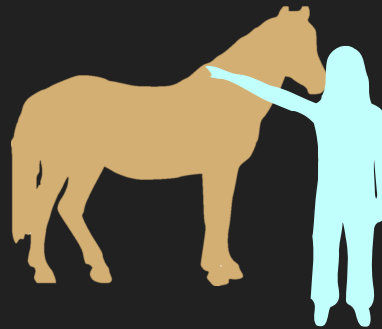


Pet-directed speech and its effects on horses

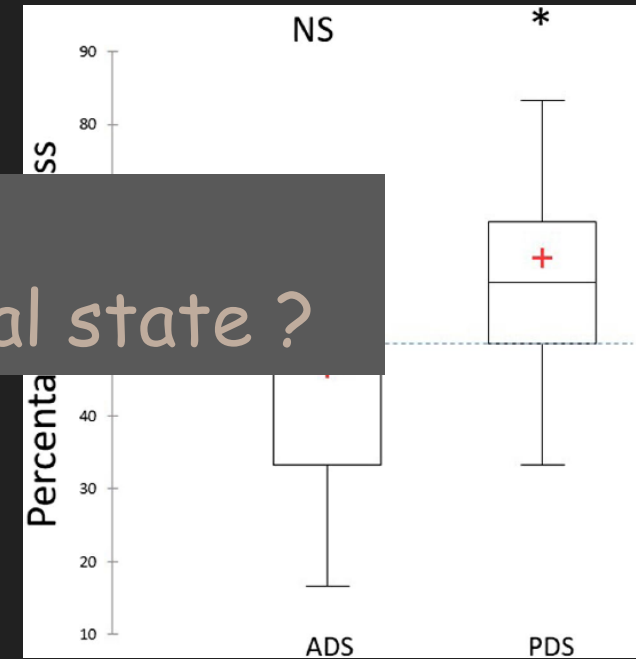
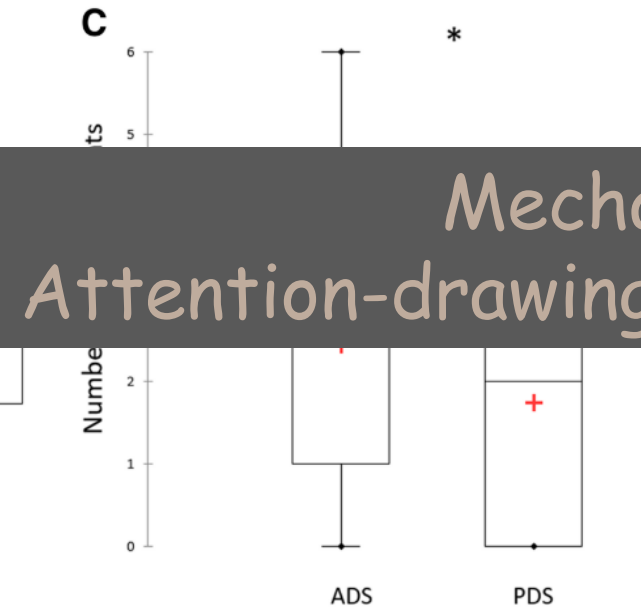
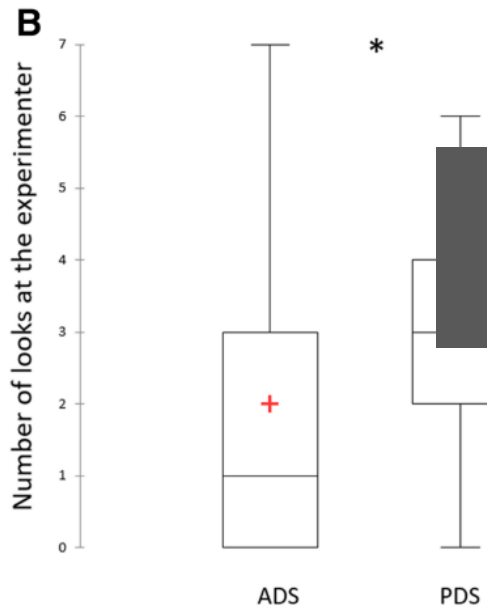
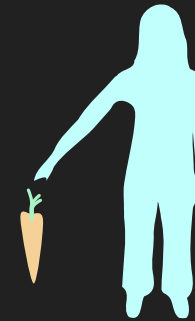
High pitch
Wide pitch range
Slow rate of speech

Lansade et al. 2021

During grooming



Pointing task



Mechanism ?
Attention-drawing, emotional state ?

Methods

28 female horses

Pre-registered videos of women speaking in PDS and ADS



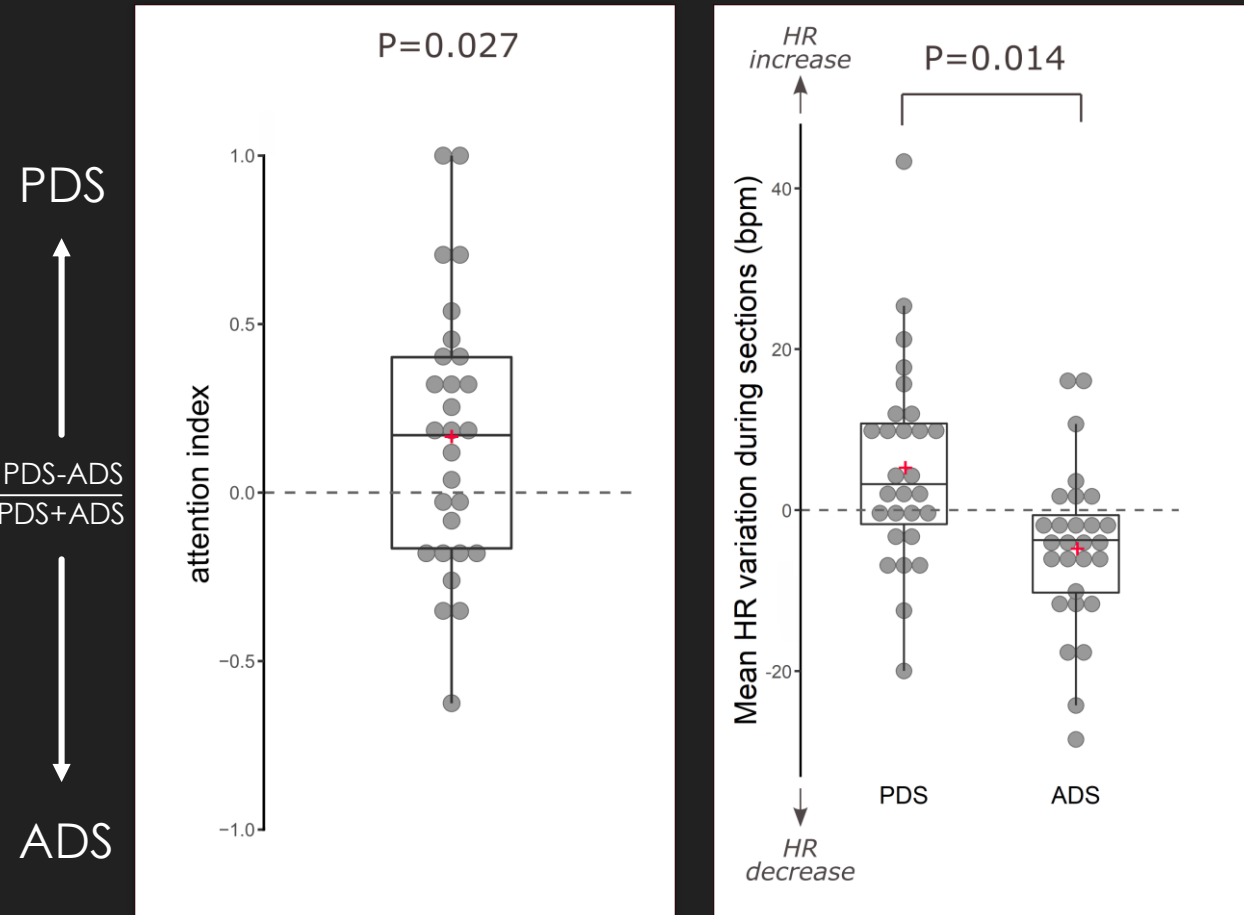
Behaviour

Attention to video
Alert/relaxed posture
Defecations, neighs,
snorts, shows of sclera

Heart rate

$HR_{\text{end}} - HR_{\text{start}}$

Results



→ PDS helps to **attract** horses' **attention** and has an **arousing effect** on them

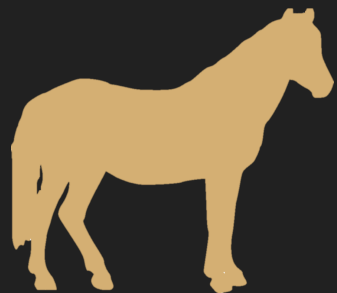
No differences in emotional indicators between PDS and ADS

Discussion: why this effect of PDS on horses?

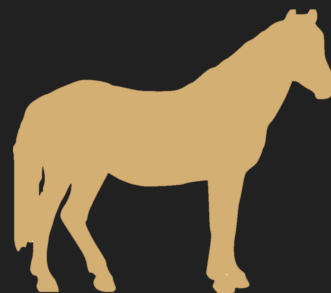
Trösch et al. 2019, 2020

Saint-Georges 2013

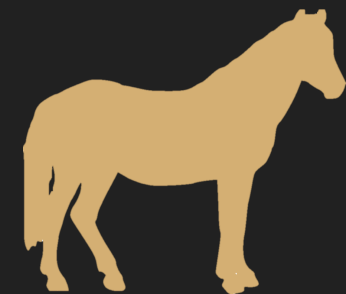
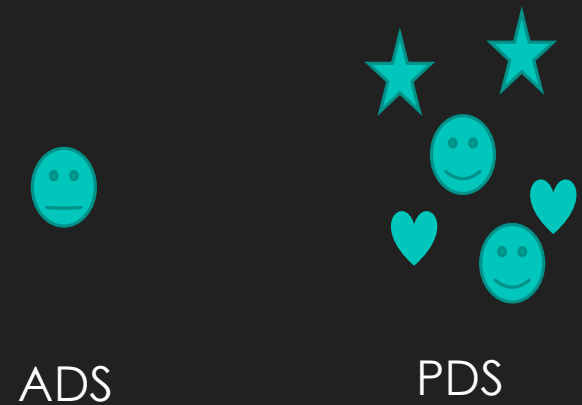
- PDS catches the ear



- PDS carries communication intent




- PDS conveys positive emotions



Conclusion

- PDS is **arousing and attention-drawing** for horses → can be used during **human-horse interactions**
- Broadcasting **pre-registered videos of humans** allows to study horses' perception of us



Thanks to the CO3
Organizing Committee

Thank you for your attention

Thanks to UMR PRC,
IFCE scientific
counsel and French
Ministry of Research
for funding my
research

Thanks to Chloé
Gouyet, Léa Lansade,
Céline Parias, Ludovic
Calandreau, Rachel
Degrande and all the
Ethology, Cognition
and Welfare Team

plotine.jardat@gmail.com