



BP – Animal Intelligence

Is the mammalian/emotional brain's capacity to see color (beyond shades of black and white of reptilian brain), a metaphoric and literal expression of the capacity for emotion and relationship to color our world?

We need to learn from animals what our emotional brain capacities – and needs – are.

New research shows that we have grossly underestimated both the scope and the scale of animal intelligence. Primatologist Frans de Waal on memory-champ chimps, tool-using elephants and rats capable of empathy.

<http://online.wsj.com/article/SB10001424127887323869604578370574285382756.html?mod=e2fb>

Animal abilities to reason appears to be a huge topic in Philosophy:

<http://www.iep.utm.edu/ani-mind/>

Rescued elephant herds inexplicably gather to mourn South ...

For 12 hours, two herds of wild South African **elephants** slowly made their way through the ... the house of late author Lawrence Anthony, the **conservationist** who had saved their lives. ... Elephants have long been known to **mourn** their dead.

Larry Dossey, MD writes (in his book *The Power of Premonitions*):

“In their book *The Haunting of the Presidents*, Joel Martin and William Birnes report that just before President Abraham Lincoln was assassinated at Ford’s theater, the Lincoln family dog became frantic at about the same time as the curtain was rising at the theater. The pet, usually gentle and quiet, inexplicably started barking uncontrollably and running around the family quarters in a frenzy, as if looking for its master, the president. None of the personnel could calm the animal. The dog continued running through the hallways until it stopped, threw its head back and began to wail. The thought on everyone’s mind was that something had happened to the president. There was no quieting the dog, whose yelps roused servants from all over the White House.”

Perhaps an interspecies internet will provide us all with expected surprises into the nature of consciousness:

<http://on.ted.com/InterspeciesInternet>

Dolphins help save swimmer from shark

vetstreet.com Swimmer was raising money for dolphin conservation

As if to thank him for his support, a pod of 10 dolphins arrived to keep Adam Walker safe from a shark during part of his 16-mile swim through New Zealand’s Cook Strait. Walker was swimming to raise money for dolphin conservation.



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The dolphins arrived soon after Walker noticed a great white shark swimming beneath him in the cold, rough waters April 22, reported the Huffington Post. They joined him for an hour, leaving only after the shark had departed.

"I'd like to think they were protecting me and guiding me home!!!" Walker wrote on Facebook.

Walker, who's from England, finished the swim in 8 hours and 36 minutes.

He has now completed all but one of the legs of the Ocean's Seven challenge, a series of seven long-distance open-water swims. In addition to Cook Strait, he has done swims in the English Channel, Strait of Gibraltar, Catalina Channel, Molokai Strait and Tsugaru Strait. He plans to undertake his seventh and final swim in August in the North Channel, which separates Northern Ireland and Scotland. His efforts raise money for the nonprofit Whale and Dolphin Conservation.

Rescue Dog Saves Baby's Life (<http://living.msn.com/family-parenting/pets/off-the-leash-blog-post?post=eedc81b5-56b9-4b90-96f5-d04bcf275a7f#scptig>)



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Back in the 1950s and 1960s, when animal psychologists talked about "sympathy" and "empathy," they always put those words between quotation marks, de Waal notes. Now he wants to take away the quotation marks. He describes one of his best-known demonstrations that animals care about fairness. In the experiment, he had pairs of capuchin monkeys perform simple tasks in their cages. For successfully completing each task they would get a reward, sometimes a slice of cucumber, sometimes a grape. All the monkeys would work for and eat the cucumber slices, but they preferred grapes. If one monkey kept getting paid in cucumber and it could see that its partner in the next cage was getting grapes, it would get mad, like Darwin's Jenny.

<http://www.upworthy.com/2-monkeys-were-paid-unequally-see-what-happens-next>

A group of cotton top tamarin monkeys have become the first group of non-human primates who were ever observed whispering to each other. The monkeys — who have been under observation at New York's Central Park Zoo — huddled together and started whispering when a zoo staffer that they all totally hate (and how much would it suck to be that guy?) came into the room. "The tamarins were reducing the amplitude of their vocalizations in the context of exposure to a potential threat," the astonished researchers wrote in a paper published in the journal *Zoo Biology*. At first we assumed that the hated staffer must have made fun of their hairstyles to their faces, but apparently he's the one who captured them for the experiment. Either way, they're totally talking about you, dude. [Source]

<http://www.wimp.com/maggiesmartest/>

<http://www.maniacworld.com/which-is-the-guilty-dog.html>



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[Elephants have a ball playing with tires](#) Video: They may look like intimidating beasts, but elephants have an irrepressibly playful side. Don't believe it? You will after seeing their reaction to tires



[Baby Chimp, Tigers, and Wolf playing](#) by JoeExoticTV

[Jaak RATS LAUGH Panksepp - Emotion Researcher](#)

emotionresearcher.com/wp-content/uploads/2013/11/discover-panksepp.pdf

Jaak Panksepp has taken on many unusual roles in his storied career, but QA+ ... **Pamela Weintraub** at the magazine's offices in New York City to explain

[Discover Interview: Jaak Panksepp Pinned Down Humanity's 7 ...](#)

discovermagazine.com/2012/may/11-jaak-panksepp-rat-tickler-found...

Discover Interview: **Jaak Panksepp** Pinned Down Humanity's 7 Primal Emotions He tickled rats and showed that making them laugh is serious ...

<http://shar.es/Mu9km>

Rat regret informs decision research

Rats that passed up a short wait at one feeding station only to encounter a much longer wait at the next showed evidence of regret.

June 19, 2014: When his graduate student Adam Steiner walked in and announced, "My rats are expressing regret," neuroscience professor David Redish responded along the lines of "You've got to be kidding."

Redish uses rats to probe fundamental mechanisms of decision-making, and sees no reason other animals' brains shouldn't resemble humans'. But the idea of regret in rats still came as a surprise, and it required solid evidence—which he and Steiner have now supplied. On June 8 the researchers reported in Nature Neuroscience that rats can recognize when they've made a boneheaded decision and change their behavior in response. That, says Redish, is the essence of regret. And it means rats may act as stand-ins for humans as researchers probe how the brain makes decisions.



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“When we understand how rats make decisions, it tells us something about how humans do it,” says Redish. “The more we understand about how decision-making processes work, the more we can understand about how they go wrong and how to fix them.”

Larry Dossey, MD from the book ONE MIND, reported research with rats that - contrary to “survival of the fittest” – provide strong evidence that empathy is innate and primary:

“The experiment [Science, December 2011] was conducted by a team of neuroscientists and psychologists at the University of Chicago. Their goal was to determine whether genuine empathetic behavior exists in nonprimate mammals, in this case pairs of white lab rats. The researchers placed a free rat in an arena with a cagemate that was restrained in a clear plastic tube. The tube had at one end a door that could be opened from the outside. The free rat behaved in a more agitated way when its cagemate was restrained, compared to its activity when placed in the arena with an empty restrainer. After several daily sessions, the free rat learned how to open the door and free its cagemate. Opening the door was not a simple task, but the free rat kept at it until it had mastered the technique. After discovering how to open the door, the free rat thereafter would do so almost immediately upon being placed in the arena with the restrained cagemate.

One of the researchers explained, “We are not training these rats in any way. [They] are learning because they are motivated by something internal. We’re not showing them how to open the door, they don’t get any previous exposure on opening the door, and it’s hard to open the door. But they keep trying and trying, and it eventually works.””

In the late 1800s **Peter Kropotkin** challenged the popular Darwinian assumption that evolution was strictly about survival of the strongest. E.O. Wilson called understanding animal cooperation and altruism one of the fundamental problems in the study of animal behavior, and that emphasis can be seen in the laboratories of scores of researchers who specialize in this area today—laboratories from UCLA to Princeton, from the University of Texas to the University of Helsinki.



When we understand that our own [emotional/animal brain \(limbic system\)](#) is a foundational system and must be healthy for the later neocortex to operate effectively. We have grossly misunderstood the nature and role of the animal brain and of our emotions when it comes to understanding and developing “intelligence”.

And what about bird intelligence?

From Alex and Me, by [Irene Pepperberg, PhD](#):

(About her decades of phenomenal work with an African grey parrot named Alex. He blew away the basic conventional scientific assumptions about animal intelligence.)

“When Alex died, ABC, CBS, CNN, All Things Considered, New York Times ran 3 articles, The Economist, the British newspaper The Guardian, the Australian Broadcasting Corp's radio Science Show, and the journal Nature were just a few of the media that covered the story because of the profound significance of what Alex demonstrated.

"To some what he did seemed magical, or at least otherworldly. Indeed, he had given us a glimpse of another world, one that had always existed but remained beyond our view [i.e. "unseen"]: the world of animal minds...

Scientifically speaking, the single greatest lesson Alex taught me, taught all of us, is that animal minds are a great deal more like human minds than the vast majority of [conventional] behavioral scientists believed - or more importantly, were even prepared to concede might be remotely possible...

Eventually, these defenders conceded that...certain cherished cognitive abilities could indeed be found in nonhuman animals, but only in large-brained mammals, particularly in apes. By doing the things he did, Alex taught us that this, too, was untrue. A non-primate, nonmammal creature with a walnut-sized brain could learn elements of communication at least as well as chimps...revealing sophisticated information processing - thinking."

It is also interesting/unfortunate the ridicule, marginalization and arrogance she had to endure in the early years of her research, by all the well-established and conventionally-minded scientists. <http://www.wimp.com/alexparrot/>

SCIENCE

[VIDEO: ScienceTake: Those Clever Crows](#)

Scientists are trying to understand the limits to the well-established intelligence of crows. 2/11/14



NY Times 11/18/14

VIDEO: ScienceTake | How Birds Count

Researchers are exploring the mathematical abilities of New Zealand robins.

Animals and birds are so effective as therapeutic interventions with humans because they don't bother with the cognitive, rational, intellectualizations and instead go right to the emotions. CBT, cognitive behavioral therapy, is an example of a cognitive rational approach that misses the mark for so many whose distortions in thinking are from emotional pain and not a lack of analytical thinking. Rational thinking can certainly help, but it can't reach the core of the problem. The goal should not be just to manage one's issues and anxieties, but to heal through and past them.

Animals can help us heal. Plants can too. What about [plant intelligence?](#)

Plant Science Bulletin, 1974, Volume 20, Issue 4

www.botany.org/PlantScienceBulletin/psb-1974-20-4.php

Emotional Responses by Plants Adolph Hecht Washington State University 46 ... editor has run amuck since the lead article this time deals with something called the **emotional responses of plants**

Following his above article, in the 1974 Plants Sciences Bulletin, this is what he wrote:

Ask Not What the University Can Do for You But What You Can Do For the University

"Hardly a month goes by that I am not asked by my departmental chairman and other administrative officers if I couldn't provide funds from my research grant to subsidize what must be considered basic university functions. Requests range from the costs of repairs of general equipment facilities to telephone and mail charges as well as contributions to graduate student support. The scenario is a common one in state universities today and represents an increasing tendency to have its staff members seek outside funds not only to pay for all costs of their research but also to pick up an increasing proportion of the tab for basic university operations.

As a faculty member in a large state institution I have become bothered by these trends in university financing. I begin to feel more like a pawn whose principal role is to attract extramural funds rather than to make basic contributions to teaching and research. Since research is one of the most important elements of my job, it is the component which weighs most heavily in my promotion and evaluation of my professional standing. Yet it is the element which receives the least support from the university. This situation generates two basic questions: (1) What is the university's responsibility to its faculty if it expects research productivity as a key element of their performance?; and (2) To what extent is it justified for the university to expect faculty to generate grant funds to finance what should be covered by the university's general support budget?"

What about ensuring that credible research into these expanded areas of investigation gets funded, despite the fact it challenges status quo thinking and [conventional assumptions?](#)