最新研究发现狗比猫更聪明

最新的研究~~对~~为~~人类身边的狗~~养狗的人~~有了一些发现~~提供了一些支持。

这项发布在《前沿杂志》上的调查说狗比猫聪明，那是因为狗大脑皮层上的神经元是猫的两倍——脑细胞负责思考，规划和行动。科学家还将神经元的数量与~~其他行为~~总体的感知能力——即智力联系了起来。

在这个研究中，由范德堡大学心理学与生物科学的教授Suzana Herculano-Houzel带领的团队，~~研究~~检查了各种~~生物~~食肉动物、一类包括食肉和杂食动物的哺乳动物以及食草动物的神经元~~数量~~密度和大脑容量。根据论文结论，这些动物都尤其有趣，因为他们大多要存活下来就~~需要~~必须~~更聪明~~比猎物更精明，这就潜在的需要更多的神经元和更高的智力。

除此之外，研究者还~~研究~~检查了八种动物的大脑：猫、狗、熊、狮子~~等~~、鬣狗、雪貂、麝猫以及浣熊。他们发现有着更大的大脑的动物也有着更多的神经元，就像~~非生物~~非食肉动物一样——~~一种毕竟不像是生物的动物~~毕竟相似性表明食肉动物没有和动物王国中其他的动物有很大的差异。

结论已经很显然。除了狗的~~大脑皮层上的~~外皮神经元数目高于猫之外（5.3亿与2.5亿的差距），他们还发现棕熊的神经元数目和猫差不多，~~并没有很明显的差异~~尽管体型大小有很明显的差异。另一个方面，实际神经元的数目要比从大脑容量推断出的数目多得多。

被研究的~~金鱼~~金毛猎犬有着最高的神经元数目——62亿。

然而，研究者也承认他们的发现不能~~推断出狗的智商超过猫~~解决猫狗的智力争论这一古老的辩题。

“在我们发现狗~~大脑皮层上~~外皮神经元的数目多于猫的时候，可能证实了狗的主人和动物训练师的~~预测~~有趣的观念和我们未发表的报道上说狗因为更容易训练所以智商更高一样，猫主人可能会抗议，这也一样(“and rightly so”?)。”他们写道。

“~~任何关于它们在这方面能力的讨论将会成为观点~~任何在这点上关于它们的认知能力的争论，在直接的、系统的对这些物种和其他物种认知能力来进行比较之前，很大程度上都只是观念的问题而已。”

原文：

Dogs Are Brainier Than Cats, New Study Finds

A new study has some ammunition for dog people everywhere.

The research, published in the journal Frontiers of Neuroanatomy, says dogs may be brainier than cats. That is, dogs have cerebral cortexes with twice as many neurons — the brain cells responsible for thought, planning and behavior – compared to cats. Scientists have associated neuron density with overall cognitive ability – i.e. intelligence.

For the study, a group of researchers led by Suzana Herculano-Houzel, an associate professor of psychology and biological sciences at Vanderbilt University, examined the neuronal density and brain sizes of various carnivorans, a class of mammals that includes many predators – along with some omnivores and and a few herbivores. These animals are of particular interest, according to the paper, because many must outsmart prey to survive, potentially pointing to a higher number of neurons, and thus higher intelligence.

To learn more, the researchers examined the brains of eight mammals: cats, dogs, bears, lions, hyenas, ferrets, mongoose and raccoons. They found that the animals with larger brains also tended to have more neurons, just like non-carnivorans — a similarity that suggest carnivorans aren’t so different from the rest of the animal kingdom, after all.

The results were marked. In addition to dogs’ cortical neurons outnumbering cats’ — to the tune of 530 million to 250 million — they discovered that brown bears had only as many neurons as cats, despite the obvious size difference. Raccoons, on the other hand, had far more neurons than their small brain size would suggest.

A golden retriever that was studied had the most cortical neurons of all, with 627 million.

However, even the researchers admit that their findings shouldn’t resolve the old dogs-versus-cats debate over intelligence.

“While our finding of larger numbers of cortical neurons in dogs than in cats may confirm anecdotal perceptions of dog owners and animal trainers as well as unpublished reports that dogs are easier to train and therefore ‘more intelligent,’ cat owners would probably protest, and rightly so,” they write.

“Any argument about their cognitive capabilities at this point will be largely a matter of opinion until direct, systematic comparisons of cognitive capacity are performed across these and other species.”