ASHA VAHISHTA THE ULTIMATE TRUTH KNOWLEDGE

Truly the knowledge derived By the good mind Never before known Among the wise and in the universe With it make good rules and never waning Increasing righteousness Leading us towards Perfection

ZARATHUSHTRA - Yasna Ha 28.3 (FR)

DO ANIMALS HAVE CULTURE

In a recent analysis of seven long-term chimpanzee sites, researchers were able to identify 39 behaviors that were learned from others. If culture can be defined as behavior that is socially transmitted, chimpanzees, and other animals, are cultural beings, Frans De Waal argues. "What is the least common denominator of all things called culture?" he asks. "In my view this can only be non-genetic spreading of habits and information. The rest is nothing else than embellishment." Cultural anthropologist might not like it, but chimps are playing on our side now.

(Meredith Small -Scientific America April 2001. Review of "The Ape and the Sushi Master: Cultural Reflection of a Primatologist by Frans de Waal Basic Books, NY 2001)

DO ANIMALS THINK

Koko, a gorilla, has been learning American Sign Language from her trainer, Francine Patterson, for 20 years. In April 1998, Koko was the first nonhuman to go live on the Internet. She answered questions about her life and hopes, her desire for a baby and her dreams of freedom. (Psychology Today Nov-Dec 99)

CREATING WHAT NATURE DID NOT

(Is Dr. Scott Peterson following the Gathas?!)

A team of researchers strip genes from the simplest bacterium to create a life-form nature never thought of. At the Institute for Genomic Research a biologist named Scott Peterson and his team are trying to create something nature has not: a single-celled creature with the smallest number of genes necessary to stay alive. To make this microbe Peterson, not fate, will soon connect a bunch of genes together to build a chromosome. Then Peterson, not destiny, will place the loop of DNA into some unsuspecting cells. Next, Peterson not the force of nature, will decide which of its genes stay and which go. As this never before seen microbe doubles in number, and doubles in number again, evolution will have taken a curious turn.

Along the way, Peterson's team must grapple with some searching ethical dilemmas. The results could, for example lead to customized microbes for chewing up toxic waste, but they could also show a clear path to creating bio-weapons more deadly than anything nature has dished up. **"In a nutshell, when you are faced with the power unlike anything you've really used before," says Peterson, "you have to stop and ask: Am I using this power appropriately or not?** It is not hard for me to imagine a sinister application, and that's frightening." (Adapted from Discovery - April 2001)

TRAPPING LIGHT

Dr. Sajeev John and Eli Yablonovitch have been thinking of trapping light. Their idea has been realized in the form of photonic crystals, which could prove as far-reaching an innovation as semiconductors. Photonic crystal look a bit like a cage, and that's just what they are. They're cages that trap photons - particles of light that move at 186,000 miles per second - like fireflies in a jar.

To stop light without absorbing it, which just destroys it, to trap light while keeping it intact and useful -that is a neat trick. Anybody can stop tight by absorbing it. The trick is not to kill the protons but to tame them. Once they are in the cage you can find ways to let them out when you want and where you want. You can control light the way we already control

electrons in microchips, or integrated circuits. If we can do that with light, information will flow at the speed of light. An optical computer that processed information as light rather than as electricity could process trillions of bits per second. That's thousands of times faster than any advanced computer today. It is rather the speed of light compared to any other tamed speed. (Discovery - April 2001)

BRAIN WAVES

Our brain produces electrical fields with frequencies from 1 to 40 hertz. Beta waves are recorded during a normal waking state (13 - 30 hertz); Alpha waves during relaxation (8 - 12 hertz); Theta during light sleep (4 -8 hertz); and Delta with deep sleep (1 - 4 hertz).

It is in the Alpha state that the mind works at its best and solves complex problems, it is the equivalent of Vohu Mana

INCREASE YOUR MEMORY

(Adapted from Psychology Today Jan-Feb 2000)

Have you ever opened a closet door and then forgotten what you needed. Have you ever started your car and forgotten where you intended to go. Have you ever forgotten what you wanted to say. Do phone numbers and names take what seems like forever to recall? If yes, try and remember "Phosphatidy Serine".

Forgetfulness is considered a sign of growing old, but not so by a group of scientist who believe that certain dietary supplements may protect the brain from wear and tear. Phosphatidy Serine a fat-soluble nutrient found naturally in our bodies, seem to restore memory and improve cognition. PS is a building block for every cell membrane in the body, but it is particularly concentrated in the brain, where it assists communication between neurons and regulates certain hormones and neurotransmitters.

It is believed as we age we need more of PS. If you want to try PS to improve your memory, try Soy Beans it is said to be the main source of PS. In addition Soy is also good for the heart.

IRAN ZAMIN