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Ethology of Barking - Why Do Dogs Bark?

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Introduction

When barking presents as a problem it is important to avoid regarding all cases as having the same cause. Any remedy that fails to take account of all the internal and external causal factors is predisposed to failure. Therefore history-taking should identify the most likely motivations for unwelcome vocalisation and therapy should be designed to meet the behavioural needs they point towards. Furthermore we should note that the gratification that barking brings has been very poorly studied. This may account for some of the problems we face when attempting to resolve barking dog problems. Treatments should aim to interrupt the behaviour in the short-term and replace it with a more appropriate alternative in the long-term. This paper will examine useful and novel ways to educate, environmentally enrich and even exhaust the howling hound.

The ancestor of the domestic dog vocalised for various reasons, many of which still arise in modern urban settings. But it is clear that dogs are not small friendly wolves. Crucially they are more vocal, more playful and often more dependent. We keep them in challenging environments and in many cases set them up to be inappropriately vocal.

Reasons for barking

It is suggested that dogs can communicate by using ten different types of sound, ranging from growling to howling. They bark for a variety of reasons. As with all behaviour, dogs bark for innate reasons that may subsequently be subject to learning.

Innate reasons. It is critical to consider the internal and external causal factors of various innate forms of canine vocalisation. Internal causal factors include the drive to rejoin the social group and find new companions. External factors may be associated with various stimulants including intruders, prey, games and the return of the social group.

Additionally, barking may detach itself from its initiating causes to become learned, habitual or even pathological. By identifying high-risk dogs we can minimise the probability that they will grow up to become nuisance barkers. We should also consider the possibility of over-bonding and explore ways in which it can be avoided in juvenile dogs.

Learning. It is extremely important to consider the role of learning in the development of barking from its innate causal factors and ask: Has the dog learned that barking brings rewards? Some of the possible rewards include:

Disappearance of external stimuli. Barking to deter people from entering the owner's property is appropriate if there's an occasional intrusion in the front yard. It is much less welcome if there is a steady stream of people passing the property and the dog barks at them all. Since some dogs learn to bark at every passer-by it seems that some of them have (rather superstitiously) learned that barking is the very best way of getting rid of passers-by...even though almost all of them would go away anyway.

Attention. Unfortunately, owners often attempt to silence their dogs by shouting at them, but it seems that many dogs respond as if the owners are barking too, and so they continue undeterred, or even increase their efforts. So, some dogs learn that barking of any origin prompts their owner to give them attention, if the attention is simply being told to 'Shut up!' Eventually such dogs may bark just to get a response from their owners.

Return of the pack. Some dogs vocalize in an attempt to call their owners back home again. If they happen to be barking when the owner returns home then the dog most likely learns that barking is effective and so it barks with even more determination next time.

Endorphins. Although very poorly understood, neurotransmitters such as dopamine and beta-endorphins may be involved in the development of persistent behaviours including stereotypic barking. As such they may allow barking to bring its own rewards. Stereotypic barking is defined as repetitive, invariant and apparently functionless vocalization and is undoubtedly the most difficult type of barking to modify since it is virtually self-propelling and somewhat immune to retraining.

Solutions

Innate needs. If we agree that dogs bark for numerous reasons, including out of excitement, distress, stereotypic response and territorial defence, then the solutions to problem barking have to differ from one dog to the next. History-taking should be designed to identify the most likely motivation for barking and therapy should be designed to meet the behavioural needs they point towards. Behavioural needs that may be poorly served in dogs that bark include:

Exercise

Company

Stimulation

Oral needs

Learning. Devices to stop vocalization should not be used without an attempt to address the reasons for the noise. To borrow an analogy from David Appleby (2004), you have to disengage the drive from the engine before it's safe to apply the brakes. So, once we are satisfied that the dog's behavioural needs are being met eg with methods being employed to train dogs to be exhaustively active, the next thing we should put in place is a mechanism for making them actively quiet. When we consider the role of learning in detaching barking from its innate causal factors we can combine two approaches:

- 1. Taking the rewards away when barking occurs
- 2. Training an "off-switch"

Taking the rewards away. If the rewards for barking are identifiable it is usually possible to remove them. This allows a process of non-reward to extinguish the barking – i.e. an extinction programme (McGreevy, 2001). Here are a few examples:

For attention seeking barking, we can construct humane, unwelcome outcomes for barking when the owners are present. For example, if every time the dog barks for attention the owners get up and walk out of the room, or silently turn their backs, the dog will eventually learn that barking is counter-productive. The owners will need to be coached on how the dog will tend to try even harder to get noticed when they are preoccupied.

Similarly, if the owners resolve to never enter the home when the dog is actively barking the dog will never associate barking with the return of the pack.

Training an "off-switch". Only when an extinction programme is in place, is it time to think of ways of stopping the barking that remains. It is worth considering how many dogs are regularly told to "shut up" and how many know what "shut up" actually means. A system of training for non-vocalisation has been established following the principles of learning theory (Lieberman, 1993).

The 8 Point Plan for training dogs to stop barking

- Find a way of encouraging the dog to bark. You may find
 it will bark out of excitement in response to the door
 bell or if you hold its food bowl up in the air, or you may
 only need to use a food reward or a toy. (Tying the dog
 up safely may also increase frustration, and so
 stimulate vocalisation).
- When, with a bit of friendly teasing, your dog does bark, praise it and start to repeat the word 'speak!' during the vocalisation.
- Repeat the exercise until the dog associates the word 'speak' with the act of barking and is vocalising merrily for rewards.
- Reserve praise and rewards for times when the dog has barked only after having heard the command to speak. This places the bark under stimulus control (i.e. puts it on command).
- 5. Introduce the word 'quiet!' or 'stop!' while your dog is barking on command, and give it a toy or food treat as soon as it stops barking.
- Reserve praise and rewards for times when the dog has stopped barking only after having heard the command to be 'quiet!' or 'stop!' This places the termination of barking under stimulus control.
- Repeat step 6 whenever the dog is barking without being told to speak. This links the signal to be quiet with the cessation of spontaneous barking. Reward liberally for all appropriate responses at this stageof course!
- Issue the neighbours with a supply of rewards and instruct them to repeat step 6 whenever the dog is barking.

References

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