

# The Whole Brain Architecture : Now Feasible

Now experts in related domains can work on it!

*Let's build  
a brain together*

<https://wba-initiative.org/en/>

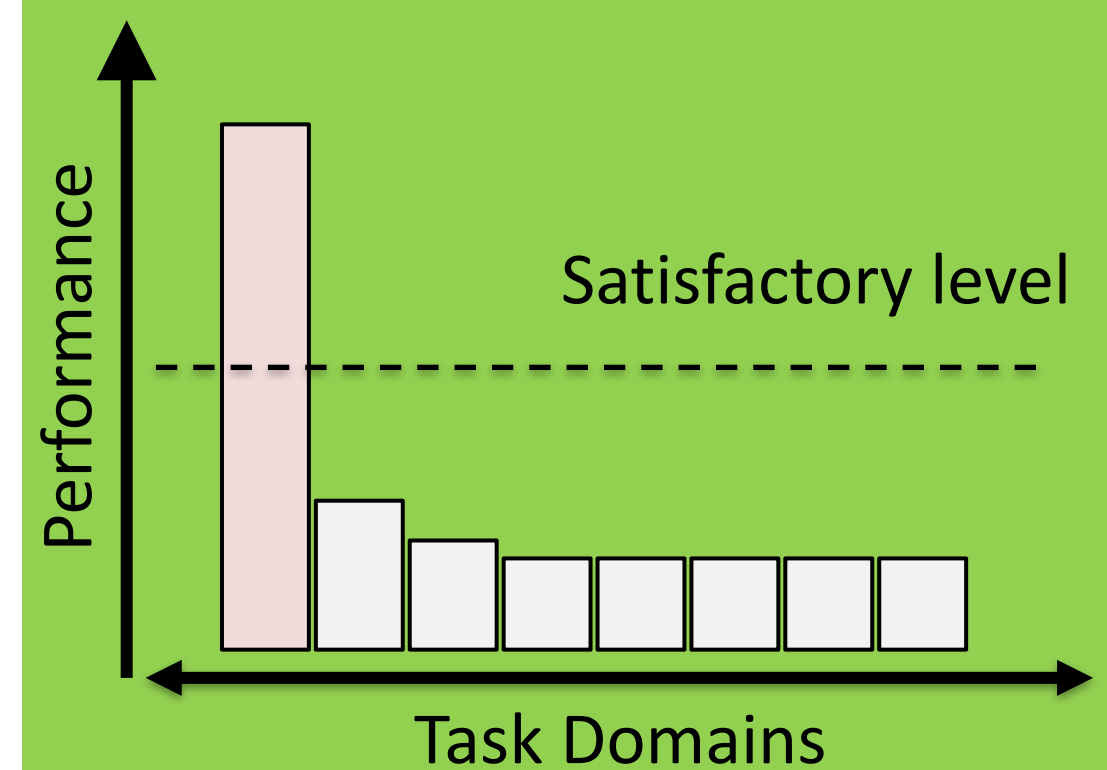
## ① AGI as the Technological Goal

Toward AI with a wider range of sufficient capabilities

### Narrow AI: now maturing

Intelligent behavior in specific domains

- already practical
- e.g., chess, automatic driving, surveillance, medical diagnosis, ...



### Machine Learning

is the key technology to obtain good performances by acquiring knowledge in data-abundant routine environments

### AGI: technical goal

Acquiring problem solving capabilities through experience to solve problems beyond the assumptions at the design stage

- Basis for autonomy

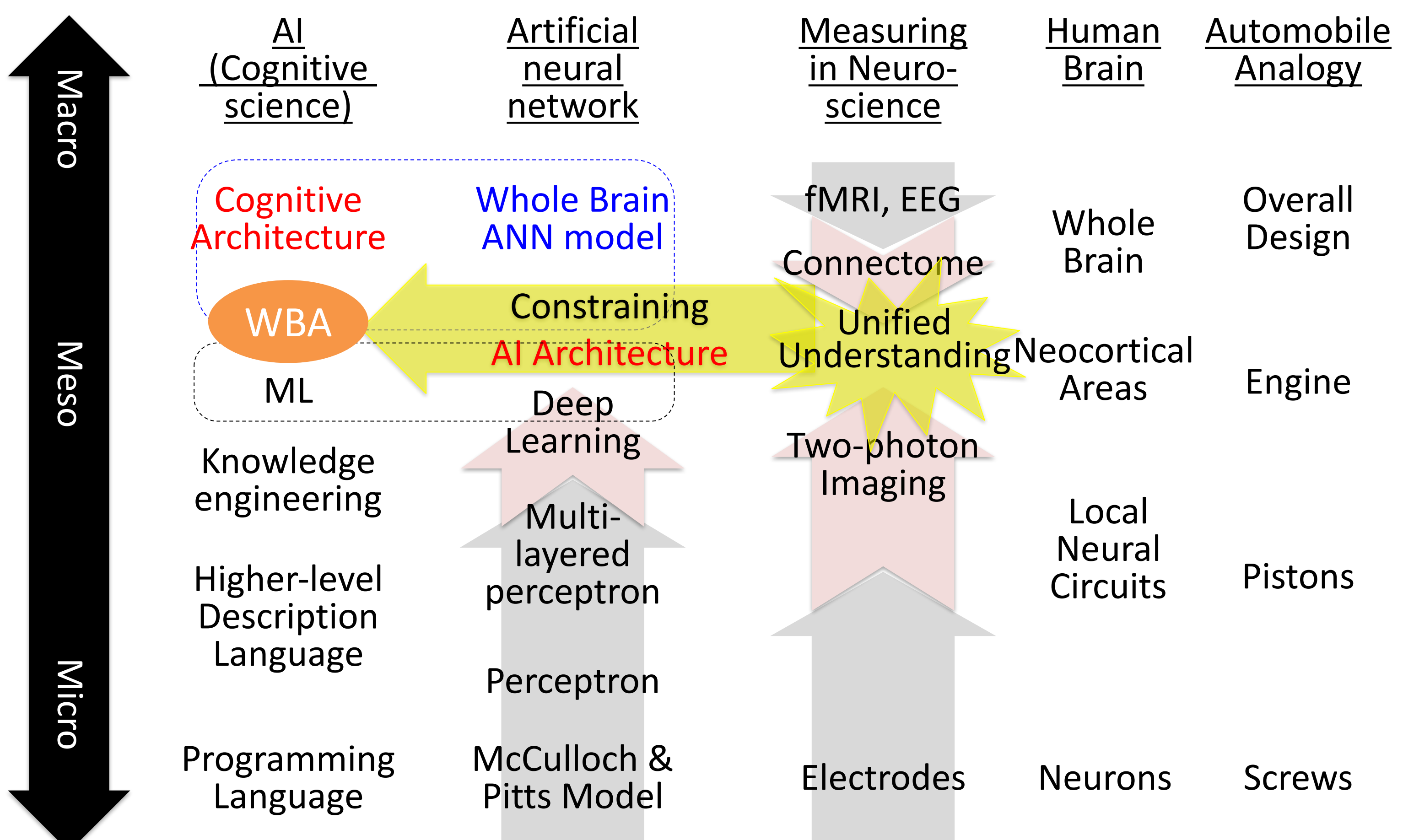


### Cognitive Architecture

is the key technology to cope with data-scant unknown environments by combining acquired knowledge

Gradual Shift

## ② AI Architecture can be learned from Brain



Natural and artificial neural network studies have reached the mesoscopic level so that they can serve/constrain AI Architecture design.

## ⑤ The Basic Ideas of WBAI

### Vision

to create a world in which AI exists in harmony with humanity

### Mission

to promote the open development of WBA

### Values

Study: Deepen and spread our expertise.  
Imagine: Broaden our views through public dialogue.  
Build: Create AGI through open collaboration.

Desirable AGI through Open WBA development

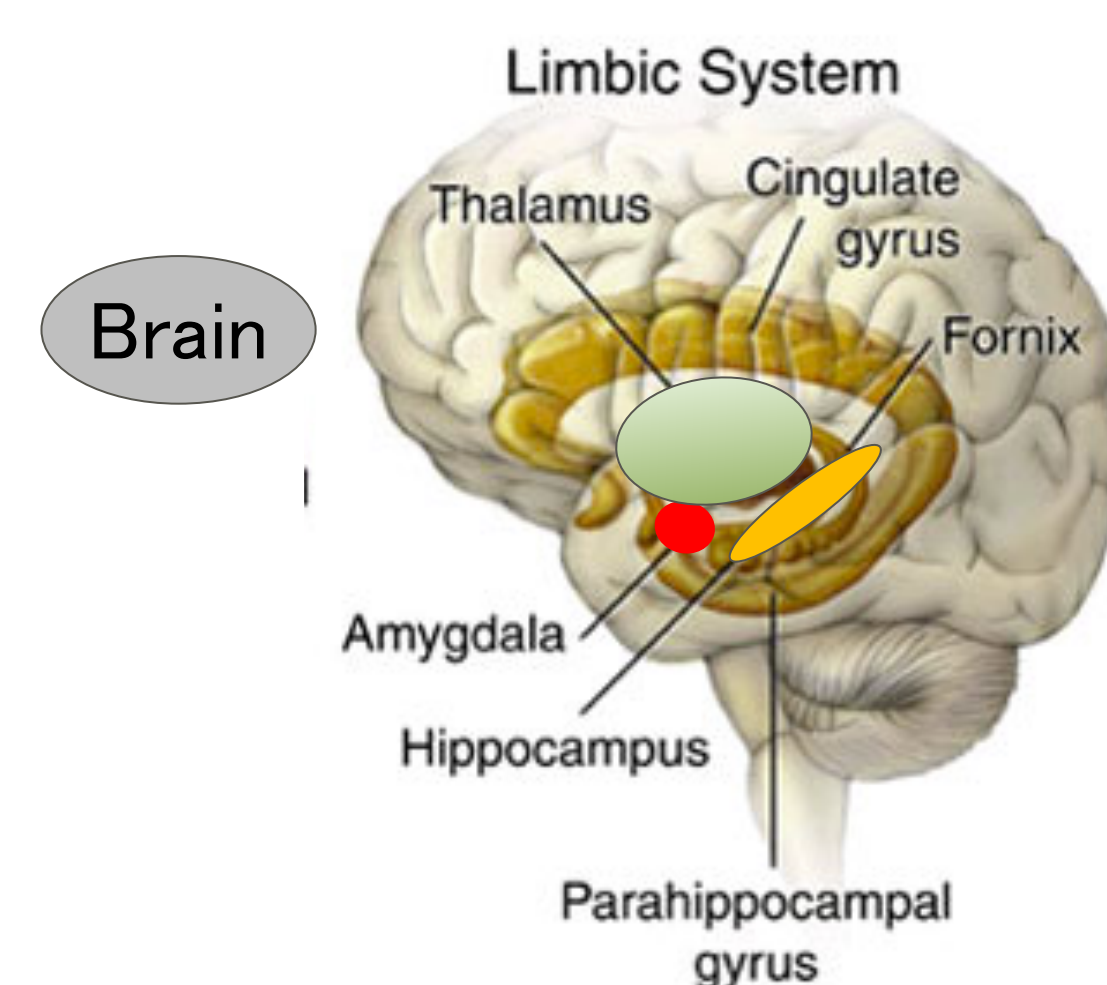
AGI thinking and behaving like human beings

AGI as common goods for the humanity via open co-creation

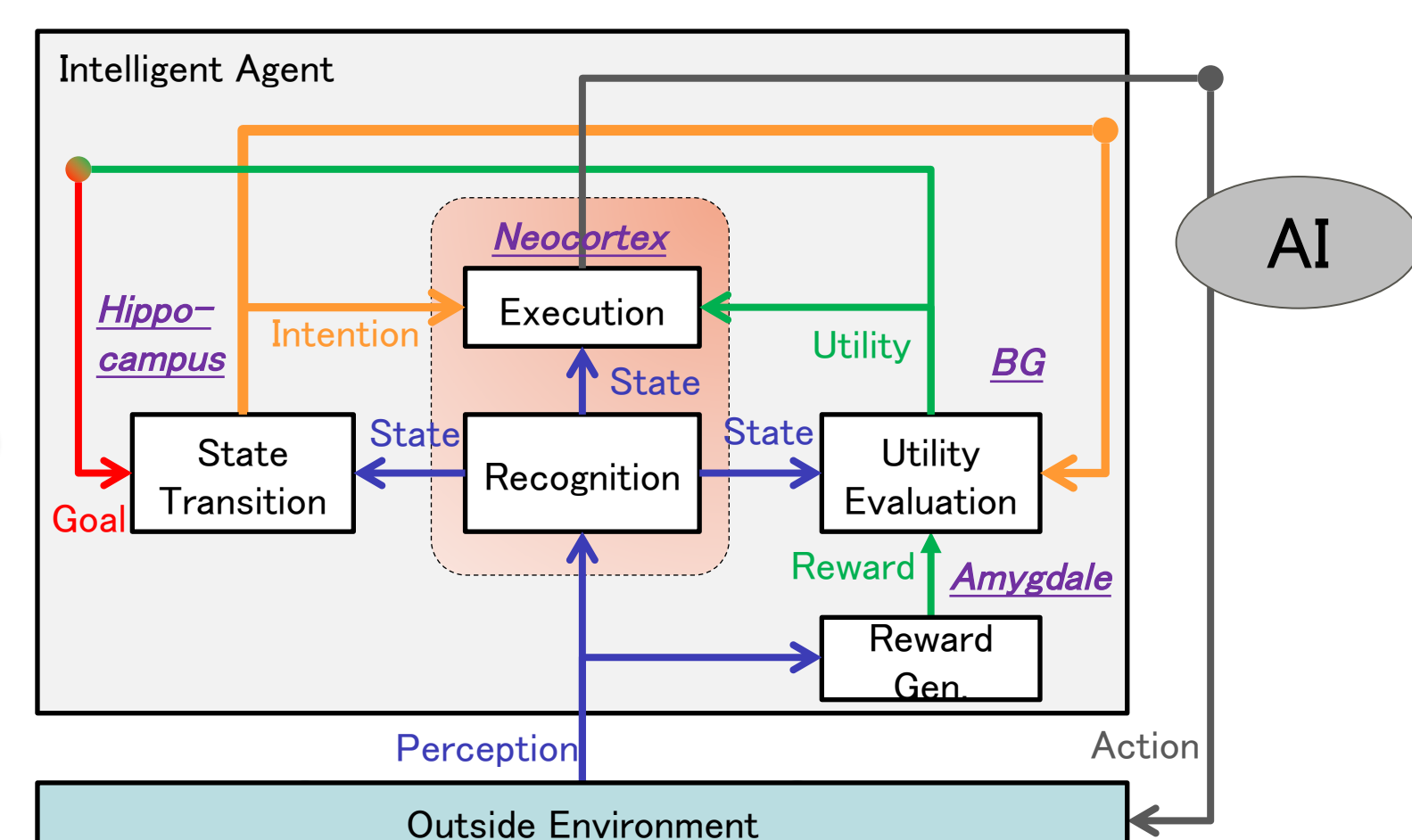
Here is the field where your expertise in ML, neuroscience, cognitive modeling, or AGI can be put into action!

## ③ The Whole Brain Architecture (WBA) Approach:

'to create a human-like AGI by learning from the architecture of the entire brain.'



- 1) Develop brain organs as Machine Learning modules
- 2) Integrate them into Cognitive Architecture



### Merits of the WBA Approach

Preventing divergence in development by sharing architecture as constraint

Utilization of knowledge in human sciences

Open development to integrate with the brain architecture as the reference in appropriate milestones.

## ④ The Open WBA Platform:

NPO WBAI is making a place for collaborative development

### Integration :

A brain-inspired architecture platform for integrating machine learning modules

### Catch-up :

An open engineers' community that can implement the cutting-edge machine leanings in a short term

