

Tell Me About Your Dog! Part I

by Armin Winkler

The SV celebrates 100 years this year, so for all intents and purposes Schutzhund training has been around for close to 100 years as well. In that time countless books have been written, and even more seminars have been taught, and let's not even start on how many conversations and discussions were held late into the night on the topic of dog training. In all these discussions about dogs, their qualities, and their training a lot of terminology is used. Being one of those people that often talk late into the night until I lose my voice, I have discovered that very few things in training are quite as diverse as the interpretations of terminology. Why is that?

Many terms used in dog training today had a certain meaning assigned to them through the way they were used. But often as the use of the word changed, so did its meaning. One of the most difficult things in discussions about training today is to establish a basis of understanding and interpretation of terminology. Usually once the people who are having the discussion are "on the same page" the discussion becomes much more productive. I feel that the concepts of dog training are often oversimplified. Traits are generalized and labeled in such a way that it has become virtually impossible to visualize a dog from its description.

We all have to assess dogs in order to have the correct approach in their training. To develop a training approach we need to know as much detail about the dog as possible. And to learn details about the dog we have to break things down into smaller pieces that make up the dog's motivations. So rather than generalizing something I notice about the dog I try to get a read on every separable trait I can find. Every trait is like a piece in a complex mechanism, and to ensure that it functions properly, we have to inspect every piece.

It is not my intent to "preach the gospel" and state undeniable truths. Dog training is not an exact science, it is educated guesswork. Hopefully, the more education we get, the more accurate the guesses will become. But we have to remind ourselves that they are still just guesses. This article is intended as an analytical discussion of the complexities involved in this type of guesswork. I hope it provokes some thought and leads to closer examination of details.

Stimulus Thresholds

This is the most logical first subject, since every response a dog shows is triggered by a stimulus. Webster defines threshold as "the point at which a stimulus is just strong enough to be perceived or produce a response." In other words it is the lowest level of stimulation that will trigger a response.

Unfortunately, this term is not used often enough when a dog is assessed. When we talk about drive, nerve, hardness, etc. most of the time we are in fact talking about the stimulus threshold of the dog, and nothing else. Let's use the example of pain to examine this. Pain is nothing more than discomfort, and every dog has a different point at which a particular physical stimulus becomes uncomfortable. In other words every dog perceives the sensation of pain at a different level of physical influence. This has nothing to do with the dog's character or temperament, it simply describes his body's response to a physical stimulus. We often use words like "hardness" to sum this up. But hardness has become a quality assessment. Can we really simplify it that much? I don't think so. I will address hardness a bit later in the article, for now I want to stay on the topic of thresholds.

Another example to help illustrate the point. Often dogs are assessed as being "defensive." That does that really mean? I guess that depends on the person making the assessment. But again, the term "defensive" leads to interpretation. The broad range of dogs that have this said about them are vastly different, yet they are all categorized with the same term. One thing that most of the dogs that are called "defensive" have in common is this. They all have a low stimulus threshold for defensive stimuli. You may say, "Isn't that the same thing." The answer would be, "No!" I will also discuss defense drive a little bit later, for now I will just say this about it. A dog's self defense drive is activated when the dog perceives a stimulus that leads him to feel concerned or worried about his own physical welfare. The response could be active defense (aggression) or passive defense (flight or other types of avoidance behaviors). And that encompasses all the dogs that are called "defensive," the only common thread is their stimulus threshold. Each of these dogs may require a different approach in training, depending much more on their response to the stimulus than to the stimulus threshold. Some dogs may have a very high stimulus threshold for defensive stimuli, this says nothing at all about their ability to handle the stimulus once they perceive it.

Prey drive also has stimulation thresholds. Many quality assessments are made about dog's prey drives when in reality all that was assessed was the stimulation threshold. This often leads to faulty conclusions

about the dogs and consequently less than optimal training. A dog may perceive a prey trigger stimulus very easily. So it is easy to activate the prey drive the dog has. But this in no way means that the dog also has good prey drive. The quality and strength of the dog's prey drive requires separate careful assessment that goes beyond the stimulus threshold. Just look at puppy testing. How often do we see puppies that are very easily stimulated in prey and find that the puppy grown up falls far short of the expectations we had for him? Again, under more careful examination we see that the ease of reaching stimulation is a different assessment category than the quality of the drive itself.

Another example is the stimulus threshold for noises. I believe that the test currently in place to test so called "noise-sensitivity" does nothing more than allow a small assessment of the noise stimulus threshold. My friend Thomas Baumann also views the current test as an inadequate assessment of noise sensitivity. He is currently conducting research into this matter at his private training facility as well as at the police service dog school (Naustadt/Sachsen/Germany) he heads up. He set up a training room with high-tech stereo equipment over which he plays a collection of about 15 different noises for three minutes with short pauses between the different noises (ranging from a bicycle bell to breaking glass, to engine noises and fireworks) to each dog who is left alone in the room while being tested. The results of these tests were amazing. While some dogs appeared completely unfazed initially some broke down completely after about one minute. Others initially showed reactions to the sounds, light fear or aggression, but some of those steadied themselves and handled the test fine. The range of reactions included panic stricken flight, cowering in a corner, standing completely frozen shivering with fear, aggressive reactions and neutrality. This research is far from over, and more researchers will become involved to interpret the final findings of the studies. For now, it is enough to allow me to illustrate that noise sensitivity is much harder to assess than often thought. And once again the thresholds of when a noise becomes bothersome to a dog is an important factor in the assessment. To determine more than that one has to look at the reactions, and interpret those with great thought and detail. Again oversimplifying a character assessment of the dog does not help us to get a clear picture of who he is.

Stimulation thresholds have to be assessed individually and for every separate assessment category. They represent sub-categories to every trait a dog may exhibit. Many dogs may have identical stimulation thresholds, but their responses could vary a great deal. It is not

uncommon that the thresholds are different levels in each category. I will refer to stimulation thresholds probably in every subject still left to discuss which hopefully will help to further illustrate where and how they fit into reading a dog. The conclusions I would like the reader to draw from the discussion of stimulation thresholds is that they require separate examination, that they are only parts of traits, that they should be designated separately, and that they in themselves tell us nothing about the quality of a dog.

One final comment on thresholds. Many can be manipulated through experiences. In other words, training can raise or lower some thresholds of stimulation. The process of raising a stimulus threshold is what we call de-sensitizing. If this process is done correctly, a dog will require a much higher level of stimulation to show a response. Stimulus thresholds are lowered by setting up situations which will pre-dispose the dog to perceive a stimulus at a lower level. While in the beginning it is actually a combination of stimulating factors that trigger a response, if it is done correctly a single low level stimulus may later be enough to trigger a response.

Hardness

Hardness is another term that is used too broadly. Dogs are generalized with this label. But what does hardness mean? Let's have a closer look at it. The Swiss behaviorist Dr. E. Seiferle defined this term the following way. "The ability to take negative influences and experiences such as pain, punishment, defeat in a fight without being affected significantly at the moment they happen or in the long term." In this definition, it is very clear, that the dog in question has to perceive the influence he is experiencing as adverse or negative and deal with it without being significantly affected by it.

When a dog is called hard, many interpretations are possible, unless more detailed examinations are done to truly assess a dog's hardness. In my mind, the first logical factor to assess is the dog's stimulus thresholds. For example, one of the influences specifically mentioned in Dr. Seiferle's definition is pain. But as I have already mentioned, dogs' pain thresholds vary a great deal. If a dog has a very high pain threshold, that means it takes a pretty severe physical influence to cause the dog discomfort. But if the dog does not perceive a physical influence as painful, can we really say that he is "taking" pain? I don't think we can. Not perceiving the negative gives us no indication on how the dog would deal with something negative.

I would say that most of the time when someone speaks of a dog's hardness, all we really learn about the dog is his pain threshold and his level of reactivity. What is reactivity? Well, by that I just mean a tendency to show a reaction. It doesn't seem to matter nowadays what kind of reaction a dog shows. A dog that shows any reaction is too often automatically labeled as not as hard as a dog that shows no reaction. Often even positive and strong reactions are interpreted as signs of weakness. While dogs that either are not very reactive and/or have high stimulus thresholds are often called hard.

I guess we could break down hardness into three areas. Pain-hardness, hardness to the helper, and hardness to the handler. These are the main areas where the term hardness is used. I think pain-hardness can simply be called pain threshold. It is in fact the level of physical influence that the dog perceives as uncomfortable or painful. It makes no statement about the dog's character or temperament. Hardness to the helper depends clearly on the dog's threshold for defensive stimuli. A dog that does not feel threatened by the helper should not be called hard. Hardness to the handler depends on how easily a dog is affected by the emotions of the handler. Yes, I did mean to say emotions. Naturally there are overlaps in these three areas. Often dogs link a neutral stimulus like pain to the helper, or the handler in which case the threshold of stimulation relating to helper or handler becomes a factor in how the dog deals with the pain. Think about dogs that can't wear a pinch collar for obedience because they would crumble. Many of those same dogs will pull their owner on a bicycle by a Springer fastened to a pinch collar without blinking an eye. The difference is that there is no handler influence during the bike ride. Another example, dogs who have no problem if their owner slaps them with a soft stick, some even get excited by it. Those dogs if their thresholds for defensive stimuli are low will show extreme reactions (positive or negative) if a helper were to do exactly the same thing.

Another factor that greatly affects a dog's ability to endure something is his drives. I chose the word "endure" to differentiate it from the word "take" that Seiferle used in his definition of hardness. For example, a dog may endure a negative influence to satisfy his prey drive, that is not the same as being able to take the same negative influence in a situation where his prey drive is not activated.

The standardized testing for hardness in Schutzhund trials, in breed suitability tests, and in breed surveys are generally the two stick hits during protection work. This gives us barely a glimpse at the dog and nowhere close to a detailed picture. The things we learn are quite

useful, and informative, but I don't think they tell us much about the dog's hardness.

I hope I am not confusing anybody. I no more have a perfect system for assessing hardness in dogs than anyone else does. But a superficial label is not enough, we have to dig deeper. We have to keep the definition of hardness in mind and look at all the details surrounding the situation and keep all observations in their proper perspectives to get as accurate a picture about the dog as possible. This is crucial for making the right training decisions.

Nerve

Nerve has become a catch phrase for almost everything. Good nerve, bad nerve, weak nerve, strong nerve, thin nerve, thick nerve. Where do these terms come from? And more importantly, what do they mean? The nerve itself is nothing more than a fibrous long cell that transmits impulses from parts of the body to the central nervous system and back again. I don't think anybody is talking about one dog actually having "thinner" nerve cells than another, that would be a bit hard to measure. Webster also refers to nerve as a "boldness or brazenness." And even though that is a bit more useful, it still does not really address the uses of the term. I personally believe that all the talk about nerve came from conversationalizing a behavioral concept that many people using the term are not even familiar with. I will attempt to give a brief description of this concept before talking about a practical assessment of nerve.

The concept I am referring to is one that the behaviorist Ivan P. Pavlov developed to type temperament. He used a system to differentiate between four basic "types" of higher nervous system activity (This where the term nerve came from.) He based his terminology on a concept that leads back to Hippocrates (500 B.C.) where the temperament types were based on four different bodily fluids, namely blood (sanguine type), mucus (phlegm/phlegmatic type), bile (cholera/choleric type), and black bile (melancholic type). That is just to explain where the names came from. Now the breakdown of what the types actually mean.

What does Pavlov mean by "higher nervous system activity?" The two basic types of nervous system processes are arousal (excitement) and inhibition (blocking). Both of these processes are necessary for an animal to adapt to its environment and to learn and perform skills and tasks in order to function. These processes take place in the cerebral

cortex of the brain as physiological studies have shown. It is the strength of these processes as well as their balance and speed of mobility between the processes that gave Pavlov the separation criteria for his temperament typing.

Dogs who displayed weakly developed arousal and inhibition processes were categorized as "weak types." The name for this type is the melancholic type. Since these dogs are identified by their weakness of nervous system processes they will never function properly in their environment. Any degree of difficulty when performing a task leads to failure. They generally show passive behavioral tendencies and weak reactions. Avoidance and flight tendencies are pronounced. They appear often inhibited, anxious, and unsure, which are results of this weakness of nervous system processes. They generally have low stimulus thresholds.

"Strong types" are split into three different separate types as well.

First there is the "strong, unbalanced arousable (excitable) type." This type is referred to as the choleric type. In this type display very strongly developed arousal (excitement) processes with weakly developed inhibition processes. They often appear unruly and out of control. They have aggressive tendencies, and are very active dogs. Their responses to commands and handsignals that trigger arousal (excitement) processes are very fast. But the accuracy of the performances of tasks is often poor, since inhibition (blocking) processes are weakly developed and arousal processes dominate them. In other words, they do not differentiate as clearly between tasks. The active defensive reaction is pronounced. These dogs appear irascible (easily angered or quick tempered). They have low stimulus thresholds.

Second there is the "strong, balanced, mobile type." This type is called the sanguine type. The word balanced refers to a balance between strong arousal (excitement) and strong inhibition (blocking) processes. These types perform all tasks very fast and accurately. They rarely make mistakes and learn very quickly. If they have the right attributes for protection work they make excellent service and performance dogs. They generally have medium stimulation thresholds.

Third, there is the "strong, balanced sluggish type." This type is called the phlegmatic type. They have strongly developed arousal (excitement) processes and strongly developed inhibition (blocking) processes and a good balance between the two. The designation

sluggish refers to a slow mobility between the two processes. These dogs are generally described as calm. They work consistently but slowly. They require strong stimulation to stay motivated and require repetition of stimuli. Their performance potential is limited due to the slow mobility. They have high stimulus thresholds.

I hope this gives the reader a bit of an understanding of the basic temperament types that have led to the term nerve. Naturally there are still differences within each type. Again I would like to stress that the more detailed an assessment is, the better.

Now that we know where the term nerve comes from, we have to examine what we should look at when discussing the nerve of a dog. One big misconception is once again the stimulus thresholds a dog exhibits. A low stimulus threshold does not make a dog weak nerved. But it is likely that such a dog is a more reactive than one with higher stimulation thresholds. But the reactions have to be assessed separately to determine the strength of the dog.

Another misinterpreted trait is the activity level vs. calmness of a dog. Calm and sometimes even passive dogs are often said to have good nerve. And while the calm type still is one of the strong types, they are certainly not the most desirable workers. The passive type is actually more often the weak type than not. To give a little more food for thought on that topic, I'd like to refer to the findings of the behaviorist Krushinsky during the training of "anti-tank dogs" during the war. Anti-tank-dogs were trained to run under tanks with a pack of explosives strapped to their backs and remain there until the explosives could be detonated. Putting aside the wasteful aspects of this use for dogs, it needs to be said that it was an extremely difficult task for dogs to perform. Aside from the distractions of battle noise, smell, and people everywhere which made it difficult to direct the dogs, they also had to overcome natural fear and inhibition to stay only a few feet away from the steel tracks of the tanks. So it only stands to reason that dogs which were required for this task were dogs who had especially strong nerves. But to quote Krushinsky "it is a mistake to expect to find these dogs among the calm and passive types, instead they were all very highly arousable (excitable) and very active." This didn't become apparent however until all the candidates who showed great results in training were also tested for their arousability (excitability) and activity level. They performed tests measuring ease of arousal and physical mobility. The results were very clear, the dogs who performed their tasks in a reliable, fast and

precise manner under these extreme demands were all dogs who also displayed very high activity levels and low stimulus excitability.

So all the talk about nerve that I hear in discussions is quite vague and not very descriptive at all. People's tastes regarding which of the temperament types (or nerve types) they prefer seems to play a large role in which adjective they put in front of the word nerve when it comes to describing a dog. Again, I feel that we need much more detail in our discussions if we want to get a true picture of the dog in question.

Courage

The word courage implies a willingness to face and withstand something that is recognized as potentially dangerous or harmful. I have to agree with Dr. F. Brunner by saying that this is a much too anthropomorphized description to be used when discussing dogs. Another description of courage is also a fearlessness. That comes much closer to being useful in our discussion about dogs. We should probably go even a bit further in the dissection of the word to ensure that misinterpretations are few. Not showing flight behavior is definitely a part of what we are trying to say when we call a dog courageous. I guess a high stimulus threshold for worry causing stimuli may cause the appearance of courage as well. It is a very difficult term to define as a useful dog training term. I would change the term altogether and try to express what we are trying to say with the word courage by giving a quantitative analysis of a dog's tendency to show avoidance behavior (this may range from none to outright flight). I am again not alone with this idea. My friend Thomas Baumann has developed a similar rating system for his police dog character test. Naturally there are more parts to what we are trying to say with the word courage, but those have more to do with the level of prey drive, and the particular active responses a dog shows in situations. Because when we talk about courage, we expect the dog to do something, and not just not show fear, or not run away. These responses depend more on the active behaviors dogs display during work. More on those later.

Boldness

I feel I have to mention the term boldness after discussing courage. Too often they are used as the same word. When people say courage there is the implication that some struggle or confrontation took place to test this trait. We get the image that the dog did something "in the

face of danger." Boldness is a different trait. I believe that it relates to a dog's sense of exploration and curiosity. Many dogs in breeds that are simply incapable of doing protection work still display boldness. To borrow from "Star Trek" for a moment, "To boldly go where no one has gone before" sums the trait up fairly well. To describe a dog as bold he has to be inquisitive and be willing to check things out. He may even be unsure about objects and other things in his environment, but the inner desire to see what it is and check it out makes a dog bold. We can use this term without touching on the subject of how a dog may deal with confrontations. It implies a certain level of confidence, but more so it describes an active sense of curiosity that allows him to explore his environment in a bold fashion and approach anything that peaks his interest.

Energy and Hyperactivity

These terms are kind of my own. I want to briefly describe what I mean by them. During the discussion of nerve I talked about activity levels in dogs. While during that discussion we were talking about specific arousal to stimuli, I'd like to mention here that excitement and arousal can also occur non-specifically. High-energy and hyper dogs often appear as if they have a lot of drive. In those cases I then ask myself, what drive is it? Upon closer examination I find that the dog's energy is not directed at anything specific. The worst case scenario is a dog who is just hyper. Hyperness is the worst kind of undirected energy imaginable. At seminars I refer to these dogs as having Attention Deficit Disorder, because that is truly how they act. Hyperactive and completely unfocused. With careful manipulation we can harness this undirected energy and give it direction by channeling it into a drive. This will not happen on its own, it is something we have to do as trainers. It is important to recognize that these traits exist. They have to be understood and put into perspective in order to design correct training methodology for a particular dog.

Conclusion

This brings me to the conclusion of part one of this article. It was meant to deal with certain general concepts that are important in the assessment process of reading a dog. In part two I will deal with the actual responses to stimuli and drives as the working part of the assessment process. I hope you join me for that one as well.