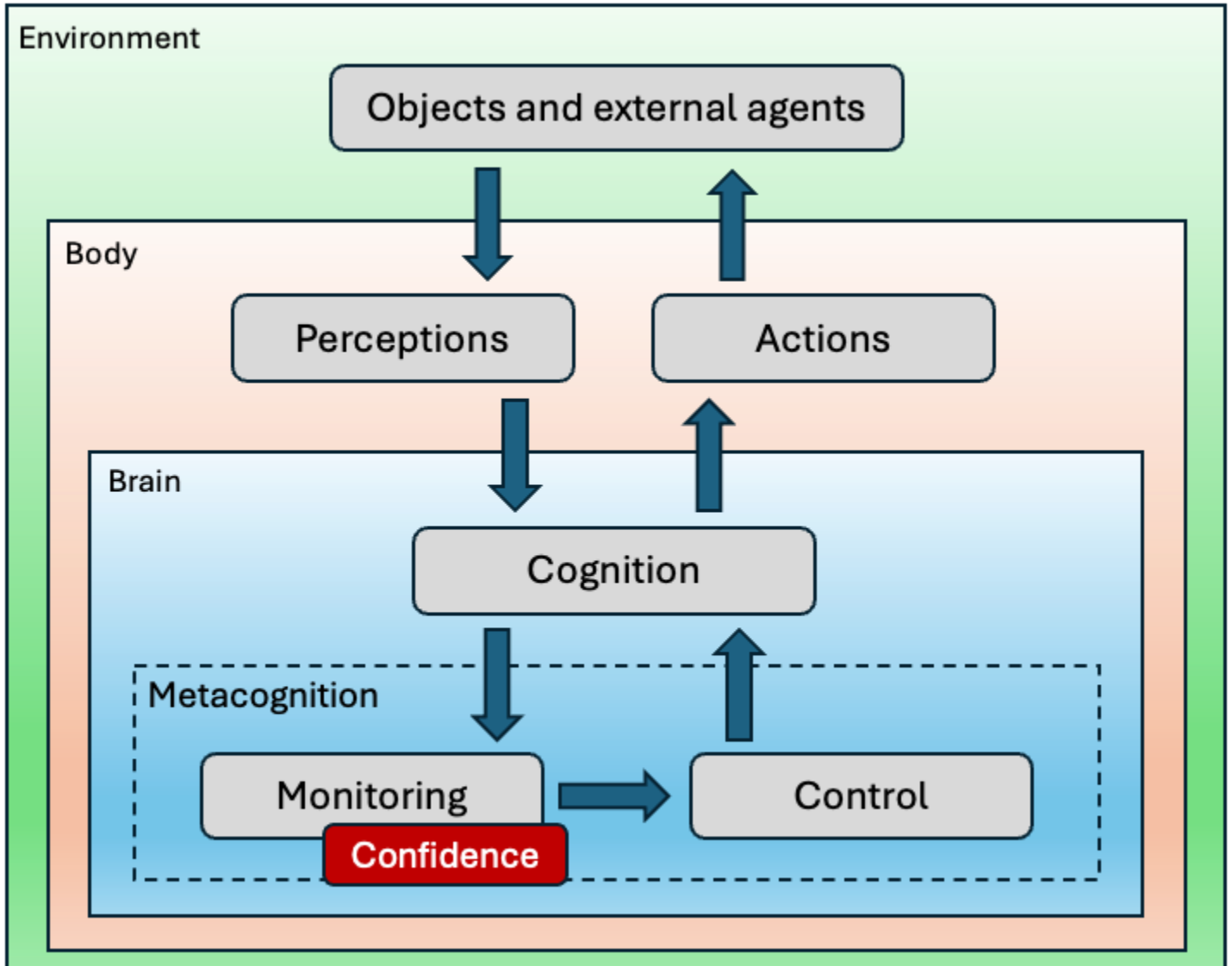
# Confidence as hyperparameter tuning for sequential decision-making

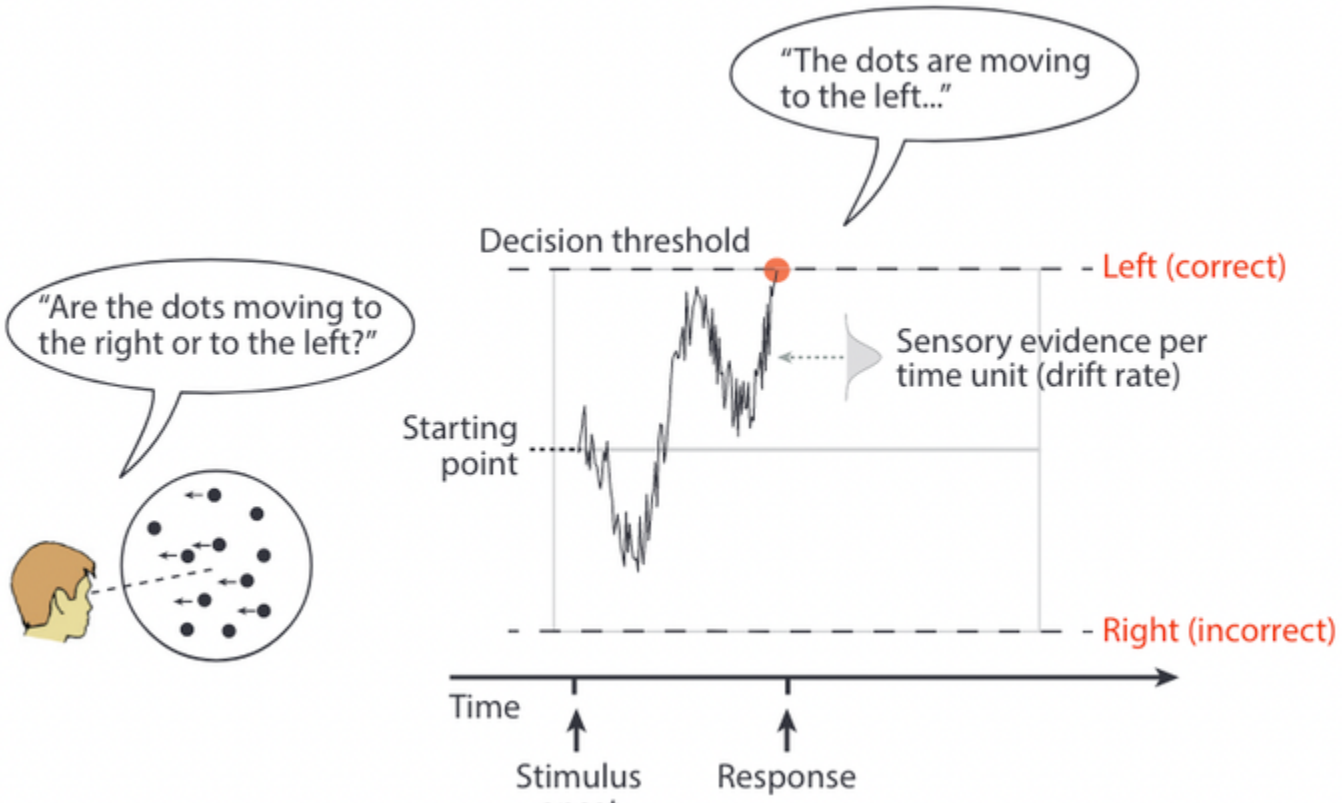
Baptiste Pesquet

# Metacognition



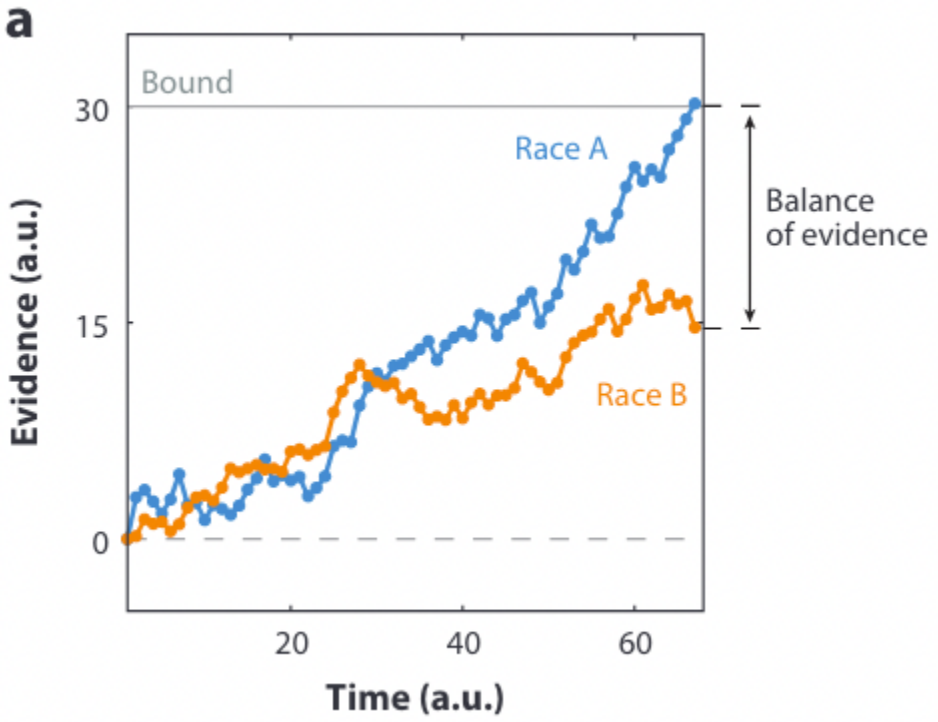
# Sequential decision-making

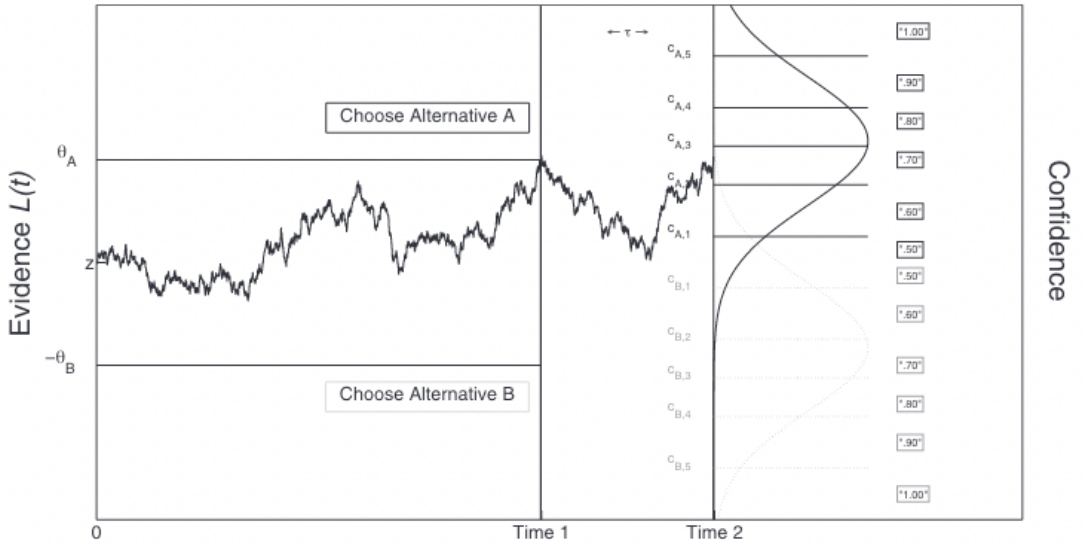
- Speed/Accuracy Tradeoff.
- Canonical model: integration of noisy information until a threshold is reached.
- Many refinements: multi-alternative choice, impact of learning, change of mind, etc.



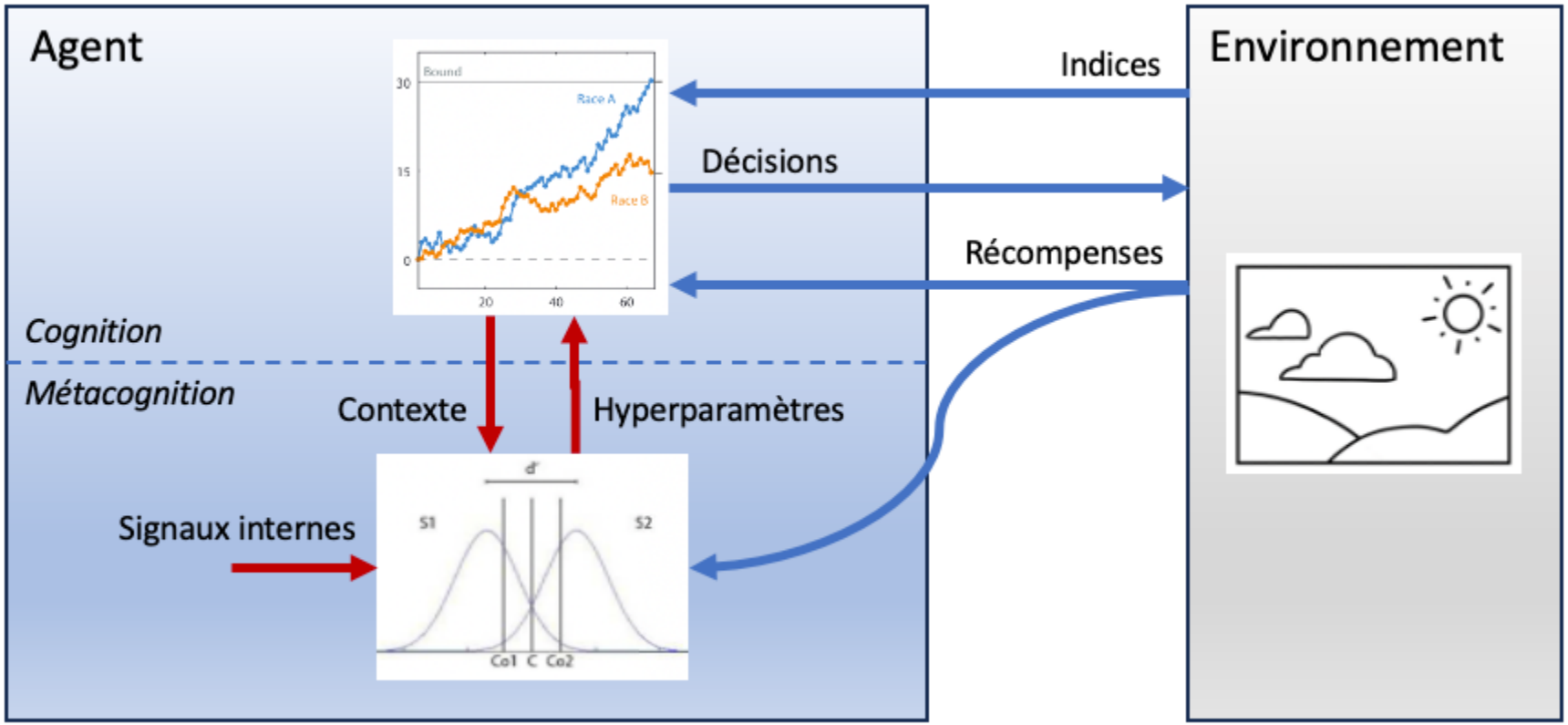
# Confidence for decision-making

- Quantifies the degree of certainty associated with a decision.
- Canonical model: post-decisional computation based on accumulated info.
- Can be used to alter the subsequent decisions.



# Proposed architecture: confidence as hyperparameter tuning for sequential decision-making



## Current & next steps

- Article for ESANN 2025.
- Detailed review of confidence for decision-making (future PhD chapter).
- First experiment on very basic task.

# Questions?