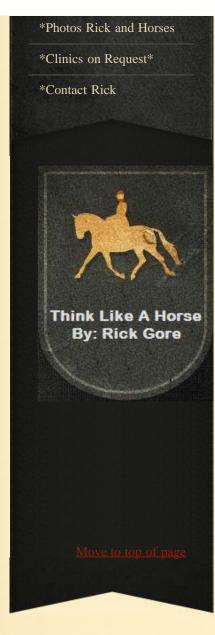




<u>Opposition Reflex - Instinct Behavior - Herd Actions - The Copying Effect - Pressure</u>

What is **Opposition Reflex?** It may sound like horses are stubborn or may have an instinct to resist training from humans. Opposition infers or can be **confused** as resistance, conflict, opponent or disagreement. Therefore, someone using or hearing this term may believe this misconception about horses. Reflex is an impulse, reaction or spontaneous effect. This can sometime be confused or seen as a horse being spooky, flighty, unsafe or dangerous or an unwilling partner.

The opposition Reflex was first discovered as the Freedom Reflex by the 1904 Nobel Prize winner, Ivan P. Pavlov (1849-1936). Opposition Reflex is a survival instinct that is passed on from birth as an instinct. This is also called Thigmotaxis \Thig`mo*tax"is - This is the response of an organism to physical contact when touched by a solid or fluid substance; it will either be positive or negative Thigmotaxis. When the movement is away from the touching body, it is negative Thigmotaxis. When the movement is towards the touching body, it is positive Thigmotaxis. An example of positive Thigmotaxis is the wall-hugging behavior in mice. This is also seen in horses running in a fenced area. Watch a horse run along a fence line, they will follow the fence, they will run the fence line into a corner and if no corner is there, they will continue to follow the fence. This fence hugging behavior is positive Thigmotaxis. This is why an experienced and knowledgeable horseman will never stand on the fence line, especially when a horse is running in a panic, fear or flight mode. However, many ignorant horse people will tell people to stand by the fence when a horse goes into a panic or stampede run. Positive Thigmotaxis moves toward the contact much like a foal stays or is drawn to its mom and wants to maintain contact with the mother to secure basic survival needs. Negative Thigmotaxis move away from the contact much like a horse tries to pull or retreat when first squirted with a hose and water. Water is pressure, touching and stimulus, so until a horse is taught to accept it or ignore it, it will instinctually try and oppose the pressure.



Earthworms have a high degree of positive Thigmotaxis since they borrow in the ground as the move and live. Knowing and understanding that opposition reflex is a <u>reflexive action</u> and is **involuntary** will help people to understand a horse better and not blame or label the horse. Seeing the world through a horse's eyes is critical to understanding problems and issues. In humans, you can see a reflex action when you touch something hot. You will pull away immediately without thinking about and if someone tried to hold your hand in fire, you would pull away even harder and fight with all your might. Pain may be the primary motivator to pull back, but survival and reflex is also in play.

Although opposition reflex is not a learned response, I think it is reinforced by the behavior of the herd or by other interactions with predators, humans or other horses. Opposition reflex is a self-defense method provided and ingrained by Mother Nature. Confusion, frustration, anger, fear, pain, pressure and humans can trigger the reflex. Opposition reflex can trigger things from the horse like rearing, biting, pulling, tail swishing, bucking, and running off, striking and other behaviors. If you do not understand or know about opposition reflex, then you will confuse some horse behavior as bad, mean, disrespectful and other crazy labels that people want to pin on horses. Trust and understanding will help prevent this reflex from surfacing in a horse. It you don't understand this concept you can't understand why the horse does what it does.

Reminder: Release teaches horses. Discomfort motivates a horse to seek comfort. Horse's avoid pressure (discomfort) and seek comfort (release or lack of pressure). When horses get pressure, they try different things to get release. If you give release during the wrong behavior, you teach the horse his last behavior when the pressure stopped was the right answer. This is a very hard concept for humans to grasp and not many people understanding this.

Horses by nature and instinct need to challenge higher horses, even if a number two horse knows he is number two, he will always, at some point, try to challenge the number one horse. This is done to ensure only the strong and able is in charge. Knowing this will stop all this taking things like this personally. As long as a horse is not directing his aggressive or playful behavior to you, you need to ignore and let a horse be a horse. Too often no matter what a horse does, people take it personally or someone tells them that it is disrespectful, so they chase, punish, correct or harass the horse. This only confuses the horse and shows you are not a good, fair, consistent and understanding leader. This is very common in the horse world. Understanding this and not falling into that trap will help you and your horse grows together. Do not look for a reason to show your horse how tough, strong and smart you are. Get involved when you need to, know and understand what is really going on and know what you are really communicating. If you do not know, how can you expect the horse know?

An example of opposition reflex that comes to mind is teaching a foal to lead. Since horses are born with an "opposition reflex", foals tend to pull back when we apply forward pressure. Either to hold, hug, handle or pull on a lead rope. That is commonly a confusing situation. An alternative when they resist forward pressure is to pull with rhythm, release and timing more to one side. Foals have less power to resist lateral pressure and are likely to take a step to the side and move, this can be rewarded with release of pressure. This movement will tell the horse it can move towards pressure to release it. Later this initial curve or sideway movement can be modified into straight and forward movement. This action, moving towards pressure, is against their inborn instincts, so it is new and it must be given time to sink in so the horse can learn it and trust it.

Another concept or theory associated with opposition reflex is **Reciprocal inhibition**, it was adopted by Wolpe in 1958. <u>Reciprocal inhibition</u> neural systems refers to the tendency of elicited muscle actions to inhibit the actions of an <u>opposite type</u>. The elicitation of muscle reflexes involves three possible actions: flexion, extension, or a tonic combination of the two. Stimulating a group of muscles to flex causes the simultaneous inhibition of opposing extensor muscles. The concept of reciprocal inhibition described the effect of **counter conditioning and the process of systematic desensitization**. Wolpe argued that relaxation/appetite and anxiety/fear are mutually exclusive affects that regulate each other through a mechanism of reciprocal inhibition – horses cannot simultaneously feel anxious while relaxed; a horse can't

feel fearful while eating. The third characteristic of reciprocal inhibition (flexor/extensor tonic equilibrium) is analogous to situations in which opposing emotional alternatives are held in a stasis of conflict between the available options. Can a horse trust you if he is scared? Can a horse learn if he is in pain? Can a horse feel comfort if he is restrained or trapped?

When you try to force a horse, especially with pain, it will resist. It is not an intentional act or reasoned out by the horse. It is a reflex action. If you push on a horse, the horse will push or lean into you, if you pull, it will pull away, if you restrain it, it will try to get free. Many confuse this as being mean, stubborn, crazy, retarded or stupid. It is DNA, instincts and reflex action.

When you pull on a horse, normally continuous pulling (steady pressure), you stimulate **The Opposition Reflex.** When you try and force a horse, you create resistance (commonly seen in trailer loading). By doing these actions, you are communicating the very opposite of what you really want the horse to do. The more you do this, the more the horse will learn to oppose you in your attempts and in other things. Technically, you are teaching a horse to fight against you. Every time you teach this you also teach the horse you do not understand him, you are not a willing or cooperative partner. You also show the horse that you are not a strong leader and that the horse should not and does not have to listen to you. Knowing this, understanding this will help you NOT make these costly mistakes and will help you have a better relationship with your horse. Remember - Horses fight pressure to stay alive - DNA tells them when trapped you must fight, flee and pull against the pressure to live.

This is very hard for Humans to learn, remember, when you pull back or jerk on a horse it will make the horse instinctively react, increasing or reinforcing the opposition reflex. The more you pull, the more the horse pulls. The more the horse reacts the more you try and "show him who is boss". However, if you understand this concept, you can change the horse's behavior by changing your behavior. A slight pull or pressure with timing and release can communicate to the horse and *encourage the correct response*. Not forcing the horse will prevent the opposition reflex and will help the horse to learn to control this natural reflex.

Another thing that comes into play with horses is "the copying effect." Herding animals like elephants, horses and other groups, are prone to copying the actions they see within the herd hierarchy. That means a horse will naturally copy our actions, emotions and attitudes. Horses learn what they see. This is why the old saying came to be, "a horse is a mirror of you". Horses can learn fear, trust, confusion, body language, cues and other things that people may not know they are teaching. Which is why may people say a horse knows if you are scared or fearful. Horses can also be taught to ignore or work around their instincts and control or override their opposition reflex.

People and the human mind tend to perceive patterns when there is not. So people who have owned horses for years will see a pattern in a horse or horses and will justify the pattern because of bloodlines, color, swirls, breed or other perceived causes. This is what people do when they blame horses for being stupid or not listening or being stubborn. This belief comes from a lack of understanding and need to justify or rationalize things they don't understand. Many people believed the world was flat and in fact people were considered dangerous if they mentioned the world was round. On my horse history page I talk about a horseman that was killed and burned for working his horse without pain or fear, since the people feared his strange techniques.

Species associated with stampede behavior include cattle, elephants, Wildebeest, wild horses and humans.

Herds have this reflex when they get fearful or panic. The move and run together from fear of being left behind or alone. There is safety in numbers. This is sometime called herd mentality or in humans called mob mentality. Yell "Fire" in a crowded dark theater, watch the herd and stampede behavior. Watch the survival instincts kick in. Add a little smoke and yelling and watch the panic increase. Notice the positive Thigmotaxis towards the exits. Most humans seeing this would not see a problem. No one would be saying stupid spooky humans. Most would see this as normal, reasonable and good survival behavior. Yet let a horse, a prey animal do this same behavior and suddenly humans want to make it bad, strange or not normal. Perception is reality. If you see it as stupid, you will send those feelings to your horse.

Scientists have a theory that for every wrong response, action or result, that each wrong result indicates progress. Every time you fail, you have found another way that does not work. So you are one step closer to finding the right answer, since you now know one more way that does not. If you pay attention and listen to your horse, they will tell you if something is working or if it is not working. This is why you must learn to ignore what you know or think you know, and modify or change what you are doing to get a different result. If you want your horse to change, YOU must first change.

I think humans have opposition reflex, reactions and actions. Try and grab a woman's purse and watch her clutch it and pull back, she will not just let it go or give it to you. Is this a reflex or learned behavior? Try to push your way through a crowded line or area, notice how the people will push back and lean into you and not just move and make a path. Throw someone in a pool that cannot swim and watch their opposition reflex NOT to sink kick in. Does that make humans stupid, mean or stubborn, I think so (*smiles). Humans get defensive, they tighten and get stiff when resisting. We get aggressive; it is part of our primal instinct as a predator, when in fear, frustrated or mad. You will see this in many horse people that don't understand what they are doing. They get mad or scared and jerk the reins or lead rope or hit or strike the horse. They tighten up their legs, arms, hands and body. They fight with a horse. This emotional response, which is hard to control or prevent, works in opposition to the horse's instincts. So the human reacts like a human and the horse reacts like a horse and somehow the horse is always blamed. Horses make us better, they make us think, they make us control our instincts, and they show us our flaws and weaknesses. Some people learn from this, grow and become better. Others blame the horse, mistreat the horse and take it out on the horse. Therefore, the horse learns to mistrust and fear the human and that forces the horse to go back to its survival instincts, which is exactly where you don't want it to go. Too many times I see people cause things they are tying to prevent since they don't understand and the horse always pays.

Recognizing things that cause this reflex action will help you control your actions so you can prevent this reflex. Pulling on a horse to trailer load, pulling on a new born horse trying to lead it, pulling on the bit when a horse is scared, kicking a horse when it won't move, pushing on a horse when they is standing on your foot, all these things promote this reflex action. Steady, consistent, controlled, rhythmic and progressive pressure helps teach a horse and helps a horse to understand what you want. Hard, fast, aggressive, pain, reactive, ambushing pressure causes this reflex, which to the unknowing, appears that the horse is resisting, fighting or being stubborn. All wrong, but for most humans, being wrong means blaming the horse.

Moving through, running through, jumping past, fast strong reactions is how Mother Nature tells a horse to break away from predator to survive. Without this reflex the horse would just give up and not fight to get free, they would become easy prey, their numbers would decrease, and their species would not last long. It is unfortunate that people cannot or do not see this. Horses have survived for centuries using their fear and Opposition Reflex. They have been doing the opposite of what Predators want them to do for a very long time and it has served them well. Most think that just because a horse is **so called "domesticated"**, that all other instincts suddenly and magically disappear. This is why most people (85%) that get into horses tend to get out of horses within the first year. This can be contributed to lots of things like fear, injury, confusion, frustration and **all of these are commonly caused by Lack of Understanding of the horse.**

When a predator wants its prey to go left, the prey's reflex tells it to go right - natural opposition, survival, instincts and opposition reflex helps the horse survive. The prey is not bad or wrong; it probably is not even thinking about it, it is DNA taking over. It is Mother Nature's way of saving the prey from the predator. After people have these basic understandings they can begin to see that **there are no bad horses or mean horses or stubborn horses**, there is only a misunderstanding and disconnect between prey animals and predators. In the world of horsemanship - there are no absolute rules only guiding ideas and principles. Every question in horsemanship can be answered with "It depends". And that normally depends on how much understanding the human has?

Horses tend to seek out leaders. They will lead in the absence of a leader to survive, but instincts tell them to follow the strong. Horses tend to interact in many ways, such as rhythmic pressure, steady pressure, rhythmic motion, fluid and flowing movements. This is what we call

feel and timing. For a horse to accept you, you must learn to control and use these forces in harmony. This calm behavior by you will give your horse comfort and security. If you watch flocks of birds or schools of fish move, they seem to flow, move, bend and become one. Horses do this as well, but it is easiest to see when the herd is in flight or fear mode. Horses will gather up, get tight, become one group as if they feel each other's energy and can predict each other's movements. This is instinctual behavior for a horse, much like fish and birds, does not have to be taught. Humans must work hard to learn this and then must practice it and use it often, in order to become skillful. Over time, it will become subconscious behavior for the human and it will not have to be thought about before it is done. (See my article on The Horse Learning Model This is when you will see good horsemanship. This is when horses become comfortable with you. Other humans may call you a horse whisperer or see some magical secret you possess. This will not happen over-night and if it is not used continuously, it will fade away and the horse will know.

Feel is something that humans have to learn. We may know how to feel like predators but we don't know how to feel like prey. Our aggressive predator instincts make us want to grab, jerk and make fast sudden hand movements. We are a dominant species so we dominate. Asking gentle is not in our DNA, especially men. Learning to be soft, smooth, rhythmic, steady increasing pressure works much better with horses. Most humans want to grab, squeeze or hold tight to a lead rope, this creates hard pressure and can make the opposition reflex activate. Whereas a soft, light hold where the rope can softly slide in your hand and where it does not snap or jerk the horse, will teach the horse to give or not fear the pressure and will NOT activate the opposition reflex. The same is true with the reins. Tight non-give grip (what most do when they are scared, insecure, lack confidence or fearful) causes a horse to pull, resist and fight. Whereas a light, soft, smooth hold on the reins allows for pressure to be controlled, released and applied rhythmically will better communicate with the horse and will NOT activate the opposition reflex. Soft hands make soft horses and hard hands make hard horses. Many think this only applies to reins, it applies to all handling of horses, leading, lunging, picking the feet, rubbing the face, handling the ears, rubbing the tail, if your hands are used around your horse they should be soft, smooth and flexible, NOT hard, rough and stiff. And this applies to all body parts as well, legs, arms, seat, etc.

Rhythmic pressure seems to get a horse to move away whereas steady pressure tends to cause a horse to go against it. So by learning to use rhythmic pressure, both physical and non-physical, natural opposition reflex is diminished. Understanding pressure and when to release is critical to getting the proper answer or response from your horse. Of course, timing comes into play here as well. When teaching a horse to yield to pressure, the pressure must be continuous until the horse yields. If it is not the horse learns to ignore, push, resist, or react aggressively to pressure. It is really easy to teach a horse to be aggressive to pressure. To do this you simply STOP pressure when the horse is aggressive, rears or kicks. Then the horse learns that is the correct response to pressure or the correct response to get relief from pressure. This is so common and probably one of the biggest mysteries to most horse owners. Without knowledge or understanding of a horse's reflexes, instincts and survival skills, most people teach this dangerous lesson over and over. And when the horse learns this lesson well, he is sold or auctioned for being dangerous. People must know that pressure CANNOT be stopped during wrong or dangerous responses from the horse. The problem here is many people are scared of horses and they TRY things and the horse does have opposition reflex action and instinctual behaviors, the people get scared or fearful and they stop pressure, thus teaching the horse to be dangerous and to do dangerous things in order to get release of pressure.

Fear can be created with bad timing or bad rhythm. Understanding fear will help you not make this mistake. You read my Horse and Rider Fear Page by clicking here.

Horses naturally push into steady pressure. Moving against it or barging through it is how they escape predators in the wild. Mother Nature tells them to break loose of a predator's hold or crash through any obstacle that is in the way of their escape. So pushing into steady pressure has become part of their programming for survival.

There is a system that works with every horse and this understanding is part of that system.

However the predator must learn what is natural to prey animals because reading the intention of the predator is built into the DNA of the prey animal. There is no way to hide your emotions or thoughts. Horsemanship is a journey of self discovery, change, growth and understanding of one of the greatest creatures on the planet.

Although this topic may sound complex and seem advanced, it is just one of the many topics that go into good horsemanship. Never stop learning and never think you have it all figured out. I hope this sheds a small amount of light into the vast darkness of horsemanship. Remember, when you get better, your horse gets better. It is never the horse's fault. And a horse is only a reflection of you.

Happy trails,

Rick Gore

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The horse you get off of is not the same horse you got on; it is your job to make sure the change is for the better. -- Feeling down, saddle up. -- Good horses make short miles

It is never the Horse's fault! -- Rick Gore Horsemanship