Richard Weis
Dressage Technique

The German Training Scale
implications for the rider

3. Lengthening

Contact and connection to the bridle is the third element in the German Training Scale, as RICHARD WEIS discusses. Good contact is the result of achieving good rhythm, in a supple and loose horse, and all paces become even and reliable.

You might be thinking to yourself 'the rider doesn't wear a bridle', so how can this feature of coordination and balance in the horse help the rider on his own scale of training, the way the other elements do? Hmmmm!

In fact, it is very relevant and it helps us identify the one single most important feature of the very special type of coordination that distinguishes the dressage horse and dressage riding.

Classical dressage requires the vertically aligned body that is on top to control the horizontally aligned body below. When it is achieved, no matter whether it is vertical or horizontal, alignment depends on the ability to concentrate directional forces.

In the first two articles in this series, we looked at what it means to be in rhythm and supple. Rhythm brings about an economy of movement, and suppleness is when that effort is evenly distributed throughout the length of the body.

The one single biomechanical feature in both the man and the horse that typifies good dressage is lengthening, and this is what we see when the horse offers a good connection to the bridle.

Lengthening is an inherent reflexive tendency. It is the body's natural reaction to gravitational forces. Man lengthens vertically away from the earth and the horse lengthens horizontally towards the horizon but both achieve the desired result, and that is to go easily despite the relentless pull of the earth, using an in-built equal and opposite reaction to it.

A suspension bridge

This is more obvious in us than in the horse. Our bodies take the direct approach by standing up against the earth. Horses have their major gravitational problem between the pillars of their legs. In old, worn-out horses the stomach sags, the back drops and the neck is drawn back into the withers. In well-schooled dressage horses, the lengthening of the spine draws up the stomach, and the rider with it. There is a continuous strap of muscle along the horse's back and an enormous conglomeration of ligaments. These are toned by the engagement of the quarters at the back and by seeking the bridle at the front. It works a little bit like a suspension bridge where the front and back pull away from each other, lifting the middle.

These are the concentrated directional forces. They could be seen as mainly controlling coordination, because it is through these reflexive mechanisms that tone is distributed and effort is economised.

Posture helps

Of course posture shows the condition of these reflexes. The worn-out old horse and the slumping old rider have not managed to keep the lengthening reflexes in prime order. Like everything else, they deteriorate when they are under-utilised. Many books describe how horses need to develop back muscle before they are capable of performing certain exercises. This explains the slow progress of the work. It certainly does take time to get the back of the horse strong enough to buoy itself up with the additional weight of the rider, which is positioned halfway between the pillars of support.

As a generalised overview, we could say that lengthening is achieved by the head leading and the body following. The horse's head leads forward in the direction of travel and the rider's head leads up away from the downward pull of gravity. Horses make some sense of this situation by having their ears, eyes, and nose pointing where they are going. They tend to be led by these senses. We, on the other hand, have our sensing apparatus pointing in the direction we are going, but we lengthen in the general direction of our spine.

A logical progression

The German Training Scale does supply us with a profoundly logical progression, irrespective of whether it is applied to the horse or the rider. Both have a gravitational problem. Both have in-built mechanisms to deal with it, and this is the stuff of dressage!

When the horse seeks the bit, especially with the added leverage contributed by the weight of the head dropping towards the vertical, the rider notices that the neck comes longer, filling the space in the rein. In fact, the exercise of giving the rein forward is a reliable test of true lengthening. If unwanted tension exists, the picture deteriorates. The horse may run off, or shorten its neck into its withers, or it may change its balance and its stride. The concentrated forces that flow rhythmically along the spine of the horse are vertically supportive, as well as supplying the strength the limbs swing from.

We call the flow along a lengthening back 'swing'. When a back is swinging it is free of the tension that would inevitably interfere and shorten it. It is a well-known fact that long muscles can produce far more power than shortened ones. A muscle can only pull – it cannot push. It has a higher degree of pulling power when it is long than when it is already shortened by unwanted tension.

Horse on the rebound

For the same reasons, the rider's back too must swing. In order to concentrate forces through lengthening, the swing must primarily exist in the up and down plane, not the forward and back plane. This is why the model of the rider being a 'spring' that contains the horse between his body weight and the ground, and bouncing the horse, is biomechanically sound. The lengthening of the neck of the horse, which fills the space in the bridle, goes a long way towards making the horse into a kind of rebounding contraption.

Equestrian literature refers to the down forces when it talks about heels going down, sitting deep and dropping shoulder blades. It refers to the up forces when it describes the requirement to sit tall and look up. Anything with a simultaneous up/down is springy, and the best spring comes from good alignment, brought about by healthy lengthening of the spine.

Any down forces applied to the horse magnify the rider's weight with the momentum involved. This would be futile if the horse were unable or unwilling to respond with extra lift. You only go down to go up.

Rider or swimmer?

Riders too have large straps of muscle connecting the top end with the base. I have had an opportunity to feel many top riders' backs in my capacity as an Alexander Technique Teacher and a good dressage rider's back is built up like a swimmer.

It needs to be, because it is the strength of the back that supplies the limbs with the required strength, generated without excessive effort. It is also the rider's back that addresses and encourages the horse to swing through its own, by applying a kind of pedalling action.

The rider sits as the guardian of the oscillations that flow through the horse's back in patterns typifying the gait (walk trot or canter) and the movement being ridden. The rider simultaneously lifts the horse's back with the top of his head, and directs the characteristic wave-like ripples of the horse's back forward, where they pulse out through the poll, over the top of the bit.

Master of bounce

The use of the head and neck is the crucial element in lengthening. When the head drops towards the vertical, its weight stretches the back of the neck. In the horse, this is the top line. The horse feels like it has its 'handbrake on' when it comes above the bit, its neck retracting into its torso with no desire to go forward.

So too, a rider who leads with his chin, or pulls his head in to avoid an imaginary roof, is squashing the potential of the movement. It as if the rider opposes the idea of being lifted. Riding, especially in sitting trot, is one bouncy business, and a rider needs to wholeheartedly embrace the concept by becoming a master of bounce.

The head leads up enthusiastically, supplying down forces that in turn, travel unblocked, all the way to the stirrups. The downward flow supplies the raw material of the driving aids, and the upward flow receives then. The lower down we look in the body, the more movement should exist. Ankles have a lot of give, knees a little less, hip joints a little less. When shock absorbency is successful in the legs, the pelvis is free to encourage the back of the horse, while acting as a kind of juggler for the spinal column. The head experiences a smooth and balanced ride.

All of this requires a strong sense of rhythm, a well-toned supple body free from distorting tension and good vertical alignment. Vertical alignment is simply efficient. By its nature it requires the minimum effort to sustain.

In a desperate attempt to produce strong driving aids, many riders lean back. This is particularly evident in the riding of extended movements where horizontal forces are a strong feature. Leaning back squashes movement.

In the next article we will have a look at impulsion because we now have achieved the prerequisites – good rhythm, a supple, loose, swinging back and concentrated directional force through a lengthening spine, expressive of a strong desire to go somewhere. Now we can rev up a bit of energy and express it in lift without producing chaos. That's where we're aiming!