

Science And Dog Training: Getting it out of the lab and into practice

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This session will take some of the techniques and theory discussed in 'Learning to behave: the science behind Animal behaviour and management' and apply them to the number one dog-related complaint received by councils; barking. Recent technological advances such as the 'ABS Bark Count Collar' and the 'Remote Individual Dog Bark Specific Noise Monitor' are likely to be invaluable not only in determining if there is a barking 'problem' but in determining the cause of the barking, identifying the intervention utilised and evaluating the effectiveness of the treatment.

The basic tenets of learning theory were described in another paper presented at this conference. This paper focuses specifically upon how some of these principles can be applied to barking dogs.

Dogs are highly social and social interaction, of any type, may be rewarding. This is especially true when the owner interacts with their dog when only he or she has been naughty, ignoring them when they are 'good'. Inevitably the bad behaviour is reinforced and continues. Very few people actively reward their dog for being calm and quiet, yet that is exactly what is required to ensure that their dog does not bark. During a barking period, the dog should be rewarded for any small periods of quiet, after all even a dog has to draw a breath at some point.

In the case of territorial barking the behaviour is rewarded by the 'intruder' leaving the dog's territory. It is possible to selectively reduce barking at 'authorised' intruders, such as postmen. If the owner is at home, then the owner can classically condition the dog by rewarding it with high value treats only when the postman is at the property boundary. Over time a positive association is established with the stimulus of the postman. If the owner is absent and the postman is cooperative then two techniques are possible. The first involves the postman only moving away from the property when the dog is quiet and thereby rewarding the dog's quiet behaviour, which will therefore increase in frequency. Alternately, the postman may be provided with treats which he can throw to the dog as he approaches the property. A process of association will classically condition a less aroused response to the postman over time. Even if the postman is not cooperative, it is still possible to reduce the strength of the dog's response by enlisting as many other people as possible to follow one of the behaviours described above. Generalisation will reduce the dog's reactivity – as long as the postman does not behave in any way that would differentiate him as a stimulus i.e. by shouting at the dog or kicking it.

Desensitisation might be another training alternative when a stimulus is predictable and easily repeatable. For example, Fido barks madly when the doorbell rings. If the doorbell is rung repeatedly (perhaps by the owner using a remote controlled doorbell) over an extended period of time, when no one is actually at the door then the trigger event (bell) will

lose its exciting quality and cease to elicit the barking.

Counter-conditioning may also be used. By training the dog to go to a mat or its bed, where it is rewarded for being calm, when it hears the doorbell, the owner has substituted one behaviour for another.

However, when the triggering stimulus is not immediately identifiable, predictable or readily reproduced then it is far more difficult to address the problem. Identifying what is triggering the barking may require extensive observation or the use of video cameras. For example, if a dog is barking at hot air balloons that only go overhead when the wind is in a certain direction, or barking at possums at night, then the most effective solution may be to manage the problem by confining the dog inside the house at these times.

Recent advances in technology such as the 'ABS Bark Count Collar' and 'Remote Individual Dog Bark Specific Noise Monitor' have allowed more objective evidence to be gathered about barking dogs. Not only is this a boon to officials involved in such complaints, which can be very difficult and time consuming to resolve, but the barking patterns may provide insights into the aetiology (cause) of the barking. For example separation-related barking is likely to be most pronounced in the period immediately after separation diminishing over time. By contrast, reactive barking to external stimuli may follow patterns i.e. when children are going home from school or the postman arrives, boredom barking is likely to become progressively worse over time and stereotypic barking will follow a very consistent, repetitive pattern throughout the day. Stereotypic barking may be seen in older dogs that have become deaf and maybe a way to remind them that there is a world out there even if it's gone quiet.

Understanding why an animal is barking should help identify the appropriate treatment. For example, boredom barking, which is probably the most common type of barking, can be addressed by providing the dog with greater appropriate stimulation in the form of enrichment toys, peer-socialisation at doggy day-care or exercise via a dog walking service. Research has established that the use of food toys reduces barking in kennelled dogs (Schipper, Vinke, Schilder, & Spruijt 2008), most likely because eating and digestion has a counterbalancing effect upon stress activation systems.

It is important to remember that dogs have been valued for generations as a type of 'perimeter alarm system' to warn people of any threat to their survival. People still want their dog to bark at appropriate times. In fact, dogs have been surrendered to shelters because they do not bark! The issue is ensuring that barking is appropriate and not excessive.

Reference List

- Schipper, L. L., Vinke, C. M., Schilder, M. B., & Spruijt, B. M. (2008). The effect of feeding enrichment toys on the behaviour of kennelled dogs (*Canis familiaris*). *Applied Animal Behaviour Science*, 114, 182-195.

- If barking due to Separation Anxiety, Incidence ↓ over time.
- If due to boredom, ↑ over time.

Need to ID trigger & pick mgmt strategy.

Classical Music found to reduce a dog's barking.