



The role of human voice in the development of human-piglet relationship

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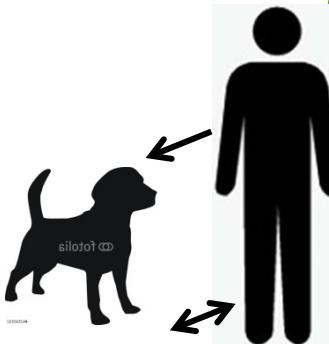
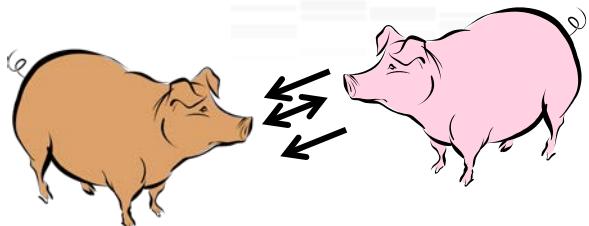
The role of human voice in the development of human-piglet relationship.

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OUEST

Background and Objectives



(Hinde, 1976; Estep and Hetts, 1992)



(Stone, 2010; Kalmus, 1955; McComb et al, 2014)



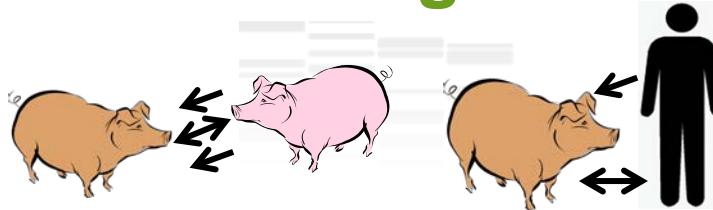
(Jones, 1993, Edwards et al, 2013; Markowitz et al, 1998; Seabrook and Bartle , 1992)

- ❖ Studying relationship
→ evaluating interactions

- ❖ Animals' senses
→ determining their *Umwelt*,
(Von Uexküll, 2006)

- ❖ Interactions: visual, tactile
→ auditory ?

Background and Objectives



(Graves, 1984)

42 Hz to 40,5 kHz 80 Hz to 1,4 kHz



❖ Social animals

❖ Communicative abilities

❖ Hearing sensitivity
→ sensitivity to human voice ?

❖ Sensitivity to human visual and tactile interactions
→ sensitivity human presence ?

(Tallet, 2013; Heffner et Heffner, 1990; Titze, 2000)

(postures: Miura et al, 1996; approach: Hemsworth et al, 1986; tactile: Hemsworth et al, 1987)

1. Assessing piglets' response to human presence in their living environment, with or without vocal stimuli
2. Assessing treatments effects on human's attractiveness in a novel environment

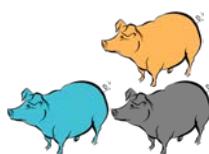
Material and Method



- ❖ 2 repetitions : 90 weaned piglets
- ❖ 3 groups : 15 piglets/ group/ repetition
- ❖ 5 min/ day for 3 weeks

Material and Method

❖ Test 1:

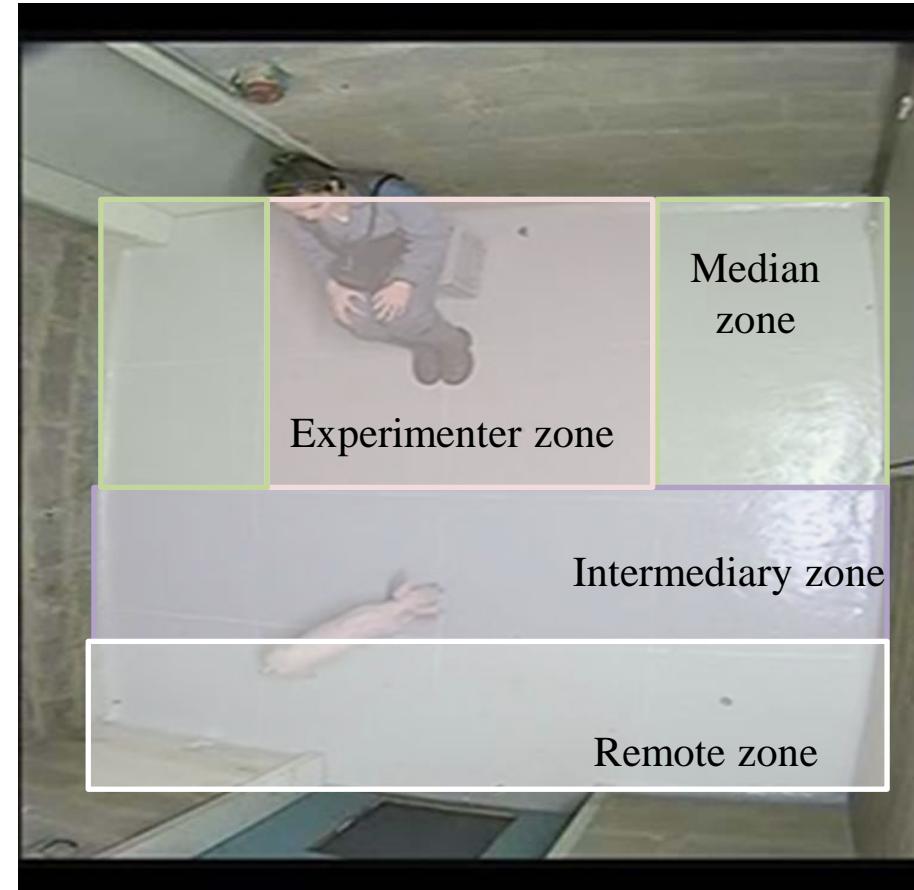


Voice broadcast
Background sound

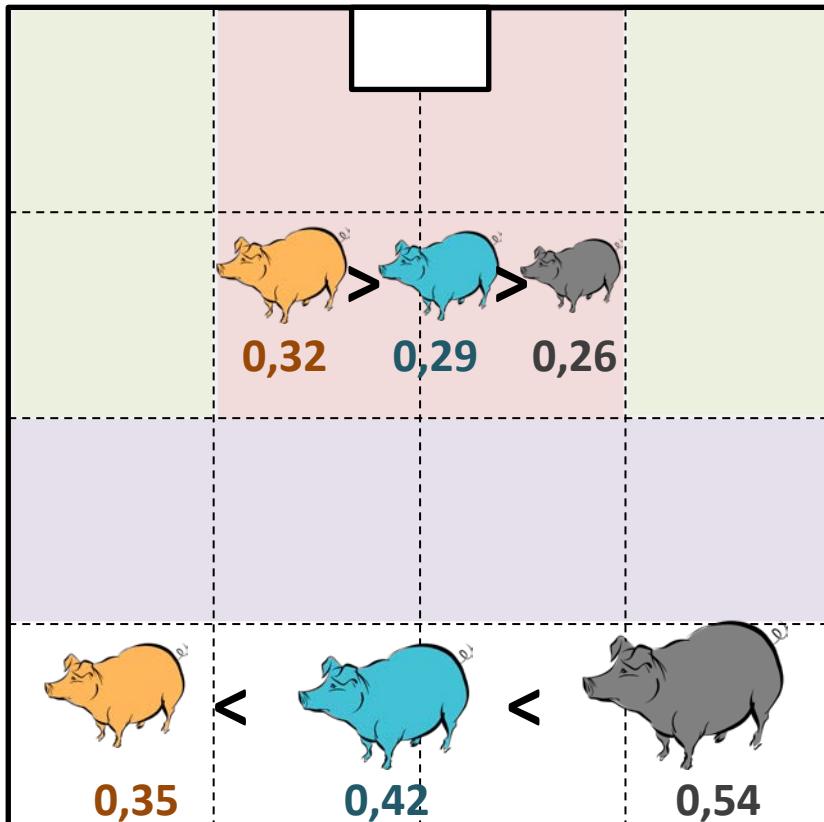
❖ Test 2:



Background sound



Results and Discussion



Test 1

- ❖ Proportions of time in the different zones

← experimenter zone

± 0,01

← remote zone

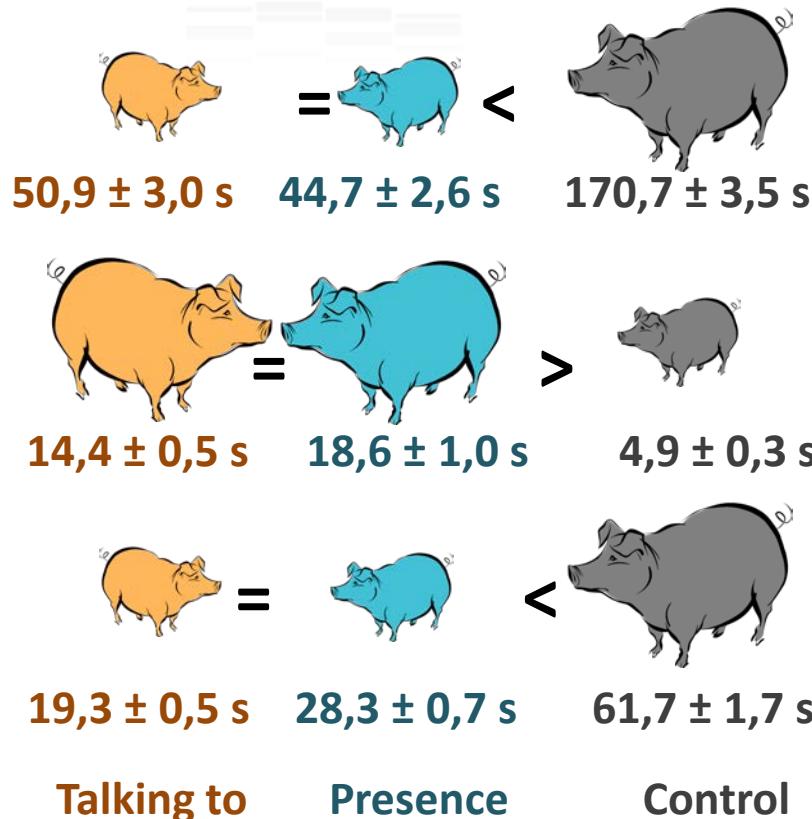
± 0,01

Talking to

Presence

Control

Results and discussion



Test 1

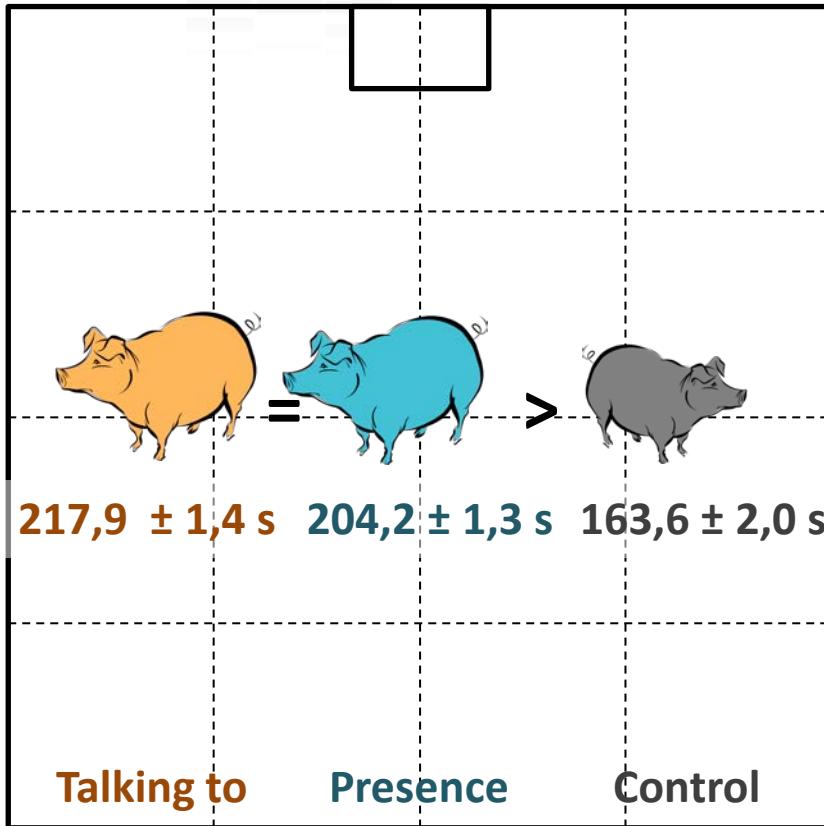
❖ Latency of investigation of the experimenter

❖ Look at the experimenter
← Latency

← Duration

Chicks (Jones, 1993), piglets (Gonyou et al, 1986, Hemsworth et al, 1981)

Results and discussion



Test 1

- ❖ Duration of test area investigation

↗ Dogs' exploration in presence of a their owner vs stranger (Prato-Previde et al, 2003)

Results and discussion

- Human presence exposure ↴ the fear of the experimenter
- ❖ Attraction hypothesis ?
 - YES: investigation latency < previous data (Gonyou et al, 1986; Tallet et al, 2014)
due to experimenter's passivity (Hemsworth et al, 1986)
 - BUT: = duration of investigation in all treatments
 - conflict of interest : investigation of the experimenter vs exploration of the test area (Tallet et al, 2014)
 - habituation to the stimulus (Tallet et al, 2014)
 - Attractive but not enough
- ❖ Voice role ? Deprivation of voice (test 2)
 - ↗ interest in staying close to the experimenter
 - ↗ interest in communicating with her (Manteuffel et al, 2004)
 - Element of recognition of the experimenter? (Tanida et al, 1998)





CONCLUSION

- ❖ Human presence exposure with or without voice broadcasting ↴ fear of the experimenter
- ❖ No ↗ of the experimenter's attractiveness with the voice
- ❖ the voice might take part in the experimenter recognition



Thank you for your attention.



je concours!



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