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I think therefore I am (a monkey): Rhesus 'understand Descartes as they've same self-awareness that philosopher described'

By [Daily Mail Reporter](#)

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Rhesus monkeys appear to understand what Rene Descartes meant when he made the famous statement: 'I think, therefore I am.'

They possess the same form of 'cause and effect' self-awareness the 17th century French philosopher was grappling with, scientists believe.

Like humans, they have a sense of 'self-agency' which traces thoughts and actions to the existence of 'me'.





Thinkers: Rhesus monkeys are believed to possess the same form of 'cause and effect' self-awareness that French philosopher Rene Descartes grappled with

Previous research had found that rhesus monkeys consistently fail in an important test of self-awareness, the ability to recognise themselves in a mirror.

However, like apes and dolphins they did seem to be able to monitor their own mental states.

For the new study, scientists got 40 university students and four trained male rhesus monkeys to move a computer cursor with a joystick. As they were doing this, a second 'distractor' cursor partially matched their movements.

Both humans and monkeys were asked to identify which computer cursor was being moved by them and responding to their intentions.

In both cases, they were able to select the cursor they controlled at greater than chance levels.

WHO WAS DESCARTES?

Rene Descartes is often described by academics as the Father of Modern Philosophy.

The Frenchman, born in 1596, was the first thinker to develop the idea of emotions, a concept that we now consider essential to the human condition.

He was a major figure in 17th-century European rationalism, the idea that knowledge can be obtained by reason alone – as opposed to religious revelation.

He is perhaps best known for the Latin statement 'Cogito ergo sum'. It translates into English as 'I think, therefore I am', or 'I am thinking, therefore I exist', or 'I do think, therefore I do exist'.

Descartes' is also a major influence in mathematics.

He developed the Cartesian coordinate system, allowing algebraic equations to be expressed as geometric shapes.

'This suggests that the monkeys, like humans, have some understanding of self-agency,' said psychologist Justin Couchman, from the University at Buffalo in the US, who led the research.

'This awareness, or implicit sense that it is 'me' who is presently executing a bodily movement or thinking thoughts, is an important form of self-awareness.'

The study, reported today in the Royal Society journal *Biology Letters*, is the first to demonstrate self-agency in a species that has not passed the mirror self-recognition test.

The findings may improve understanding of self-awareness problems in people with conditions such as autism, schizophrenia and Alzheimer's disease.

'Mirror self-recognition is developmentally delayed in autistic children and absent in many who are mentally retarded, have Alzheimer's disease or are schizophrenic,' said Mr Couchman.

'It is not clear why this deficit occurs, but like rhesus monkeys, these groups may simply have biases against mirrors.

'If, when studied, such individuals attempted to distinguish self-generated actions from partially altered actions in the paradigm reported in this study, it might offer information as to whether the breakdown in their mirror self-recognition is due to a difficulty in processing certain kinds of perceptual or cognitive information.'

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For the new study, scientists got 40 university students and four trained male rhesus monkeys *****how were they able to differentiate?*****Both humans and monkeys were asked to identify which computer cursor was being moved by them and responding to their intentions*****Asked? How were they able to communicate with the students? Just curious because my daughter is a student so I have had experience with human to student communication.

- Dave, London, 06/7/2011 19:34

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Funny that you refer to Descartes of all things! I remeber it was him who claimed that all animals are just machines with no feelings and if they scream in animal testing it is just a mechanic biological output because as machines they don't feel pain. A "lovely" man he was, as he is responsible for our science today still working with completly useless animal testing and causind so much agony.

- greygull, on the waves, 06/7/2011 17:07

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Mein Gott! There goes that talking rotweiler, again!

- Freddy der Fox, Germany, 06/7/2011 15:34

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Rrruff! I've seen a German fox, an American squirrel, some mice and sheep send comments to DM but have yet to see a monkey send one; so either they're not as clever as you say they are or they're all guardian and telegraph readers, heh, heh!

- Ronny the Rotweiler, Wales, 06/7/2011 15:29

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"For the new study, scientists got 40 university students and four trained male rhesus monkeys to move a computer cursor with a joystick." Did the monkeys also have to stay in bed until noon each day, drink themselves silly each night, speak in loud foghorn voices and remain unwashed until they went home to their mothers?

- kgbarrett, Bexleyheath, 06/7/2011 15:12

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Correction: 'Cogito, ergo sum' does not report a correlation but states a fact. The 'therefore' intervening in the translation is incorrect and should simply read 'I think, I am'. Typical abusive translation. Latin was a beautiful and ultimately precise language. _____ - Albert, Sick in a once great Country, 06/7/2011 12:33, sadly, I couldn't agree more... Animal kingdom is far from being fully understood.

- Chelsea, UK, 06/7/2011 13:45

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