

Conformation or Posture?

A new perspective.

by Maureen Rogers



Conditions thought to be conformation faults may not be hereditary at all, but caused by the way a horse has learned to hold itself, giving new hope for correction, better performance and well-being.



Maureen Rogers photograph

Horses come in many different shapes, sizes and colors; some are stocky, some are short, some are long necked or high withered, round or lean. Like humans, there is also infinite variety among individual qualities, markings, body type(s) and characteristics. Part of the animal's inherited genetics, to some degree these differences can be categorised by 'breed'. Horse breeds vary according to where they originated and breed characteristics have been somewhat altered by humans deliberately breeding dominant genes to achieve or enhance a desired trait.

Over time, each breed has been developed according to a standard of excellence for 'type' that includes correct conformation of bone and muscle structure and body proportions representing the requirement of the breed to perform specific tasks. These standards are ideals and in reality there can be quite broad variations even among individuals of the same breed.

Usually the most significant factor of interest to breeders and judges of breeds (in competition) is 'conformation', or the manner in which an animal is formed according to the desired breed requirements or job at hand.

It's a word all horse enthusiasts are familiar with, and certain traits have an undesirable connotation. Characteristics such as 'cow hocked', 'sickle hocked', 'long backed', 'pigeon toed', 'roach backed' and 'flat heeled' are all considered conformational faults. But are they necessarily to do with conformation, or can there be underlying influences that present the appearance of the horse having cow hocks, sickle hocks, or whatever? From personal experience over ten years of teaching and private consultations, it is evident that confusion exists throughout the equine world on what the term 'conformation' actually covers.

In short, conformation can be seen in the size, shape, length and bone density of the cranium (skull), and in the length and

shape of the skeletal structure of the horse, e.g. the differences between a Shire horse, an Arabian and a Thoroughbred. Other conformational issues include the shape and size of ears and nostrils, the size and position of the eyes, the characteristics of mane, forelock and tail, the wither height, and length of leg.

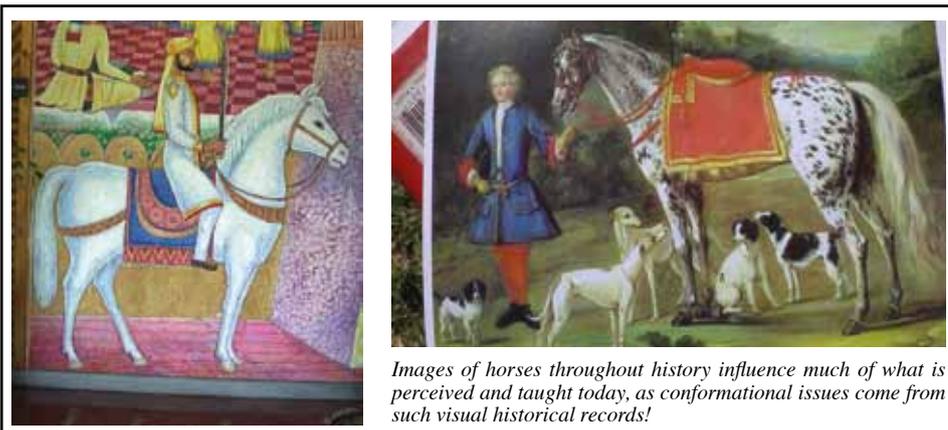
CONFORMATION OR POSTURE

When equine conformation is discussed, it often includes postural issues. So in order to identify the difference, the question - what defines posture and what defines conformation? - has to be asked. In short, posture is how the horse organises itself, or stands, whereas conformation is characteristics derived from breeding: like hair color, eye set, and the density, length and size of the bone/skeletal structure. In short, posture can change, conformation cannot!

The posture of the foal is generally very balanced when born, however through the horse's life it changes and is affected by injury/trauma, surgeries, hoof imbalances, training, ill-fitting tack or gear, and pressure. The horse learns to compensate for these external forces being exerted on its body by altering its posture and/or natural organisation; in other words many times the horse is trying to get away from pain or discomfort. From this constant compensation arise patterns in both posture and movement (biomechanics), different muscle groups become contracted or tightened, and scaring can occur, which then affects, misaligns and pulls on the bone/skeletal structure and creates stress on the joints and nerves throughout the body. These imbalances in posture have an effect on hoof development/growth, gaits and biomechanics - thereby affecting the equine's overall performance. Mouth problems, from tight muscles patterns or dental issues, are also a huge factor in creating postural defects, therefore correct regular dentistry is important to keep the horse's mouth in balance.

When looked at more closely then, if a horse's colour, breed, eye shape, or bone-size, density or length is not the subject of discussion, then most traits such as 'cow hocked', 'pigeon toed' etc are not actually due to conformation but to posture. And many times this poor posture is due to compensation for a body that is not in balance. This is significant, because horses with 'undesirable' traits such as cow hocks, which are thought to be conformation, and therefore unchangeable, may well be postural changes due to imbalance, and are therefore subject to change, i.e. improvement.

To clarify the terms: conformation is about the horse's breeding. Posture is how the horse organises itself, or the way it stands and biomechanics means how the horse carries itself in movement. It



Images of horses throughout history influence much of what is perceived and taught today, as conformational issues come from such visual historical records!

is also important here to identify that the roundness or fullness of the musculing of a horse is not conformation but conditioning, or muscle tone.

The idea that traits considered as conformation may be false, or alterable, will surprise most people, challenging what each has been taught by horse trainers, judges, pony clubs, industry professionals and books. Knowing how to identify the difference between conformation and posture can be vital, as with a little insight, knowledge and awareness, one can take the action needed to bring a horse's body back into balance. This may not only improve the appearance of its conformation, but also make a significant difference to its performance ability, comfort and long-term health.

HISTORY'S ROLE

For centuries, painters, artists, anatomists, and more recently photographers, visually documented recordings of the horse, which through time and for generations have been referred to and relied on as the reference for what is 'normal'. This has played a major role in influencing how the equine industry perceives present day conformational issues in the horse. A significant point that needs to be realised is that the vast majority of horses in art had imbalanced postures! Most of what is now perceived as conformational issues that have become text-book normal to the industry, trainers, owners, riders and experts, are actually, to a vast degree, postural!

While aspects of the horse, such as head size, varied in paintings from era to era, the posture stays true and has very minimally been influenced by the way they were painted.

People have become so accustomed to seeing the ramifications of imbalance in horses (cow hocks, ewe necks, etc) that these are perceived as characteristics of some horses' natural conformation, and therefore unchangeable.

Instead of accepting that a horse's characteristics are not what are generally accepted as conformationally correct, or is 'poorly bred', opening the mind to the



Maureen Rogers photographs

Above Top: This horse shows several "what are thought to be conformation issues" - high shoulder angle, long necked, sickle hocked, flat heeled in hind feet and long backed. His postural position is very similar to the horses in the paintings and photos from history. He had difficulty standing for the farrier as he was very weak in the hind end.

Below: Same horse a year later after being treated with craniosacral therapy. He is softer in the stifles, rounder in the hind quarter, hooves on the hind end have heel growth, change in shoulder angle, neck and top line are shorter. The changes in his 'posture' have affected his biomechanics and his hooves have grown differently. This shows that many of the previous issues thought to be conformation are not, and can change!

possibility that such characteristics may be postural and conditioning means that change is possible. This opens up the possibility of a better outcome for both horse and owner!

Once one can clearly identify the difference between conformation and body imbalances/posture, action can be taken to correct and restore the horse's natural balance. This will relieve its joints of stress, keep the skeletal and muscular system in optimum health, encourage

healthy hoof growth and restore correct posture and performance

While features such as a horse's skull/cranium shape, and the length, density and thickness of bone cannot be changed, other elements that influence body structure, can, and the main clue - postural stance - is the most obvious.

Throwing off old ideas that allow no positive outcome - "there's nothing you can do", "he was born like that", "he's flat in work" or "he's lazy" - opens new ways of seeing the horse, and gives hope for improvement to what were thought of as serious faults that can cause a horse discomfort, restrict its capabilities and ultimately shorten its life.

BODY OUT OF BALANCE

Once they know what to look for, it will surprise most horse owners to learn that 98 percent of horses are standing, overloading and using their forehead to pull themselves most of the time, as per the 'postural' pattern the drawings, paintings and photographs from history are showing.

When their stance is observed, the majority of equines show this pattern - front legs either behind or underneath the shoulder, the head and neck stuck out forward, the hind end in any posture out behind. Due to this, industry facts show that 60% of the horse's weight is on the forehead, which is correct for the imbalanced horse. When the horse stands overloaded on the forehead this is being asked to do the job of the hind end, attributing and resulting in damage to ligaments such as the suspensory, and the lamina of the hoof. So, for many horse owners, seeing their horses stand, and move, like this seems normal. This pattern starts to occur in most horses at a very young age.

There are many attributing factors that influence an equine's posture early in its life and start the process of creating postural imbalances. One of these could be complications at birth. A simple and common one is pulling back in early training - which can be attributed to many initial problems, including damaged tissue and misalignment of the poll vertebrae. These patterns eventually influence how a horse moves, chews (mastication) and how wearing patterns occur with the teeth. Many of these influences are common, human-associated practices such as ill-fitting tack, incorrect hoof trimming, training methods, dentistry practices and, later trauma and injury due to accidents, becoming cast in a stall, hitting a cross country jump, running into a fence post, head injuries, being hung up on fences, gelding, etc - each only exacerbating the underlying early disorganisation. Once the postural imbalance pattern occurs to upset the natural balance of the body (posture), the horse starts to compensate and this

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Conformation and Posture cont...

progresses until in some instances it may become lame, headshakes, refuses jumps or manifests as a behavioural issue.

When in an imbalanced state horses will try to make themselves comfortable, any way possible, overloading on the forehead, by putting their hind legs out behind (cow hocked), rotating their legs and influencing how they weight bear, even turning their heads to the opposite side on a circle or carrying their head either in front of the 'normal' position or to the side - all to protect themselves from the pain or discomfort they are experiencing. Essentially, the horse re-creates itself to re-establish balance or a convenient balance, however the compensations it has to adopt are unnatural and will ultimately reflect overall muscle/skeletal alignment, its stance, movement or ability to perform. Any injury or trauma will continue to exacerbate the compensation patterns.

From these postural imbalances adopted by the horse, owners and health practitioners will see joint deterioration - commonly in the stifle and hock - tears in tendons and ligaments, stress to the skeletal system, uneven growth of hooves, and changes to biomechanics and performance. The horse becomes less efficient, and eventually these postural changes will be incorrectly deemed as conformational issues. In an attempt to bring the horse back into balance different training methods, and aids such as side-reins, gags or draw-reins, may then be implemented - which only create more problems. Learning to identify the different causes enables action that can then be taken to make changes.

EQUINE POSTURE AND THE FEET

The horse's hoof responds and grows according to body posture, how its weight is loaded or not and distributed, and concussion or lack of concussion, not its conformation, which plays a minimal role in hoof growth or development. However, paying attention to how the hoof grows is invaluable in learning about the biomechanical movement and postural organisation of that horse. Bringing the horse's body back into balance corrects weight loading and biomechanics, and plays a vital role in healthy, even hoof growth. In many cases the treatment of posture is overlooked while the feet are focused on and treated, which creates a limit in postural changes and biomechanics. As the posture changes the horse moves differently, therefore the hoof will grow differently! It is important that one works with a properly trained farrier or barefoot trimmer to optimise the changes in the horse's body.

IDENTIFYING DIFFERENCES

In learning to identify postural imbalances it is important to allow the horse to stand how it chooses in its preferred or natural

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This young foal shows healthy posture - a very balanced weight from the front to hind end with good angle of shoulder and joints.



Maureen Rogers photograph

position to give the observer information. Commonly, 'squaring up the horse' or making it stand square will only hide tell tale, disorganised patterns. Observing how the horse rests can be very informative: if it stands out of balance, constantly reorganises its posture, habitually drops a hip, or does not drop a hip at all, or stands with a front leg forward. These are some of the indicators that its posture is out of balance.

If a horse has difficulty putting weight on its hind legs e.g. standing for the farrier the leg buckles out, the stifle locks - this may be due to imbalances or weakness in its hind end attributing to postural imbalances. Horses have a mechanism designed to lock their joints, enabling them to sleep standing up, so this inability indicates the skeletal system is out of balance and the locking mechanism is not working. A simple exercise to check for hind end imbalances and weakness can be performed on the diagonals of a horse by lifting the front leg and observing how the horse stands on the diagonal hind leg. If it does not put weight through the leg or collapses, it needs therapy! - especially to stop further damage from occurring and to bring back stability.

With horses exhibiting any of these signs, the tendency of many is to use aids such as draw-reins or side-reins, which will only exacerbate an already existent imbalance. The right care is needed to correct the posture and biomechanics, and prevent further damage or deterioration to the horse's musculoskeletal system.

When checking to identify problems, many professionals will trot a horse; however trotting hides imbalances in biomechanics, so walking is the best pace.

UNDERLYING ISSUES

Conditioning a horse is important for any equine athlete, but the belief is held by many horse owners and riders that if they strengthen the horse's muscles,

an underlying issue will go away. This is not true; the weakness will still exist underneath and cause ongoing and increasing problems as time progresses. It is the muscle tightness that puts pressure on joints and pulls the skeletal structure out of organisation (balance), thus the posture becomes distorted. When tightened soft tissue (muscle and fascia) is released, the physical position of bones can change. The posture then changes, the horse becomes more comfortable and its posture continues to improve the movement and biomechanics of the horse.

A healthy body and good movement does occur when each part of the horse is moving independently, with softness and suppleness. This is not possible when there is existing, acute or chronic tightness. By learning to identify the difference between posture and conformation, horse owners and professionals can take action to restore the horse's balance and posture, and at the same time improve its health, performance capabilities and quality of life.

About The Author Maureen Rogers



Giles Penfound Photographer

A pioneer in the field of equine craniosacral work and the founder of the Equine CranioSacral Workshops, Maureen is Internationally renowned for her craniosacral work and biomechanics in the performance horse.. She has recently released her DVD 'Posture versus Conformation Breaking the Myths'.

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Maureen will be a presenter at **Equitana Melbourne**, from the 18th to the 21st Nov 2010, at the Melbourne Showgrounds. www.equitana.com.au