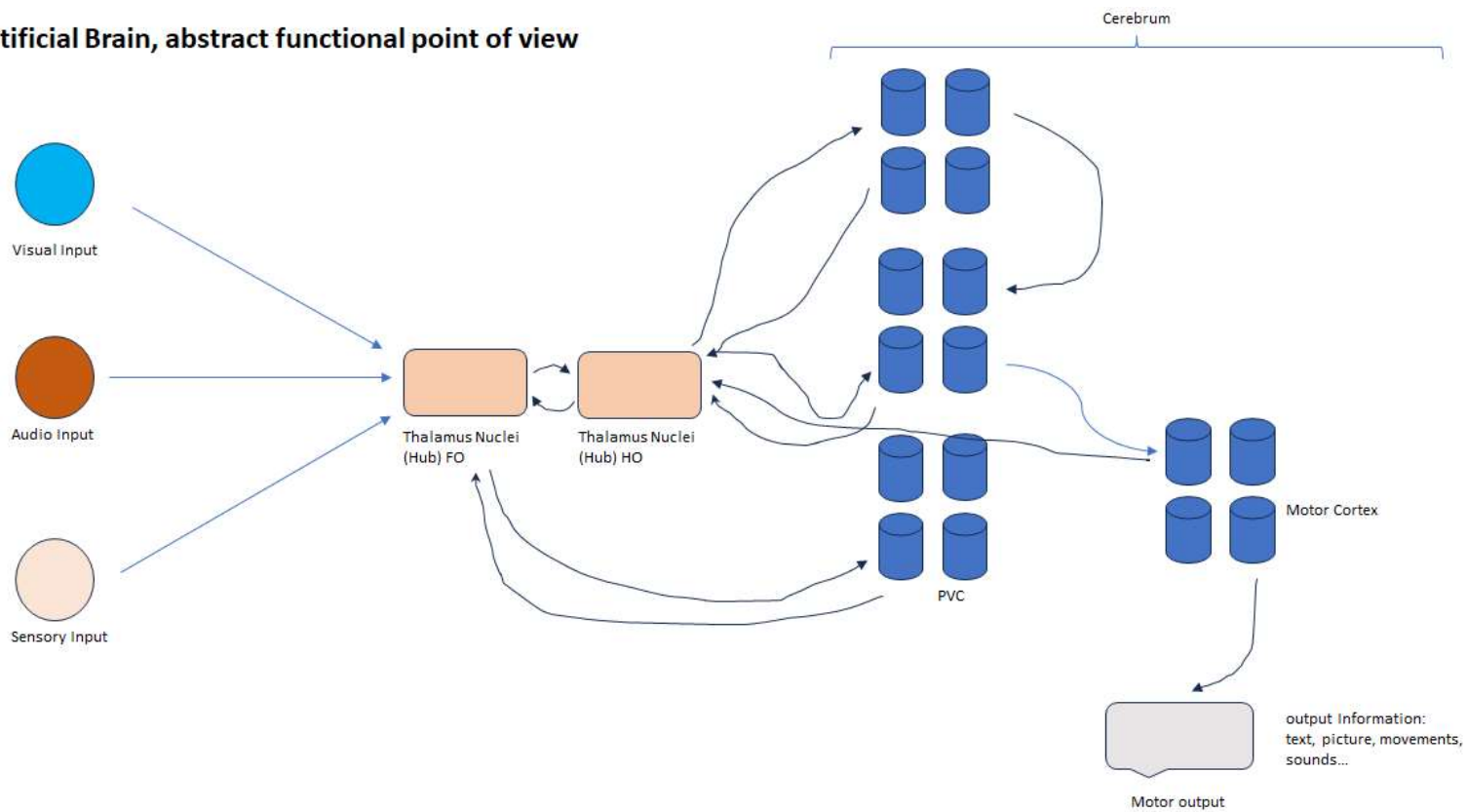




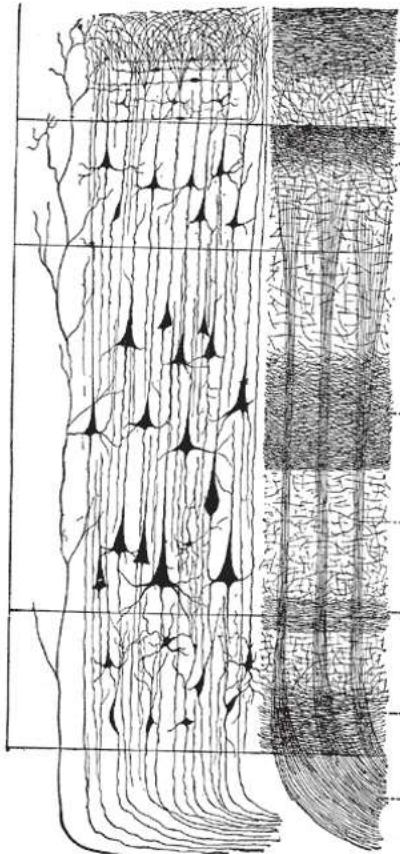
Xephor Artificial
AGI realized by Stochastic Fibred Category Theory



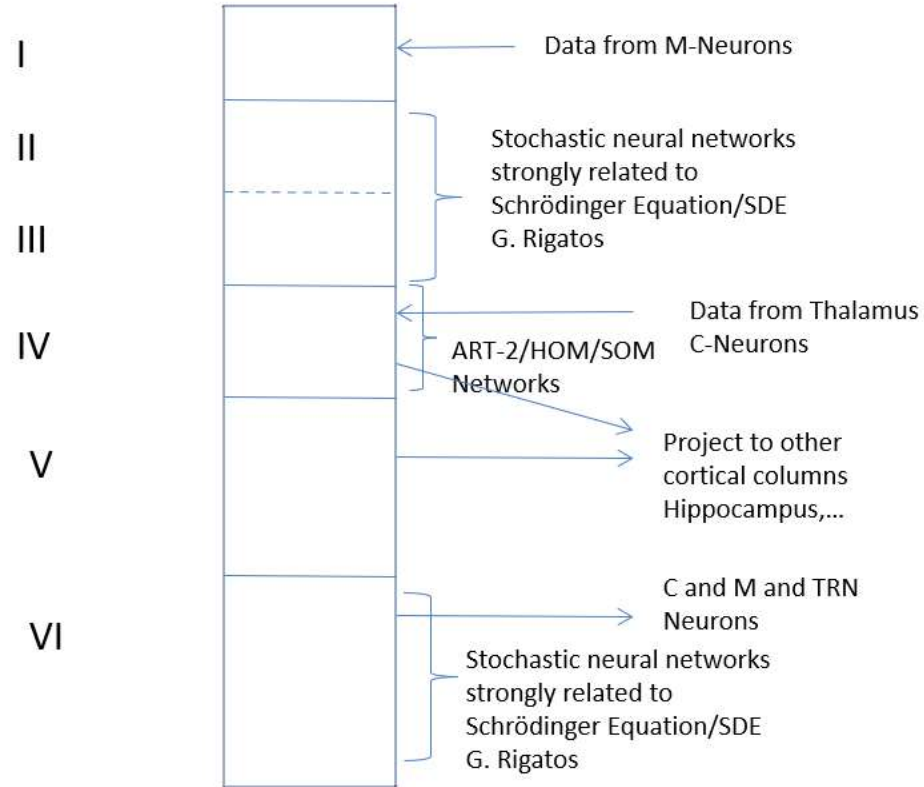
Artificial Brain, abstract functional point of view



Machine learning new-> QNN

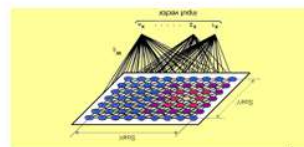


There are 3 – 6 layers columns in the HB



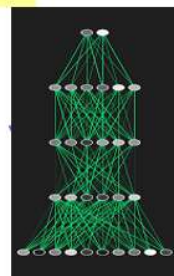
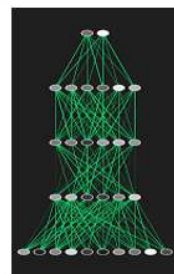
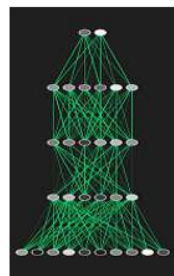
Cortical Column

Target Data Input

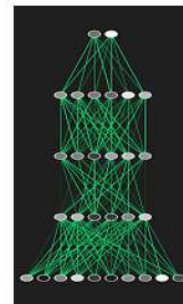
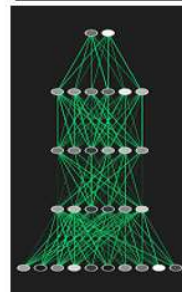
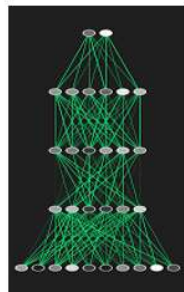


Layer I

Learns/stores categorical objects/morphisms



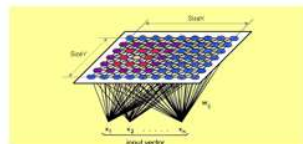
Layer II



Layer III



Input Data



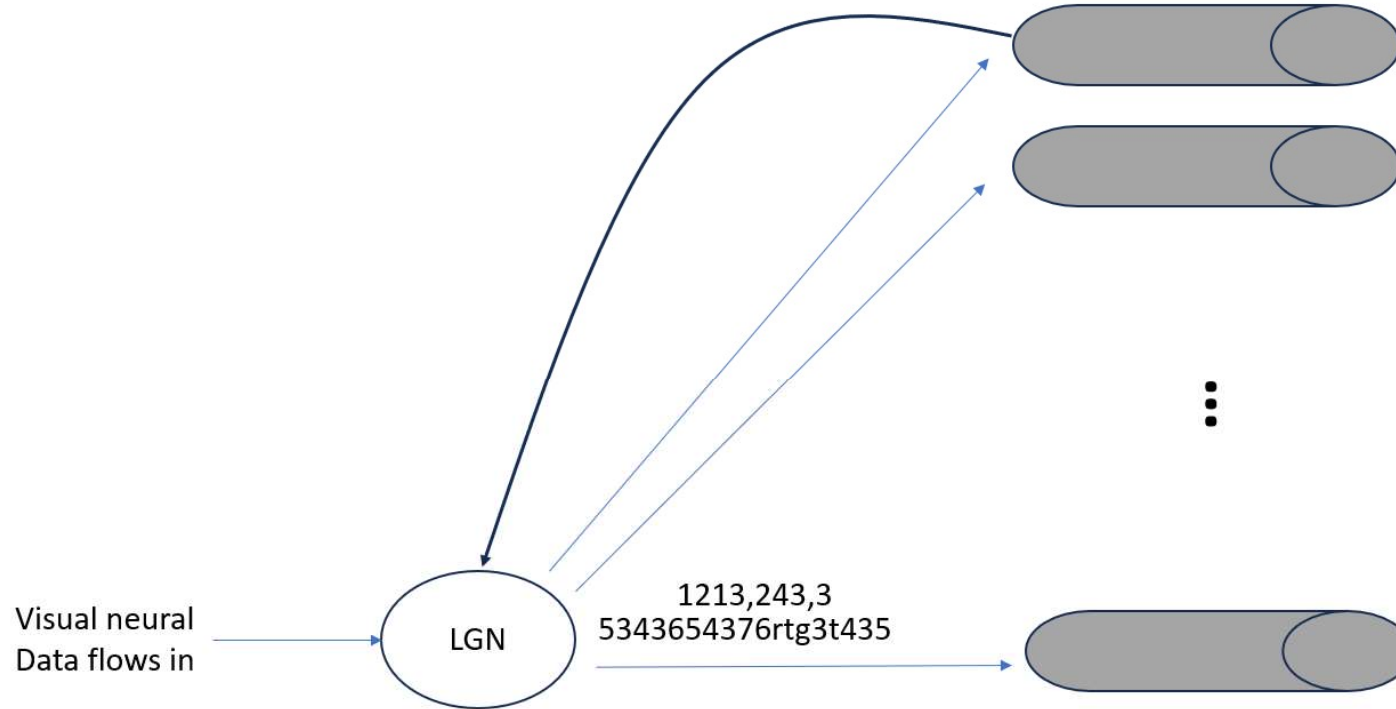
Layer IV



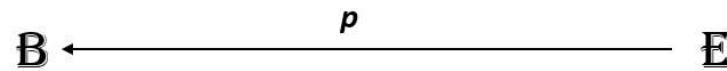
Neural Anatomy



Visual Cortex

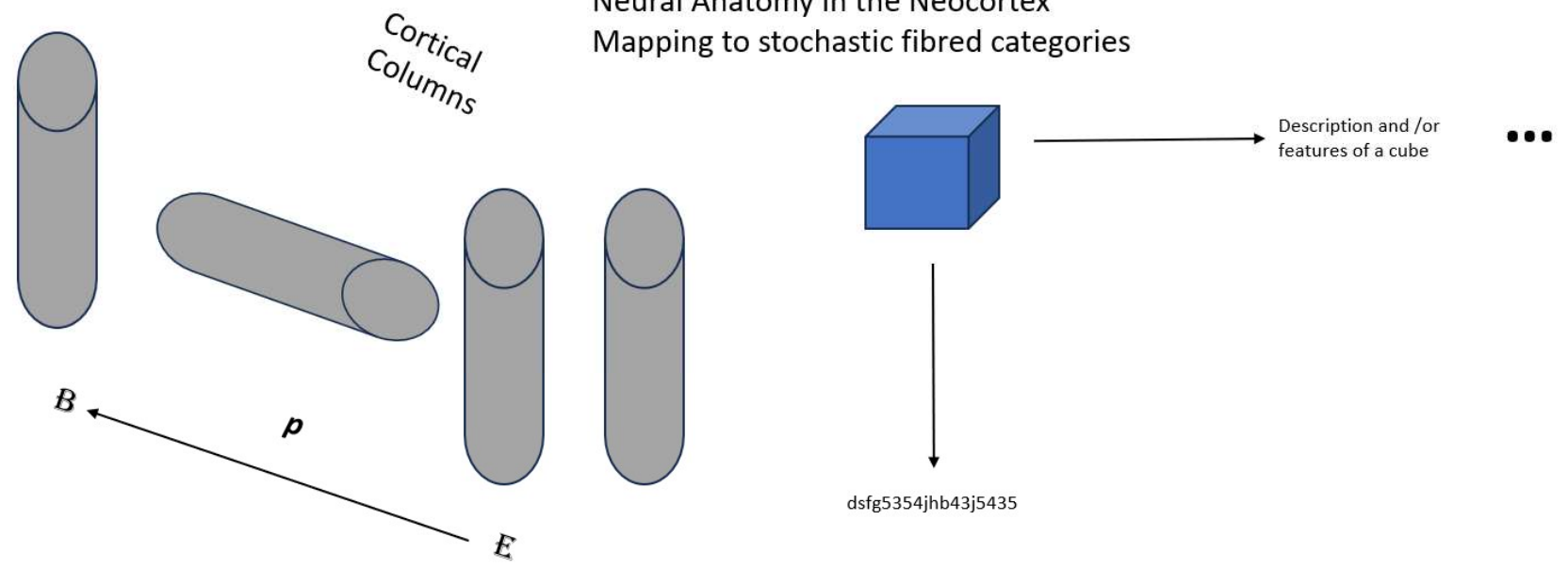


System retrieves for older memory form Hippocampus recent addresses (Hopfield Networks)





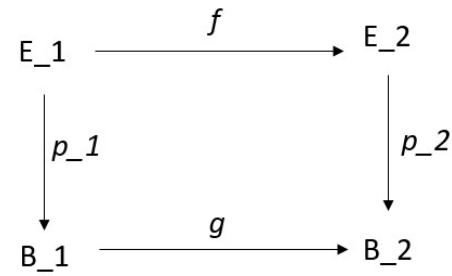
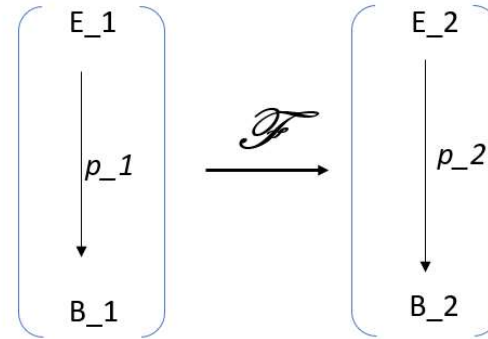
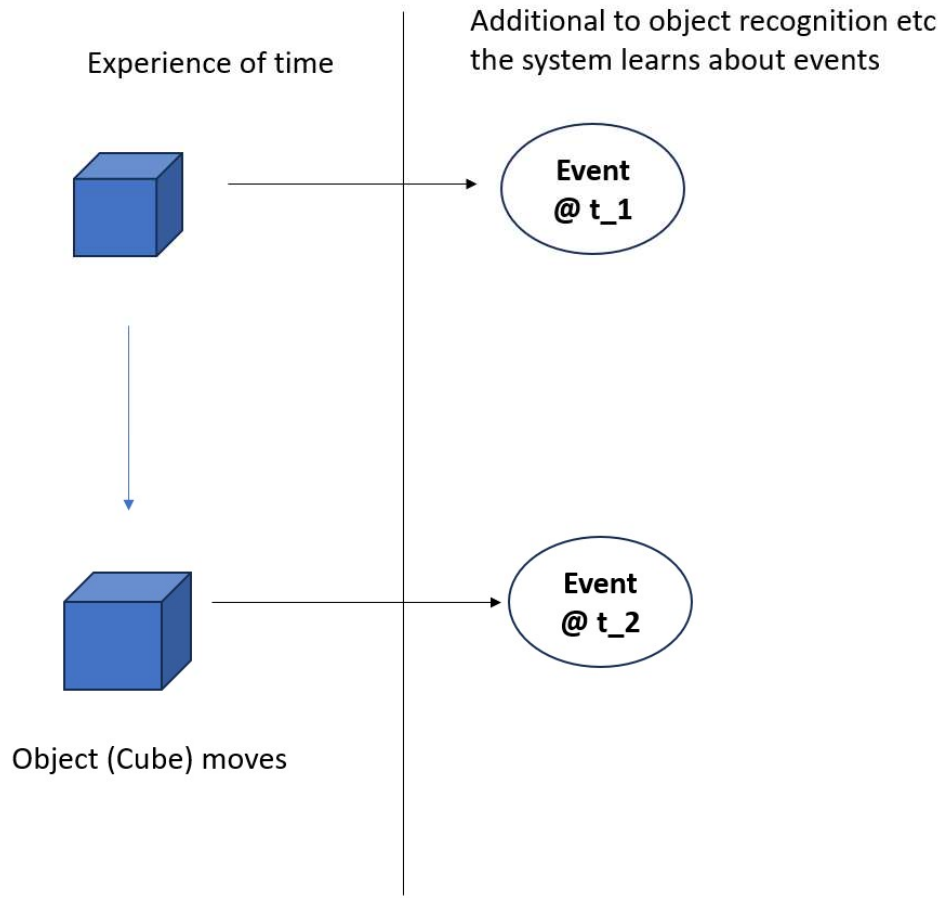
Neural Anatomy in the Neocortex Mapping to stochastic fibred categories



Address (Index Object)

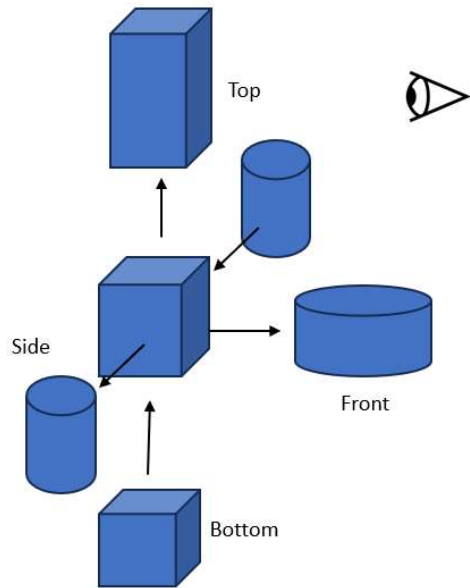
Objects, Functors, Natural Transformation
like cubes, humans, rotation, walking...



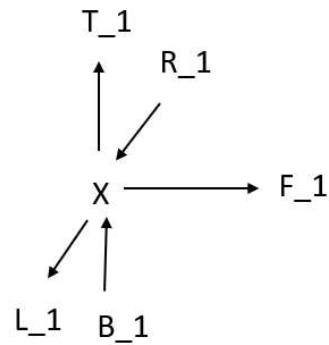




Spatial Imagination I



System is able to identify the different objects on an image/sensor data from real world

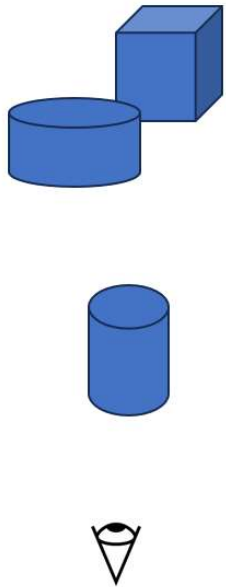


System is creating/revoking a model from original trained information

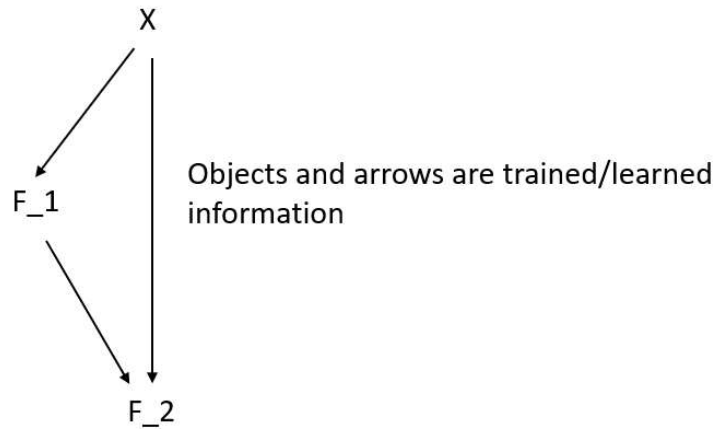




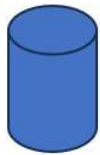
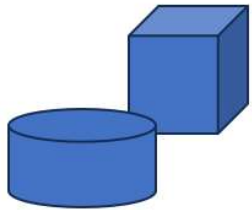
Spatial Imagination II



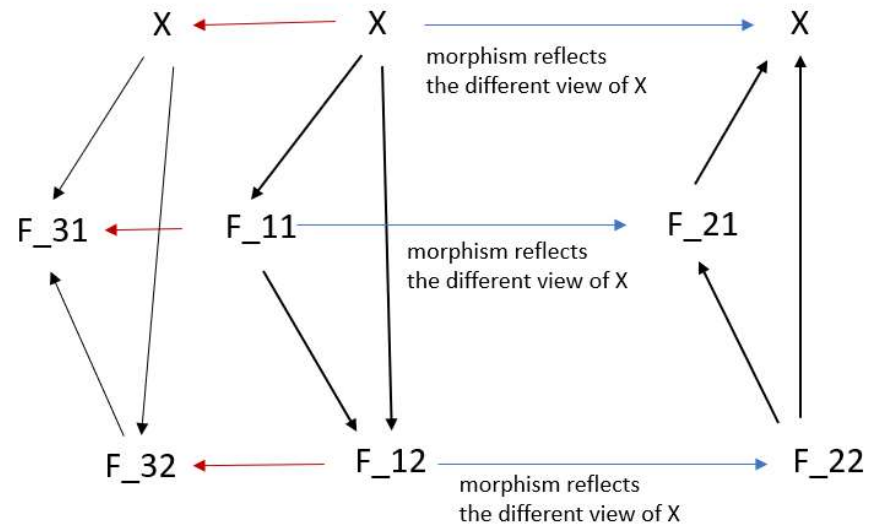
Morphism/Functors are cortical columns
-thalamus nuclei
e.g. input X signals -> output F_1 signals
→ reverse order: output only one direction



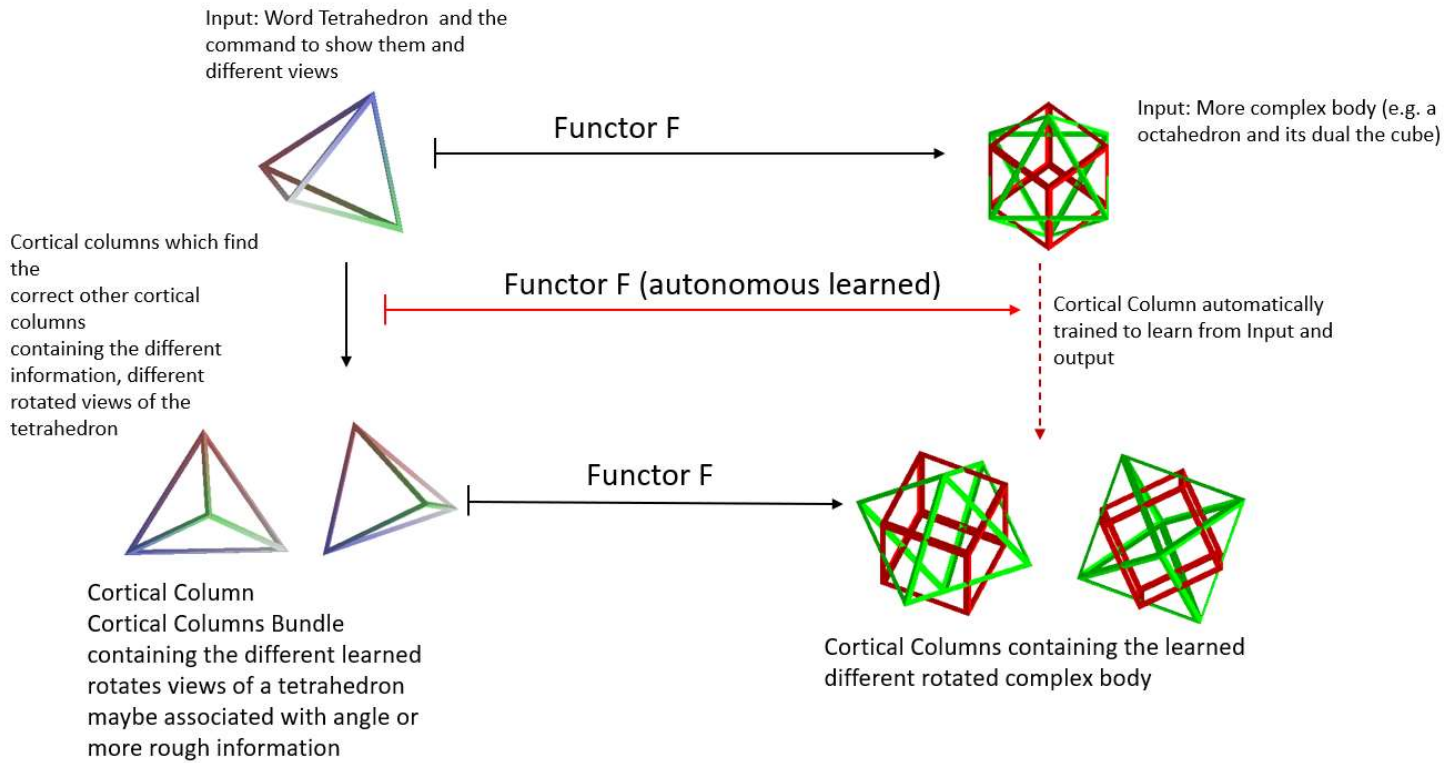
Spatial Imagination III



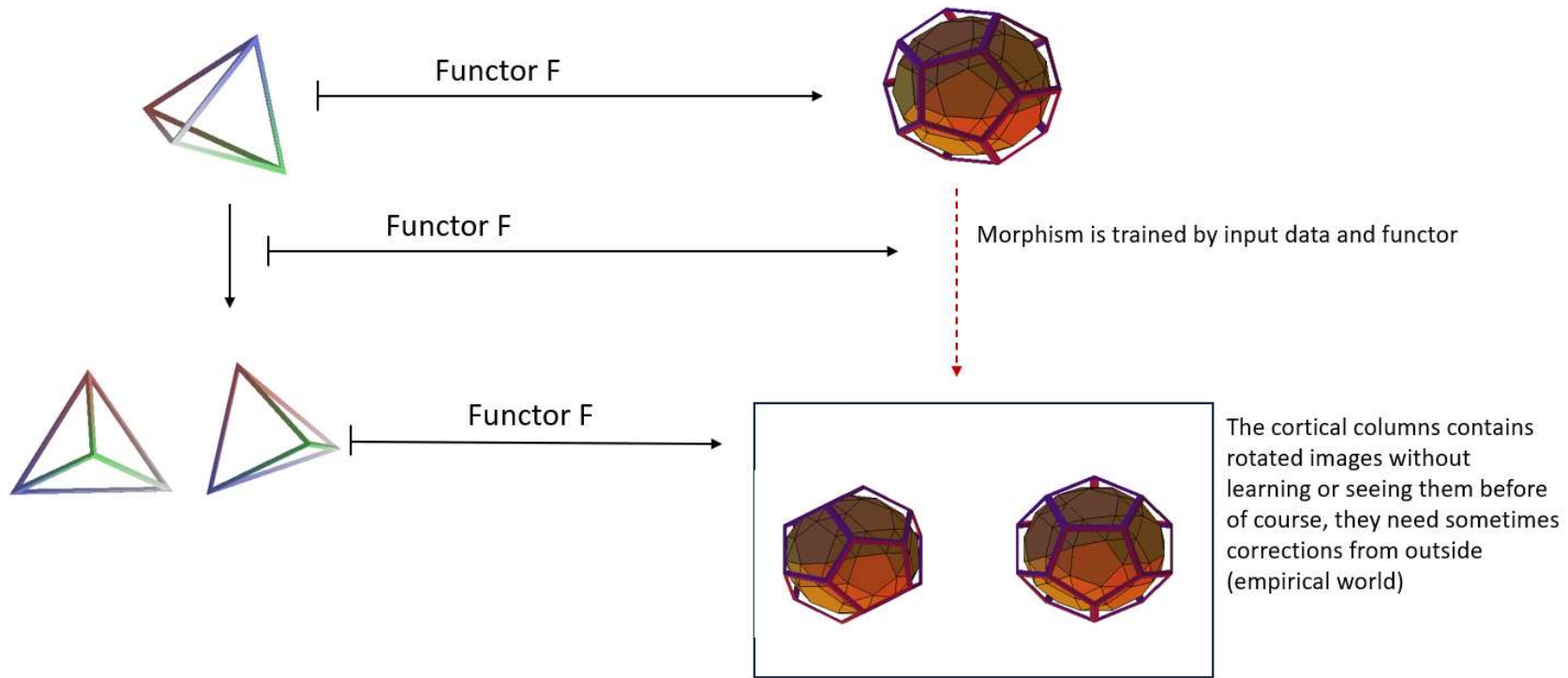
Functor/natural transformation



Spatial imagination Use Case I



Spatial imagination Use Case II





Thank you!

Xephor Solutions GmbH

Konstantin Walzgasse 37

A-3002 Purkersdorf

Phone: +43 676 93 99 566

E-Mail: office@xephor-solutions.com