Setting The World To Rights
Ideas have consequences.

Scientism Watch – Fishy Feelings 2

A couple of years ago we commented on a purportedly **scientific** (but actually scientistic[1]) study that claimed to have found "conclusive evidence of pain perception in fish".

Now, a similarly scientistic **study** has come to the opposite conclusion about worms, lobsters, crabs, insects and spiders: they feel no pain.

Nothing inconsistent between the two conclusions. Fish aren't on that list.

But interestingly, the authors of the second study explicitly rejected as worthless the entire body of evidence cited by the authors of the first study. In summary:

> The scientists [in the first study] found sites in the heads of rainbow trout that responded to damaging stimuli.
>
> They also found the fish showed marked reactions when exposed to harmful substances

But Prof. Farstad, of the second study, said:

> "It seems to be only reflex curling when [worms are] put on the hook ... They might sense something, but it is not painful and does not compromise their well-being."
>
> […]
>
> Farstad said most invertebrates, including lobsters and crabs boiled alive, do not feel pain because, unlike mammals, they do not have a big brain to read the signals.

They do have a small brain, however, which **reacts centrally to stimuli** – for instance, all the legs cooperate to move the crab away when it encounters harmful substances, or towards a crab of the **opposite sex**.

Of course neither group displayed any scientific evidence for using the criteria that they were using. How could they? That is not a scientific issue. Evidently both sets of researchers in effect brought their conclusions with them to the study: the first happened to be false, the second true. But if they were going to do that, why didn't

they just look in front of them at their computer screens, and notice that their computer meets all of the first study's criteria for feeling pain, and all the second study's criteria for not feeling it. And then, shouldn't these researchers have responded with some trace of intelligence – never mind feeling – to that stimulus?

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1 *Scientism*: The purported use of scientific methods to resolve non-scientific (i.e. philosophical) issues.

Wed, 02/16/2005 - 18:18 | **permalink**

Request for clarification

You say on the one hand that this is not a scientific issue, but on the other, that the conclusions of the two studies were incorrect and correct respectively.

If this issue - of the extent to which various types of animal can be said to feel pain - is *not* scientific, then shouldn't we say that neither study is right? That's the view I take, personally.

Natural selection has equipped all sufficiently advanced animal life with some kind of 'damage alarm' systems, which detect damage and modify the animal's behaviour in ways likely to avoid or minimize further harm. I think we have to base our ethical judgements about what constitutes humane treatment purely on a 'third-person' understanding of animals' central nervous systems and behavioural repertoires. That information is, of course, inadequate to answer the moral questions, but I think it's better to admit this outright than to pretend (as some of these articles seem to do) that 'if we only knew what the animals were really feeling then the ethics would become clear'.

by Neil Fitzgerald on Wed, 02/23/2005 - 15:05 | **reply**

Re: Request for clarification

Neither study provides any evidence, or any valid argument, for its conclusion. That is a separate issue from whether the conclusion is true or false.

Unfortunately if we were to "base our ethical judgements about what constitutes humane treatment purely on a 'third-person' understanding of animals' central nervous systems and behavioural repertoires", there would have to be draconian laws about the humane treatment of computers.

by **Editor** on Wed, 02/23/2005 - 15:24 | **reply**

Re: Request for clarification

I think you've misunderstood. All I'm saying is that I don't believe there is a 'fact of the matter' about whether (e.g.) fish feel pain - the statement is too vague. It is unverifiable and unfalsifiable, and

hence unscientific.

However, I think you're being a wee bit stingy if you really don't think fish have more sophisticated damage alarm/avoidance systems than computers. Isn't it equally if not more appropriate to liken a computer's (more correctly, its operating system's) damage avoidance mechanisms to a fish's immune system as to a fish's pain-behaviour? What this shows, among other things, is that the analogy is too distant to be of much use.

by Neil Fitzgerald on Wed, 02/23/2005 - 16:57 | **reply**
