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Tallet

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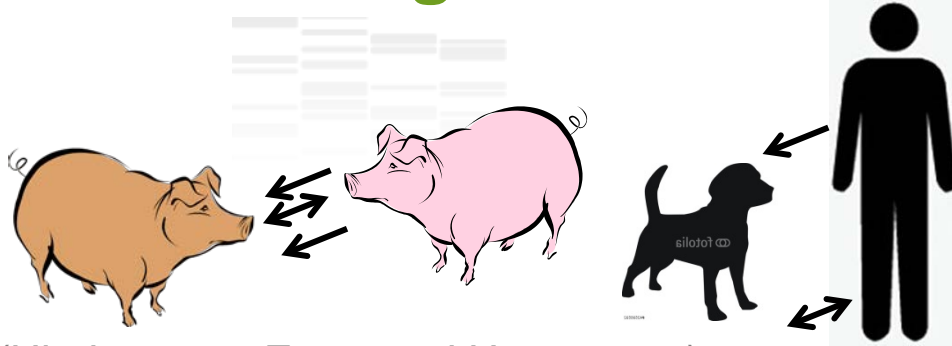


# The role of human voice in the development of human-piglet relationship.

Sandy Bensoussan, Raphaëlle Tigeot, Marie-Christine Meunier-Salaün, Céline Tallet



# Background and Objectives



(Hinde, 1976; Estep and Hetts, 1992)

- ❖ Studying relationship  
→ evaluating interactions



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

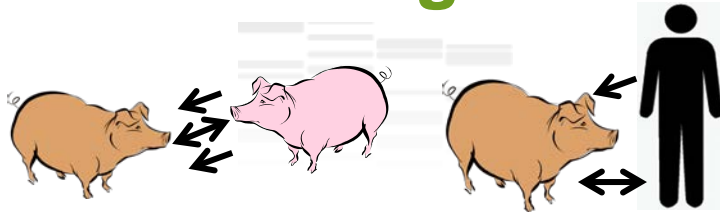
- ❖ Animals' senses  
→ determining their *Umwelt*,  
(Von Uexküll, 2006)



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

- ❖ Interactions: visual, tactile  
→ auditory ?

# Background and Objectives



(Graves, 1984)



- ❖ 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



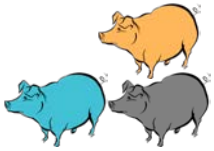
- ❖ 2 repetitions : 90 weaned piglets
- ❖ 3 groups : 15 piglets/ group/ repetition
- ❖ 5 min/ day for 3 weeks

# Material and Method

## ❖ Test 1:

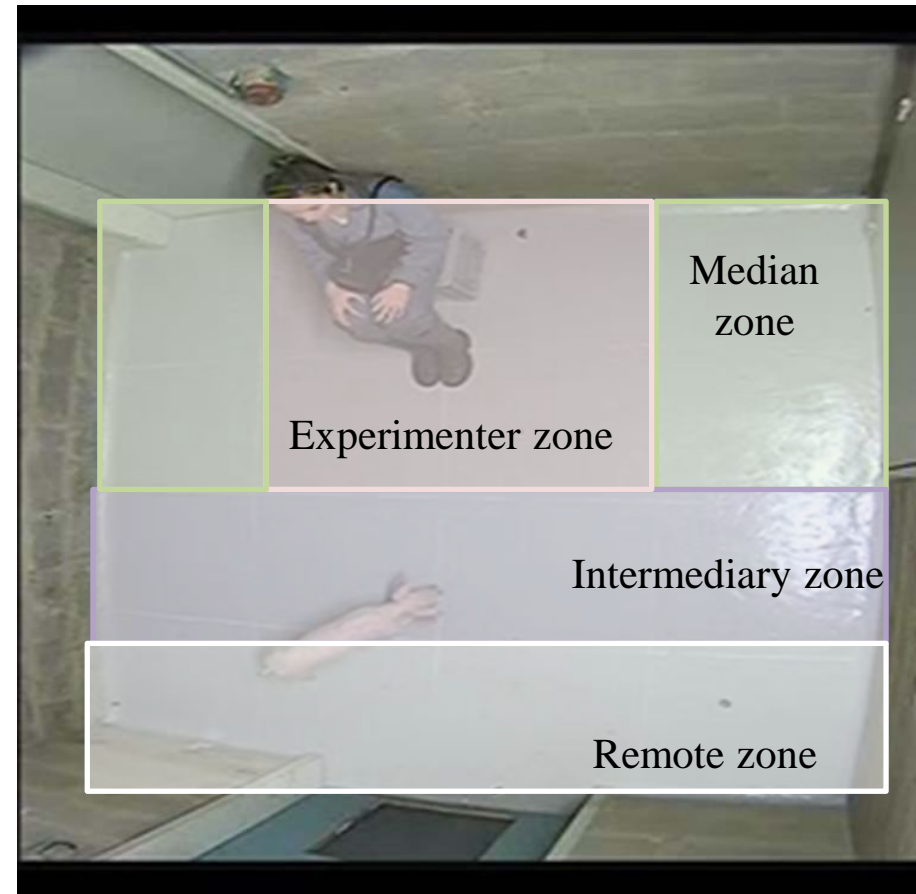
Voice broadcast

Background sound



## ❖ Test 2:

Background sound



# Results and Discussion

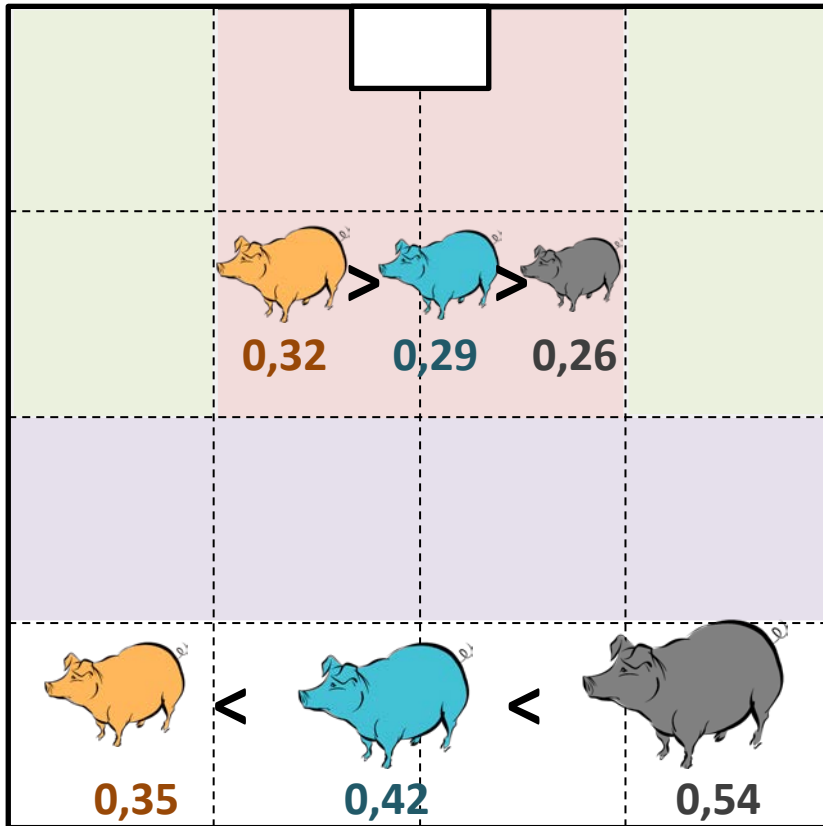
## Test 1

❖ Proportions of time in the different zones

← experimenter zone  
± 0,01

← remote zone

± 0,01

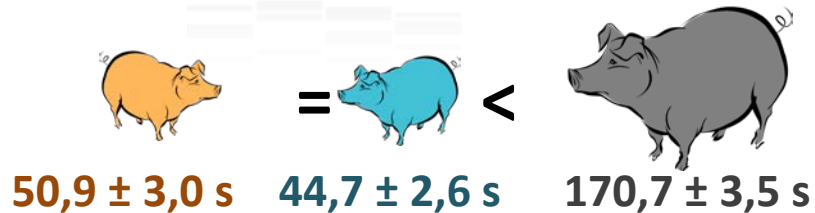


Talking to

Presence

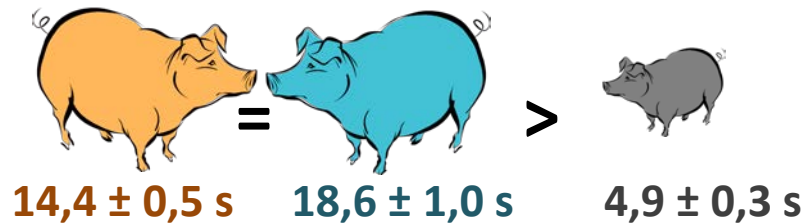
Control

# Results and discussion



Test 1

❖ Latency of investigation of the experimenter



❖ Look at the experimenter  
← Latency



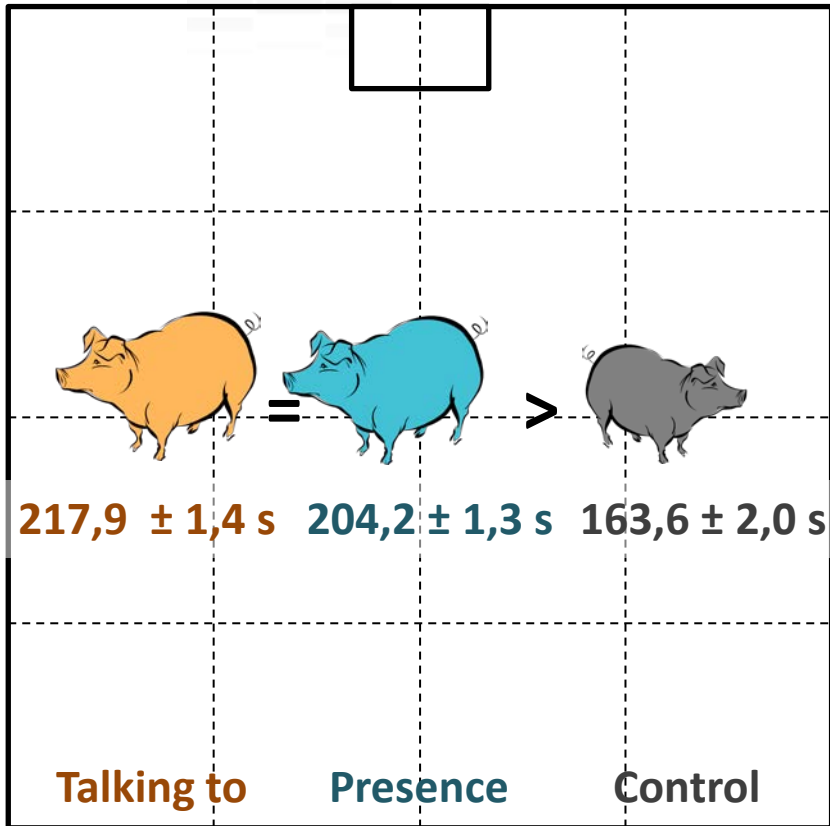
← Duration

Talking to      Presence      Control

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  $\searrow$  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)



- $\nearrow$  interest in staying close to the experimenter
- $\nearrow$  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  $\searrow$  fear of the experimenter
- ❖ No  $\nearrow$  of the experimenter's attractiveness with the voice
- ❖ the voice might take part in the experimenter recognition

Thank you for your attention.

