#### Headline:

The horse-whisperer's guide to self-carriage does sadly not exist – but there are a few hints

## Fact box 1:

## Self-carriage

and feedback

The word self-carriage is defined as 'The ability of a horse to move or stand in a balanced manner without support or interference from its rider; the quality or state of moving or standing in this way' by Lexico.com (Dictionary.com and Oxford University Press in collaboration) The origin of the word self-carriage is dated to the 1960s.

Feedback in education science has been described by educational researcher John Hattie as 'information provided by an agent regarding aspects of one's performance or understanding'. Education science student Ylva Larsson, Umeå University, has concluded that 'feedback from the horse is immediate and valuable' in horse riding education.

## Fact box 2:

#### **ISFS**

The International Society for Equitation Science (ISES, www.equitationscience.com) is a non-profit organisation for research into the training of horses to enhance horse welfare and improve the horse-human relationship.

Equitation science promotes scientific methods that identify which training techniques are ineffective or may result in equine suffering.

ISES runs yearly international scientific conferences, where the latest research findings and their application in practice can be communicated and discussed. ISES also provides a pool of expertise for international bodies and academic institutions.

Members of ISES are academics, students and practitioners from multiple disciplines around the world.

# Fact box 3:

# Learning theory

A central approach for training horses within ISES (for ISES, see other fact box) is learning theory. This theory is described in ten principles:

- 1. Regard for human and horse safety.
- 2. Regard for the nature of horses.
- 3. Regard for horses' mental and sensory abilities.
- 4. Regard for current emotional states.
- 5. Correct use of habituation/desensitization/calming methods.
- 6. Correct use of operant conditioning.
- 7. Correct use of classical conditioning.
- 8. Correct use of shaping.
- 9. Correct use of signals/cues.
- 10. Regard for self-carriage.

The principles are further explained at the ISES website equitationscience.com. There is also a more popular, less academic interpretation at the website horsewelfare.com.

# Lede:

What is happily bouncing away down a centerline in effortless harmony, with smiles on two faces? It could be a rider who understands the feedback from a horse in self-carriage. Though hard to find in the riding teacher's manual, we have collected a few ideas of what the horse might say on self-carriage.

#### Text:

In her PhD thesis, Swedish riding instructor Mari Zetterqvist Blokhuis says: \*Rider and horse are constantly "talking" to each other in terms of their bodies, and thus the rider needs to be open and "listen" to what the horse is trying to say.' She argues that in her observations this communication passed merely unnoticed by the different instructors, whose lessons she attended.

"Today, there remains a lack of pedagogical engagement with how the emotional part of rider-horse communication might be taught and learnt, including the rider's ability to pick up and interpret the reactions and actions of his or her horse", Mari Zetterqvist Blokhuis discusses.

## Avoid nagging

The riding ideal of self-carriage in the horse is one of the ten principles that ISES promotes for learning theory (see fact boxes). Here, it is explained as: 'Aim for self-carriage in all methods and at all levels of training. Train the horse to maintain gait, tempo, stride length, direction, head and neck carriage and body posture. Avoid forcing any posture. Avoid nagging with legs, spurs and reins i.e. avoid trying to maintain responses with relentless signalling.' Also pointed out is that lack of self-carriage can promote hyper-reactive responses and compromise welfare.

So self-carriage is important, both for rider safety and for horse welfare. But how do we know that the horse is in self-carriage? Most of the average rider's hours in the saddle are spent without an instructor helping out, so we have to listen to the horse. What feedback does the horse give when in self-carriage?

### Some is easy

Keeping the same gait would be easily noticed, as soon as a rider can recognise the different gaits. Maintaining the same tempo would make the rider identify when the horse slows down or speeds up, and for stride length, when the horse takes shorter or longer steps. For direction, the rider would need to be aware of a chosen line of travel, and realise if the horse deviates.

When it comes to the horse's head and neck carriage and body posture, there is more of a feel element at stake for the rider.

– It must be implemented in the rider, to know what self-carriage is. If you don't know, you can't notice the feedback from the horse, says Mari Zetterqvist Blokhuis.

She gives a few examples from experts who have described the feeling: I'm not sitting on my horse; rather, he allows me to sit into him and into his rhythm (German Helen Langehanenberg). Swing in the bum (Swedish Gunilla Byström). The horse moves more noiselessly (German Eckart Meyners).

— It is like they become lighter to the aids and lighter in the mouth. Like you feel you are carried by the horse, with the elasticity over the back from the hindlegs up towards the hand and he becomes lighter

### Find the feel

Mari Zetterqvist Blokhuis tells about a course she had with riders in groups, who should do leg-yield on the quarterline. The riders squeezed with legs and hung onto reins for dear life.

in front. And reflection; in riding lessons there is very little time for reflection on what you actually do.

- I asked them instead to try and feel what was happening. Apparently, they were not used to do that, it created discussions and Facebook threads afterwards. I've also let riders increase and decrease the speed in walk on a long rein without using the hand, and after a while, riding school horses have realised hey, the one up there is trying to say something.

She points out that instructors may forget to explain why they gave the particular instruction. That they think as if they were themselves sitting on the horse and expect the rider to have the same feeling and simply understand.

Really, it should be possible to systematise. Or make riders write a training diary. Would be easy
with the smartphones; a text or a video clip that would help reinforce the feeling or learning process,
says Mari Zetterqvist Blokhuis.

## Timing and insight

Swedish equitation educator Anders Eriksson champions the aspect of good timing from the rider, but not only to have an implemented bodily knowledge.

– You do need insights in learning theory. To respect the horse in the work, and not ask for more than the horse can or knows how to do.

And we have asked a few more ISES members which feedback from the horse tells the rider the horse is in self-carriage:

Australian Andrew McLean, co-founder of ISES, PhD in equine cognition and learning, former international event rider:

- Overstretch, but only for about two steps any longer would mean for the horse to lengthen the stride give the rein, take the legs off, and if the horse maintains speed and stride length you know it is in self-carriage. But it cannot maintain the same self-carriage for a longer time, so do lots of transitions, also within the gait and change from straight line to circle.
   Australian Robyn Stokes, former dressage judge:
- For me, it is to do with feel. The weight in the reins, feel the hind end coming underneath you. As a judge, I can see. I do what I want to see. I do not always get there, but I try to go from envisioning what others do.

#### Giving one rein

Australian Manuela McLean, riding coach with special focus on para riders and children:

- Give both reins, if the horse keeps the speed, it is in self-carriage. Give with one hand to see if it keeps the straightness or falls over to the side. You have different kinds of stretch, though, from falling on the forehand to arch the neck close to the jaw and say aah, you gave me more freedom. But especially for kids, I would use the concept of speed. Also the ears; if speeding, the ears reveal. New Zealander Jody Hartstone, coach and Grand Prix dressage rider:
- Mainly, three types of self-carriage speed, stride length and frame should not change. Without giving on the rein, basically if you feel them heavy in the mouth, you can feel losses of self-carriage. But to really do it is give with both reins. If you give one rein, you can target which one of the front legs that tends to run further and has a longer stride. If it makes them crooked, you feel losses of balance in the reins.

#### Few studies

Self-carriage has not been studied at great length in academia, with the exception of research veterinarian Hilary Clayton, who has conducted numerous studies of the biomechanics of the horse at, mainly, the Michigan State University. For self-carriage in a dressage horse performing collected movements, she advocates the action of the horse's sling muscles (serratus and pectoralis) that lift the heavy shoulder area and therefore give the horse a more uphill frame. One would assume that also a horse in other movements than the collected would head towards the same biophysics.

## Summing up

So, which kinds of feedback from the horse indicate self-carriage? Lighter to the aids and mouth (feel), the weight of the reins and the hind end coming underneath (feel), maintaining speed, stride length and frame when giving both reins and taking the legs off (observation), watching the horse's ears (observation).

And what can the rider do, apart from setting up for the feel and observation? Envisioning what others do (reflection), insights in learning theory (reflection), try to feel what is happening (reflection), Further studies of feedback from the horse indicating self-carriage could be how a greater number of riders perceive the feedback. These studies could also use video recording to see if the rider's perception of, for example, giving both reins and maintaining the self-carriage is accurate.

Ylva Larsson