Dogs may understand human point of view, researcher finds

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Dr Juliane Kaminski and her dog, Ambula.

(Phys.org)—Domestic dogs are much more likely to steal food when they think nobody can see them, suggesting for the first time they are capable of understanding a human's point of view.

Many dog owners think their pets are clever or that they understand humans but, until now, this has not been tested by science.

Dr Juliane Kaminski, of the University of Portsmouth's Department of Psychology, has shown that when a human forbids a dog from taking food, dogs are four times more likely to disobey in a dark room than a lit room, suggesting they take into account what the human can or cannot see.

Dr Kaminski said: "That's incredible because it implies dogs understand the human can't see them, meaning they might understand the human perspective."

This is the first study to examine if dogs differentiate between different levels of light when they are developing strategies on whether to steal food. It is published in the journal Animal Cognition.

Dr Kaminski said: "Humans constantly attribute certain qualities and emotions to other living things. We know that our own dog is clever or sensitive, but that's us thinking, not them.

"These results suggest humans might be right, where dogs are concerned, but we still can't be completely sure if the results mean dogs have a truly flexible understanding of the mind and others' minds. It has always been assumed only humans had this ability."

The research is an incremental step in our understanding of dogs' ability to think and understand which could, in turn, be of use to those who work with dogs, including the police, the blind and those who use gun dogs, as well as those who keep them as pets.

Dr Kaminski ran a series of experiments in varied light conditions. In each test, a dog was forbidden by a human from taking the food. When the room was dark, the dogs took more food and took it more quickly than when the room was lit.

The tests were complex and involved many variables to rule out that dogs were basing their decisions on simple associative rules, for example, that dark means food.

There is no evidence on how well dogs can see in the dark, but the results of this research show dogs can differentiate between light and dark.

Dr Kaminski said: "The results of these tests suggest that dogs are deciding it's safer to steal the food when the room is dark because they understand something of the human's perspective."

Dogs' understanding may be limited to the here and now, rather than on any higher understanding, Dr Kaminski said, and more research is needed to identify what mechanisms are controlling dogs' behaviour.

In total, 42 female and 42 male domestic dogs aged one year or older took part in the tests. They were chosen only if they were comfortable without their owners in the room, even in complete darkness, and if they were interested in food. "Some dogs are more interested in by food than others," Dr Kaminski said.

Previous studies have shown chimpanzees have a sophisticated understanding and seem to know when someone else can or can't see them and can also remember what others have seen in the past. It is not known how sophisticated dogs' understanding is in comparison. Many earlier research papers have found that, for dogs, a human's eyes are an important signal when deciding how to behave, and that they respond more willingly to attentive humans, than inattentive ones.

Provided by University of Portsmouth