

Fishy business

MARK SAINSBURY

Be it known that, waiving all argument, I take the
good old fashioned ground that the whale is a fish,
and call upon holy Jonah to back me.
(Ishmael, in *Moby Dick*)

In 1818, James Maurice, the inspector of fish oil and tax collector for New York City, brought a case against Samuel Judd demanding payment of \$75, being the unpaid fee for ‘gauging, inspecting and branding’ three casks of fish oil. Judd countered that no inspections or payments were due, since the oil in question was spermaceti oil (from the spermaceti whale) and hence not fish oil. For 3 days, the jury heard evidence from eminent anatomists (saying that whales are not fish) and from merchants and seafaring men (mostly, but not in every case, saying that whales are fish). It reached its verdict in a mere 15 minutes, ruling in favour of the plaintiff: whale oil is fish oil, and Judd owes Maurice \$75. In short, the jury ruled that whales are fish (Burnett 2007).

The parties offered significant reasons for their opinions. The victorious side reasoned from the premises that sea-creatures are fish, and whales are sea-creatures. The first premise is enshrined in much popular opinion, including creation stories according to which God made the creatures of the air (birds), the creatures of the land (beasts) and the creatures of the sea (fish). The losing side argued on the basis of significant dissimilarities between fish and whales: fish oxygenate using gills, reproduce by laying eggs and have true fins, whereas whales oxygenate using lungs, reproduce by suckling live-born young, and their fin-like appendages are differently structured from the fins of, say, a shark. There was no dispute about these facts, only about their relevance. Both parties agreed that whales are lung-using, air-breathing mammals and that they are sea-creatures.

Had they appealed to the great taxonomist, Linnaeus, the upshot would have been equivocal. Those who appealed to the edition of 1756 would have found whales classified as fish. Those who appealed to the edition of 1758 would have found whales classified as mammals, and not as fish. Let’s call the former classification the ‘ancient’ one, and the latter the ‘modern’ one. Does this difference in classification involve different meanings of ‘fish’?

(1) Suppose the ancient meaning of ‘fish’ is the same as the modern. Then the sentence ‘Whales are fish’ was false as endorsed by the ancients, just as it is false as spoken by us moderns. The ancients were mistaken, even when they knew that whales are mammalian sea-creatures. They systematically, and without being open to correction, used the word ‘fish’ for things to which the word did not apply. This is inconsistent with the fact that the

meaning of a word in a community is determined by how it is used in that community. The ancients used 'fish' for whales, and this should be reflected in what their word meant. So they did not mean by 'fish' what the moderns do.

(2) In that case, we may presume that the ancients used 'fish' with a meaning on which 'Whales are fish' was true. The meaning of their word 'fish' would align with their use: they used it to include whales, and that fits its meaning. Then there is only a verbal difference between the disputants in *Maurice vs. Judd*. 'Whales are fish', understood in the ancient way, is true, but, understood in the modern way, it is false. This is inconsistent with the fact that the debate was substantive, and not merely verbal.

On (1): Not all attribution of false beliefs threatens to undermine the relation between how words are used and what they mean. Perhaps people falsely believed for hundreds of years that the earth is flat. This raises no problems for the relation between meaning and use. There is no room for debate about what the ancients referred to by 'the earth' or by 'flat'. Presented with satellite photographs of the earth, no doubt many would have revised their beliefs. The case of whales and fish is not analogous. There was no disagreement about the fact that whales were mammalian sea-creatures. There was nothing simple that could be done to reveal to the ancients their supposed error, as *Maurice vs. Judd* makes plain.

Some aspects of meaning are opaque to users. 'Gold' was (and still is) used by many who do not know that it applies only to an element with atomic number 79. Might some such phenomenon affect the meaning of 'fish', so that its exclusion of whales was opaque to its ancient users? One answer might be based on Putnam's simplified model of the way in which a word can be introduced so as to incorporate an opaque element. For gold, a Putnam-style story might be: 'Let's use "gold" for *that* (the ring on my finger), and anything standing in the same-metal relation to it.' This excludes iron pyrites from the extension of 'gold', no matter how often it was mistakenly called gold, since it is not the same metal as gold and does not have atomic number 79. But an analogous story for 'fish' would not exclude whales: 'Let's use "fish" for *those* (the creatures swimming in the bay), and anything standing in the same-kind-of-creature relation to them.' The ancients did not subscribe to the modern classification of creature-kinds in terms of internal anatomy, but explicitly used a classification of creature-kinds relying on habitat and mode of propulsion. Even if the ancients had used Putnam's way of introducing the word 'fish', it would still have tracked just the finny tribes, and whales are finny enough.

On (2): Substantive disagreement requires agreement in meaning. There needs to be some proposition that one party affirms and the other denies. If the ancient meaning differed from the modern one, no proposition expressed by 'Whales are fish', or its negation, meets this condition. That is certainly

not how things seemed to the protagonists in *Maurice vs. Judd*, and nor is it how it strikes us today: we think the jury gave the wrong verdict.

There is something paradoxical about fish. An adequate resolution will require carefully formulated metasemantic principles.

University of Texas at Austin
Austin, TX 78712, USA
marksainsbury@austin.utexas.edu

References

- Burnett, D.G. 2007. *Trying Leviathan*. Princeton: Princeton University Press.
- Putnam, H. 1975. The meaning of 'meaning'. In *Language, Mind and Knowledge*, ed. K. Gunderson, 131–93. Minneapolis: University of Minnesota Press.