

"We have to grasp the chance and achieve stillness on the horse"

Ulrike Amler interviewed veterinarian and author Dr. med. vet. Gerd Heuschmann



Dr.med.vet. Gerd Heuschmann

Dr. Heuschmann, in regards to a seminar with FEIF judges and officials in Wurzburg, you wrote that the IPZV has to come to grips with the fact - and I am paraphrasing - that most of its top horses are leg movers. You had the opportunity this year to observe Icelandic horses and their riders, for example

at the world championships in Austria. In your opinion, has there been any change this past year?

Regarding the quality of what I saw, I don't think that there has been any change. My own insight, perspective and understanding have changed a little bit though. To mention it up front, I believe that the Icelandic horse is worked in a slightly different balance than a warmblood, with regards to the FN manuals. By now I have come to the conclusion that you cannot school an Icelandic horse step by step

according to the military statute no 12 (H.Dv.12 – note: military statutes for mounted soldiers). These horses are balanced differently; however, the basic principles of relaxation and contentment in the horse are just as valid here. What I mean by this is that the traditions and history for all utility and work horses and horses bred for those purposes, mandate a certain different balance.

Could you please clarify that a bit more?

I will describe this from the perspective I am coming from: when we examine well ridden western or Iberian or gaited horses I noticed that they look different and move in a different balance. I then tried to find out what the reason for this might be. We know that a well ridden warmblood ideally moves with rhythmic cadence, supple contact with a soft mouth, light at the poll and with a swinging back. Such a horse moves with gentle positive tension along its

topline. This positive tension should not be confused with tenseness. According to Udo Buerger, this positive tension is connected to the jaw muscle; you communicate via the rein contact with a sensitive hand. The horse moves to the hand. Often people think that they should have kilograms in their hands, when in fact it should just be a few grams. Biomechanically we know that a few grams in the rider's hand translate to ten times that at the poll. That means that if I have 200 grams in my hand during an extended trot and at the piaffe maybe only the weight of the reins, I will have 2 kilogram at the topline during the extended trot and maybe 100 grams during the piaffe. The weight I have in my hands translates to ten times that at the top line. This can be measured and calculated.



We can therefore conclude that the horse moves with a positive tension through its body. Its back swings with suppleness and rhythm, and its hind legs step dynamically under the body. This may be compared to the positive body tension a competition dancer sports during a performance.



You will also realise that this positive tension, whether it is in a dancer or a well moving warmblood during a perfectly ridden Grand Prix test, can only be maintained for a specific amount of time. Now look at a discipline where the rider gets on the horse in the morning, rides out to his herd of cattle and moves with the horse for the whole day, or an Icelandic rider who moves with his herd across uneven and mountainous terrain all



day long. You will of course conclude that these horses cannot possibly maintain this positive tension for such a long time; not even if they tried.

Horses from old working breeds – such as Quarterhorses, Camargue - and Icelandic horses – find their natural balance in a way that allows relative long periods of movement under saddle.

Do you conclude from this insight that these horses need to develop different types of muscles, similar to differences in muscular structures between a sprinter and a long distance runner?



Utilitarian riding in Iceland: the sheep round-up – unthinkable without an agile, flexible and therefore rideable and willing horse.

That goes beyond my expertise, but I would say yes. I also believe that here, we will find the reason for the separation between campaign and school horses as discussed in H. Dv. 12. The cavalry horse was not able to hold this positive tension either for hours on end. The western horse, Iberian and the Icelandic horse are the breeding results of this utilitarian riding style; the work with herds of cattle and sheep. These horses were always ridden with slightly loose reins, and with

a slightly hollowed but supple back. The rider really could not afford to sit on a stiff backed horse. The back is sagging slightly but remains very mobile. This is the point. A warmblood for example swings through in a rhythmically supple and quiet fashion. An Icelandic horse moves its small feet with a high frequency. It becomes clear that this contradicts somewhat the slower dynamically swinging motion. In tölt the horse has to make these fast short movements.

Biomechanically speaking, where do we find the origins of tölt?

I met a colleague in Sweden who works a lot with Icelandic horses: she feels that the movement originates in the musculature beneath the long back muscle, the autochthonous muscle system. This is a hypothesis, derived from observation. Horses in bull fights have to also be highly agile; they cannot run in front of a bull, well raised, slowly with a rhythmically swinging back. They would end up as dog food. They have to be fast and agile and that requires a completely different balance. So far I have not received any feedback on this from official sources (note: FEIF and IPZV) because they obviously never thought about this at all.

Could it be possible that so far nobody has really given any thought to the biomechanics of these work horses that all have a common genetic background, or started any kind of research into this issue?

That is very much the case and it goes much deeper. In these disciplines there are no riding manuals in the traditional sense, either. There is no riding school system regarding the Spanish riders, the western scene or gaited horse riders. There have been a few attempts to write down a few smart thoughts since the 1870s but that is as far as it goes.

There are no written riding instructions as such, but does this not go back to the basics of Horsemanship? After all, these utilitarian riding disciplines all depended on the reliability and functionality of their horses?

That is correct. But even in western circles, this idea of Horsemanship is quite young. The first one to publicize anything related to that was Tom Dorrance in the 70s. We refer back to statements by Antoine de Pluvinel in the 17th century or de la Guérinière in the 18th century or Herr von Holleuffer in 1896. We have no written traditions in these utilitarian riding disciplines. I was in Lisbon for a biomechanical congress at the university and we discussed the same issue. One of the professors confirmed that there was no understanding of dressage either; the knowledge of this utilitarian riding style was passed on directly from generation to generation.

So they compensated for ignorance with a feel for the horse. That is something that seems to have been lost today.

Very true. But I would not necessarily say that it was ignorance; these were traditions. Today the goals are different. Years ago, at the beginning of the 90s, when I was still with the FN, we had 3000 Icelandics here. Now we have 60 000. We have to get used to the fact that we can't just feed the H. Dv. 12 guidelines to people with Icelandics, Paso Peruanos, Quarterhorses or Lusitanos, without giving it some thought. We have to think outside the box because people are getting frustrated with this booklet. They have a hard time getting four gaited or five gaited horses or horses with flying pace to move with a swinging back. As it turns out, these horses are made for something entirely different. I realized that we have to approach the topic from a different angle.

I would like to discuss this point. We now have a scoring system for Icelandic horses that is based on sport competition guidelines. Is that fair to the horses if there is no riding school system or manual to ride them in a healthy way?

A few years ago I did a seminar for trainers of gaited horses, and when I asked whether we

might be able to agree on a smallest common denominator, i.e. to ride horses with supple backs, one of the trainers clearly answered 'no'. That's the crux of the problem. If you have a gaited horse you can ride it while its back is supple. Every athlete in this world has to have a supple back. It is the prerequisite for top efforts without ruining one's health. That is the same for human and animal alike.

Do you see alternatives to compensate for the lack of schooling materials when it comes to utilitarian riding styles?

My experiences during the last seminar in Baden-Württemberg brought me a new understanding. Not being an expert in Icelandic horses, I am always searching for new insights. My momentary level of knowledge can always be updated as I learn new things.

There is a group of Icelandic horse riders who ride with Bent Branderup. Bent Branderup is somebody who picked up the old traditions of the middle ages. The curb reins and the cavesson reins are gently curved. The horses are in this other balance. You can see it when the horses trot: no suspension, no élan in our eyes. Branderup says, of course they have élan, but the understanding is a different one. As you can see, not even the terms mean the same. This understanding of a more hollow back – emphasis on high agility – with fine reactions and suppleness based on different concepts - that seems to work. In my opinion this type of a definition of dressage works much better for gaited horses, definitely for Spanish horses, and also for western horses.

Icelandic horses are very varied when it comes to gait distribution. That is also a factor of conformation. Many riders are frustrated with the discrepancy between the clear four beat as a standard for everything, and beat faults that result from the inherent balance of a given horse.

You are talking about piggy pace here?

I am talking about horses with a strong genetic shift to the lateral, horses with little gait ability, horses that are very trotty or horses with a less than perfect gait distribution. To follow through with your statements, should we not leave them in their natural balance, i.e. we would let them be in these gait variants that are stigmatized as faulty in the Icelandic horse scene?

This is a **basic** principle of the classical riding style. We try to improve on what's there with fine aids, but we don't try to reverse it.

You are talking about not 'bending' the horse or to ride it in tenseness to accommodate the demand for clear beat tölt?

Tenseness is always wrong. In your sport you then use bell boots and weighted heel boots. I could see that during the seminars. Those are all attempts to influence the gait process. Maybe we should have competitions in a different fashion to accommodate the variety: this horse has this gait distribution, that one that, and we test each type according to its genetic makeup. We must not destroy the back for the tölt.

Top priority is the health of the horse and the harmony with the rider. Only if we put these two principles at the top of the list, will we still ride in 30 years. Because the members of SPCA organizations will say: you have cars and motorcycles. If you torture them, you don't need to sit on these wonderful horses. The world is just beginning to wake up and consider the animals' welfare. We cannot isolate ourselves from that. Thank God for that on the one hand, but it does bear the inherent danger that if we cannot regulate our own problems, somebody else will do it for us. If non-riders do it for us, we'll end up walking instead of riding.

After the star gazers of the past century, flexing and rollkur obviously made their entrance into our show and training stables; horses are often presented way too tight. We again hear that 'Icelandic horses are different'. FEIF president Iversen promotes an apparent 'greater flexibility in the neck vertebrae' than is the case in other horses.

That's not true at all!



The flexibility of the thoracic spine does not differ from breed to breed.

In your experience as a vet, do you see any indication that Icelandic horses have special anatomical traits that would justify these training methods?

Every horse can scratch its hip bone with its front teeth. Every horse has a highly flexible thoracic spine. Every horse has gliding joints in its thoracic spine. Every horse can take its

nose between the front legs to ward off a horse fly. Every horse can stretch its neck like a giraffe. Every healthy horse can do this. The problem is that the attachment point of the head and neck influences the back. Good riding is always defined via the back – and with that also via the neck and hocks. The back is always the central element. A good back swings, is supple and without tension. Sitting is easy on such a back and the rider can be completely relaxed, no matter whether it is a warmblood or an Icelandic horse. The problem with the Icelandic horses is the fact that it is still somewhat comfortable to sit on them even when they are tense. This is due to their breeding and similar to western horses. Look at warmbloods and how our top riders bounce around on them when they are tense. It's a horror to watch that.



A solidly tense tölter is not really eye candy either...

The concept of harmony is what's most important. When a warmblood swings in its back, such as von Holleuffer described it in 1896, the horse's back will take you along. Waldemar Seunig writes, "You can't help but sit well." This feeling is not that clear with the Icelandic horse, somewhat due to the high frequency motion. If it was as uncomfortable as a warmblood, riders would think

Rollkur takes away the horse's shine and dignity and this is very obvious in the discrepancy between the happily beaming foal on the ad posters and the helpless expression of the later 2011 world champion in T1.

about it more often. Still it is nonsense. The horse needs its neck in a natural position, softly rounded because of a relaxed neck not because the reins artificially created the position. That is the problem. Waldemar Seunig described this nicely in 1943. He says collection or moving in a frame and with elevation are not the goals in dressage training, but are the results of good schooling work. That means that all of that will happen if you work correctly. The horse in profile that is in a good frame is the result of good work, not the pre-requisite for good work.

Is this also a valid image for horses that show gait shifts as we understand them when it comes to Icelandic horses? I am talking about trotty, pacey or pace horses that are relaxed in their backs?

Exactly. Whenever the back begins to work in a supple and rhythmic manner and does not get tight, we have true connection and the movement flows through the body. Holleufer described this in 1896. This connectedness front to back is the result of a swinging back. It's not like some riding schools explain it: you fiddle in the front and then you end up with it somehow. The horse steps towards the hand. The horse only connects like that when the back swings. In this way of thinking we therefore need the rider to swing and be relaxed first. If you sit there with a tight back and then start to push you are basically lost when it comes to good riding.

It now occurs to me that we as riders have more of an obligation to get physically fit for this sport?

Of course you should not go overboard with this idea. For a while I overdid it with bicycle racing. In the end my thighs were so tight that I could not ride any longer. A rider has to be supple and flexible.



This horse also moves with light contact. The supple back allows the movement through the horse. The swinging tail is a very important clue for that.

There are suitable compensating disciplines such as Pilates or similar options.

Whatever, but humans have to move. This is in contradiction to our daily office life. I much prefer a sensitive, supple, a bit heavier person to a slender, highly trained bean pole who is as stiff as a board. On the top of my wish list is less the fully trained athlete, and more the sensitive and supple person. Anyway, the absolute weight is probably an issue that should be discussed regarding Icelandic horses. It is difficult to determine that. I know supple people who weigh 100 kg, and I would be happy to let them ride my warmblood. On the other hand, there are many long distance runner types, where you can see every muscle and tendon and who weigh 40 kg but they are so tight that I would refuse to let them ride my horse.

Your ideal would be the suppleness and flexibility we find in children?

What I am really talking about is mental suppleness. An endurance athlete who is so absolutely focused is just not a rider. A happy supple person who looks ahead, who can go with the flow, who is not overly ambitious, but just healthily so, who can give in once in a while; all those are valid points. We have to consider our riders' psychological makeup as well.

That sounds like a different approach. Could you go into some more details here?

As a closing thought, I have something really interesting: about two, three months ago I watched a documentary on TV. They studied what stimuli act on people these days.

For that purpose they attached EEG (note: electroencephalograph) electrodes to their heads, put them in a car and let them drive

for 400km during rush hour traffic; with a navigation instrument and a cell phone. They wanted to find out how many stimuli these people had to process and what consequences this might have for them. The results were amazing: a person during those 400 km had to process as many stimuli as a person a hundred years ago did during one year. There are people today who have even more stress, and that all day long. And then in the evenings they go to the barn and ride and all of the sudden they are supposed to be still, relaxed, sensitive, and able to wait. In theory they have to be the complete opposite of how they were all day and that from one second to the next. I think that is basically impossible. The psychological component of the rider plays a huge roll in my opinion. We still underestimate that. I think that is the main reason why everything is moving so dramatically in a negative direction in this sport.



Ambition, tightness, tenseness, cramp, fight – a route without alternative?

Uncontrolled ambition and lack of self control destroy the horse?

People do to the horse what others do to them. We live in a performance oriented society. Performance is valuable but not the person performing. It's the same with horses. It is only of value if it won the evaluation, won many ribbons and prize money. Nobody cares about the normal Freibergers, Haflingers, Icelandic horses that Mrs. Müller, Mr. Meier, Mr. Heuschmann deal with. They have to be top horses. Everybody wants that and if they don't have it they will create it. And if they can't create it directly they will do it mechanically. I think this is a sign of our times. We have to let riding become therapy for our times. We have to grasp the chance and achieve stillness on the horse, let the soul hang loose and get down to 25% from 180%. Then performance does not have to be damaging.

On the DVD 'If Horses Could Speak' I love what Peter Krainberg says, "first the harmony principle, then the performance principle'. When you travel in harmony with your horses, performance will come on its own. Then competition is not negative. Judges should look at harmony first, the basic principles of good riding, and only then consider technical details.

Herr Dr. Heuschmann, many thanks for the exciting and extensive discussion.

Ulrike Amler posed the questions for Dr. med. vet. Gerd Heuschmann

Photos: Ulrike Amler; Karen Diehn, Christiane Rochlitz, Barbara Schnabel, Bettina Treiber

Translation: Christiane Soeffner

© töltknoten.de 2012

© töltknoten.de 2011