

When Animals Dream by David M. Pena-Guzman

Nick Everitt is skeptical about animals dreaming.

During the nineteenth century it was widely believed by both scientists and lay people that some species of non-human animals dream. Charles Darwin, for example, declared without reservation that “dogs, cats, horses, and probably all the higher animals, even birds...have vivid dreams” (*The Descent of Man*, 1871). This widespread conviction was not based on any rigorous scientific investigation, but was accepted simply as a matter of common sense. Challenged about its rational basis, a defender of the idea would simply point to the behaviour of various species of sleeping animal. The sleeping hound, for example, whose paws twitched, whose tail wagged, who sniffed and growled and barked, was alleged to be dreaming of hunting. Similar accounts could be given for a variety of other species.

With the rise of behaviourist psychology in the early years of the twentieth century, this willingness to attribute dream states (or indeed any mental states) to animals declined. Science, it was thought, should confine itself what is observable; and since dreams were not observable, they could play no part in any account of animal sleep. Although behaviourism has long since lost its dominance in the social sciences, a reluctance to attribute dreams to animals has continued. In *When Animals Dream* (2022), David Pena-Guzman aims to counter this trend by drawing together evidence that dreaming in fact occurs in a wide variety of species, including all mammals, birds, octopuses, even fish.

How is this claim to be supported? Pena-Guzman quotes a number of interesting studies. It is well-known that in humans there is a correlation between dreaming and rapid eye movements (REMs); and REMs are also found in many non-human species. There is also a similarity between certain types of brain activity found both in dreaming and in waking life. Using these two types of correlation as a base, Pena-Guzman revisits investigations into sleep in other species. To take one example, zebra finches are not born with the capacity to sing; it is a skill they have to learn by practice. Research has revealed that the neural activity of awake birds who are practising their singing is similar to neural activity they sometimes display when asleep. It is as if they're rehearsing their song in their sleep. Pena-Guzman invites us to accept that the finches must be dreaming of their song.

In the case of octopuses, the correlation is rather different. Some octopuses will change their body colour according to what they're doing – hunting, consuming prey, camouflaging themselves. These same changes in body colour can be observed when they're asleep. Again, we are invited to accept that the sleeping octopus is dreaming of hunting, eating, hiding.

Zebra fish, by contrast, don't have a cortex (which is associated with sensation in higher animals, such as in humans), nor do they display REMs. Nevertheless, they do have what Pena-Guzman calls the 'functional equivalent' of a cortex, and there are some similarities in the activity of this non-cortex in sleeping and awake fish; so again Pena-Guzman claims the fish are dreaming.

It is not always wholly clear how strong he thinks the evidence is that he musters in the book. This is partly because it covers so many species. Still he seems to think that it is compelling in the case of mammals and some birds, and strong but not compelling in the case of other birds, reptiles, and fish. But it is possible to be a good deal more sceptical than he is of this interpretation of the evidence.

Take first the role of REMs in humans. Strictly speaking, these are correlated not with dreams, but with dream reports. It is only if we assume the dream reports to be reliable that we can proceed to correlate REMs

with dreams. Yet surely people may be mistaken both in asserting and in denying that they have had a dream. Secondly, even if we assume that peoples' dream reports are generally correct, the correlation between REMs and dreams is only partial. Dreams occur in the absence of REMs, and REMs occur in the absence of dreams. This suggests that discovering REMs in other species will only be rather weak evidence that they dream.

What about the movements of sleeping animals? What about, for example, the sleeping dog whose tail and paws twitch, who sniffs, growls, and barks? Pena-Guzman quotes with apparent approval a nineteenth century study which claimed that 'there is every reason to believe' that the dog is engaging in imaginary quarrels, chases, and other adventures. Surely this is too credulous. Moving paws, sniffs, etc could be simply muscular twitches, which occur from time to time in all mammals. Consider a human case: an awake pianist sits drumming his fingers and nodding his head. It would be a mistake to say that 'there is every reason to believe' that he is thinking of practising at the piano: he may just be fidgeting. However, if we would not be entitled to say this of him when he is awake, we surely should not be entitled to say it of him when he is asleep, even if he's making finger movements. Indeed, we have no good reason to suppose any sort of mental state causes his movements. Equally, in the case of the dog, it is a step too far to say that its bodily movements show that it is dreaming of attacking, etc. Even if we think it's reasonable to believe the dog is dreaming, its bodily movements do not necessarily reveal the content of its dreams.



A Midsummer's Night's Dream Edwin Landseer 1851

Having argued that many species of animals dream, Pena-Guzman goes on to argue that dreaming displays what following Ned Block, he calls 'phenomenal consciousness'. That is to say, there is a subjective 'feel' and a sensory content to dreams. He further claims that dreams have an imaginative, creative aspect. Humans and other animals can in their dreams construct scenarios unlike anything they have come across in waking life, and which aren't mere recombinations of what they have come across, either.

There is a great deal of intrinsic interest to the thesis Pena-Guzman discusses, but he also wants to put it to a further use. He thinks that the idea that animals dream supports the claim that animals have moral status. In other words, the fact, if it is a fact, that animals dream, shows that we have moral obligations to them.

He defends this idea in the final chapter of the book. Presenting it encourages in the reader the expectation that he is going to construct an argument starting with the premise that animals dream and moving in logical steps to the conclusion that we have moral obligations to them. That's an extremely ambitious project, and it is no surprise that Pena-Guzman fails in it. His argument goes via the assumptions that dreams are phenomenally conscious states, and that phenomenal consciousness confers moral status. The second assumption is doing all the work here, and it needs some justification, but it does not get it. However, when Jeremy Bentham discussed the rival view that it is *rationality* that confers moral status on some creatures (humans) and not others (all non-humans), he famously remarked that "The question is not, Can they *reason*? nor, Can they *talk*? but, Can they *suffer*?" Moral intuitions will differ here, but building on and enlarging

Bentham's suggestion, I would suggest that we might think that the key moral question is whether an organism can *feel pain and distress*. If it can, then we have a moral obligation not to gratuitously cause it pain and distress. If it can't, then morally we owe it nothing, no matter how vivid and inventive its dreams may be.

When Animals Dream is clearly intended as a seriously academic work: it has thirty-seven pages of footnotes and a twenty page bibliography. But it's written in an accessible, engaging style, and details some intriguing animal experiments. Although I was unconvinced by the author's claims, it is a really enjoyable read. And it has a wonderful cover.

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