

Neocortex and Hybrid Thinking

The Neocortex is the part of the brain that has evolved the most recently. It's the outer layer of the brain which enables us to think. The neocortex had evolved in the early mammals around 200 million years ago. It was just the size of a postage stamp and was a thin covering around their walnut sized brain, but it enabled them to invent a new behavior when in a critical situation. This evolution gave them great advantage and as time passed, the mammals grew bigger and so did the neocortex. Presently, the neocortex covers about 80 percent of the human brain. It's the part of the brain that drives us for a conquest like writing a book or making an invention.

The neocortex can be divided into a series of modules, where each module could learn some pattern, remember it and trigger response when they are stimulated again to it. These modules are organized into hierarchies in conceptual levels, each more abstract than the next one. These 300 million modules enable us to do tasks from recognizing an Alphabet to having complex emotions.

The last evolution of the neocortex was around 2 million years ago, when we developed the frontal cortex, which basically increased the size of the brain and enabled us to develop language, culture and technology. With the current developments in miniature robotics, in the next 30 years it will be possible to send nanobots into our brain which will help to connect our neocortex to the synthetic neocortex in the cloud, providing an extension to our neocortex. Our thinking then will be a hybrid of biological and nonbiological thinking. This non-biological thinking is subject to exponential increase, given the technological developments. This will be the next stage of our human brain evolution which will enable us to make the qualitative leap in culture and technology.