# ENTERING YOUR DOG'S MIND 

Understanding Dog Behavior \& How the Handler can Influence it for Better or Worse

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We have taken dogs in to our homes and hearts, we have the opportunity to observe their behavior closely. We mistakenly interpret his behavior in human versus canine terms and we have the responsible to understand pet behavior to make lives more stimulating and too have good communication.

## A LOOK ON THE INSIDE

Frontal Lobe- Involved in intellectual function, multitasking, strategic planning


Olfactory bulb - Only sense that goes directly to area in brain

Hippocampus - Responsible for value system in dog's mind


Hippocampus - Dog motivated by different reasons from the ones we experience and conflict between what he instinctually wants to do and what we want him to do is played out here

- Reward offered less engaging than what dog is doing decides to ignore the command
- Dog ever think about a recall when chasing something?


## THE SENSES TELL THE STORY

Taste - Humans 9000 taste buds Dogs 1706 taste buds

Hearing -Dogs hear 4 times the distance of humans

Sight- Diurnal
6 times weaker eyesight


Taste- Only function at birth
Hearing- Mobility of ears allows dog to scan environment for sound and collect sound waves which means they can use one ear to locate sound and both ears to catch maximum number of sound waves

Vision-thrive in low light settings because Tapetum glistening opaque reflective layer why dogs eyes glisten at night or low light photos

- Dogs have greater scope of peripheral vision
- $\quad$ See more laterally and less well straight ahead
- Difficulty seeing (and focusing) on something right under their nose
"retrievers"...Trouble seeing bumper in grass


## NO PROBLEM FINDING SCENT...

It's about sorting out the multitude of scents that are there already

Most critical sense but most difficult for humans to comprehend


## Scent

- Total surface area far greater than total surface area of dog's entire body
- Mobile nostril- determine direction of scent
- Odors have powerful influence on physiology and behavior of dog
- Sniff- disruption to regular breathing pattern
- Sniffed air molecules are captured by vomeronasal organ and accumulate in nasal chamber
- Odor molecules dissolve and concentrate in nasal mucous and stick to receptor cells (lots of mucus needed)
- Chemical smell signal gets converted to electrical signal and transferred to cerebral cortex and limbic system
- Regular breath goes down to lung
- minuscule particles of dead skin "raft" and deposit odor on the ground with every step...one four billionth of a gram of sweat is left on the ground


## HORMONES BEHIND LEARNNG

Dopamine- related to reward and movement
Have to search it out and problem solve

Endorphins - "runners high"
Designed to make you continue to fight
Serotonin- linked to emotional balance
lick and chew/ replay
Cortisol - "stress hormone"


Shrinks brain network

## DOG TOO STRESSED TO EAT $\rightarrow$ TOO STRESSED TO LEARN

## Dopamine

- Have to search it out and problem solve
- Have to move to build dendrites in brain grow and connect as we learn need to create tremendous network
- Can override fear
- Create curiosity and get rewards
- Help downregulate brain

If we haven't developed a superhighway (only do same task over and over) if we are in the right chemical state they have the confidence to search through the problem to solve a problem they have never seen

## Endorphins -

- created by stress (creating pain)

Serotonin

- Learn and wait $\rightarrow$ learn faster/longer
- They replay the task in their brain
- New areas of brain start to light up and build scaffolding
- Dog can never perform a task better than they can play it back in their minds

Cortisol shrinks the brain network

- Learned helplessness
- Never live up to potential
- Will check out and disassociate "hyper-aroused"

Low road - stress fast response and hard to get rid of

- Somethings wrong
- Commence the panic
- Can't think through problems
- Get trapped and victim of emotional state
- Go fight or flight

Brains are not machines!
3 minute is the time period for dissipation of excitement neurochemicals so dog enters calm emotional state Dog has more patience and can decrease dissipation to $15-20$ seconds

## HOW IT ALL WORKS

Cognition requires use of

- Mind
- Intelligence
- Learned behavior

How does Obedience


- Cognition - mental action or process of acquiring knowledge and understanding through thought, experience, and the senses
- Mind- function of dog's brain, evolution, genetics, senses, hormones and learning
- Intelligence - efficiency to use past experiences in order to adapt to a new situation
- Learned behavior - what we have most control over
- Obedience the guarantee that behavior will be executed when the signal is given


## PERCEPTION

NON-VERBAL COMMUNICATION

Small movements make a big change in
dog's behavior

- Unconscious of hands
- How we tilt a head
- We radiate random signals

Dogs watch our eyes

- communicate authority


## Be the



- We always expect dogs to do what we ask of them so they have compelling reasons to try \& translate our movements \& postures
- While we think of the words to use our dogs are watching for the subtle visual signals that they use to communicate to one another
- Dogs look at humans much more frequently than we comprehend
- Communicate mouth shut, keep body moving and keep hands off dog
- Challenge- have someone videotape you training


## READING DOGS <br> developing your eye

- Leaning toward me, away from me, standing square over all four paws
- Frozen still, breathing normally, breathing too fast with shallow breaths
- Corners of mouth (commissure) go forward or backwards
- Eyes soft or hard


## Demonstration: Making observations - watch your dog for one second and detail what the dog does

Count to one -one thousand and have someone move for that second.
Make good observations - too much can happen at once for your brain to notice it all. Learn to focus on specific actions or areas and ignore rest for later observation


Dominance is a social construct designed to decrease aggression, not facilitate it- resolve conflict without fighting

Most problematic dogs-easily aroused with no emotional control who are reactive to any perceived challenge to their social position

## INTERACTIONS WITH DOGS <br> polite versus rude greetings

Humans greeting dogs
How we are hardwired

Dogs meeting dogs
Posture communicates what they
think their social status is


Greet dogs- head on, direct eye contact can be threatening to dogs
Polite dogs approach from 90 degree angle from the side and avoid direct eye contact If the strange dog doesn't want petted, don't pet them.
Meeting dogs- humans will hold breath, round eyes and mouth in on alert expressionhuman signal tension and tightening leash will cause a dog fight
Watch tail of 2 dogs while they greet

- Look at who raises the base of the tail and whose tail gets lowered at the base...not the tip
- One dog leans forward, stands straighter and higher, ears forward rather than back...this dog has more social status
- Both dogs mirror images of each other...you need to distract them and get them thinking about something else
- 2 dogs standing face on, staring in each others eyes is big trouble...leads to tension and aggression


## TRAINING THE <br> HUMAN

BECOMING MINDFUL OF OUR OWN ACTIONS!
What cue is my dog ACTUALLY responding to?

Flexibility of Language- A dog's nightmare!
Repetition Pitfalls
Create simple commands - that's simple right?

- Tone


## We are

 what we repeatedly
# Excellence, then, is not an act but a 

habit.

- Aristotle
- Speed


## YELLING MAY GET ATTENTION BUT AT WHAT COST?

## Demonstration -stand relaxed but immobile and ask your dog to sit doing nothing but moving your lips

- Its hard to do...what moves...eyebrows, head tilt
- $\quad$ Sit on the floor and ask your dog to sit
- Now ask dog to sit in the way you usually do...do the same outside of the room
- Was there more than one movement? Which one caused the dog to sit?
- Experiment with different movements and you'll discover which one the dog keys in on more than the others

Does down rise up in the air as you finish the word like a question or descend like a statement of fact
Listen to yourself or ask others to pay attention to what you actually do say to your dog
Be clear in what you say
Ask how consistent you are within yourself and how consistent is the family
Once your brain starts to pay attention to what you say, with little effort you'll start to become more consistent Synonyms are great...they enhance, add nuance and finesse but very challenging for dogs

Rearranging order of words is a grammatical change and asking a dog to understand the rules of human grammar is asking for the moon

Repeat condition dog to wait for the full signal to be given to respond

- When we repeat we typically get louder...volume can not create the energy needed to stimulate our dogs to respond
- Barking dogs are frightened dogs and the louder they get the more panicked they are
- Barking says I see you...watch out or help...there's trouble
- Braking is a group activity
- Number of notes - short, repeated notes encourage activity and one single note discourages it
- Low pitch signifies authority or confidence...inhibits dog, high pitch encouragement and praise
- Pitch modulation- flat, unwavering pitch- soothe or slow animal, opposite to excite

Once your brain starts to pay attention to what you say, with little effort you'll start to become more consistent


Demonstration: Family cues dog? Are They The same?

## REINFORCEMENT

Behavior occurs -> Reinforcer occurs -> Subsequent behavior

Positive

- Creativity, experimentation \& initiative
- Long retention

Negative - something to avoid
Punishment

- Used to eliminated unwanted behaviors
- Human emotion to inflict pain,
aggression or frustration
- Force reflects absence of power

Cue - a signal to the dog that he will be
paid for performing a certain behavior


YOU CAN NOT REINFORCE BEHAVIOR THAT IS NOT OCCURRING!

Increases the likelihood of that behavior occurring in the future

- Anything in conjunction with an act tends to increase the probability that act will occur again
- Works like a feedback loop- if behavior doesn't increase then the reinforcer was presented too early or too late or the payoff you selected wasn't reinforcing to that individual
- Learner needs to know what you are doing right now has won you a prize
- Behavior that is occurring can always be intensified with positive reinforcement
- Exposure teaching the dog to trust itself, trust you and follow it's instincts
- Training is teaching the dog to have a specific response to a specific situation

When animal undergoes fearful experience, short following time period when animals fear response can be modified
10 minute delay "grace period" before fear response processes into long term memory - brief period to change animals response
Bribery Encouragement actually reinforces trying to do something not actually doing it as small as you can get away with

- Smaller, ate quicker, less wait time, more reinforcers/session
- Rule of thumb-count on using $1 / 4$ of daily meal

Behavior is on cue when gradually precede behavior with cue
Bridging stimulus -Whistle/clicker/yes -

- Bridges time between act and behavior being reinforced
- Real way for communicating exactly what you like in the animal's behavior
- Becomes more powerful when combined with primary reinforcers
taking a very small tendency in the right direction and shifting it one small step at a time forward towards an ultimate goal
if i have to use force i am lacking in social status but if i can give an obedience command and have enough social status over you the words alone would employ you to comply


Demonstration: Shape a command with only Yes
don't shape 2 criteria simultaneously
When there is no progress, typically shaping too many behaviors at once Ask
Questions?
Behavior has more than one attribute? Break down and work criteria separately What is learned isn't forgotten but under pressure of learning new skills, old may fall apart a little

- Time less important than the what
- Last behavior is the one that is remembered best
- Reach perfection by rewarding improvement

How fast you raise criteria is a function of how well you communicate
Every time you raise the criteria, you change the game
Work on different behaviors to relieve monotony
When there is no progress, typically shaping too many behaviors at once
Breakthrough opportunities to make a lot of progress and need to be prepared with next step otherwise you have nothing to reinforce

# SHAPING EFFECTIVENESS <br> HOW DO I KNOW THE DOG UNDERSTANDS <br> 4 conditions to full understanding <br> Immediate after presenting conditioned stimulus <br> Never happens in absence of stimulus <br> Never occurs in response to another stimulus <br> No other behavior occurs in response to stimulus 

- Establish a second command?
- Jump the gun and anticipate?
- Breakdown in back chain process?

Too many tasks under pressure

- revert back to "default"


JOGS DONT TRY TO BE DISOBEDIENT - HOW CAN I PROVIDE A CLEARER SIGNAL?

## Establishing a second cue

Present new stimulus first then the old one and reinforce the response. Then gradually make the old stimulus less and the new one very obvious
Don't immediately give strong stimulus to "refresh his memory"
Anticipation - when jump the gun use a time out
Stop activity and do nothing for 1 minute
Behavior chains

- Misbehavior is often the result of chain breakdown
- Failure to build and maintain behavior in the chain
- Unlearned behavior in chain
- Behavior have not be brought under stimulus control
- Behavior chains are trained backwards
- Memorize the end first to go from weakness to strength

Proofing your dog- ensure dog is comfortable in new environments before putting too much pressure on her to perform

- The Dog's Mind: Understanding Your Dog's Behavior Bruce Fogle D.V.M. M.R.C.V.S.
- Don't Shoot the Dog: The New Art of Teaching and Training Karen Pryor
- The Other End of the Leash: Why We Do What We Do Around Dogs Patricia McConnell PhD
- Absolutely Positively Gun Dog Training: Positive Training for Your Retriever Gundog Robert Milner


## INCREDIBLE RESOURCES

