

## Exercises, Their Purpose and Execution, Part 3

In dressage we always look at moving from the back to the front. In this article I have reversed the order-so far. We have looked at exercises that will help us loosen the muscles of the horse so that it will become supple in its body and relaxed in the mind. These exercises require a degree of control that only a horse that is willing and able to listen can allow. We did not want a great degree of power because it would have made controlling it that much more difficult to achieve. Now that the horse is allowing our aids to go through we can move on to the next set of exercises. These exercises are designed to improve impulsion. They, however, need energy to be successful. Now our focus is on the motor, the haunches of the horse.

Exercises to improve impulsion:

- Transitions between gaits
- Transitions within gaits
- Lateral movements

Just last week I read somewhere that Dressage is a sport where the opportunity for learning is unlimited. I am sure that your experiences riding have already borne that out for you. One of the challenges I find myself confronted with much of the time is to understand what exactly happens to the horse as we train, condition and educate it. The demands we make on its body, mind and character are continually increasing and I am aware that the performances we expect from an FEI horse would send a horse of equal age but without the benefit of training into despair or orbit. Schooling clearly has changed the horse. The increases of his level of strength and agility are obvious but there are also improvements of his mind and character. Some horsepersons claim that training will enhance a horse's intelligence. In my opinion it will certainly sharpen it. The aids are more and more complex and it takes a greater sensitivity to discern between them. They also follow in a much more rapid order, forcing a much faster processing of information, which in turn causes the horse to stay more focused on its rider. On top of that the rider expects her mount to stay at that high level of focus over a longer period of time.

I am convinced that horses with this amount of training learn to think. Observe such a horse under an inexperienced rider and see how the horse is trying to figure out what is expected of him. He will go through many trial movements checking which one will satisfy his rider, and one can just feel the frustration when nothing seems to create the harmony he is looking for.

We condition the strength and skills of the horse, we train its mind and I also believe that we educate its character. As I mentioned earlier, schooling is stressful. The trainer is constantly pushing her horse against his limit both physically and mentally. The horse needs to learn to live with this level of stress. He must also give up his natural desire to serve his own needs and work toward pleasing the trainer in order to enjoy harmony. The horse, an animal of prey, naturally strives first and foremost to survive. It must learn to submit even in moments when it is not sure about the consequences of that obedience. This horse has learned to trust. Only a horse with a self confidence that has been strengthened through the guidance of a thoughtful trainer, can achieve such trust. This horse is now a team player. Many trainers and rider cheat themselves out of such a relationship with their horse by not matching the horse's generosity in tolerance and desire for harmony. Do not misunderstand me, the horse must obey and do its best to be correct. It is the methods used to take the horse to that point that causes concern in our horse community and that of the animal protection societies.

This is a different way to explain why maintaining the conditions set out in the training scale are of utmost importance while schooling your horse. In order to avoid confusion and unnecessary repetition it is equally imperative for you to understand that exercises often overlap in their purposes. Let us look at the shoulder-in for instance. It is considered an exercise to improve impulsion as well as collection. Some trainers even use the shoulder-in as a means to further the suppleness of their horse. I do not disagree with either use of the exercise. It is in the emphasis of the various aspects of the shoulder-in that determines its purpose. The bending of the spine supples, the increased engagement of the inside hind leg and the corresponding stronger push off improves the impulsion and the rider insisting that the horse increase the bend of the haunches through well timed half- halts during the carrying stance develops the strength necessary to collect.

Impulsion seems to be one of the most misunderstood concepts in Dressage. Some riders seem to look at it as speed. That is wrong. Some look at it as energy. That is a good part of it. In my opinion impulsion is an attitude of the horse expressed through forwardness under the control of the rider. It is the desire to go forward. Some horses are blessed with a great deal of natural impulsion. In some we can develop it. Unfortunately there are some who will always need to be prodded into using energy in their work. They are not candidates for the higher levels of dressage. Jumps in front of them however might get enough adrenalin flowing to have them energetic enough to do well as jumpers.

The term prodding reminds me of another area of misunderstanding. Lately we often hear or read about the terms 'electric hind legs' or horses that are 'hot of the leg'. This is to indicate a horse with an active hind leg and a quick response to driving aids. To me these terms are unfortunate. Imagine yourself touching an electric wire or a hot plate. Your reaction would be a jerk. It would be totally out of your or anybodies control. That is undesirable. What we are looking for is a horse that is sensitive to the rider's leg and is willing to obey in a measured way. By that I mean that the horse will move forward according to the strength of the aid. The old masters had it right when they wanted horses to allow them to ride them forward. This brings about the correct direction of riding from the back to the front. In my view the 'hot of the leg' horse needs to be ridden backwards.

The naturally motivated horse must accept the controls of the rider so that the desire to go forward can be turned into impulsion. The exercises to achieve that goal are the same as the exercises we employ to create the attitude of forward. Remember, the idea is to develop a horse that will move forward off the rider's leg, not a horse that will charge forward or a horse ignoring its rider. So in order to be successful we first must prepare the horse for the exercise by making sure it is working in its best rhythm, is supple and on the aids.

Ride this horse on a twenty meter circle at a walk and change gaits between the walk and a trot. Outside of keeping your horse on the aids pay close attention that you develop a strong first step into the trot and an active hind leg in the transition down. Just like we did not want a horse racing forward like it was cued by a cattle prod (electric shock), we also do not want breaks on our horse that will lock the wheels. We want 'Anti Lock Brakes'. The horse is allowed one or two steps that move further under its body and transition from the trot to the walk by use of the hind leg and thus maintaining its balance and connection. Only two or three steps at the walk and we ask for another active step into the trot. About half a circle later we ask for the walk again. In case you wonder why so few steps at the walk, it is because the walk is a gait without impulsion. As you can see, we use the transitions to engage the horse and at the same time prepare it for the next transition.

One of my students after proofreading this article asked me: "my horse is forward at the walk, he lets me control that forwardness, why do you say that the walk is a movement without impulsion?" In the walk there are always two legs on the ground. So the push off phase does not produce much lift and that makes the walk a relatively flat gait. Those of you who have ridden the collected walk may agree with me that it is dressage's most unexciting and most anxiety creating gait. It feels like not much is happening and at the same time your impression is that you are going nowhere. That is the result of engagement and shortened strides. Since two legs stay on the ground the push off stays without expression other than the shortened frame and elevated carriage of the horse. There is no moment of suspension in the walk, and it is the duration of the moment of suspension either forward, upward or a combination of both, that determines the amount of impulsion.

After a few (three to six) of these walk-trot-walk transitions we move him unto the rail at a trot and see whether the exercise has improved his impulsion. We can also ride these exercises on straight lines. In my experience however, the engaging effect is greater on a circle. As always when we ride on bent lines, we need to repeat the exercise on the other hand. Circles are a great tool for the trainer, but they must be used carefully not to bore the horse or even cause excessive stress on the horse's joints.

Also very effective in improving the horse's desire to go forward are the transitions between trot and canter. The canter is naturally even more forward then the trot. That is why it is now our goal to take the impulsion of the canter with us into the trot. Again the

quality of the transitions determines the success of the exercise. This quality is in turn a direct result of the balance the horse shows in the gaits and especially in the transitions. This also clearly indicates that speed is not a factor, engagement is. To be able to ride the transitions forward without loss of balance proves the need for the second part of the definition of impulsion, a horse that is willing to put its desire to go forward under the control of the rider. Should it happen that our horses after the transition down from the canter starts to run in the trot and shift a great deal of weight into our hands, the exercise has failed because the impulsion of the canter has turned into momentum at the trot.

The way I understand the physical aspect of momentum, is that a body is carried forward strictly because weight once moving will not stop on its own unless it hits an object that will not move or because of other forces such as friction, gravity etc. that will gradually slow it down and cause it to stop eventually. Jump off a moving vehicle and feel the effect of momentum. It will cause you quite an effort to stop. If the vehicle moved too fast for your ability to run, you will fall forward onto your face. Anything that rolls or slides down a hill is carried forward by gravity and even if it moves onto a level surface it will continue to move because of momentum. Momentum is the result of an imbalance forward in the horse. It is highly undesirable. Impulsion is a function of the muscles of the horse, not its weight. You can control the actions of the horse's muscles with a simple command but the result of the horse's weight carrying it forward will wind up in your hands and then it is your muscles that must help the horse with its balance.

To avoid momentum in the transition to the trot the preparation is the key to success. The canter must be shortened so that he can trot at the same speed in a working tempo. I use speed here as a measure of meters per minute, not as an indication of fastness. The half-halts to shorten the canter must be ridden in such a way that the horse will not lose his engagement and balance. This improved engagement should create the impulsion for a powerful but balanced trot. Ride these transitions three or four times on the circle then go straight and test the result of your schooling. After that, change rein since both sides of the horse need to be challenged to work with more impulsion.

So far the work has been relatively easy. Now we advance to the transitions within the gait. Here balance and control become of major importance. Let us not despair however, because if our horse has cooperated so far without loss of throughness and has improved in impulsion and balance, he is ready for the task. The question now is: do we ask for it on straight lines or on the circle? I would say that it depends on the horse. If the question is control, use the circle. Should we feel our horse may not be able to balance much more than working gaits on a circle or may need more help lengthening we choose the straight lines. In the later case it would also be wise to limit the degree of lengthening and continue mostly with transitions between gaits until balance strength and impulsion are advanced enough to do the work without creating tension or rhythm problems. The most mistakes made in this exercise are in the transition down, by overusing the rein aids. Remember, we do not want to stop the engine, we want to engage the hind leg.

Let us move onto the circle in a trot. Choose a circle at the end of the arena. This circle now has an open and a closed side. The closed side is at the end of the arena while the

open side faces the middle of the ring. We want at first to use the rail as a natural barrier to help us transition down, so we lengthen on the open side and travel in the working gaits on the closed side of the circle. We start the exercise at the trot. I like to prepare my horses for this exercise by riding several walk- trot transitions. Let us do the same. When we feel comfortable with the horse's balance and energy, we carefully start to lengthen the stride as soon as we leave the rail. Between the centerline and the upcoming rail we shorten the stride again. Important here is to keep the motor going while we slow the horse. Again, like before, we must ride the transitions forward. Remember the purpose of this exercise is to improve impulsion, the desire to go forward expressed in a stronger push off the ground. Pulling on the reins is not going to encourage the horse to move forward. So instead of pulling we firm in the reins while sitting deeper and slowing the movement in our hip. At first the rail is going to help us as we through repetition teach our horse the language of shortening the stride while encouraging the hind leg to engage more.

Again the purpose is to improve impulsion not propulsion, so we must control the direction of the energy. Our horse must stay balanced in the lengthening only then will it be able to come back with improved impulsion. So while we ask for the lengthening of the stride we allow for a lengthening of the frame but not a significant lowering of the neck. Technically that means that we ask the horse to push its weight forward harder, but we do not allow it to move its center of gravity forward at all.

As soon as we feel that our horse can stay balanced in this exercise without using us to support him and does it equally well on both hands it is time to move to the straight lines. The major source of problems here is the rider's ambition. At first a lengthening will do. As the horse does that well we can move to medium gaits. This is also quite strenuous for our horse; let us therefore start on short lines like the short diagonal, half the diagonal or half of the long side. The actual effect of the exercise is in the transitions not in the amount of lengthening. Once we can ride the transitions with invisible aids, impulsion should no longer be a problem for us.

In the lateral movements the exercise does most of the work. Until now it has been direct rider influence that produced the effect of the exercise. In the following work the rider's task is to ensure that the horse executes the exercise precisely and then the exercise will cause the horse to engage more on the side of the bend and thus create the stronger push off that result in greater impulsion. Since these exercises tend to affect the hollow side of the horse more, they must of course be ridden on both hands.

The shoulder-in is a good example to explain the sources for mistakes in these exercises. As I have mentioned earlier, it is the increased engagement that causes the stronger push off and that is the impulsion. What brings about the engagement is the need for the horse to support it's weight more with the inside hind leg as a result of the bend of the horse and it's shoulder moving to the inside of that leg. This takes the horse's center of gravity in front of the inside hind and since in a correctly ridden shoulder-in the hind legs travel straight that leg is placed under the weight of the horse and must carry a greater load than it's partner. The greater load causes a deeper flexion in the joints, which in turn then

pushes off harder etc. This extra work is what the horse tries to avoid. Outside of actual rider errors in the aids, most of the mistakes made are the result of uncorrected evasions the horse produces to escape harder work. There are basically two ways in which the horse achieves that. One is no bend or insufficient bend, the other is bending in the neck only. In the first case the horse will travel in a leg-yield with the hindquarter to the wall. From the front it looks like the horse is traveling on three tracks as it is supposed to but both front and hind legs cross. From the back it gives the appearance of the outside hind leg stepping out. It is a good suppling exercise but fails to improve impulsion. If the horse bends in the neck only it travels on a straight line along the rail inconvenienced by a neck bent too strongly inward. Often it is also described as a “popped out shoulder”. The horse no longer follows his head but his shoulder. Proper use of the outside aids will correct this mistake.

It is however not always to be blamed on the horse. No matter how willing the horse may be, if the reins are applied too hard the hind leg will not reach further forward. Ever wonder what it would be like if the riders had the same corrections applied to them that they apply to the horse?

The shoulder-in is also a great exercise to improve collection, but we will talk about that next month.