

DOMINANCE – CHALLENGING TRADITIONAL THINKING

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Dominance, meaning 'status', has been used for many years to tell dog owners they must assert authority over their domestic dog. If they didn't, the dog may try to raise its status within what it perceives to be its 'pack' i.e. the owner and family. The basis of this theory is that as dogs are descended from wolves, wolf behaviour must apply to dog behaviour. To attain authority, or 'alpha' status, over our dog we had to apply 'pack rules' based on wolf behaviour. This often meant harsh training methods and a strict regime of behaviour.

Today, we have a far greater understanding of the behaviour of both wolves and dogs than we did 20 to 30 years ago when pack rules became popular. Many leading canine authorities believe it is time to challenge the 'dominance' theory, get rid of 'pack rules' and realise that our domestic dog is just that – a dog.

IN THE BEGINNING

To understand why pack rules are considered out-dated, we need to understand dogs are not wolves. Science has identified that the dog (*Canis familiaris*) is descended from the wolf (*Canis lupus*). See Fig. 1



Fig 1. (*Canis lupus*) Courtesy Monty Sloan

However during the period of evolution, many changes occurred both in morphology and behaviour (Coppinger 2001, Lindsay 2000)



Fig 2. Courtesy Ray Coppinger

In Fig. 2 the skull on the left of the picture is that of a 43Kg wolf. The skull on right is of a 43Kg dog. A dog's brain became about 20% to 25% smaller than the wolf's, speculating that wolves are more intelligent as they have evolved to 'work' to survive in a more challenging, more dangerous and less protected natural environment. (Coppinger 2001, Lindsay 2000).

The dog's teeth became smaller, more crowded and jaws became weaker. There are now three shapes of head (Turner 1994);

- The shape most like a wolf's, if somewhat smaller, is Mesocephalic: a medium length muzzle typically seen in German Shepherds, Labradors, and Terriers. About 75% of all dogs have this shape head.
- Brachycephalic: a short, wide muzzle, typically seen in Pug, Pekingese, Bulldog and Boxer where the eyes are set towards the front of the skull
- Dolichocephalic: a long, narrow muzzle typically found in sight hounds where the eyes are set at the side of the skull

We have breeds of different shapes and sizes, conformation, tail carriage, ear carriage, coat lengths, colours and type, and some with little or no coat at all.

A female wolf may not come into oestrus for the first time until she's about 22 months of age, sometimes older, and only has one oestrus cycle a year which is always during the winter. The pups are born during the spring when prey is more plentiful and chances of survival are greater (Kreeger, Packard 2003). Compare that to a domestic female dog that can come into oestrus at the age of 6 months, has two oestrus cycles per year at any time of year depending on when she was born. A male wolf is only fertile during the mating season (Kreeger 2003), ie once per year (see later). A domestic male dog, reaches maturity at about 6 months of age, remains fertile every day of his life.

Coppinger (2001) puts forward a convincing hypothesis as to how the evolution of dogs began. He believes that when Man started to build villages, wolves that showed less 'flight distance' started to scavenge around the dumps created by discarded food and human waste. As generation after generation of wolves scavenged around the dumps so those wolves became less and less fearful of Man. Over the generations the wolves became more domesticated; later more tame; and later, trainable. Eventually, Man started breeding for particular behaviours and looks.

Clutton-Brock (1999) asserts '*These tamed wolves would have become less and less like their forebears because inherently variable characteristics such as coat colour, carriage of ears and tail, overall size and proportion of limbs would be altered by the combined effects of artificial and natural selection. In this way a wolf became a dog.*'

As the wolf became a dog, so the motor patterns between the wolf and dog changed. The predatory motor pattern for the wolf is:

orient > eye-stalk > chase > grab-bite > kill-bite > dissect > consume

Today we have breeds that have different predatory motor patterns. For example, a Border collie's predatory motor pattern is different from a Retriever's. The collie's predatory motor pattern is;

Orient > **EYE-STALK** > **CHASE** > (grab-bite > kill-bite > dissect > consume)

The 'eye stalk' and 'chase' are highlighted as they are enhanced, and have become the most rewarding parts of the motor pattern. The parts of the motor pattern in brackets should be latent. Figure 3 shows the collie 'eye-stalk'.



Fig 3. Courtesy Ray Coppinger

The Retrievers' predatory motor pattern is;

ORIENT > chase > **GRAB-BITE** (> consume).

Fig. 4 shows the Retriever's 'grab-bite' with a soft mouth so as not to bruise the flesh of the shot game.



Fig 4. Courtesy CC Guard

We have bred dogs to help man as assistance dogs; for guarding; retrieving; herding without killing; pulling sledges; hunting; to take part in obedience, agility, flyball, and working trials competitions; as search and rescue dogs; sniffer dogs; companion dogs or just lapdogs. All these things are totally alien to the wolf, so a dog doesn't think like a wolf. However, by applying pack rules we are treating all of our domestic dogs as replicate wolves, irrespective of their behavioural type lineage.

But, no two dog types, no two breeds and no two individual dogs are the same. Each individual dog has different behavioural needs and different emotional states, and while the behavioural type and, latterly, the breed of dog are very important factors, all individuals have different motor patterns of behaviour, experiences and motivations that govern their emotions and behaviour in any situation.

Lindsay (2000), states, "*Understanding dog behaviour rightly begins with a study of wolf behaviour. However, a long history of domestication behaviourally segregates dogs from wolves and one must take care not to overly generalise*

between the two canids in terms of their respective motivations and behaviour patterns.”

PACK SOCIAL ORGANISATION

The ‘pack rules’ that owners have been told to use, and which are now being challenged, should have come from observing the behaviour of free roaming wolf packs. But as there were few free packs to observe, (Mech 1999) they came from observing captive packs whose behaviour is somewhat different to that of a free pack. In fact, this would be rather like using data collected from observing prisoners in a jail and pretending that this represented a good model for the behaviour of normal human society and families.

Generally, a stable wolf pack consists of a mated pair, their immediate offspring and adult helper offspring from previous years (Wayne, Vila, Mech, Boitani 2003). This is known as a ‘nuclear family’. However pack dynamics are not necessarily straight forward, as packs could also consist of an ‘extended family’, ‘disrupted family’, ‘step-family’ or a ‘complex family’ (Packard 2003). The point is that these packs are best viewed as families, and usually are made up largely of related, co-operative animals, except where a new male and female, dispersed from their respective maternal packs (families), meet to start a new family.

Conflict within a pack is therefore rare and restrained because each animal usually has genetic vested interest in helping the pack succeed reproductively, whichever wolves are actually doing the reproducing. Of course, very few wolves ever get the opportunity to reproduce, and the vast majority remain with their parents to help them continue producing litters successfully year after year. The parent/offspring relationship is maintained into the adulthood of the offspring that stay in the pack by means of ritualised behaviour, but rarely involves serious threat, and even more rarely, actual physical attack (Abrantes, 1997, with additions by Neville 2007). See Fig 5. It would simply be a waste of energy, and any injury inflicted on any member would deleteriously impact on the hunting, survival and reproductive capabilities of the family.

Importantly, competition within the pack is seasonal. About two months before the breeding female comes into oestrous, the testes of the adult males in the group descend from their usually atrophied state and the males begin to compete. The breeding male (termed ‘alpha’ because he is the breeding male) is the only male to retain fully evident and functioning testes all year round. Other adult males (now termed beta males) may now compete with each other, and perhaps even occasionally with their father. But the aim is NOT to try to usurp him so that the ‘son could now mate with his mother’. This would be seriously counterproductive in terms of genetic diversity and species success. Nor is the competition with any other male member from the pack about establishing some kind of ‘pecking order’ as was often thought. It is about deciding whether any particular male is fit and strong enough to leave the group and go in search of his own mate in unfamiliar territory. At the same time, if any adult females in a pack feel fit and strong

enough, or have maintained a sufficient distance from their mother to nullify the oestrus-suppressing pheromones that she produces such that they now come into oestrus, then they too will leave their maternal pack, or be driven out. (On occasion they may be killed if they do not get out fast enough). Having left, if they meet a dispersed male, they may then reproduce and form a family of their own with separate genetic inputs, though this whole event is fraught with danger and invariably doesn't succeed. (Mech, Boitani 2003, additions by Neville 2007). But back in the original maternal packs, the successful mating of the breeding female signals the re-atrophication of the remaining males' testes with the exception of her mate. These other males all now have crucial roles in protecting, feeding and educating the young that will be born in 63 days time, and will not be wasting vital energy squabbling among themselves over status or anything else.



Fig.5 Courtesy Monty Sloane

Contrary for the reasoning behind the pack rules, the alpha wolf is not a dictator. *“No member alone decides when an activity begins and ends. The autocratic leading wolf does not exist.”* (Zimen 1981). According to Mech (1999) *“The concept of alpha as ‘top dog’ ruling a group of similar-aged compatriots is particularly misleading.”*

While dog owners are told to be ‘alpha’, or ‘top dog’ and to apply ‘pack rules’ to enforce their authority, David Mech, (1999), who is a world authority on free roaming wolf packs, provides an entirely different perspective. He says, *‘Calling a wolf an alpha is usually no more appropriate than referring to a human parent as an alpha. Any parent is dominant to its young offspring, so ‘alpha’ adds no information. The point here is not so much the terminology but what the terminology falsely implies: a rigid, force-based dominance hierarchy.’*

PACK RULES

Having looked briefly at the social structure and interaction of a free roaming wolf pack, it would be interesting to compare the so-called pack rules domestic dogs have been lumbered with and compare them to how wolves actually behave. After all, free roaming wolves, as opposed to captive wolves, are the dogs distant ancestor. Pack rules are many and varied and it depends who believes what or who has written what as to the rules owners believe in, but I'll explore some of the most common ones.

Eat something before your dog

This, dog owners are told, is because the alpha wolf always eats first. In reality if there are pups to feed, *they* are fed first. If the kill is big enough, the entire pack feeds together regardless of rank. (Mech, 1999). What will our domestic dog learn from this 'rule'? Probably nothing. "*Most training books tell people to feed their dogs after themselves to reinforce the leadership status of the humans. This is wrong*", (Overall, 1997).

Do not play games of tug with your dog

This rule refers to wolves tugging on a piece of meat and the higher status wolf would win. This is misinterpretation of how wolves open and dissect the tougher parts of a carcass. They grab an end of some part of the prey's anatomy each and pull against each other to tear the skin apart or to pull muscle meat from bones. Each animal gets what he gets from this co-operation, it has nothing to do whatsoever with 'status'.

Research into the differences between dog-dog play and dog-human play by Southampton University (Rooney, Bradshaw, Robinson, 1999) therefore unsurprisingly concluded; '*Consistently allowing a dog to win games is alleged to result in the dog perceiving itself as stronger than its owner, leading to subsequent conflict and behavioural problems. This idea is based on extrapolation of (falsely interpreted) intraspecific behaviours, particularly those of the wolf. Winning possession of toys is described as simulating the winning of the battle for the best meat at the end of a pack hunt which can have consequences for the social hierarchy. This idea assumes that play is a contest and the goal is to possess the toy. Although this was the case during dog-dog play, we saw no evidence for it during dog-human play. Since dogs react differently to human and dog play partners, we see no reason to assume that the consequences of dog-human games are the same as dog-dog games. Decreased competitiveness may mean that the outcome of dog-human games is less likely to affect the players' relationship than has been suggested by some authors.*'

To avoid any possible problem of resource guarding of the toy, train the dog to 'leave' or 'drop'.

Get your dog to lie down

Supposedly the lower the physical position the dog is, the more subservient it is.



Fig 6

Fig 6 shows one of my dogs. I have just asked her to lie down, and she has, but she is not being submissive. 'Be submissive' is not something that can be taught, like a 'sit' or a 'down'.



Fig 7. Courtesy Jay Lorenz

Fig 7 shows what a dog looks like when it's being submissive. It is an innate behaviour, a coping strategy. A dog will show this behaviour when it's afraid of someone or something, and harsh training methods or abusing a dog may trigger this innate behaviour.

Don't let the dog sleep on the bed

The alpha wolf supposedly never shares his bed with a subordinate, so an owner sharing a bed with the family dog may send a signal that it is alpha. In reality, for the first few weeks, wolf cubs cuddle up together but from about 4 weeks of age they develop 'social distance' and from thereon sleep apart, including alpha. '*Contact between sleeping animals is rare and occurs mostly by chance*' (Zimen 1981).

A domestic dog sleeping on the owner's bed may cause a 'resource guarding' problem. Just like food or toys, a dog may protect the family bed as he perceives it as a resource, but it has nothing to do with status.

Do not walk around or step over the dog – make it move

Supposedly, the alpha wolf will 'make' a subordinate move if it is in the way. However, with an established social structure, a subordinate will voluntarily move when a higher-ranking wolf enters the 'social space' of the subordinate (Abrantes 1997, Mech 2003). One of the requirements of Assistance Dogs International member organisations was to teach dogs to lie still while people stepped over them. The standard was changed a few years ago to remove this part of the assessment, not because it was a dominance or status issue, but because they feared the dog might sustain injury in public if it stayed lying down when someone stepped over it. Canine Partners continue to train their assistance dogs to lie still but also train the dog to 'move' when asked to do so (Bondarenko, 2007).

Making a dog move won't make it more subservient or enforce the owner's 'dominance' (now read 'parenting skills!'). There could be good reasons for wanting the dog to move or to lie still but this is achieved by training, resulting in a well-trained dog, not a subservient one.

Never let the dog initiate the beginning or end of attention

Supposedly, alpha wolf alone initiates any form of attention and also ends it. This rule has been taught and written about for over 20 years but comes from observing captive wolf packs. What we do know about a free roaming pack is that adult wolves of both sexes care for and show tolerance within the family. A wolf pack needs strong social bonds. According to Mech (2003) *'The psychological tendency to form (strong) bonds results from a mere desire for physical contact. As pups grow older, physical contact continues during play and eventually occurs daily among all members of the pack.'*

The bond between domestic dog and owner must also be strong if they are to co-habit harmoniously so why can't a dog come up for attention? Dogs are social animals and need social contact. Some dogs, however, will take advantage of being given too much attention and will start to *demand* it. If owners are inconsistent in whether they give attention or not, it may result in a confused dog developing unwanted behaviours such as barking or jumping up in order to get the attention it desires. To avoid confusing the dog, owners must be consistent in their actions and train the dog. Dogs need to learn good manners and like everything else, this comes through training. It has nothing to do with status or pack rules.

Always walk through doorways before the dog

This rule has clearly come from observations of a captive wolf pack where alpha may well go through small opening first; when transferring from one pen to another for example. But our dogs are descended from free roaming packs and in their environment, from forests to icy tundra, it is unlikely that there are any small openings which wolves might file into!

Even *if* owners follow this flawed rule, subservient wolves will show signs of deference as alpha goes first. People cannot mimic the posturing of an alpha (breeding) wolf, and a dog won't show a submissive posture as the owner goes through a door first, so the entire exercise is pointless. It means nothing to the dog and the owner achieves nothing.

There are many more rules that are equally as flawed and pointless as the ones above. The pack rules that we burden our dogs with don't even apply to free wolf behaviour, so what are our dogs going to make of them?

According to Dunbar (2006) *'Learning from wolves to interact with pet dogs makes about as much sense as, 'I want to improve my parenting -- let's see how the chimps do it!'* Coppinger (2001) agrees when he says that dogs are as far removed from their ancestors as we are from ours. Dunbar (2005) expresses strong feelings against pack rules, *'Why on earth do we treat our best friend like our worst enemy? How on earth can anybody think that a dog is trying to dominate his owners by eating first, going through doorways first, enjoying the comfort of furniture, playing games of tug-of-war, eagerly or*

pulling on leash? Dogs are not masters of subtlety or innuendo. Dogs are straightforward and they live in the here and now'.

Pulling on the Lead

The 'rule' that says dogs that pull on the lead are being dominant as the Alpha wolf always leads the pack, is that if you go into any dog training class you'll find owners being taught to have their dog walk by their side. So if dominance = status, the dog is being taught that he is of equal status to the owner. So then why isn't the dog taught to walk behind his owner if he's lower in the pecking order? It's another typical example of silly inaccurate 'pack rules' being used selectively. In reality, it could be any wolf out there at the front when the pack strings out in a long line on a hunt. In unfamiliar territory it could be that the testosterone inspired confidence of an adult male, perhaps the alpha male, would lead his family into unknown areas, but in the family's more familiar hunting range, it could just as easily be a female 'out front'. There are no 'rules' about this, and different animals initiate and lead different group activities on different days in different places, and sometime there is no obvious 'leader' If your dog pulls on the lead, train him not to with clicker and lure techniques, or fit a Gentle Leader headcollar to manage, restrain and help train him.

Rank Reduction Programme

When a dog develops a behavioural problem, a common solution has been to impose pack rules but in these cases they are known as a Rank Reduction Programme (RRP). Effectively it means the dog's life is going to be turned upside down and his expected daily rewards will be denied him. According to Fisher (1997), *'If you remove an expected reward, you are in all aspects other than physical, punishing the dog.'* The result of being denied expected rewards and therefore being randomly punished, *'could cause conflict, depression, response suppression, and even helplessness'*. This regime of mental cruelty could suppress the unwanted behaviour, but what happens when life returns to normal? The unwanted behaviour is likely to return.

One must also consider if there is ever likely to be any such thing as a standard response 'dog' with predictable behaviour patterns, given their selection by man to produce behavioural types (and latterly, breeds), quite apart from all the mongrels and crossbreeds? The emotional relief of frustration at not getting an expected reward can only be gained by either a) increased vigour, and maybe aggression to try and seize the resource (hence problems get worse as the dog tries harder), or b) resignation...giving up on expecting to get the reward (hence the dog appears to have changed for the better but has actually become depressed or learned to be helpless.

If we look at these two possibilities of response, think about how you might expect a Labrador to react if you make him sit and wait for food or denied him some other significant reward. How would he feel? How quickly might his restrained frustration evolve into anger, or how long before he might give up

waiting and go and do something else? Perhaps quite a while because a Labrador can perhaps endure the frustration better than many breeds. Now think about how a Jack Russell or German Shepherd Dog might react to a similar withholding of food, and your expectation of their endurance of frustration! So how could a 'standard RRP procedure possibly impact on all dogs in the same way in altering their own view of 'where they fit' in the human pack, even it had such an effect in the first place? Clearly in each case the individual's dogs needs and personality must be assessed. Specific unwanted behaviour must be tackled directly through a specific individual approach to have best chance of success. This comes through teaching (and rewarding) the dog to behave differently in the problem circumstances, not through some blanket 'cure-all' of a 'rank reduction programme', 'learn to earn' or 'nothing in life is free' programme, or whatever other ridiculous jargon names these standardised, reward-controlling, and often psychologically cruel programmes are given.

Bear in mind also that selection of dogs by man for breed and type has also impacted on how dogs relate to each other...maybe two dogs of the same type/breed may have similar values with regard to certain resources, but do Jack Russells, Shelties and Pointers really have the same view of what to do about rats in holes? Think about how this might impact on assessing and treating competitive aggression problems between two dogs sharing a house, such as competition over certain food or access to the owners. What effect might it have if both dogs are subjected to a Rank Reduction Programme, or if owners try to 'demote' one below the other to create some kind of artificial linear hierarchy?

Dog/Human Pack?

Bearing in mind that dogs and humans are two completely different species, why would a dog feel that we constitute 'a pack'? Dogs and humans are both social species which is why we can co-habit together, but the dog will not form a pack in the true sense of the word with us. We co-habit together as a social unit, not a pack.

Instead of trying to dominate our dogs, why not concentrate on socialising and training them; not just basic obedience but in household etiquette as well. We are owners who are responsible for guiding our dogs and influencing its behaviour by socialising and training. Training should not be the harsh methods based on physically dominating or threatening the dog, but positive motivational methods like clicker training or the food lure/reward method.

If we can accept our domestic dog does not perceive itself as part of our pack but part of our social unit, we can then start to treat it for what it actually is – a dog.

I think John Fisher summed up the whole concept of 'dominance' between dog and owner best, when he said about people who want to be 'dominant' or 'pack leader', '*. . . if it's how you want to live with your dog I have news that is going to disappoint a lot of people who have striven to reach this alpha status – it all means diddly-squat to your dog.*'

The 'dominance hierarchy theory' is clearly badly in need of 'replacing' scientifically as well as in the assessment and treatment of canine behaviour problems. Yet look at these quotes made by some scientists quite a long time ago and how this undermines the whole concept of 'Dominance' in dogs as it has come to be known since.

'Dominance may not be synonymous with hierarchical standing. Dominance has been traditionally defined as the individual's ability to maintain or regulate access to some resource' (Hinde 1957, 1970)

'It is a description of the regularities of winning or losing staged contest over those resources, is not to be confused with status, and does not need to confer priority of access to resources' (Archer 1988)

Please check out also the following more modern on-line reference for more recent broader scientific discussion:

Semyonova A. 2003. The social organization of the domestic dog; a longitudinal study of domestic canine behavior and the ontogeny of domestic canine social systems. The Carriage House Foundation, The Hague, Netherlands

See: www.nonlineardogs.com (2006 version)

Abstract

The theory that a hierarchy based on dominance relationships is the organizing principle in social groups of the sort *Canis lupus* is a human projection that needs replacing. Furthermore, the model has unjustifiably been transferred from its original place in the discussion of the behavior of wolves to the discussion of the behavior of domestic dogs (*Canis familiaris*). This paper presents a new, more adequate model of how *C. familiaris* organises itself when in groups. This paper is based on a longitudinal study of a permanent group of five randomly acquired dogs living in their natural habitat, as they interact with each other within the group, with newcomers of various species who joined the group, and with fleetingly met individuals of various species in their outside environment. This study shows that the existence of the phenomenon "dominance" is questionable, but that in any case "dominance" does not operate as a principle in the social organization of domestic dogs. Dominance hierarchies do not exist and are in fact impossible to construct without entering the realm of human projection and fantasy. The hypotheses were tested by repeatedly starting systems at chaos, and then observing

whether the model predicted the evolution of each new system. The study shows that domestic canine social groups must be viewed as complex autopoietic systems, whose primary systemic behavior is to gravitate as quickly as possible to a stable division of the fitness landscape so that each animal present is sitting on a fitness hill unchallenged by other group members. Aggression is not used in the division of the fitness landscape. It is not possible for an observer to measure the height of respective hills. There is no hierarchy between or among the animals. The organization of the system is based on binary relationships, which are converted by the agents as quickly as possible from competitive to complementary or cooperative binaries, through the creation of domains of consensus. The production processes by which this is done are twofold. The first is an elegant and clear, but learned, system of communicative gestures, which enables the animals to orient themselves adequately to each other and emit appropriate responses in order to maintain or restore the stability of their fitness hills and the larger social landscape. The second is learning. It is the learning history of each animal, which determines how adequately the animal can operate within the system and what the components of its individual fitness hill will be, and which, in the end, is more crucial to the animal's survival than even presumed genetic factors or some human-constructed "dominance" position.

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Personal communication (2007) Nina Bondarenko, Behavioural Consultant,
formerly Programme Director of Canine Partners

Wolf. His Place In The Natural World by Dr Erik Zimen (1981) Souvenir
Press Ltd

With many thanks from the Directors of COAPE to Barry Eaton DipCABT for allowing us to reproduce and supplement his excellent review article for the benefit of COAPE Diploma students.



Barry is an experienced dog trainer having run training classes for many years and is a leading authority on the training of deaf dogs. He lectures widely in the UK and Europe on the concept of 'dominance' between dog and owner, and his booklet, '*Dominance: Fact or Fiction?*', which explores an alternative view as to how a dog perceives himself within the human family unit, is an essential publication on your reading list for this course.