

Re: Perceptual symbol systems

Source: <http://sci.tech-archive.net/Archive/sci.cognitive/2004-08/0403.html>

From: dan michaels (*feedbackdroids_at_yahoo.com*)

Date: 08/11/04

Date: 11 Aug 2004 11:01:25 -0700

Traveler <traveler@nospam.com> wrote in message
news:<tf1jh09cfr6bevobdtokbu98lm2mc7v2lh@4ax.com>...

> *In article <8d8494cf.0408101814.3bc29230@posting.google.com>,*

> *feedbackdroids@yahoo.com (dan michaels) wrote:*

>

> > *Traveler <traveler@nospam.com> wrote in message*

news:<i4jfh0tg5dqnml6ourmo8s7fol84chbneh@4ax.com>...

> >

> >

> > > *There is very little in the brain that is related to the world around*

> > > *us when we are born.*

> >

> >

> > > *One wonders where did the 30+ visual areas in the cortex come from,*

> > > *and why are they interconnected via 1100+ pathways. Why are there edge*

> > > *detectors, movement detectors, color detectors, shape/blob detectors,*

> > > *orientation detectors, binocular disparity detectors, on and on?*

>

> *What makes you think any of it has to do with our particular*

> *environment? Certainly it has to do with the design of the eye which*

> *is based on the physics of light at certain wavelengths and the*

> *refraction index of the lens. And it's true that the visual cortex is*

> *genetically designed to recognize edges, lines directions, etc... But*

> *all this stuff is just generic visual sensory capabilities. The eye*

> *and the visual cortex have nothing to do with the actual things that*

> *you look at. That is to say, they could not care less where you set*

> *you gaze: animals, trees, people, stars, rivers, rocks or what have*

> *you.*

Well, in fact, that is the point. There is a reason we have those particular 30+ cortical centers that each perform more or less specific types of processing on the incoming visual information. Natural selection selected for those particular processing types because the information they provided to the organism enhanced survival. The information selected for was common and repeatedly found in the environment the organisms evolved within. Trees have vertical