THE GEARS

The ability to execute a movement correctly depends primarily on being able to prepare the horse so he will find it easy to do the movement—and then to ride the movement in such a way that the purpose of that movement is achieved.

By this I mean that, naturally, the horse must first be in balance, in the correct frame, between the aids and working with sufficient energy to be able to execute the movement. In addition, the horse should work at a speed and tempo that make it easier for him to do the movement.

When riding a test at a competition, of course we must ride the movements according to the regulations and in a frame and degree of collection specified by the level of the test. In this case, the goal is to present the horse at his best, taking into consideration his current stage of training.

When we are training at home, the focus is on improving the horse's weak points, while at the same time continuing to develop those things that he does well so they get even better. When schooling the horse, we would like to use every minute, every movement, and every stride as effectively as possible. First and foremost, the way we train should result in a horse that remains sound as long as is possible. We should have a clear picture of what we want to achieve with our work, at every moment along the way.

A well-performed movement consists, among other things, of the following:

- Steady tempo
- Good, stable balance
- Elasticity and suppleness,
- Collection, self-carriage, swing, thrust and strength
- The horse between the aids, working his muscles over the topline and reaching forward to the bit
- Straightness and lateral flexibility
- Trust, relaxation and resiliency
- Engagement and freedom of the shoulders

There is always something we would like to develop. If we always ride in the same frame, at the

same speed, and in the same tempo, we will find that there are movements the horse can do well, others he can do but with difficulty, and some he can't do at all. As riders we must know exactly how we want the horse to improve and in which frame, which speed and which tempo he needs to work in order for this to happen. From this section (The Basics) please read Speed, The Frame, and Tempo.

Anything that you can't change, you can't control either!

- In order to have control over the speed, you must be able to change the speed.
- In order to have control over the frame, you must be able to change the frame.
- In order to have control over the tempo, you must be able to change the tempo.

You must feel that the way in which your horse works is something you have created. This means there must be a reason for the frame, the degree of collection and the tempo for every moment you are riding your horse. Here are a couple of examples:

Example 1: Improve the horse's self-carriage in shoulder-in to the left

The horse has a tendency to fall out over his outside shoulder and over-bend, failing to place his hind legs under his center of gravity. So how should you improve the self-carriage in shoulder-in to the left?

Possible solution: Have the horse close to straight through the corner before you start the shoulder-in. Slow the speed by shortening the length of stride, elevate the frame, keep the horse straight with your outside aids with perhaps a little quicker tempo, so the horse has energy to lift his forehand. Ask for less angle than normal (shoulder-fore) and ride the movement only for a short distance at a time. As the horse develops his self-carriage you can increase the bend, angle, length of stride and swing.

Example 2: Help the horse who finds it difficult to bend around the rider's inside leg in shoulder-in to the right

In this case, the horse is not supple or relaxed enough in the muscles on his right side.

Possible solution: Ride the shoulder-in to the right, a little more forward and in a lower frame, with less collection and less angle. It would be ideal to do this work off the track. When ridden this way, most horses will find it easier to answer the rider's inside leg.

There is a purpose for every movement we want to achieve...and there is always something we

want to improve. In order to develop the horse's abilities, we need a large range of control. Meaning, we must be able to ride our horses in many different speeds and frames and be able to vary the tempo from slower to quicker, and back again.

Normally we describe the speed of the horse's three gaits as follows:

- Walk: collected, medium, extended, and free
- Trot: collected, working, medium, and extended
- Canter: collected, working, medium and extended

It is very important to know your horse so well that, for example, you can pick the exact speed, degree of collection, tempo and frame in which your horse can execute a correct collected walk. This applies to all speeds in all three gaits.

When the horse changes his speed, he should do it by changing the length of his strides. The length of the stride is changed by shifting the horse's center of gravity forwards or backwards. The center of gravity shifts back and forth according to how the horse changes the angles in his hind legs. Accordingly, we can say the horse's hind end, in a way, compares to the gearbox in a car. And the rider's seat is the primary aid and can be compared to the gearshift.

THE EIGHT GEARS

Let us imagine that for each gait, the horse has eight gears forward, graduating from a very short, slow speed to an extended, fast speed.

1st gear a slow, very short gait, ridden almost as if the horse is taking one step at a time

2nd gear a slightly more forward gait than 1st gear

3rd gear a collected gait

4th gear a collected gait with slightly longer strides and more energy

5th gear a medium walk, working trot or working canter

6th gear a medium walk, working trot or working canter with a little bit quicker hind legs

7th gear a medium walk approaching extended, or medium trot or canter

8th gear an extended gait

To make it easier to find the right speed for your horse you can do the following exercise in walk.

Please note:

This is not an exercise for young horses!

Begin by making a halt. Think of your horse with his eight gears. The hind legs are the gearbox and your seat bones are the gear shift. Feel as if the hind legs are connected to your seat bones, as if the hind legs were a pair of stilts.

Ask your horse to go forward slowly in first gear by using your seat bones. Use your lower legs as needed, but as little as possible (only if your horse doesn't respond to your seat aids). When you have found 1st gear, stay in 1st gear for a few strides. Then, shift to 2nd gear, and so on.

When you have a feeling for the correct speed in each of the eight gears you can go directly from one gear to whichever other gear you want. For example, from 2nd gear to 4th, from 4th gear to 7th, from 7th back to 3rd and so on. When this works and the horse understands, you can change gears almost exclusively by using your seat. Of course, you should drive the horse forward from behind to a soft hand at the same time.

In each of these eight gears you can ride the horse in a lower or more elevated frame. In addition, you can change the tempo to be a little slower or faster. Now you have a large range that you can use to find the exact gear that suits your horse and the particular movement you would like to ride at any point in time.

For example, try trotting in 2^{nd} gear, and shifting between a little slower and a little quicker tempo, without changing speed. Try changing the frame from normal to a little deeper, then to a more elevated frame and back to a normal frame. If you can do this, you have (as I mentioned earlier) as large a range as you need to develop an athletic horse who can perform movements in the best possible way, using his natural ability.

Working with your horse in this way can be incredibly rewarding but is not something for beginners or young horses. When learning how to shift between all these speeds it is important to get help from your trainer.

APPLYING THE GEARS

So what should we use all these gears for? If we always ride at the same speed and in the same tempo, it becomes monotonous, lifeless and lacking presence. We won't be able to develop the horse to his full capacity in many respects. Working with the gears not only helps us find the best frame, degree of collection and tempo for each movement we ask of each individual horse, but it also helps to keep the horse's attention.

A movement can be used to achieve different training goals. Before riding a movement, you should ask yourself what you want to achieve by training the movement. For example, if you ride a serpentine in a slower speed, with a little quicker tempo, and in a more elevated frame while keeping the horse straight, you will increase the engagement and collection. If you ride the same serpentine at a little higher speed, in a lower frame and with bending, it will have a suppling effect. This approach can also be used when you ride a circle.

Which gear should the horse be working in before you can perform the movement correctly? The art in performing a correct movement lies in the preparation. In other words, if the horse is working in the correct gear, the movement should feel considerably easier for the horse to do. So when we feel that a movement hasn't turned out as well as we expected, perhaps we should ask ourselves if the horse shouldn't be working in a different gear.

Try to develop all the gears in your horse, and to shift between them. Listen to the horse in order to discover which gear is number one, number two, three and so on for your particular horse.

In each gear you can also vary between a deeper or more elevated frame to find the point where your horse works the very best. When you have found a gear in which your horse works well, you can also think the other way around and ask yourself what movements you can develop in this specific gear.

USING THE GEARS WITHIN EACH GAIT

Though the concept of the gears is the same for each gait, there are some differences in the definitions and the use of the gears for the walk, trot and canter. This section addresses those differences.

The Gears at the Walk:

1st gear	a slow, very short walk, ridden almost as if the horse is taking one step at a time.
2nd gear	slightly more forward than 1st gear
3rd gear	a collected walk normal for your horse
4th gear	slightly longer strides than collected walk and with more energy
5th gear	medium walk
6th gear	medium walk, with a little bit quicker hind legs
7th gear	slightly longer strides than 6 th gear, approaching an extended walk.
8th gear	extended walk

You have found the correct gear at the walk if you can, for example:

- make a transition to piaffe from 1st gear
- make a walk pirouette or transition to passage from 2nd gear
- make a turn on the haunches from collected walk in 3rd gear
- ride a little bit more forward than collected walk in 4th gear
- ride a leg-yield from medium walk in 5th gear
- create more energy in medium walk without changing speed in order to help the horse step further under behind and elevate his front end in 6th gear
- create a walk that is large and energetic, but not quite extended in 7th gear
- execute an extended walk in 8th gear

The Gears at the Trot:

a slow, very short trot, ridden almost as if the horse is taking one step	at a time
2nd gear slightly more forward than 1 st gear	
3rd gear a collected trot normal for your horse	
4th gear slightly longer strides than collected trot and with more energy	
5th gear working trot	
6th gear working trot with a little bit quicker hind legs	
7th gear medium trot	
8th gear extended trot	

You have found the correct gear at the trot if you can, for example:

- develop a slightly forward piaffe from 1st gear
- create a more steady tempo, resting on each stride in 2nd gear (for some horses, passage can be developed from this gear)
- execute collected movements like shoulder-in and half pass in 3rd gear
- ride collected movements while maintaining energy and liveliness in 4th gear
- ride figures and leg yieldings from a working trot in 5th gear
- create more energy in working trot without changing speed in order to help the horse engage his hind legs and elevate his front end in 6th gear
- execute a medium trot in 7th gear
- execute an extended trot in 8th gear

The Gears at the Canter:

1st gear a slow, very short canter, ridden almost as if the horse is taking one step at a time.

2nd gear slightly more forward than 1st gear

3rd gear a collected canter normal for your horse

4th gear slightly longer strides than collected and with more energy

5th gear working canter

6th gear working canter with a little bit quicker hind legs

7th gear medium canter 8th gear extended canter

You have found the correct gear at the canter if you can, for example:

- develop a degree of collection appropriate for canter pirouette from 1st gear
- develop a degree of collection appropriate for working canter pirouette from 2nd gear (for some horses this speed can also be used to teach flying changes every stride)
- execute collected movements like shoulder-in and half pass in 3rd gear
- ride collected movements while maintaining energy and liveliness in 4th gear
- ride figures and counter canter from a working canter in 5th gear
- create more energy in working canter without changing speed in order to help the horse engage his hind legs and elevate his front end in 6th gear
- execute a medium canter in 7th gear
- execute an extended canter in 8th gear

USING THE GEARS TO DEVELOP A STEADY TEMPO

Many horses need help to find and maintain a steady tempo, especially at the trot. In order for the rider to help the horse, the rider must have a feel for tempo. A great way to develop this feel is to play with the gears.

If you can't change the tempo, you aren't in control of it.

We can use the movement, half pass, to illustrate why this is so important. In half pass, which is a collected exercise, we want the horse to move his hind legs well under his body and to lower his haunches so that he can lighten his front end and be freer in his shoulders. The trot must have a steady tempo. The horse should execute the movement without relying on negative tension. He

should be "let go" in his muscles and bent around the rider's inside leg without resisting. So a well-executed half pass consists of a number of prerequisites that must be fulfilled before the horse can perform it correctly. Most horses will have one or several weak points when learning a movement such as half pass.

Let's consider a few examples using different gears to rectify weaknesses in the half pass. For some horses who find it difficult to keep a steady tempo, it can help to ride half pass at a slower speed than normal, with less collection and angle. The focus here is to help the horse become more relaxed, resting on every stride. Another horse might need to be ridden more forward to develop a steady tempo in half pass. And a third horse might need to go in a little quicker tempo in order to stay steady during the movement. As you can see, it can differ from horse to horse.

For some horses, it's helpful to ride at a speed that is close to passage to improve tempo and self-carriage. Other horses might tend to tense when riding half pass. These horses may benefit from a deeper frame than normal to encourage relaxation over the topline. A deeper frame can also apply to a horse who needs to be more "let go" through the muscles on the inside of the bend. Some horses might not reach forward to the bit well enough in the movement. These horses can be ridden more forward and with less angle.

It is difficult to improve most of these weaknesses if we always ride the horse in the same speed and frame. If the horse has a weak point, he needs our help, and we can be more effective in helping him if we have a larger range of gears to choose from. This, of course, applies to many other movements. Keep in mind, we will definitely find that some gears don't suit every horse we ride, and one gear may work well to develop one movement, but not another.

He who walks behind cannot lead the way.

If the rider does not determine the speed, tempo and frame, the horse will be forced to choose it himself. Someone has to make the decision, and if the horse is the one making the choice, the rider will end up following the horse's speed. As I said, the one who follows walks behind and is not in a position to influence the next stride. If you continually follow the horse into his speed, tempo and frame, he will be bothered when you try to make any adjustments.

If the horse works in a tempo, a speed and a frame that you have created, it is much easier to change and adjust things without irritating the horse. Regardless of the speed in which the horse works, it should be clear that it is the rider who is driving the horse forward into that speed. This allows the horse's gaits to be at their best. If the rider pulls the horse back into a slower speed (steps on the brake so to speak), it will always lead to loss of swing and self-carriage.