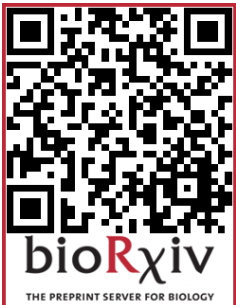




# How prior knowledge shapes brain representations

Roman Kessler

roman.kessler@email.uni-kiel.de  
Institute of Child and Adolescent Psychiatry  
UKSH, ZiP



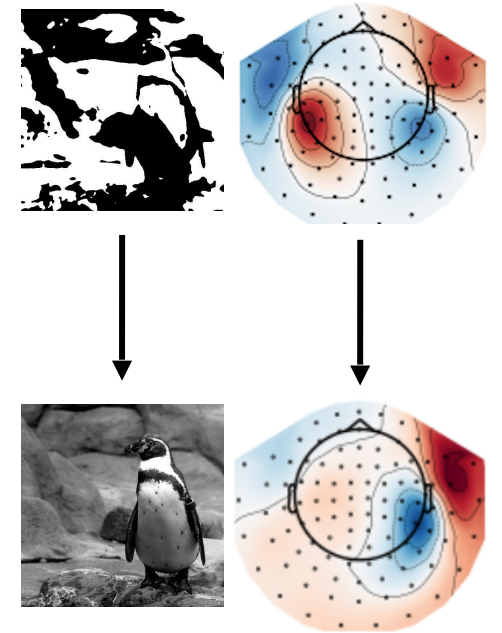
# What can you see?



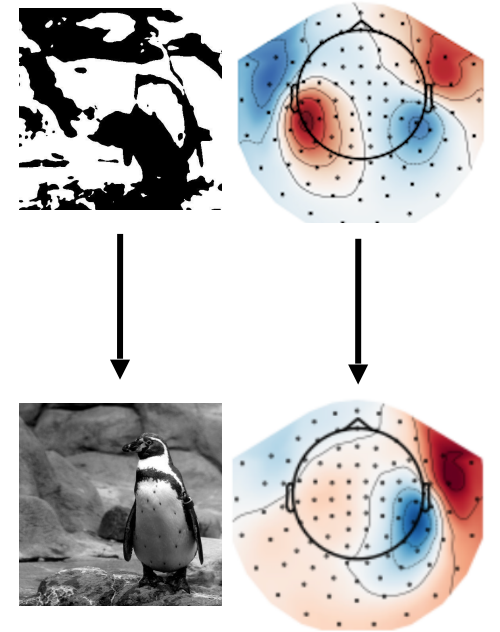
# What can you see?



Do brain responses  
to ambiguous images  
get more similar to  
their photo image counterpart?



Do brain responses  
to ambiguous images  
get more similar to  
their photo image counterpart?



# EEG task



**NAÏVE**

# EEG task



What have  
you seen?

**NAÏVE**

# EEG task



What have  
you seen?



**NAÏVE**

# EEG task



What have  
you seen?



**NAÏVE**

**PHOTO**

# EEG task



What have  
you seen?



**NAÏVE**

**PHOTO**

**LEARNT**

# Building the brain representational space



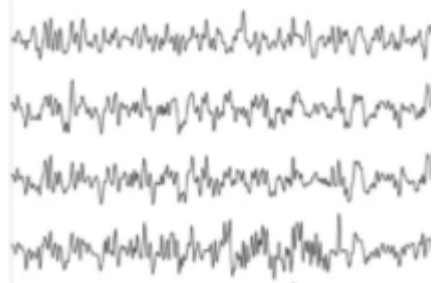
NAÏVE

# Building the brain representational space



NAÏVE

electrodes

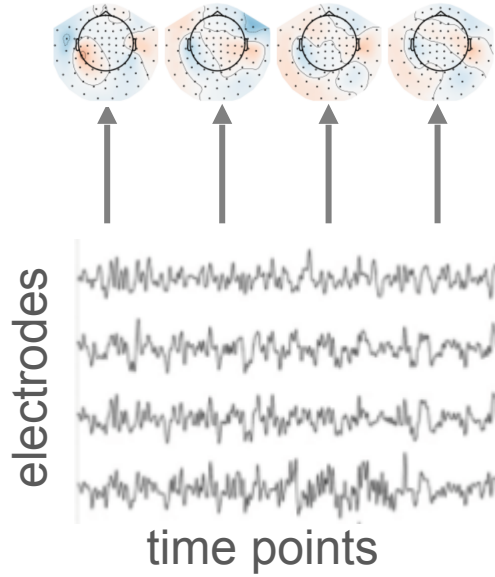


time points

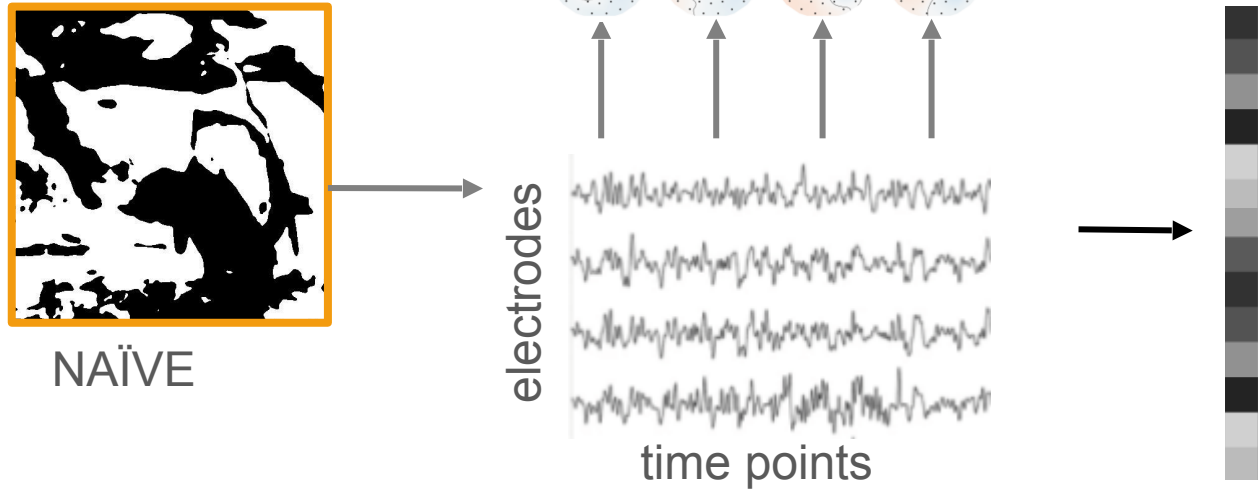
# Building the brain representational space



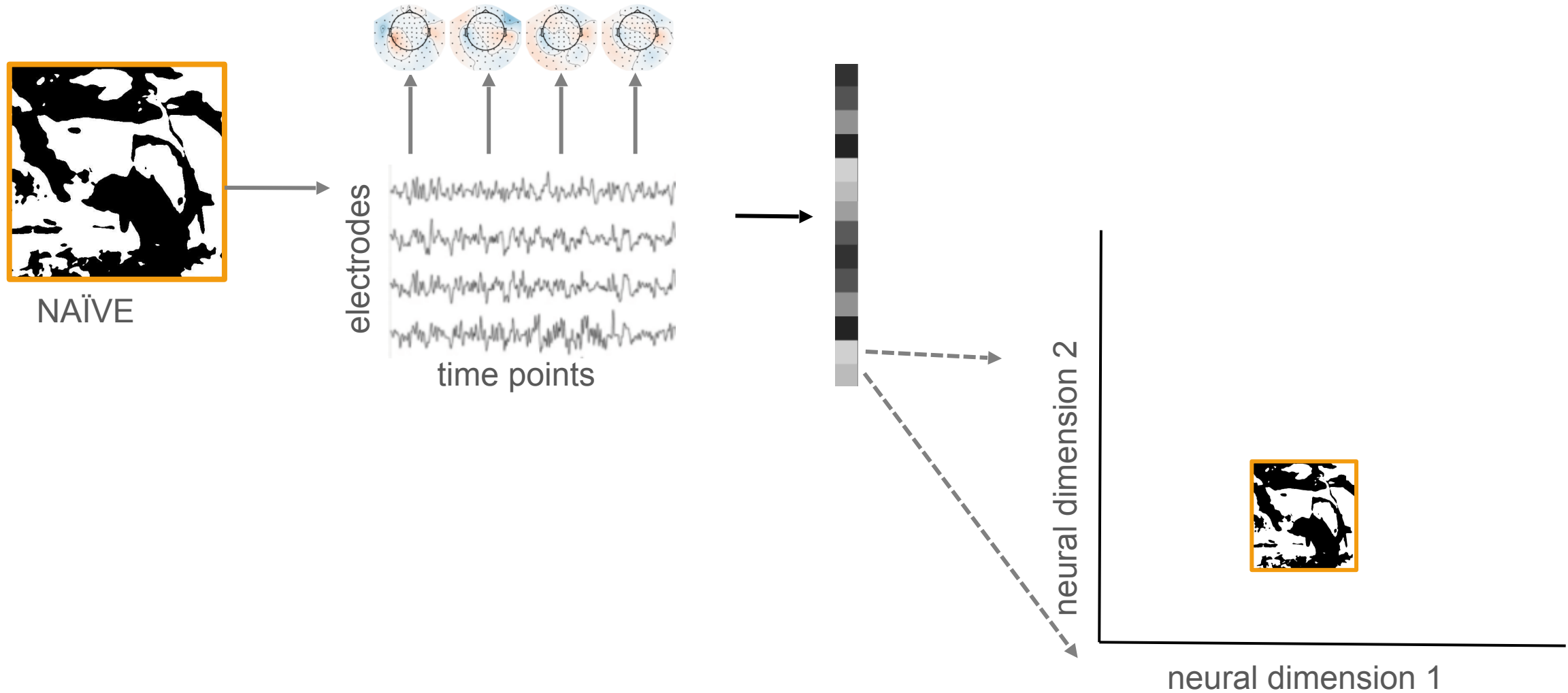
NAÏVE



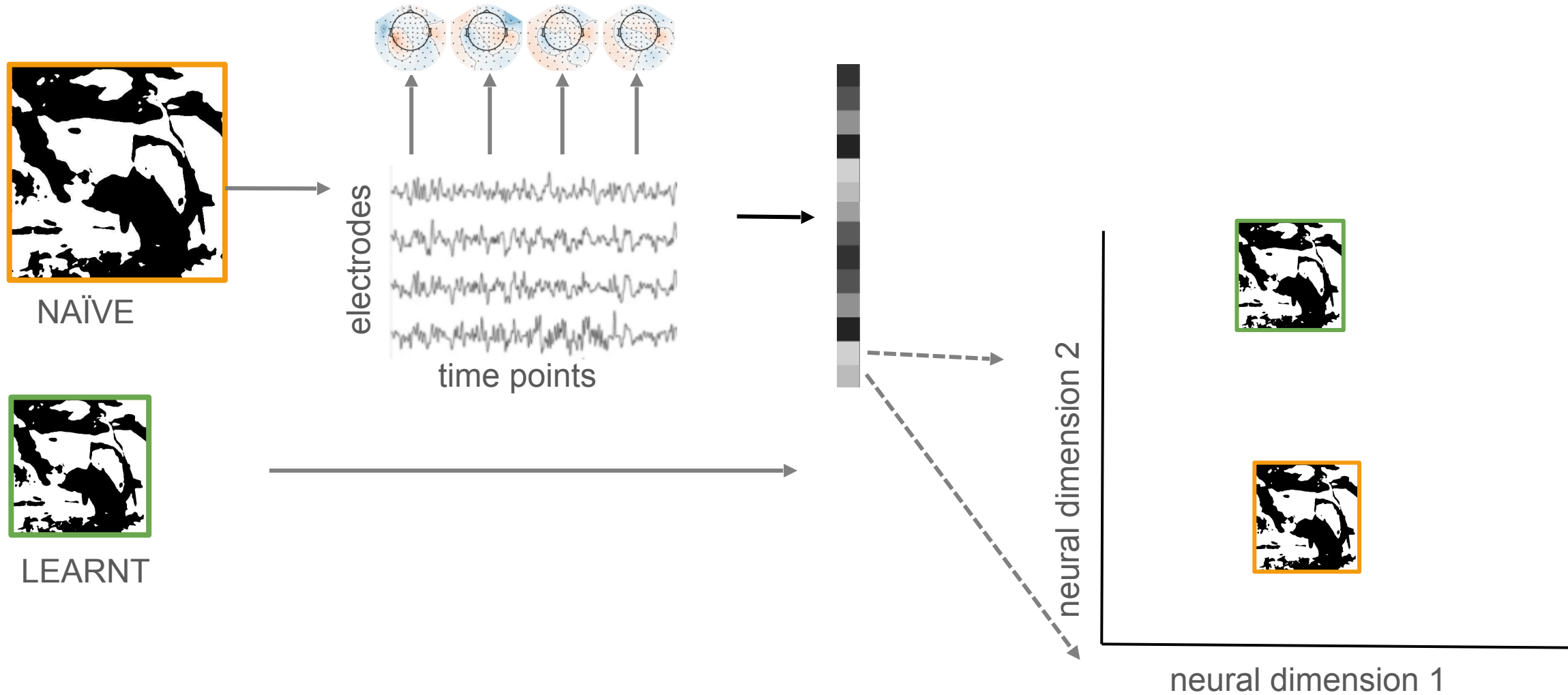
# Building the brain representational space



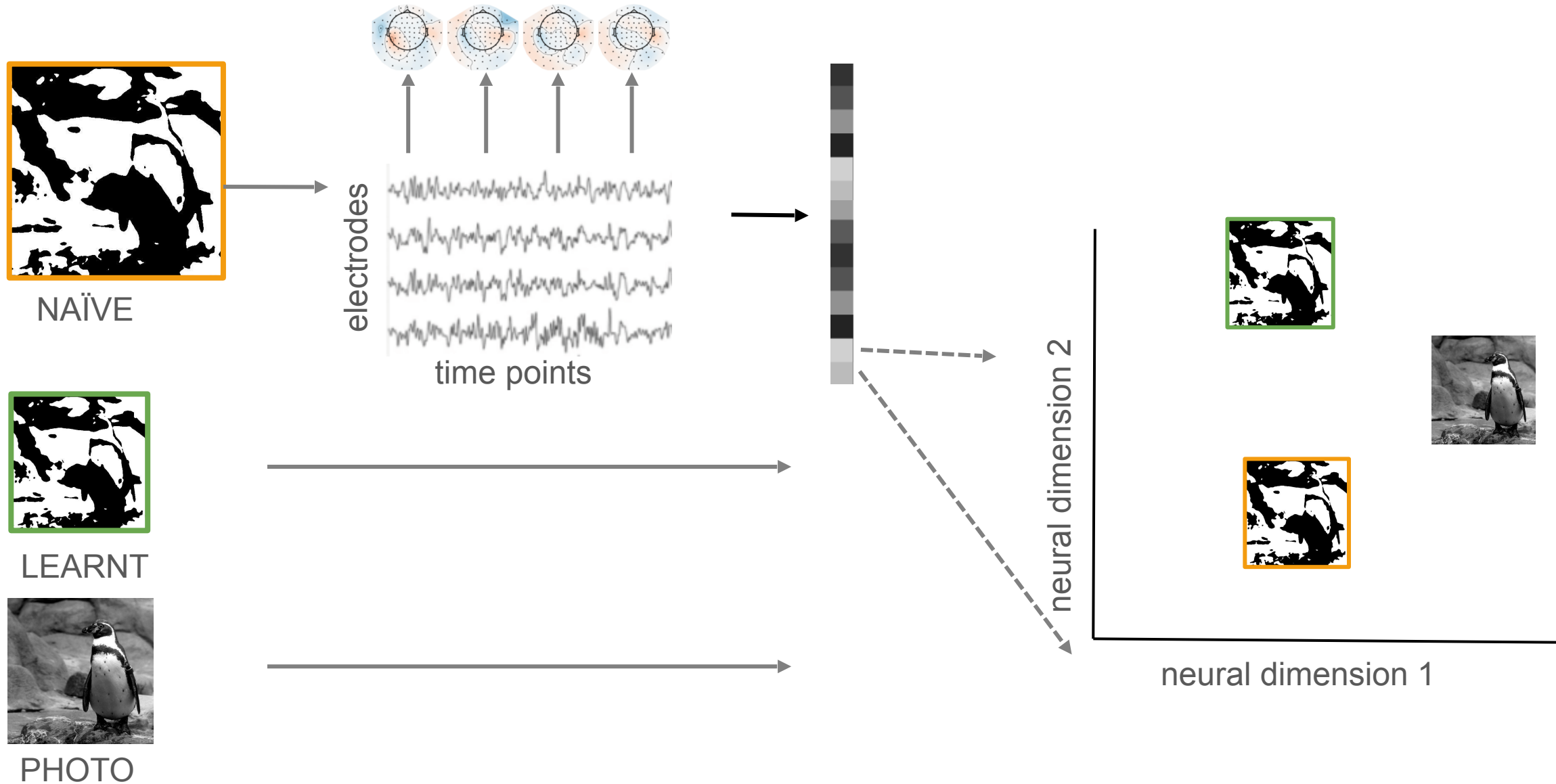
# Building the brain representational space



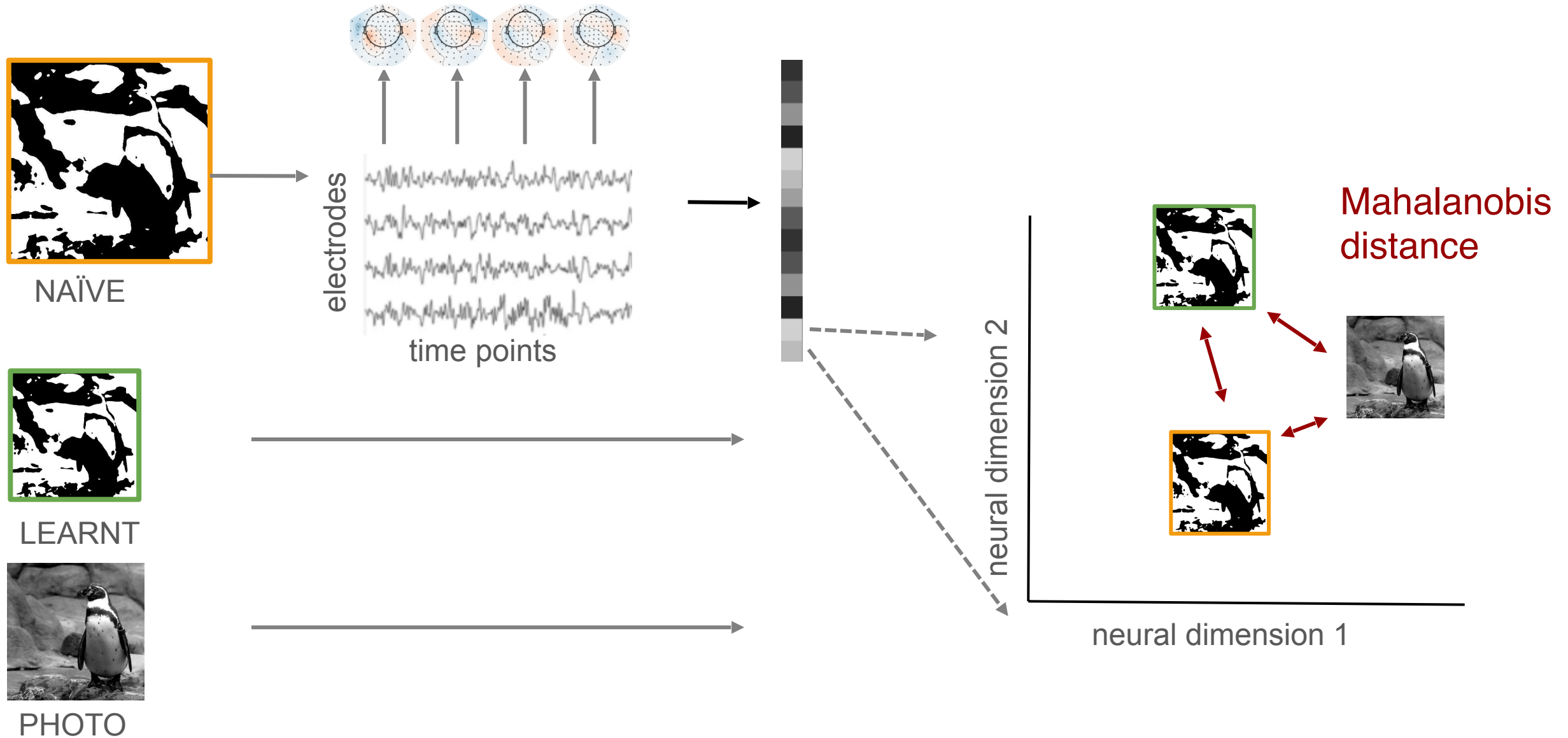
# Building the brain representational space



# Building the brain representational space



# Building the brain representational space



# Representational alignment

Representational alignment =  $d(\text{NAÏVE}, \text{PHOTO}) - d(\text{LEARNT}, \text{PHOTO})$

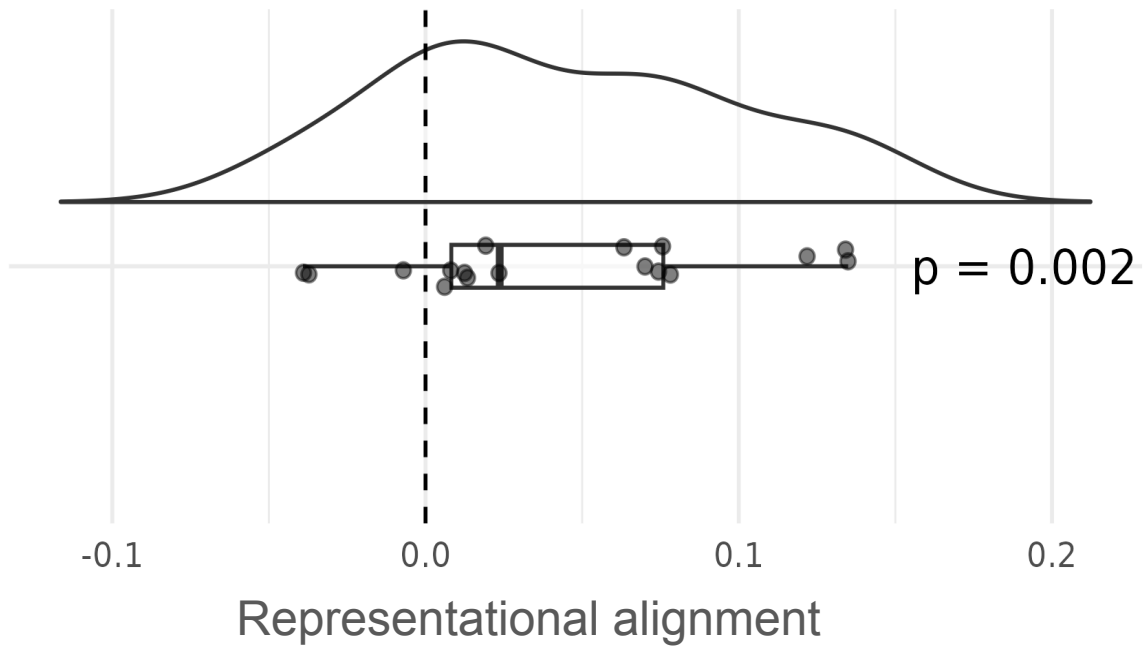


# Representational alignment

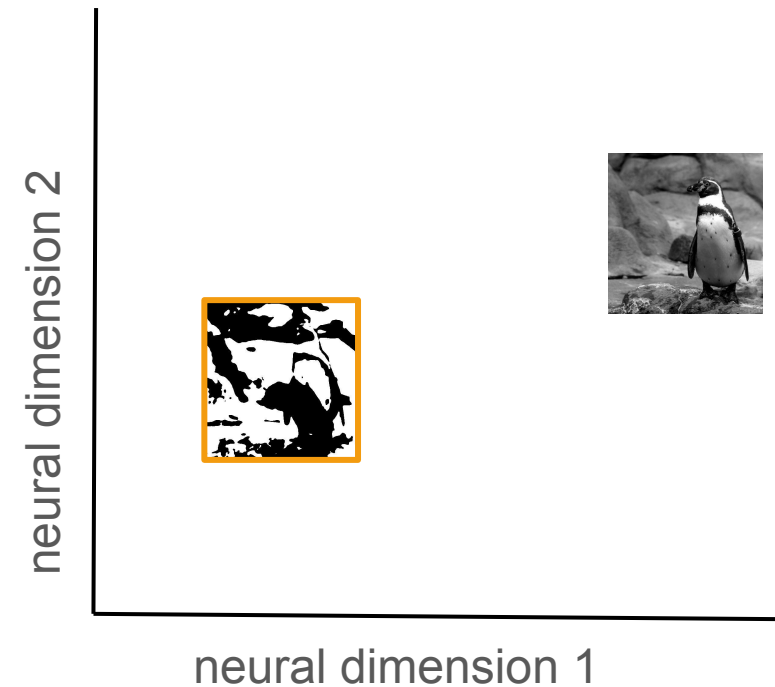
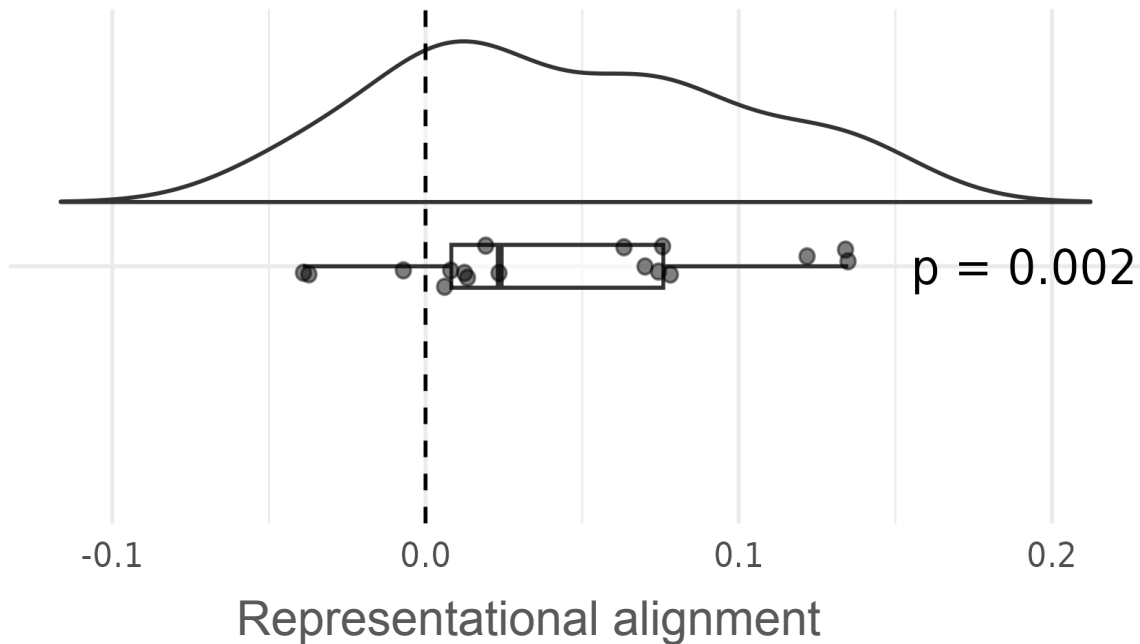
Representational alignment =  $d(\text{NAÏVE}, \text{PHOTO}) - d(\text{LEARNT}, \text{PHOTO})$



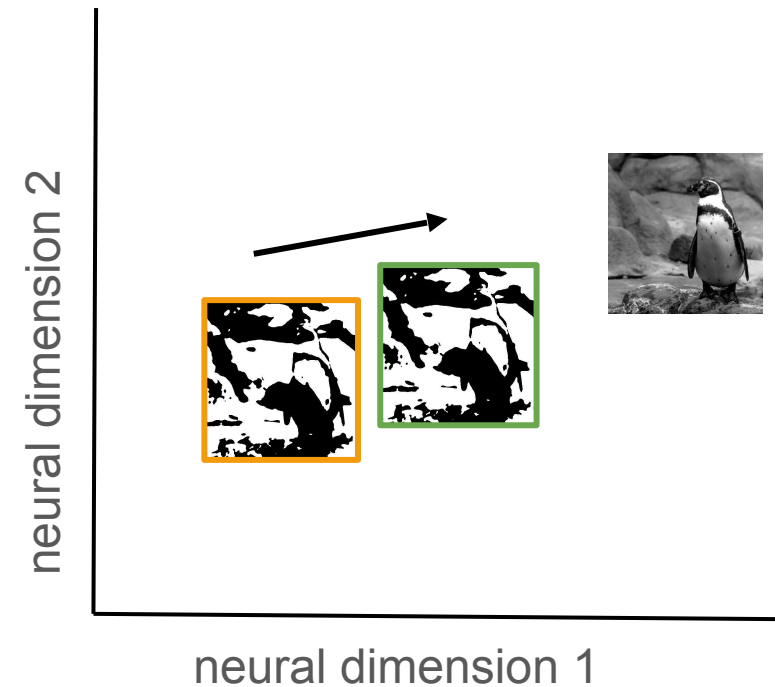
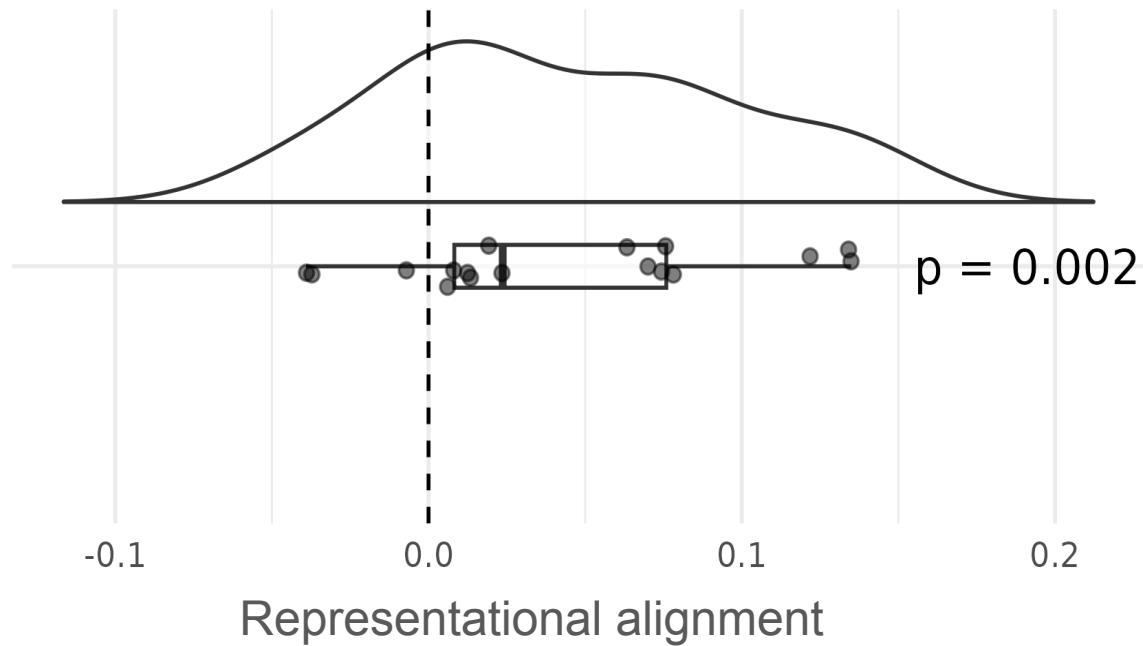
# Brain responses to ambiguous images move towards brain responses to photos



# Brain responses to ambiguous images move towards brain responses to photos



# Brain responses to ambiguous images move towards brain responses to photos





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