

Anthropomorphism

Sir David Attenborough thinks that dolphins are **deep thinkers**.

Why? Well, apparently they are able to herd fish:

Dusky dolphins use teamwork to corral huge shoals of anchovies into a tight ball, while some bottlenose dolphins use walls of mud or tail-thrashes to scare mullet out of the water. Off the coast of Brazil, dolphins have even formed a successful fishing partnership with humans.

Yeah, because inborn fish-herding behaviour could never evolve in a species that lives solely on fish, could it?

And isn't Sir David just a teeny bit fazed by the fact that it is possible to write zoology textbooks specifying which *species* uses which herding tactic?

They can communicate too:

As highly social mammals, dolphins possess amazing communication skills using sound and body language to keep in touch. In Hawaii, they can even understand us, through a special sign language that the scientists have developed.

But again, it doesn't seem to occur to Sir David that this is simply the dolphin using a program in its brain that evolved so that dolphins could send a fixed repertoire of signals under predetermined conditions. We humans might see their meaning as saying "food over here" or "Hey, baby! How about doin' the horizontal mambo?", but to them it's just ... well that's the point isn't it? What is the point of imagining that there is such a thing as what it is like *to them*? Why aren't similar documentaries made about the deep thoughts of our (or for that matter the dolphins') immune system, as it tracks down bad cells and spares the good, with a sophistication, ability to 'learn', and complexity of communication that makes a dolphin look like a floating beer can by comparison.

It might be fun to have a companion sentient species to talk to. But dolphins are dimwits, their immense intellectual achievements in the field of putting frisbees into baskets notwithstanding. They show

a very limited ability to **learn language** but the language always refers to moving objects around and putting them in specific places. If there was a dolphin that was capable of having a conversation about art, philosophy, music, physics, mathematics or even Big Brother, that would be a sign of intelligence. But there isn't. Thinking involves being able to create new and better ideas. There is no reason to think that dolphins learn, in the human sense of the word, any more than a word processor learns science when a scientist types a paper which it then reformats and prints out. Dolphins are just slotting parameters, provided by humans, into a program hardwired into the dolphin brain by evolution. The only creativity involved is that provided by the gullible humans who interpret the resulting behaviour.

Thu, 06/12/2003 - 07:56 | [digg](#) | [del.icio.us](#) | [permalink](#)

I have to disagree strongly w...

I have to disagree strongly with this ignorant post. You would never say that if you had a dog. I know for a **fact** that my dog understands me and can communicate with me. A lot more than some **humans** I could name.

Sorry if this is a repeat. I tried posting this before but it hasn't shown up.

by [Sylvia Crombie](#) on Thu, 06/12/2003 - 08:44 | [reply](#)

d00d fribees pwn

I consider "But dolphins are dimwits, their immense intellectual achievements in the field of putting frisbees into baskets notwithstanding." an unfair attack on the value of frisbees.

-- Elliot Temple

<http://curi.blogspot.com/>

by [Elliot Temple](#) on Thu, 06/12/2003 - 08:55 | [reply](#)

Not just dogs, warcraft III too

I (also) have to disagree with this ignorant post. You would never say that if you had warcraft III. I know for a **fact** that warcraft understands me and can communicate with me. A lot more than some **humans** I could name.

And unlike some people, I'm going to back this up!

Warcraft understands when I communicate with it: all my troops go just where I tell them. And it responds too. Every unit will acknowledge me when I address it, and warcraft announces various things that it thinks I might be interested in without prompting.

-- Elliot Temple

<http://curi.blogspot.com/>

by [Elliot Temple](#) on Thu, 06/12/2003 - 09:52 | [reply](#)

heh...

Very funny, Elloit. So, like in Starcraft, is the sexy medic hitting on me when I click on her a lot? I hope so! That would make my evenings at home less boring knowing that a program has learned to flirt with me.

Suck that dolphins!

Kevin D.

by a reader on Thu, 06/12/2003 - 10:10 | [reply](#)

heh...

Kevin D:

The thing is, Elliot isn't just being funny. He's implicitly giving an argument in support of **The World's** post. Namely: what evidence does anyone have about dolphins or dogs being capable of having deep thoughts, that Elliot doesn't also have, in spades, about his Warcraft program?

by **David Deutsch** on Thu, 06/12/2003 - 13:40 | [reply](#)

anthropomorphising the relatives

Anyone got any ideas about why humans go all anthropomorphic about mammals? And why it's mostly *mammals* rather than other kinds of living creatures that get the oohs and aahs?

Did it originate with hunter-gatherer man teaming up with dog-ancestors? Or was it linked with the domestication of cows, sheep, goats, pigs, camels, llamas, whatever? And why on earth do we go gooey over cats - for their rat-catching abilities?

If I'd read Guns, Germs and Steel I might know the answer to this. *sigh*

I suppose if one spends a lifetime giving soft voiceovers in an anthropomorphic fashion, some of it will eventually rub off.

by **emma** on Thu, 06/12/2003 - 15:33 | [reply](#)

Um

I don't know whether animals have "deep thoughts" or not, because *I have no idea what you all mean by "deep thoughts"*.

Any clarification, at all, please?

Thanks,

Alice

http://libertarian_parent_in_the_countryside.blogspot.com/

Oh... darn...

I thought he was being sarcastic. Oh. Well, if your right I see what your saying.

Personally I feel it's all boiled down to a series of programmed responses. (Warcraft included.) How are dolphins trained to do those neats tricks with the frisbee? Their actions are reinforced with food. They're doing the trick because they've been programmed to "think" that "if I do this, I'll get that". That's why the programming needs to be reinforced from time to time. Even after the training is completed they'll still get that fish every once in awhile to make sure the behaviour is repeated. Same with house pets. You train an animal using food.

But that isn't to say that animals are robots. No, they possess emotions as well. Nowhere near as complex as human emotion but the basics are there and they sense changes. Tells your dog he's an idiot in a sweet tone and he'll wag his tail 'till the cows come home. Too often humans want to inflect human traits and characteristics upon animals to somehow make them more "human" than they are. Like Sigmund Freud said, "Sometimes a cigar is just a cigar."

I'll give you what I feel is a fine example of how different humans and the rest of nature really is. Humans produce no good for nature. Our very existance is a strain upon the natural system. Remove humanity from the world equation and nature would find it's perfect balance forever. Yet, humans are supposively a product of nature. Why would nature produce a creature who provided no value to it's system? It's like we were created to exist outside and above the natural system. I wonder why this is...

Shallow Thoughts

Alice wrote:

"I don't know whether animals have "deep thoughts" or not, because I have no idea what you all mean by "deep thoughts"."

Thinking = ability to create new ideas, deep thinking = ability to create deep new ideas, i.e. - ideas that explain a lot. Dolphins, and all other non-human animals that we know of do not exhibit this ability, they're stupid.

emma wrote:

"Anyone got any ideas about why humans go all anthropomorphic about mammals? And why it's mostly *mammals* rather than other kinds of living creatures that get the oohs and aahs?"

Basically anthropomorphisers think, "It looks a bit like me, it

exhibits complex behaviour, therefore it's smart."

and emma also wrote:

"If I'd read Guns, Germs and Steel I might know the answer to this."

You'd probably be better off with a book by Thomas Sowell if you want to actually understand the kinds of things Jared Diamond writes about in that book.

by [Alan Forrester](#) on Thu, 06/12/2003 - 16:38 | [reply](#)

relative intelligence

It's a good topic of conversation, and a controversy that we're not going to settle here.

Yeah, the anthropomorphic fallacy is present in spades here. But rejecting the idea out of hand doesn't help much either.

Personally, I think the jury is still out on this one. If dolphins are intelligent by our standards (e.g. can communicate meaningfully in ways that are not hard-wired, can come up with brand-new ideas and teach them to others, and so on) -- well, it may take us a while to prove it. DISproving their intelligence would be a lot harder to do convincingly.

There's a psychological desire, in some people, to project our 'selves' onto others, as inappropriate as it may seem to others. There's also an equally irrational desire, in some people, to assume without question that no one can measure up to ourselves. I don't think either viewpoint does anyone justice.

Try this as a thought experiment -- you're an intelligent dolphin. Say you're as bright as a human five-year-old, although naturally you don't have anything like a human five-year-old's upbringing. Say that you've discovered, more or less to your surprise, that HUMANS are intelligent, and you're interested in showing them that you are, too. How would you go about it? Remember that what looks like intelligent behavior to YOU might not look that way to others. (An intelligent dolphin, for example, might never get around to the idea of writing.)

If you think that demonstrating your human-five-year-old-equivalent intelligence would be easy, how about if you were as intelligent as a dog? How about as intelligent as a cat? (Do cats and dogs have roughly equal intelligence? If you think they do, how do you know?)

For better or for worse, we humans only know about gauging intelligence with those who think the way we do. (We're not even all that good at THAT; listen to a debate at the UN sometime.) Gauging the intelligence of a species that doesn't have much of ANYTHING in common with us -- well, I won't say it can't be done. But I wouldn't dismiss it casually either.

cheers,

Daniel

by **Daniel in Medford** on Thu, 06/12/2003 - 16:47 | [reply](#)

Mammals

It makes perfect sense to me to surmise that animals that are closest to us biologically probably share many of our cognitive experiences also. That the internal experience of a chimpanzee or a dog has a lot in common with that of a human is difficult to prove, but to assume that it doesn't is to place the burden of proof on the wrong side (it defies common sense).

Indeed, to take an extreme case, to assume that there was some kind of absolute qualitative distinction between the mind of the last ape and that of the first human smacks of superstition.

Of course, only an idiot would suggest that dolphins are "deep" thinkers in comparison with the average human. The dolphins have done nothing to suggest that they are capable of anything of the sort. But we should not take intelligence as the sole or even the main criterion for valuing life. There are humans (e.g. Stalin) who are very highly intelligent but whose contribution to the world has been a hefty minus. I think a kind-but-stupid person is more valuable than a cruel-but-intelligent one.

We should value higher animals as sentient beings.

by a reader on Thu, 06/12/2003 - 16:49 | [reply](#)

Dogs Are Idiots

Sylvia Crombie wrote:

"I have to disagree strongly with this ignorant post. You would never say that if you had a dog. I know for a **fact** that my dog understands me and can communicate with me. A lot more than some **humans** I could name."

I can't help but be reminded of an episode of *The Simpsons* where Mr Burns and Smithers are talking about dogs.

Mr Burns: Dogs are idiots. Think about it, if I came along and started slobbering on your crotch what would you think?

Smithers: If *you* did it sir?

by **Alan Forrester** on Thu, 06/12/2003 - 16:53 | [reply](#)

Shark dies after naked tank prank

http://news.bbc.co.uk/2/hi/england/southern_counties/2984936.stm

by **Tom Robinson** on Thu, 06/12/2003 - 18:49 | [reply](#)

thinking etc

"deep thinking = ability to create deep new ideas"

So, potential to think = thinking?

Confused.

Alice

by a reader on Thu, 06/12/2003 - 21:50 | [reply](#)

Anyone know if dolphins taste good?

A) David was right about what I meant

B) we aren't looking to *prove* animals aren't intelligent, but rather seeking the *best explanation*. proof is impossible.

C) when we say "animals aren't intelligent" we mean intelligence in the *boolean* sense. it's not matter of degree, an entity simply is or isn't. either it can learn, or it cannot. there is no inbetween.

D) the idea of "5 year old intelligence" is extremely disturbing. your average 5yo may not have a lot of *knowledge* but that's it.

E) Does anyone really think the only thing stopping dolphins building houses is they didn't get hands?

-- Elliot Temple

<http://curi.blogspot.com/>

by [Elliot Temple](#) on Thu, 06/12/2003 - 22:25 | [reply](#)

Takes a big man to call a dolphin a nitwit.

For someone who cites zoology textbooks, you certainly don't seem to have read many of them.

Behaviors such as mimicry, group hunting techniques, playing, and problem solving don't necessarily constitute deep thinking, it's true. But they do lead to it in many cases. They are precisely the behaviors that every human being first demonstrates when attempting to socialize and communicate.

Babies learn how to talk by mimicking. Does that make them stupid? Does the fact that they eventually learn to say certain things to achieve desirable results mean that they're just little survival machines? No. That's how it's supposed to work! Mimicry is the preamble to communication, and communication begins with reinforcement. We all learn different languages the same way, by first taking in lists of words for simple things that we want or need. (My Spanish is weak, but I still remember how to ask where the bathroom is... I'm a nitwit en Espanol.)

That is why we anthropomorphize machines and animals that demonstrate those kind of behaviors... because those behaviors are

instinctive to humans who are trying to learn, and instinctively

recognizable to other humans who are evolved to help them.

As far as putting frisbees in baskets goes, basic human IQ tests still use simple problems and analogies (because most abstract thought and "deep thinking" is too subjective to measure). You could say that college level engineers learn calculus in order to obtain material benefits later, on the same level that a pigeon learns to peck a certain button to get a drug. (I wouldn't recommend it though, because I'm sure most of them feel they're thinking pretty deeply most of the time.) It almost sounds as if you are saying that solving problems in order to get food relegates a creature to substandard intelligence. The opposite is true.

It's no coincidence that predators are the most "intelligent" animals there are. The evolution of group hunting behavior, to which you refer so slightly, is the prime suspect for the birth of our own big brains. Let's face it, we can eat almost any other animal there is... not because we're big or strong, but because we're smart enough to use many different hunting methods. "Thinking deep thoughts" may just be a side effect of this kind of mental activity, or it may be something specific to our makeup and circumstances. Regardless, the biological correlation between predation and brain complexity isn't in dispute. It's a pretty basic fact. That's why Attenborough is calling attention to the hunting behavior; not because he's so astounded that dolphins figured out how to hunt fish (golly gee), but because group hunting behavior is a prime indicator for a more evolved intelligence. Group hunters form communities; then you get social structures, communication, relationships, all sorts of nice brainfood.

And since it often seems that we're smarter than we really *need* to be (do we really need as much language as we've got?), it's a decent hypothesis that other creatures with high levels of hunting skills may have high levels of the other mental "tricks".

The claim that "dolphins are stupid" is completely irrelevant to the whole purpose of Attenborough's show. He's not studying dolphins in the desperate hopes that one of them will someday be able to give him financial advice. I doubt he's got high aspirations of dolphin art. He's doing this because learning about the intelligence of another species is extremely useful. We know so little about our own intelligence that any chance to study a contrast in behavior shouldn't be passed up. Dolphins in particular provide a handy test subject because their intelligence shows so many similarities to our own; we're not working from something so alien that we have no way to observe or quantify.

With regards to the article: I was very impressed by the fact that they can understand pointing. That means they can read semi-abstract human body language, expressed through fingers... pretty impressive for an animal who spends its entire life around things with fins. I don't doubt that given time and research, we'll be able to communicate with dolphins better than we do now. And I hope we don't neglect killer whales, either... who are possibly even more intelligent.

AND anuddah ting!

this is simply the dolphin using a program in its brain that evolved so that dolphins could send a fixed repertoire of signals under predetermined conditions.

This is known in scientific circles as communicating. (The program in its brain is known as thought.)

by a reader on Thu, 06/12/2003 - 22:58 | [reply](#)

ho hum

By your (author of "AND anuddah ting!") definitions, computer programs think.

-- Elliot Temple

<http://curi.blogspot.com/>

by [Elliot Temple](#) on Thu, 06/12/2003 - 23:10 | [reply](#)

A phenomenon that cannot be defined is not nonexistent thereby.

I second "a reader"'s comments. Some of this thread strikes me as labouring something fairly obvious. It may be intensely difficult (and interesting) to **define** what makes us think some behaviour is at a particular point on the intelligence spectrum, but it's not that hard to just observe.

Here's an approximate order:

People
Dogs
monkeys
dolphins
cats
cows
mice
spiders
ants
viruses

We can argue till the viruses come home about the exact order, but no one's going to deny that it's something like that. (Except you, Mr Temple, though I suspect you are only playing.)

It is an interesting question where computer programmes would come in the hierarchy. Personally I'd say about at the level of spiders. It's also an interesting question, though not one I would raise in company where it would be likely to give offence, to ask where people at different levels of mental impairment would come.

by a reader on Fri, 06/13/2003 - 16:08 | [reply](#)

Not a matter of degree

Sombody wrote:

"It may be intensely difficult (and interesting) to **define** what makes us think some behaviour is at a particular point on the intelligence spectrum, but it's not that hard to just observe...

"We can argue till the viruses come home about the exact order, but no one's going to deny that it's something like that."

Thinking = ability to generate entirely new memes (as humans do), not following a programme in the brain predetermined by biology (as all known non-human animals do).

Your statement above is approximately as ridiculous as this statement: "It may be intensely difficult (and interesting) to **define** what makes us think that some object is able to evolve by natural selection but it's just not that hard to observe, here's an approximate order:

rocks
chairs
galaxies
viruses
bacteria
starfish
wolves"

It is NOT the case that the difference between these different objects is a matter of the degree to which they are able to evolve by natural selection, it is simply the case that some can and some can't and that's all there is to it.

It is not the case that dolphins (or any other animal) are able to create entirely new memes to some degree they cannot generate new memes beyond the programme in their brain AT ALL.

by [Alan Forrester](#) on Fri, 06/13/2003 - 17:19 | [reply](#)

Culture threshold?

I don't think we're going to resolve all this until we've got some really good passive scanning technology and a heck of a lot of computing power. (Anybody know how SQUID magnetometers are coming along?) Then we can look inside active brains at all the stages of an organism's development and try to analyse computationally what's going on (assuming Roger Penrose is wrong about quantum stuff going on in microtubules).

The World's position is testable when it comes to humans, where it attributes all human behaviour to wholly culturally-received and self-generated knowledge. This is great, it sticks its neck out (but see my final paragraph below). Its position wrt dolphins, that **however** complicated their performance, it's all just parameters fed into a genetically pre-determined program, seems too dismissive. Why can't sets of parameters be regarded as primitive memes? After all, dolphins presumably can copy one another. One example from the show which grabbed me was when a dolphin was

given the impossible task of fetching some object from the floating basket that wasn't actually in there (perhaps it was the frisbee). Rather than just exploding, it helpfully(?) brought up the empty basket for inspection and nudged the 'no' button. This could be seen as a primitive kind of grammar, because the putative meaning ("what frisbee, dumbass") was independent of the expressive elements. I propose that we selectively breed dolphins for such "grammatical" intelligence for two hundred generations. If they cross a language threshold, using their sonic clicks as voices, then they may develop a simple culture. Consequently, if we turned them loose, there might then be selection pressure on their genes to provide some more brainspace. After another 10,000 generations, who knows? My guess is that intelligence is not all or nothing, but just a constant succession of overrides, which roughly speaking get less and less hardware dependent. If there is a boolean, it's the language threshold, because with a culture you don't have to start overriding from scratch. I don't see a fundamental difference between simple memes overriding genes and new meme's overriding old meme's.

When I sprain my ankle and my genes cause so much painful swelling that I choose not to run up the stairs, how is that not an example of genetic influence? OK, if my grandpa's in the attic and he's having a heart attack then I might choose to run up anyway, but the pain is still weighed up before I make the choice.

by **Tom Robinson** on Fri, 06/13/2003 - 20:43 | [reply](#)

Boolean

A Reader, (wanna give yourself numbers or something guys?)

"We can argue till the viruses come home about the exact order, but no one's going to deny that it's something like that. (Except you, Mr Temple, though I suspect you are only playing.)"

Although my style may be playful at times, I assure you my position is dead serious. *stares menacingly*

Tom,

"When I sprain my ankle and my genes cause so much painful swelling that I choose not to run up the stairs, how is that not an example of genetic influence?"

That's like saying genes encourage typing by giving us fingers. We don't deny genes can indirectly effect behavior in *that* manner.

Anyway, our best theories of intelligence say we have a conjecture machine in our brains, and a refutation/criticism machine too. Having those, or not, is boolean. Our best theories of dolphin brains say they have various hardwired behaviors just like a Warcraft III program (various units even carry out coordinated tasks, and if the code is object oriented, then we could say the various units communicate with each other to carry out complex, coordinated

battle manoeuvres... or in other words we could say Warcraft III

units have language as much as dolphins.)

-- Elliot Temple

<http://curi.blogspot.com/>

by **Elliot Temple** on Fri, 06/13/2003 - 21:35 | [reply](#)

Re: Culture Threshold

The World's position ... attributes all human behaviour to wholly culturally-received and self-generated knowledge

I'd rather say: all *differences* in behaviour between humans. Also, "behaviour" here doesn't mean a particular set of muscle movements like running up stairs. It means a particular set of ways (rules, algorithms) of responding, with muscle movements etc, to given situations, where the 'situations' can include states of one's own body like swollen ankles.

by **David Deutsch** on Fri, 06/13/2003 - 21:37 | [reply](#)

Names!

Elliot suggested:

A Reader, (wanna give yourself numbers or something guys?)

How about names instead? If you want to remain anonymous, you could just choose a different name. Like I have on this comment:

Bettina Fotherington

by **Sarah Fitz-Claridge** on Sat, 06/14/2003 - 08:36 | [reply](#)

Jordan

Well I completely disagree like many others with this piece. I am known for my opinionative view, and in this (rare) case I am on the opposing team. Dolphins are obviously able to at least understand humans, or at least the ones in the show, as they did exactly what the instructors asked. But then again this just might be some circus act you say, well if it was then why would dolphins act in intelligence over instinct in the wild? Just a few things to consider.

by a reader on Thu, 06/17/2004 - 09:36 | [reply](#)

READ THIS! Dr. Cassandra Everthorn

My research has lead me to beleive that idoits who spend all day writing an opionative pieces of writing are actually are just unable to accept the possiblity that someone might actually know something more than them and that *maybe* what they are saying is right. Well to all the idoits who actually go through all of this misinterpreted and annoying replies, get out there and do

something. Exercise! Who knows maybe you could quit smoking and have a new positive view on life! So stop reading this crap and get out there.

by a reader on Thu, 06/17/2004 - 10:16 | [reply](#)

animals do have feelings

ok first of all if you think your going to tell my dog he's an idiot get ready to get bit or braked at cause it seems my animals does have feeling and of coures everyone has they own opinon but if you really pay attintion to animals you'll noticed to some are brought up to be like humans and like cats getting there nails clipped ok thats like us getting a leg cut of we have to get use to it you know what im saying but the deep thought's thing i dont know about but animals are in a way like humans so if anyone has a commet do email me and we shall chat but for now tata

by a reader on Wed, 04/20/2005 - 19:15 | [reply](#)

Some have probably got better

Some have probably got better English than you as well.

by a reader on Thu, 04/21/2005 - 16:02 | [reply](#)

Re: Some have probably got better English

There is a relevant "classic" cartoon -- hey, it's from July 1993, before September -- by Peter Steiner in the New Yorker. It is widely reproduced; copies that look like they might stick around for a while are [here](#), [here](#), and [here](#), and can probably always be found [here](#).

by [Kevin](#) on Thu, 04/21/2005 - 20:14 | [reply](#)