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Why Won't "Dominance" Die?

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Many leading animal behaviourists are concerned that the "dominance" model of pet dog behaviour continues to survive, despite the accumulating evidence that it is at best unhelpful and at worst highly detrimental.

It is easy to see why trainers and owners alike are fond of the concepts of "pack" and "dominance" in relation to pet dogs. A pack means we're all part of the same gang. "Dominance" explains our respective positions in that pack. We live in a pack with our pet dogs and they either dominate us or we dominate them. To be at the top of the pack with total dominance would make you the "alpha", with all the esteem that entails, therefore dogs will strive for dominance unless you beat them to it. It's a neat explanation.

Except that none of it actually bears scientific scrutiny. Prof Richard Dawkins described self replicating ideas as "memes"⁽¹⁾ that live in our minds and pass from one to another through no reason other than their popularity, or catchiness. Some are harmless, like that annoying song you keep humming long after you've decided you hate it, but others can be positively harmful, like the idea that combined MMR jabs cause autism, which continues to prevent many children benefiting from the protection they provide.

The "pack" and "dominance" theory of domestic dogs is a harmful meme. It prevents many owners understanding their dogs, causes untold misery for both and is perpetuated by well-meaning but uninformed dog trainers around the world. It is proving extremely resistant to extinction.

This meme originated in the "dogs are wolves" theory in the late 1960s. It was spawned in the pond of genetics from the premise that if a dog is the same species as the wolf they must behave identically. The perceived wisdom at the time, emanating from L. David Mech's book, *The Wolf: Ecology and Behavior of an Endangered Species*⁽²⁾, was that wolves pack and dominate each other, therefore dogs must also pack and dominate each other. The theories of wolf and dog "dominance" and the "alpha" firmly entered the imagination of not only the public, but also the scientific community. As a police dog handler in the 1980s I regularly tried to "dominate" my dogs using the best available scientific model.

However, as science advances our viewpoint changes and in Mech's case, as he points out in his 2008 article *Whatever Happened to the Term Alpha Wolf?*⁽³⁾ more rigorous examination of wild living wolves revealed that their social behaviour was centred on the family unit, built around cohesion and co-operation, not conflict. A fight for pack dominance would



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mean striving to displace one parent in order to mate with the other. The model of the wolf's supposed fight for dominance and alpha status was replaced with one where parents and older siblings guide and lead younger offspring in order to enhance overall genetic fitness. In 1999 Mech published *Alpha Status, Dominance, and Division of Labor in Wolf Packs*⁽⁴⁾, in which he corrected his earlier mistaken ideas. He happily reports that in the 2003 book *Wolves: Behavior, Ecology, and Conservation*⁽⁵⁾ written by twenty three authors and edited by Mech and Boitani, the term "alpha" is only ever mentioned to explain why it has been superseded.

At the same time, studies of the domestic dog have also moved on. It has been well established that the social behaviour of the domestic dog is unlike that of the wolf. The domestic dog is a neotonised version of the wolf-type ancestor, a specialised variant that evolved into a newly formed environmental niche to scavenge the domestic waste of human settlements. These adaptations removed the need to operate as a true wolf pack and consequently there is little collaboration in hunting or in care of offspring, but much more cooperation with strangers, dog or human. Although dogs congregate in groups around resources, they do not form packs in the cohesive family way that wolves still do.

The concept of "dominance" itself has never been a quality of an individual, but the product of a relationship. Ethologists label an animal dominant over another once there is a trend towards the second animal deferring in encounters between the two. I can no more be born dominant than I could be born chairman. Because I can never be dominated if I don't allow myself to be, dominance can only be the result of *deference* by others.

Preferences will become established in repeated encounters, but pet dog relationships are far too complicated to be defined through a simple, "one individual dominates another". A smooth relationship is one in which each knows the other's preferences and defers accordingly. This is often described in terms of resource holding potential⁽⁶⁾, but the important aspect of it is that it is emergent, not the result of pre-programmed "dominance".

What we are witnessing in so-called "dominant" dogs is natural behaviour that has been modified through learning. Sometimes this behaviour is competitive in nature, but the majority of so called "dominance-related" problems are simply dogs behaving in a way that conflicts with owners' expectations.

These conflicting behaviours are the result of the dog trying to secure something they know is going to have a positive emotional benefit – to facilitate a reward or avoid something unpleasant. How we deal with the way those emotions are satisfied determines our relationship with our dogs.

Individual dogs can be placed anywhere along the bold/shy continuum that exists in all species. In shy individuals behaviour that does not meet owners' expectations is likely to be tinged with fear and in bold individuals the behaviour is likely to be joyously unrestrained. Most dogs' behaviour will be a complex mixture of these two extremes.

That complexity is increased because our pets do not continue to live in their original state as peripheral scavengers. They have been refined through selective breeding for specific purposes such as hunting, herding and guarding. By enhancing traits present in the original stock, humans have created dogs whose emotional balance depends on being able to fulfil their desire to exhibit these inherited predispositions, at least to some degree. Although the working traits of these types are reduced during "pet-ification" – the breeding of more amenable individuals that are more suited to life as a pet (witness the current "pet-ification" of the Border Collie from a working animal) - the breeding stock continues to throw up specimens in which the original working temperament is strongly represented. This may be a predisposition to chase moving objects, to nip heels, to use aggression to solve conflict, to hold something in the mouth,

or any other working breed disposition. The need to perform these behaviours, and their dissatisfaction when they are unable to do so, can steer pet dogs into conflict with their owners.

Family life can also be remarkably inconsistent for a pet, and dogs may focus their efforts on resources that are extremely important to them, but not necessarily to the owner. Lack of consistency proves to the dog that they are capable of deciding the outcome of many, albeit small, interactions. Add in the effects of either a bold or shy character, and other inherited predispositions that need to be satisfied, and you have a dog that can be extremely resistant to their owner's efforts to control their behaviour.

If, as was the case when I was a young police dog handler, this behaviour is labelled as "dominant", the perceived solution is to out-dominate the dog and bend them to your will. This often involved things like rolling them over and holding them down, or shaking them by the scruff. In dogs where the lack of compliance is motivated by frustration at being unable to fulfil inherited needs, or where the motivation is fear, such as when the dog has developed a fear of being left by the owner, applying misguided ideas of dominance will increase that frustration and fear, and with it the probable use of aggression. Less confrontationally, standing in the dog's bed to show them who is in charge will do little to prevent them barking when the owner is on the telephone, but it similarly fails to address the underlying emotional issues.

Scientific enquiry shows us that the "dominance" model is unsubstantiated. A recent paper from Bristol University⁽⁷⁾ is the latest to try to illuminate the construct if not for the general public, then at least for the professionals still left using it. So why then does it persist? In part it is the "catchiness" of the meme sticking in the mind. In part it is also because, whilst the majority of practitioners at the highest levels are aware that it is inaccurate and unhelpful, and sometimes positively harmful, some are still advocating its use. It could be that there are vested interests in continuing to promulgate "dominance" – books and DVDs to sell – and a reluctance to change one's standpoint from the embarrassment of appearing to have been wrong. However, this shouldn't stand in the way of informed change; as Keynes famously said, "When the facts change, I change my mind. What do you do, sir?"

In part it is because there are still papers being published that profess to be able to examine the concept, such as a recent offering from Cordoba University⁽⁸⁾. There was a more recent article in *Veterinary Times*⁽⁹⁾ pleading for the practice of evidence based medicine. The reasoning applies no less to the behaviour modification of pet dogs, and the Cordoba paper is a good example of why. Critical evaluation shows that it starts from an assumption, "*Dominance aggression is the most common form of aggression...*" and then compounds the error by allowing pet owners to define it in their dogs through the choice of two photographs of "dominant" and "fearful" expressions. Out of a total of thirty references only eight are post 2000, and four of *them* are the own author's. The paper's data analysis is also basic and shows associations rather than causation, but nevertheless some professionals feel able to use it to prop up their views.

In part it persists because it is still "seen to be working". It makes good television to go head to head and dominate a dog. Unfortunately, television is not real life and tends to show short interactions where the dog is forced to submit. It is not impossible for a "handy" owner to repeatedly force their dog into submission either, but these unpleasant and unnecessary measures are not how most pet owners want to live with their dogs. Lamentably the high profile of these programmes means the on-screen warning "do not try this at home" is often not heeded.

The final and probably most important reason for the persistence of "dominance" is because the debunking of the myth is relatively new. It is generally said to take twenty years for new science to permeate the public conscious, but now its time has come. More and better

research is being conducted and more practitioners are, like Keynes, changing their mind as the facts change. More members of the public are actually seeing that there are better alternatives, and more and more people are realising that whilst the meme might be “catchy” it isn’t actually very satisfying.

“Why won’t dominance die?” The use of the model to explain dog behaviour *is* dying. If memes can be said to have an independent existence, we are witnessing the death throes of this one as it struggles to hang on to what little life it has left, existing only in the minds of the most stubborn or self-interested. As the groundswell of informed opinion moves against it, there will eventually be no hiding places left.

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