

LOCKE'S PARROT

Terence Moore

In this their fourth conversation the 17th century philosopher, John Locke and the 21st century linguist, Terence Moore, consider a question not fully answered even today: what might count as the key distinction between man and animals, or in Locke's phrase what 'puts a perfect distinction between Man and Brutes.' In the Essay Concerning Human Understanding, Locke considers two possible linguistic candidates: the ability to use language appropriately, and the ability to 'quit Particulars'. As Locke and Moore explore these possibilities they come to see that the distinction between man and animals is not as clear-cut as previous generations have believed. Locke tentatively posits a third possible distinction based on a central idea in his Essay – one however Moore is compelled to dismiss, though he, in return, also tentatively, offers a fourth.

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MOORE: I want to talk to you about your parrot.

LOCKE: My parrot! I don't have a parrot; never have had!

MOORE: No, but you did talk about one, didn't you – in one of the Chapters in the *Essay Concerning Human Understanding* – the one on Identity and Diversity.

LOCKE: Oh, you mean that old grey Brazilian parrot. Did you know I added that Chapter to the second edition of the Essay?

MOORE: I did, but only because I've read what Lockeian scholars write. What made you add it?

LOCKE: Blame Descartes. His *Meditations* had me brooding about personal identity – where does it lie? So I tried, not very successfully I admit, to disentangle my

rambling speculations about the ways our memory and consciousness interact to create our idea of ourselves.

MOORE: Actually it isn't problems of identity I want to talk about this evening, though I'd like to on another occasion. Can we start with your Brazilian parrot?

LOCKE: I can't imagine why.

MOORE: In a nutshell because that Brazilian parrot supported an argument you were making about what, if anything, might count as the key distinction between man and animals. What, in your words, '... puts a perfect distinction between Man and Brutes.'

LOCKE: Oh yes, I remember. It was Descartes again got me interested. You doubtless recall in his 'Discourse on Method' he argued that though magpies and parrots could utter words as we do, they could never respond appropriately. For him that was a perfect distinction. Well, I believed I had evidence of a parrot having just that capacity.

MOORE: How exactly did the parrot help your case against Descartes?

LOCKE: Because it appeared perfectly able to use language to carry on a conversation.

MOORE: You didn't observe the parrot yourself, though did you? Your conclusion wasn't the result of first-hand experience.

LOCKE: True. I took the story from Sir William Temple's 'Memoires'. Sir William struck me as a reliable witness, and he'd heard the story at first-hand from Prince Maurice who was once the governor in Brasil.

MOORE: So your evidence is third-hand! Still what was striking – as you described it – was the way the parrot actually handled the Prince's questions.

LOCKE: Exactly! That's what intrigued me. Descartes would never've credited it. A parrot carrying on a sensible conversation! Can I look at the exchange again? I've forgotten how it went.

MOORE: Let me recap it for you. When the Prince asked the Parrot where was he from, the Parrot replied, 'From Marinnan' The Prince followed this with the question, 'To

whom do you belong?', to which the Parrot replied, 'A Portuguese'. Then the Prince asked what the Parrot did. The answer came back straightaway, 'I look after the chickens'. Apparently the Prince thought this funny, whereupon the Parrot, possibly a bit miffed, boasted, 'I do it very well'. And then demonstrated his method, by producing the clicks farmers make when attracting the attention of chickens.

LOCKE: You must admit the parrot's responses look pretty appropriate to the questions. As a linguist I'm sure you'd agree the parrot's replies show some syntactic sequencing, and a definite capacity to make judgements, and to recall absent actions.

MOORE: True, but *only if* Sir William's account is reliable. The parrot might have been trained.

LOCKE: You're right, of course. My account is – how do you put it these days? – anecdotal. But what intrigued me about that parrot was that though it had a bird body with a bird brain, that brain of his appeared to allow it to use language appropriately in a conversation.

MOORE: So if, and its a huge IF, we were to believe Sir William's account, we could no longer believe, as Descartes did with absolute confidence, that using language appropriately served to put 'a perfect distinction between Man and Brutes.'

LOCKE: That was my point.

MOORE: But your point successfully kills off any simple argument that using language appropriately serves as a key distinction between man and animals.

LOCKE: Alas, that too has to be true. Still I do have another linguistic feature I think could have a stronger claim: Man's ability in using language to 'Quit particulars'. No animal I knew of was able to abstract from the specific circumstances of time and place to form a general concept.

MOORE: Chomsky might well agree with you on this characteristic, though he uses a different vocabulary of course. As he puts it in 'Cartesian Linguistics' the responses of animals are 'stimulus-bound' whereas for

human beings responses can be 'stimulus-free' as well as 'stimulus-bound'.

LOCKE: 'Cartesian' not Lockeian Linguistics?

MOORE: I'm afraid not. His sub-title for 'Cartesian Linguistics' was 'A Chapter in the History of Rationalist Thought.' Chomsky appears to have believed you, as an alleged empiricist, were outside the rationalist tradition.

LOCKE: You, of course, know he was seriously mistaken! Still what do you think he had in mind by 'stimulus-bound' and 'stimulus-free'?

MOORE: Well, for an older generation the response to the greeting question, 'How do you do?' was formulaic, another question, 'How do you do?' A great deal of language is like that – formulaic, bound to a stimulus. Think of birthday greetings or farewells. Whereas responses to, for example, 'How are you?' are not tied to the stimulus. They can 'quit particulars', or be 'stimulus-free', and range unpredictably from 'Fine' to 'Don't ask!' to who knows what.

LOCKE: I see, though when I argued that our ability to 'Quit particulars' was a distinguishing mark, I was thinking more about our ability to abstract, to move away from the particular to form general ideas – ideas we then tied in our minds with words. From the experience of 'chalk', 'milk', 'snow' we can abstract the idea of 'whiteness'. I knew of no evidence of animals having that capacity.

MOORE: Whereas now the evidence is accumulating to show that quitting or not quitting particulars is unlikely to provide a perfect distinction either. The more we learn about animals, the less we can be sure about what they can and cannot do. In fact once we acknowledge natural selection is not a creative force – it can only capitalise on the material, the variations it's presented with – then it's plausible to suppose a species from which we may have evolved had similar, if less advanced, capabilities.

LOCKE: Do we have any evidence from such a species?

MOORE: If you accept, which most of us do these days, that we have evolved from primates, then you could look at

the behaviour of macaque monkeys. Researchers on a Japanese island observed an inventive female macaque washing sand and grit off her sweet potatoes. You could argue she did this because she formed some abstract notion, 'cleanliness'. It's reported some males caught on to the idea of 'cleanliness', though the older dominant ones never learnt the new behaviour. These monkeys may not be as smart as us but maybe it's a sliding scale – smart – smarter – smartest – monkeys, chimps and us.

LOCKE: You seem to be suggesting we shouldn't be looking for any perfect distinction at all.

MOORE: I'm inclined more to the idea of a spectrum of abilities.

LOCKE: A spectrum of abilities! There's a thought, though if we follow it through we shall have to change the preposition.

MOORE: Change what preposition?

LOCKE: We've been looking at the question of 'What distinguishes Man from animals'. But suppose it's the wrong question. Suppose the question we should be looking at is, 'What distinguishes Man among animals?' 'From' begs the question, presupposes a distinction, and maybe points us in the wrong direction. But if we change 'from' to 'among' we are centred where we belong. Man is an animal. That, by the way, is the dividing line between me and Descartes. He believed, and I never did, that animals were essentially machines.

MOORE: And a machine, he commented, '... never arranges words variously in response to the meaning of what is said in its presence.'

LOCKE: As my parrot did.

MOORE: So you say! If animals were seen as machines, Cartesians could treat animals inhumanly.

LOCKE: Could and did. But if we get the preposition right we can explore man's place among the animals, where we are on the spectrum. That would help resolve another problem for me with the way we've been putting the enquiry. Questions such as, 'What distinguishes man from

animals?' always seems to me to be calling for one single, simple and final distinction – one true and only mark of Man. One, incidentally, like rationality, that happens not only to extol the excellence of Man over all other creatures, but also does wonders for Man's self-esteem. Re-thinking in the light of our conversation so far, it could be the question has a complex of answers.

MOORE: Part of which might be the mind's capacity to 'quit Particulars.'

LOCKE: And part of which might be the ability to respond appropriately. Though neither of these provide **the** key distinction, both are probably there somewhere along the spectrum we're opening up. Rather than saying animals don't exercise these abilities, it'll probably prove more accurate to say humans exercise them to a much greater degree than animals. Which sets me wondering about the far end of the spectrum, whether there's something we humans do in our use of language that animals definitely don't.

MOORE: Back to the idea of a 'perfect distinction between Man and Brutes.'

LOCKE: Yes and no. Do you recall my conjecture about the essential basis of language understanding. The conjecture I called 'secret reference'.

MOORE: Of course. It's been my guiding beacon ever since I realised its implications for our use of language. It was your response to the consequence of our primal linguistic condition: as you repeatedly made clear in the *Essay*, each of us humans, as far as the meaning of words is concerned, is locked in our own heads, a solitary, isolated state.

LOCKE: 'Words', I agree I might have said on more than one occasion . . .

MOORE: – seven times in that short Chapter II, Book III!

LOCKE: Words '...in their primary or immediate Signification, stand for nothing, but *Ideas* in the Mind of him that uses them.'

MOORE: Which of course means that no one can ever know for certain what another person means by the words they use. It makes our understanding of others' meanings necessarily, not accidentally, provisional and uncertain. You manage to make meaning deeply paradoxical and radically indeterminate.

LOCKE: That has to be true because as I certainly said, also on more than one occasion, the meanings of words are '... nothing but a relation that by the mind of Man is added to them.' Meanings are the Workmanship of the Understanding.

MOORE: And since the results of the workmanship of my mind are not identical with yours, I can't help but come up with my own meanings for words I hear you use – meanings that will to some extent, because our experience of the world has been different, diverge from yours. Your concept 'secret reference' helps to explain how we nevertheless do appear to communicate. Though our meanings are fundamentally private, you say we act as if they weren't. This tacit act of the imagination you make fundamental to our use of language. In essence your 'secret reference' serves as an essential working hypothesis for our, more or less successful, use of language.

LOCKE: True. If my conjecture is right, then the pertinent question for us here becomes: do animals 'secretly refer'? Though I have to admit I have no empirical evidence to show humans really do secretly refer.

MOORE: I have good and bad news for you on that. The good news is that at least some evidence is accumulating that may possibly provide a physical basis in the brain for your conjecture.

LOCKE: Now that's exciting. Tell me about this new evidence.

MOORE: Researchers are finding a network of cells that fire in a creature's brain when it observes another creature performing an act it is able to perform though at that very moment it is not performing that action. In effect this network of cells in one brain reflects, or mirrors, an activity

being performed by another individual. They're calling this network, 'mirror neurons'.

LOCKE: 'Mirror neurons'! How do they work exactly?

MOORE: Take the results of some experiments done in the University of Parma on the behaviour of monkeys. They found that when one monkey, monkey A, reaches for a peanut certain neurons will fire. Much more interesting was the finding that these same neurons fired in a monkey B watching monkey A reaching for the peanut.

LOCKE: So these monkeys appear to possess these mirror neurons you've been talking about. I need to read more about this research.

MOORE: I'll give you some references later. What strikes me is that these mirror neurons could well provide the physical basis of your speculative 'secret reference', your working hypothesis underpinning our use of language. Suppose what's happening when we tacitly imagine others' words mean for them what they mean for us is that our mirror neurons are firing – responding to their public words but with the meanings those words excite in us.

LOCKE: Our mirror neurons however are not necessarily discharging to the same effect as theirs.

MOORE: Not necessarily, but sometimes they probably are, sometimes possibly they are, sometimes not at all. There are times when we just don't understand what someone is saying or writing.

LOCKE: So sometimes we understand the words of others, sometimes we don't. Which is certainly the case. What evidence is there of these mirror neurons being involved in our understanding the language of others?

MOORE: Some, negative sort of evidence. Children with a dysfunctional mirror neuron network . . .

LOCKE: You mean children with broken mirrors?

MOORE: Yes. Such children show the symptoms of those suffering from a condition we label 'autism'. Typically they avoid your gaze, appear unable to carry on an ordinary conversation, have difficulty understanding metaphors, seem oblivious of common social clues other children pick

up naturally – in short they appear unable to mirror the brain activity of others.

LOCKE: I want to learn more about that research as well.

MOORE: Of course. Though I should warn you the research is still in its early days. I'm leaping ahead a bit. But in time, the brain imaging techniques they're now using to establish the mirroring of activities in primates could be applied to see what's going on in our understanding of other people's use of language. Current work has been mainly on the mirror neuron systems in primates. That's the bad news by the way.

LOCKE: So 'secret reference' may not be unique to humans.

MOORE: If monkeys, however primitively, share our mirror neuron network, 'secret reference' is not going to provide a distinguishing mark – a cognitive capacity we have and animals definitely don't.

LOCKE: I think I'm about ready to give up on the idea of a perfect distinction. Mapping points on a spectrum of cognitive and affective abilities is, I suspect, likely to be the most fruitful way forward.

MOORE: Yes, probably, but don't despair entirely of the idea of some kind of unique distinction. I have a small conjecture, but I'm afraid no hard evidence.

LOCKE: Really! Go on.

MOORE: I suppose it's possible a significant distinction may lie in the way we use language. Animal languages, systems of communication, are shot through with what look like imperatives and statements. Roughly, warning cries about dangers; 'Look out, there's an eagle/a leopard/ a snake' around; aggressive cries, 'Keep out', 'Stay away'; sexual cries, 'Come now, I'm ready'; or statements of the sort the bees make on returning to the hive, 'There's honey over there', dancing the direction and the distance. What appears to be missing altogether is questions.

LOCKE: Interesting. You may be right. My Brazilian parrot wasn't reported to have asked questions.

MOORE: We humans are constantly using language to ask questions. Physical questions, 'What is it?'; 'How does

it work?'; metaphysical questions; 'Why am I here?'; 'Who am I?'

LOCKE: So we're back to questions of purpose and personal identity – the starting point you may recall of that Chapter I added to the *Essay*. You're suggesting there's no evidence of animal questioning, or doubting, no angst?

MOORE: Not that I know of. The reason of course we continue to ask questions is that we continue to doubt the answers we're given. Maybe it's our use of language, allowing doubting, even scepticism, that might provide your 'perfect distinction'.

LOCKE: So that's Moore's conjecture. That I need to mull over – after I've done some reading and catching up on this mirror neuron research.

MOORE: I'll await the outcome of the mulling. Till next time then!

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