## Scientism Watch – Fishy Feelings

### Fish do feel pain, scientists say

> The first conclusive evidence of pain perception in fish is said to have been found by UK scientists.

The "conclusive evidence"? Well, it's that fish not only react to harmful stimuli (which might just be a "simple reflex response") but behave differently afterwards. Uh huh. So does a computer, guys. Heck, so does a refrigerator.

Let's hope this doesn't answer **Alan Forrester's shark question**, but we have a horrible feeling it might. Has the world gone insane?

No. It always has been insane. That's why it needs setting to rights.

In related news, the BBC also reported: **Plants avoid worst Corus cuts**. Ouch! We don't blame them. Those Corus cuts *are* the worst.

Thu, 05/01/2003 - 01:38 | **digg** | **del.icio.us** | **permalink**

## Scientism

Which meaning of the word 'scientism' do you have in mind?

by a reader on Thu, 05/01/2003 - 02:14 | **reply**

## Scientism

The purported application of scientific methods to resolve non-scientific, philosophical issues, especially moral and metaphysical issues.

by **Editor** on Thu, 05/01/2003 - 02:39 | **reply**

## Observations

Observations, in and of themselves, never resolve *any* issues. Explanations that rely on observations can. Many scientists either don't know this, or ignore it. So if you see a scientist talking about a study proving something, and you don't see any explanations of

how the observations demonstrate the purported conclusion, it's

scientism.

-- Elliot Temple
http://curi.blogspot.com/

by **Elliot Temple** on Thu, 05/01/2003 - 06:08 | **reply**

## What we have here is a failure to communicate

I think that part of the problem is that different groups are using the same word ("Pain") and attaching different meanings to it.

The scientists are, indeed, observing something: "profound behavioural and physiological changes" and labeling it "Pain". Perhaps this is a standard usage in the field; but when most laymen hear "Pain" they think about the kind of anguish that people can feel. This is something entirely different and cannot be established by observation (certainly not today).

It's my understanding that our best theories about how brains work tell us that fish nervous systems are not capable of experiencing this human-like pain and these experiments do nothing to change that.

by **Gil** on Thu, 05/01/2003 - 16:52 | **reply**

## Suuuuuuuuure

Gil,

Can you find one source suggesting these "scientists" don't think fish feel pain in the human sense?

-- Elliot Temple
http://curi.blogspot.com/

by **Elliot Temple** on Fri, 05/02/2003 - 06:29 | **reply**

## Isn't pain a feeling?

Pain is a feeling isn't it? How can that be measured? Aren't feelings subjective? Don't we interpret physical sensations with our brains? Thus, how can an animal have the same experience we have? They don't have our brains so they can't experience it the way we do.

by a reader on Fri, 05/02/2003 - 12:24 | **reply**

## Wrong Word

You mean quale (plural: qualia) not feeling (emotion).

But it's not that fish can't experience it the same way because they "don't have our brains" -- two humans with different brains (we all have different brains) can, according to our best theories, experience the same quale the same way. It's that you have to be

concious in the first place to have them. Fish are thus no more

candidates than rocks.

-- Elliot Temple
http://curi.blogspot.com/

by **Elliot Temple** on Fri, 05/02/2003 - 13:20 | **reply**

## Source

Well, *these* scientists didn't speak about their results describing how the fish *felt* (which is good from a scientism point of view). Those conclusions were drawn by the animal rights activists and, perhaps, the article author. The scientists only claimed to have observed responses to damaging stimuli.

There was a quote from another scientist that *did* explicitly distinguish these findings from *feeling pain*.

> Dr Bruno Broughton, a fish biologist and NAA adviser, said: "I doubt that it will come as much of a shock to anglers to learn that fish have an elaborate system of sensory cells around their mouths...
>
> "However, it is an entirely different matter to draw conclusions about the ability of fish to feel pain, a psychological experience for which they literally do not have the brains," he said.
>
> He quoted from a study by Professor James Rose of the University of Wyoming, US, in which it was found fish did not possess the necessary and specific regions of the brain, the neocortex.

by **Gil** on Fri, 05/02/2003 - 16:18 | **reply**

## Irony

I find it somewhat ironic that Elliot and this post's author seem to have drawn conclusions about what theories these scientists hold about fish *feeling* pain based purely on the observation that they have published a paper describing physiological and behavioural responses to damaging stimuli, the fact that they use the word "pain" (which probably has an observable technical meaning in their field),
and the interpretations of laymen.

I know that they didn't claim these conclusions to be scientific, but they still suffer from the same supportability problems that are ascribed to others.

But, I agree that it is correct to criticize those who did explicitly draw grand conclusions about fish *feeling pain* in the human sense.

by **Gil** on Fri, 05/02/2003 - 16:51 | **reply**

## oh c'mon

Gil,

Have you read any of the article besides the part you quoted, which is from a NAA (fisher ppl) adviser..? OK, i know you have, but stop studiously ignoring it.

-- Elliot Temple
http://curi.blogspot.com/

by **Elliot Temple** on Fri, 05/02/2003 - 19:32 | **reply**

## What?

What am I ignoring? Where does the scientist (Dr Sneddon) say something that implied the fish feel pain as humans do?

Was it this?:

> Dr Sneddon said the team's work "fulfils the criteria for animal pain".

Maybe I'm wrong, but I interpreted "animal pain" to be a technical term for observable responses to damaging stimuli, not a psychological, emotional, interpretation.

All of the conclusions about how the pain is felt seemed to come from the animal rights people, the author, and apparently many of the readers of the article.

by **Gil** on Fri, 05/02/2003 - 23:08 | **reply**

## Do they mean 'pain' in the morally significant sense?

Gil I think you may be letting the authors off too lightly. Because

- If this were truly a technical term that they intend no other connotation for (as when a physicist uses the word 'charm' to refer to a property of sub-atomic particles),
they would apply it uniformly to everything that passes the criterion. Such as certain robots. But I bet they do not say that robots feel pain.

- If this were truly a technical term that they intend no other connotation for, then the entire project has no worthwhile motivation. It's not something that has any significance for zoology or any other science. Zoologists reading this paper are not saying "oh, now we can understand this other perplexing problem; oh now we have a promising way of investigating that other phenonenon" or anything like that. Its *only* interest is its purported relevance to moral issues of how fish should be treated, in the wider context of animal rights etc.

- If this were truly a technical term that they intend no other connotation for, then they would be at pains to point this out to journalists -- for the possibility of confusion is abvious when you use a technical term that has a different meaning in everyday life,

concerning an issue of widespread interest and controversy. Journalists don't come away from interviews with physicists with the impression that the "charm" of elementary particles means charm.

For this and other reasons, I conclude that they are guilty.

by **David Deutsch** on Fri, 05/02/2003 - 23:35 | **reply**

## Pain

David,

I think it would be useful to speak of robots experiencing pain. It would help people grasp a model for controlling it's behavior, learning, etc. It would be good to build in sensors that detect destructive stimuli, and avoid the source in the future. Pain is what I'd call it.

I'm not sure what facts are useful to zoologists, but this scientist said:

> "We believe our study is the first work with fish of the teleost family [those with bony skeletons], and the results may represent an evolutionary divergence between the teleost and elasmobranch lineages."

Which sounds to me like it proves useful (some animals have developed certain receptors and others haven't).

As for the impression that the reporter was left with as evidence; it's my experience that reporters often make mistakes like this, and worse. I'd be very surprised if this has never happened to you.

by **Gil** on Sat, 05/03/2003 - 00:38 | **reply**

## Pain

Gil: Yes it has, but that wasn't *my* fault! :)

by **David Deutsch** on Sat, 05/03/2003 - 01:06 | **reply**

## Pain

David,

:) I'm sure it wasn't your fault!

So why don't we blame the journalist, and the animal rights wackos, and give the scientists the benefit of the doubt?

I like scientists.

by **Gil** on Sat, 05/03/2003 - 02:32 | **reply**

## Innocent scientists?

Gil:

Are **these** scientists innocent too?

> "Living within a group requires a moral code of behaviour... Most animals that live in communities exhibit similar moral codes to humans.
>
> "Zoologists who have spent their professional lives studying animal behaviour, either by observation or by experiments to test their mental capacities, believe that many animals feel and think."
>
> Joyce D'Silva, chief executive of CIWF, told BBC News Online: "The whole climate over whether to accept sentience has changed hugely in the last 15 years.
>
> "It has huge implications for all the ways we use animals. It implies all farm animals are entitled to humane lives and deaths - and millions are denied them."
>
> Dr Jackie Turner, research director of the CIWF Trust, told BBC News Online: "There's far more rationality and mental complexity in farm animals than we acknowledge.

by **David Deutsch** on Sat, 05/10/2003 - 19:33 | **reply**

## Guilty

Ok, I don't know how many scientists are associated with that group and agree with its chief executive, but those who do are guilty.

by **Gil** on Sun, 05/11/2003 - 00:05 | **reply**

## Consiousness, pain, and other's experince

In order to conclude that others feel conscious pain you must establish that they are conscious.
Which is impossible.

The only thing we can do is observe their actions and draw conclusions based on how their actions parallel our own in similar situations, and make the assumption that they have a similar experience.

This applies not only to fish.

This applies to humans.

How do I know that you feel pain?
Perhaps because you say so? What if you don't speak English? What if you are to young to speak? What if you have brain damage? Because you flinch, or yell, or cry? Those could be just instinctive stimulus responses. In fact, when you say "that hurts" that could just be a complex conditioned response. Perhaps no one feels pain in the way I do except me. Or, from your point of view, except you.

Maybe know one else is conscious. You can never prove that

anyone else is conscious, only that they behave as though they were.
So your neighbor and sister are just as much candidates to feel pain as a rock is.
If a fish has a brain, and reacts to avoid certain stimuli, it is not an unreasonable assumption to conclude that they are likely to experience something similar to what we experience in the same situation.

In any case like this, just insert "severely mentally retarded human" in place of what ever animal with a primitive brain you are talking about, and see how your argument sounds.

The only reason this is even a matter to debate is because people don't want to feel guilty for eating other things which have the capacity to feel.
Humans are animals. Animals think and feel and experience. Either get over it, or become vegetarian. Stop lying to yourselves so you can feel more justified. You aren't better than everything else, you are just different.

by **Jay Aziza** on Wed, 12/20/2006 - 17:51 | **reply**

## Fish and Humans

So do you believe that a fisherman and a murderer are equally evil (both are animals)?

If you don't think that a fisherman and a murderer are equally evil, why are humans more important?

by a reader on Thu, 12/21/2006 - 00:27 | **reply**

---