

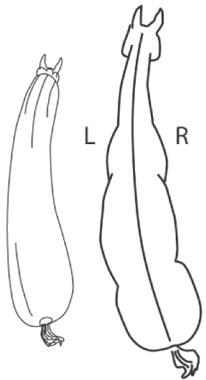


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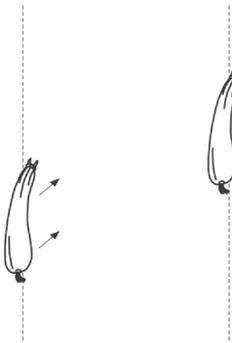
The Essential Elements of Lateral Work

By Wendy Murdoch, M.S.

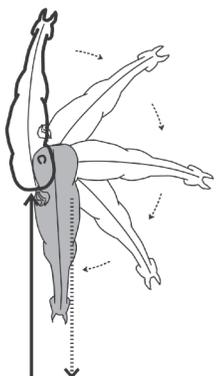
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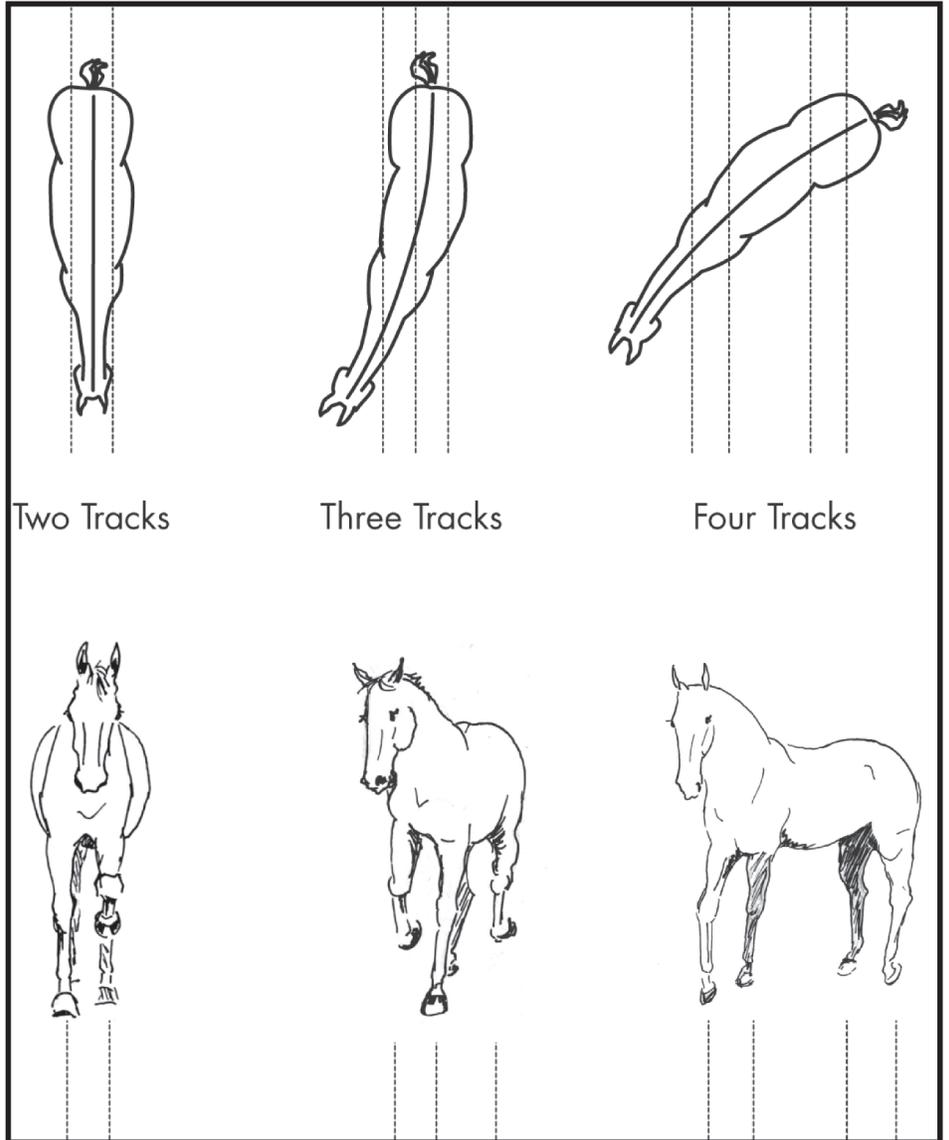
Introduction to Lateral Work



Laterally Related Part 1: A characteristic grouping of lateral movements



Laterally Related Part 2: A characteristic grouping of circular movements



Two Tracks

Three Tracks

Four Tracks

Plus...

Laterally Related Part 3: "Put the right foot in, take the right foot out, put the right foot in...."

Laterally Related Part 4: Moving from One Lateral Movement to Another "Which way to Millinocket?"

Laterally Related Part 5: Pirouettes in Your Parlor or Connecting Circular Figures

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"Pirouettes in Your Parlor"

This booklet is dedicated to Bettina Drummond. Unbeknownst to her, she taught me the relationship between one lateral movement and another. Many Thanks!

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Preface

One might think that after surviving the birth of one book I might quit. Well it seems my fingers can't stop typing the thoughts running around in my head. Even before **Simplify Your Riding** was finished I had begun on a new series of articles for **Eclectic Horseman Magazine**. The goal was to write articles on lateral work but I soon discovered that there was much to be said before actually writing anything about going sideways on your horse. First you needed to know what you were trying to accomplish and why moving the horse laterally might help. As a result the first six articles are presented here in **The Essential Elements of Lateral Work**.

It was quite gratifying to finally get these concepts into print. I had been trying to write an article about the horse being on the bit and in self-carriage for years. The stumbling block was the images. One cannot publish photos without reproduction rights. Hence I could not print the images I use in my lectures. But, after taking a

series of Anatomy in Clay® courses with Jon Zahourek I discovered suddenly that I could draw horse skeletons! (See **Anatomy of a Good Seat Reader**) Granted they could be better if I was a trained technical artist. Be that as it may I think you will find that my humble skeletons get the point across. Fortunately I was able to recruit two wonderful graphic/artists to help me with the other illustrations in **The Essential Elements of Lateral Work** reader and **The Effortless Rider®** reader.

In time my hope is that these readers become fully-fledged books but that could take years. I decided to publish them in this form so that my students and all equestrians trying to improve themselves could benefit. I hope you enjoy the information herein and please feel free to contact me via email with your questions and thoughts. My response time seems to be dictated by the wordiness of the email. Short and to the point yields the fastest response.

Enjoy the ride! Wendy Murdoch

About Wendy

Wendy Murdoch has ridden since childhood in a variety of disciplines including Hunters, Dressage, Eventing, and Reining. In 1984 while working towards her PhD in Equine Biomechanics, Wendy incurred a severe riding accident. The accident changed the course of her life from theoretical study to applied biomechanics for both horse and rider. As a result, Wendy has been teaching internationally for over 18 years. Her goal is to make riding more enjoyable and fundamentally simple by showing her students how to achieve what great riders do naturally.

Wendy's students range in disciplines from Dressage, Eventing, Reining, Hunters, Jumpers and pleasure/trail. Wendy works with riders of all abilities, levels, and ages. The principles she teaches are fundamental to all riding. They are refined and specific in order to benefit not only average riders, but also those at the top levels of competition. Wendy's thorough knowledge of anatomy, biomechanics and teaching gives her a wide range of tools to assist each rider to achieve their goals.

Wendy holds a Master's Degree in Equine Reproductive Physiology from the University of Kentucky (1986). Her background includes intensive study with Linda Tellington-Jones, Founder of TTEAM®; and Sally Swift, Founder of Centered Riding®. In 1992 Wendy became one of an elite group of people to apprentice under Sally Swift. She has also worked closely with Dr. Joyce Harman, holistic veterinarian and noted authority on saddle fitting; Bettina Drummond, an authorized representative of the Nuno Oliveira School in North America; Jon Zahourek, creator of Zoologik®, Equiken Anatomy in Clay® system for learning anatomy; and Dr. Hilary Clayton, recipient of the McPhail Chair at Michigan State University to study biomechanics in dressage horses.

Wendy believes that continuing education is essential to achieving her goals. In 2005 she completed the 4-year training and is now a Guild Certified Feldenkrais Practitioner®. As such Wendy now has more ways of presenting the fundamental riding principles to her students. In addition Wendy continues to study anatomy. She has completed the Zoologik®, Equiken®, Advanced Equiken®, Maniken®, and Comparative Anatomy courses. In addition Wendy has organized and participated in



two courses with Dr. Hilary Clayton: Anatomy, Conformation and Biomechanics Workshop (2004) and The Dynamic Horse Seminar (2005). Wendy has traveled to Europe to further her education by attending the Global Dressage Forum (2004-05) in Tilburg, The Netherlands and has had the opportunity to work with Arthur Kottas-Heldenberg, Retired First Chief Rider of the Spanish Riding School, considered the best Dressage rider in Europe in 1998.

In addition to her teaching, Wendy takes time to write. Her articles have appeared in numerous magazines including *Dressage & CT*, *Equus*, *Practical Horseman*, *The Trail Less Traveled*, *Eclectic Horseman*, and *USDF Connections*. Her first book *Simplify Your Riding* was released in March of 2004. In her writing she uses visual images, clear illustrations and kinesthetic exercises to help the rider feel, see, and understand the concepts presented. Wendy is committed to making complicated riding concepts easy to understand in common language.

In 2006 Wendy released her *Ride like a Natural* DVD series parts 1-3.



Introduction to Lateral Work

An overview of lateral movements

by Wendy

Murdoch

L

ateral movements are movements in which the horse moves sideways as well as forward. Awhile back I promised that I would write about lateral work (asking the horse to perform different lateral movements). I realized that before I could begin, you needed some other information about what self-carriage was in order to understand the concepts behind lateral work. Therefore, over several issues I have tried to explain why it is necessary for the horse to move efficiently in gravity and what both horse and rider need to do to be in self-carriage. (See *Anatomy of a Good Seat Reader*)

I felt these discussions were necessary as a prelude to lateral movements because the point of lateral work is to improve the horse's balance and quality of movement. In other words, lateral work is intended as training techniques to improve the horse's overall strength and flexibility while carrying the weight of a rider. Therefore, a solid understanding of good function is critical

"In other words, lateral work is intended as training techniques to improve the horse's overall strength and flexibility while carrying the weight of a rider. Therefore, a solid understanding of good function is critical to understanding why one might want to use a particular lateral exercise."

to understanding why one might want to use a particular lateral exercise.

Hopefully you have come to recognize that self-carriage is a result of the biomechanics (the mechanics of a living being) necessary to deal efficiently with gravity. Utilizing this biomechanical design to its fullest potential is what we consider beautiful, graceful, and elegant and awe-inspiring. Examples of elegant movement are a horse playing in the field, an accomplished dancer or an athlete at the top of their game. All of this can be consciously achieved if we acknowledge the most important physical law in relation to movement—gravity. I am not discussing other important aspects required to

achieve a high standard of performance such as desire, calmness, proper mental attitude, etc. However, I have found that when a horse is pain-free, well balanced physically and suited to the task, the mental aspects listed above appear as a result of this physical understanding and self-confidence.

Remember, gravity is something we can never escape and which should always be taken into account when doing most anything. The better we function in gravity, the less it appears to influence our movement. If we are out of balance with gravity, we could hit the ground hard, gravity being the force that pulls us down.

According to scientific studies, falling is the most instinctual fear that humans have. It is conjectured that this evolved from a time when we were arboreal creatures (living in trees). Clinging

Movement	Direction*	Bend**	Orientation	Tracks	Gaits
Straight line	→ ↑	L,R,S	None	2	W,T,C
Circle	○	L,R, away	None	2	W,T,C
Counter bend circle	○	L,R, away	None	2	W,T,C
Reinbeck (backing up)	↓ ○	L,R, S into, away	None	2	T ***
Leg Yield	→ ←	S away		2	W,T,C
Side pass	→ ←	S away	None	2	W
Full pass	→ ←	L,R into	None	2	W,C
Turn on forehand (1/4, 1/2, 3/4, full)	○	L,R away	None		W
Turn on haunches (1/4, 1/2, 3/4, full)	○	L,R into	None		W,T,C
Pirouette (1/4, 1/2, 3/4, full)	○	L,R into	None		W,C
Pivot on haunches	○	S into, away	None		W
Spin (inside or outside hind leg pivot)	○	S into	None		W,T
Turn on center	○	L,R into	None		W
Lateral displacement	↗ ○ ↖ → ←	L,R(neck straight)	IN,OUT	4	W,T
Shoulder-fore	↑ ○	L,R away	IN	2	W,T,C
Shoulder-in	↑ ○	L,R away	IN	3	W,T,C
Shoulder-out	↑ ○	L,R away	OUT	3	W,T,C
Haunches-in (Travers)	○ ↑	L,R into	IN	3	W,T,C
Haunches-out (Renvers)	↑ ○	L,R into	OUT	3	W,T,C
Half pass (two tracking)	→ ←	L,R into	None	2	W,T,C
Roll back (180 degrees)	○	L,R into	OUT		STOP,W,C

* Direction is forward, backward, diagonal and/or in a circle. ** Bend is left (L) or right (R) moving into the bend or away from the bend. *** In the reinback, foot-falls follow a diagonal pairing just as in the trot.



Direction

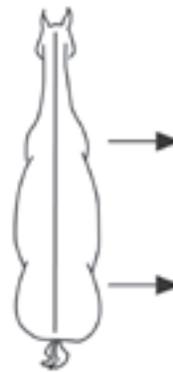
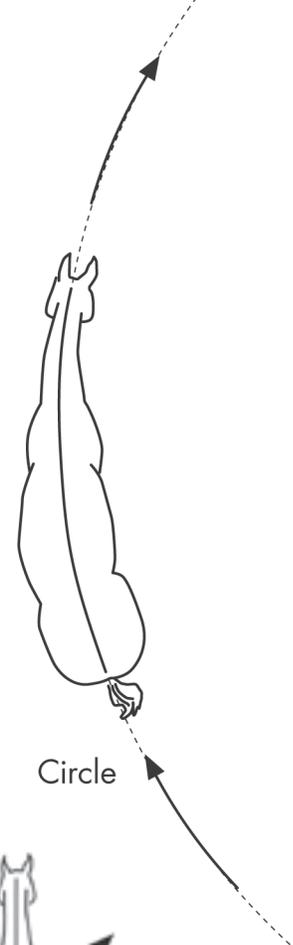
to the branches was critical to our survival. The thing most riders are afraid of is falling off their horse, which I think might be second to having the horse run away with us and then falling off.

Horses are also afraid of falling. The horse will at all costs attempt to preserve himself from falling. The biomechanics of the horse dictate certain ways in which the horse will react to the lack of balance. One specific way is to raise the head, which moves the weight of the head and neck back toward the center of gravity. This will cause the horse's back to hollow. While this posture may address the immediate balance issue the horse is facing, its overall effect decreases the rider's comfort and ability to direct the horse. This is a short-term answer to a bigger problem—lack of ease and efficiency in gravity.

Many horses (just like people) are average citizens. I can't tell you how many people believe the myth that just because it is a horse, it is a good athlete. While we are breeding much better athletes every day, the majority of horses and riders have some stiffness, habitual patterns of poor use and soreness. This is why training is so important. Training is supposed to teach the horse how to move better in order to access his latent abilities.

With good training the horse learns how to address the balance problem of carrying a rider, i.e.: engaging the hindquarters under the weight of the rider, as long as there is no pain. Ultimately, if the training progresses, the horse achieves self-carriage under the rider and is then returned to his natural state, that which we see momentarily in the field when excited, on his own. A horse that has learned how to adjust to the demands of carrying a rider is much more available to listen to the rider's requests than one that is struggling to maintain his balance.

Lateral work, when properly applied, provides tools to teach the horse how to balance with the weight of a rider so that he moves more efficiently, with less effort. Good lateral work training increases the flexibility of the horse's rib cage, which lifts the back and unifies the horse's top line. Well-trained lateral work is maintained by sequential adjustments in weight and contact as opposed to locking the horse in a frame and then trying to bend the horse through force applied to the ribs. Used badly, lateral work becomes an exercise in pulling and kicking on the part of the rider. On the part of the horse, poor lateral work becomes an exercise in pain, falling, feeling restricted by the gripping aids of the rider



Sideways



Diagonal



Forward



Backward



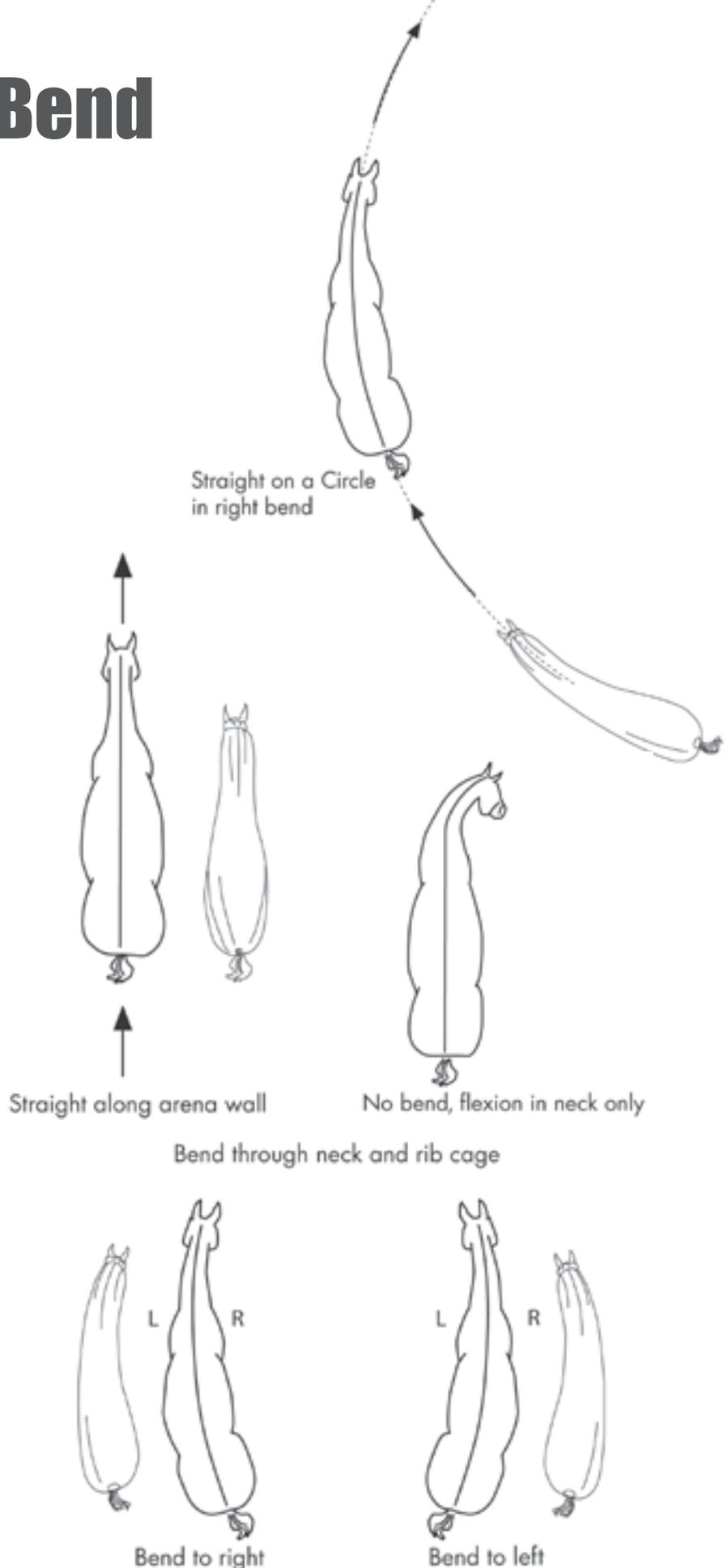
Bend

or resisting the rider's attempt to make the horse move sideways. When lateral work is well trained and with proper intent, the end result will be a horse that can move easily and efficiently in all gaits, and can travel straight with thrusting power in self-carriage while being able to respond to the rider's request to move in any direction with only the slightest indication from the rider through the aids. In other words, the horse will become an excellent partner in following your lead.

However useful lateral work may be to develop a well-trained horse, it is often a sea of confusion offering mysterious movements within which most riders flounder. I myself can recall my first attempt to understand lateral movements. I decided I wanted to understand the shoulder-in. I pulled numerous books off my bookshelf, consulting many of the greats including Podhajsky, Oliveira and Steinbreck. To my surprise and horror, I realized that each described this movement differently and made emphatically different recommendations. "Never do a shoulder-in at the walk," "start shoulder-in at the walk first." "The shoulder-in should only be performed on three tracks," "ride the horse on four-tracks." I could go on. If you are interested, perhaps you will research this for yourself. Bottom line, I could not come up with clear, concise or consistent description regarding this subject that I could understand and relate to.

I found it was best to close all the books. I went out to the arena with my horse and attempted to do some lateral work on my own. Ultimately, I made sense of it all by watching a video of Bettina Drummond recorded at a Wilton Pony Club demonstration. Bettina demonstrated how all the lateral movements were related. What a surprise this was to me! And once I conceived this, I could then understand all the movements at once and relate to their purpose instead of simply their position. Since then I have attempted to simplify the lateral movements in my teaching by starting with an overview of all the different movements. I will do this below as well. In this way I hope you will see how these moves are similar to and different from each other.

For those of you who have ridden at my clinics, this lesson is referred to as the "Zucchini Lesson." I typically use two small zucchinis (summer squash also works) to represent the horse in different positions. If you don't believe me try it! Get yourself one or two small zucchinis (under 6"). Find ones that have a good "bend." I like zucchini better than bananas because they have the



bend more toward the front and are straight through the lumbar area and croup, which is more accurate. Bananas have too much curve. Place the zucchini within a boundary, a tabletop will do. Move the “horses” according to bend and direction for each of the lateral movements. This will help clarify which way you are going before you get on your horse.

The terms and descriptions of lateral movements are much more specific and clearly defined for English than Western riding. For simplicity I will refer mainly to the English terms. To chunk things down further, I define each lateral position by using five characteristics: Direction, Bend, Orientation, Tracks and Gaits. I find that by considering the different positions in this way, it helps to see the relative similarities and differences between lateral movements.

Direction

I use direction to refer to the direction the horse is moving. Diagonally can be either diagonally left or diagonally right (see diagrams page 6). In pivot-like movements the horse can do quarter turns, half turns, three-quarter turns, full turns or multiple full turns (spins).

You can also look at direction with regard to bend (see diagram at left). With any movement that requires bend, the horse can move into the bend or away from the bend. The degree of movement into or away from bend may be slight; however, this distinction can result in a specific movement. For example, half-pass is moving diagonally into the bend, whereas traveling in the same direction on the same diagonal line without a bend is leg yield. Traveling the same line diagonally but moving away from the bend with the shoulders to the inside of the bend would be a shoulder-out or -in on a diagonal line (depending on where the wall is, see orientation). This is where you need to get your zucchini and roll it from right to left bend while moving along the same line to see the difference. Therefore, the horse's bend in relation to the direction can result in different lateral movements. On the chart (page 5) I have put this distinction in the column on bending (into and away).

Bend

Most people think of bend as referring to the bend in the horse's neck. Actually, this is not quite correct. Bend refers to the shape of the horse's rib cage, and spine. Bend originating from the rib cage will reflect in the shape of the horse's neck (as long as the neck is not stiff.) If the bend fails to come through the rib cage, then the horse will not truly be bent.

A horse bending laterally through the entire spine is similar to side bending in people. To get an idea of what side bending is like, drop your left ear toward your left shoulder and your left shoulder toward your left hip while sitting. Notice that the ribs on the left come closer together while the right side of your rib cage expands. As the horse expands the ribs on the outside of the

curve (underneath the shoulder blade), he fills into the outside rein. This is what happens when you ride the horse from inside leg to outside rein. If there is too much bend in the rib cage, the horse will fall through the outside shoulder.

Bend can be either Left (L), Right (R) or straight (S). In my book, *Simplify Your Riding*, I have photos (page 90) of a horse in left and right bend taken from behind and above to see the change in the horse's spine. (See diagram on bend, page 7.)

A good definition of flexion and bending can be found in Susan Harris' book *Horse Gaits, Balance and Movement*. Sue describes different types of flexion as follows: “Longitudinal flexion refers to the bending of the horse's joints from back to front (nose to tail), the ‘long way.’ It can refer to a part of the horse, such as flexion at the poll, neck or jaw, or to flexion throughout the whole body. Longitudinal flexion is what people are trying to achieve by riding their horse ‘long and low.’ Direct flexion usually refers more specifically to longitudinal flexion of the poll and in the mouth. When the horse flexes longitudinally in all his joints, he is said to be collected. The horse can flex laterally (sideways) at the poll, in the neck, and very slightly in the back and lumbar spine. In order to flex laterally the horse must flex longitudinally to some degree. Bending requires engagement of the hindquarters, lifting of the back and slight rotation of the spinal column. Consequently there is no such thing as lateral flexion without longitudinal flexion.”

This last statement indicates why correct bending and lateral movements improve collection. Also, the rotation of the spine to which Sue refers is what influences the shape of the rib cage and vice versa. When a horse is bent correctly, the change in the rib cage allows the rider's inside leg to rest into a pocket created by the decreased space between the ribs on the inside of the curve. A horse that is bending correctly through the rib cage will also cause the rider's inside seat bone to be slightly lower than the outside due to the configuration of the ribs in lateral flexion. (I will discuss this further when I talk about the rider's position in lateral work.)

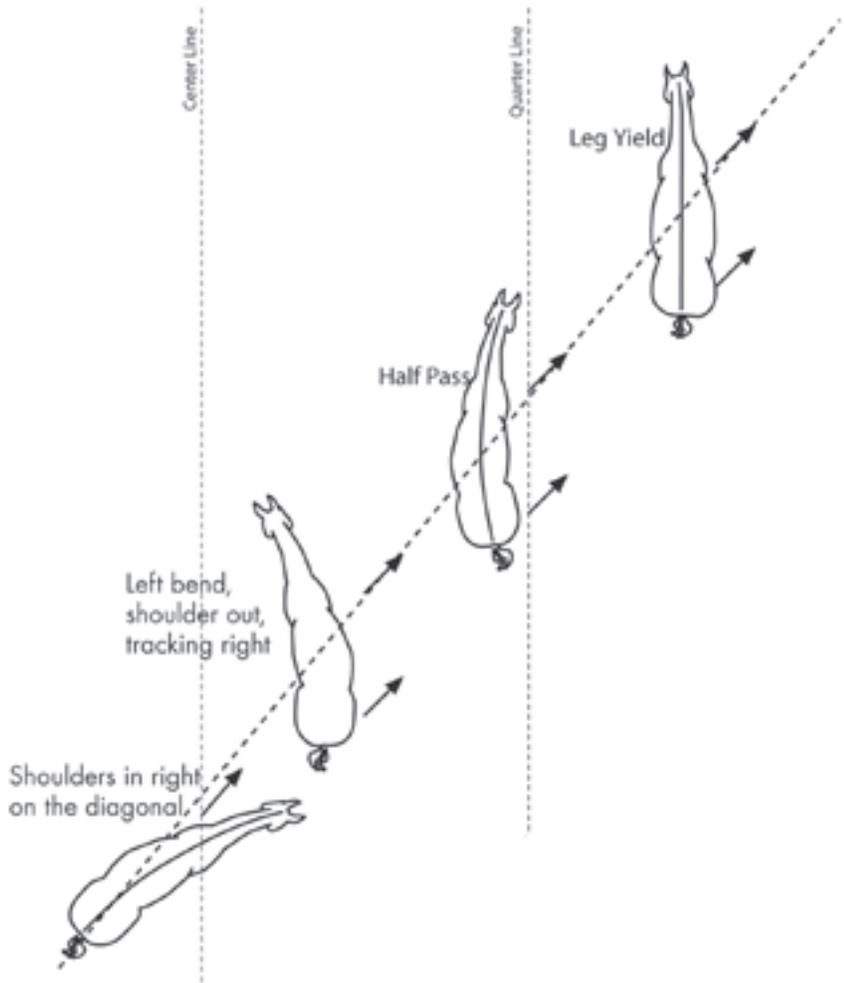
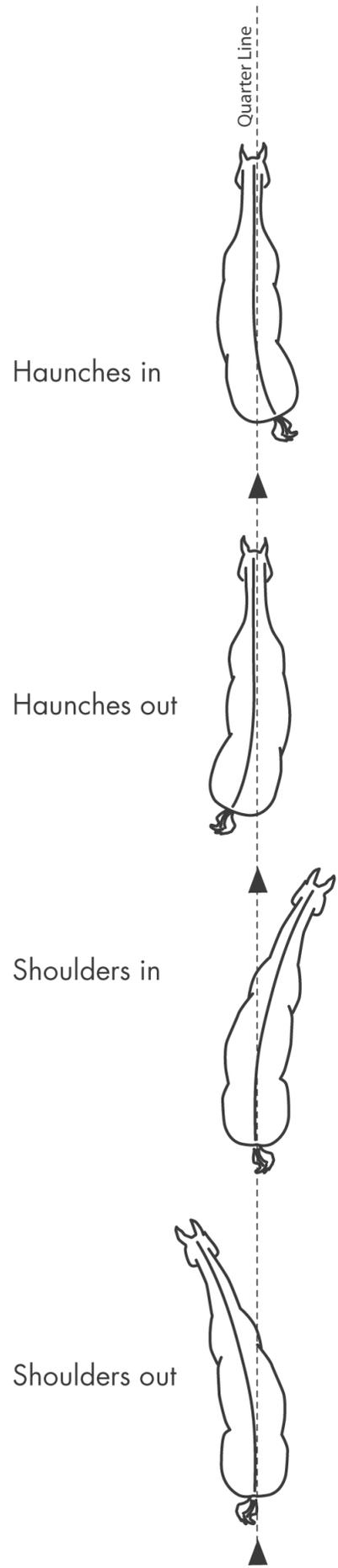
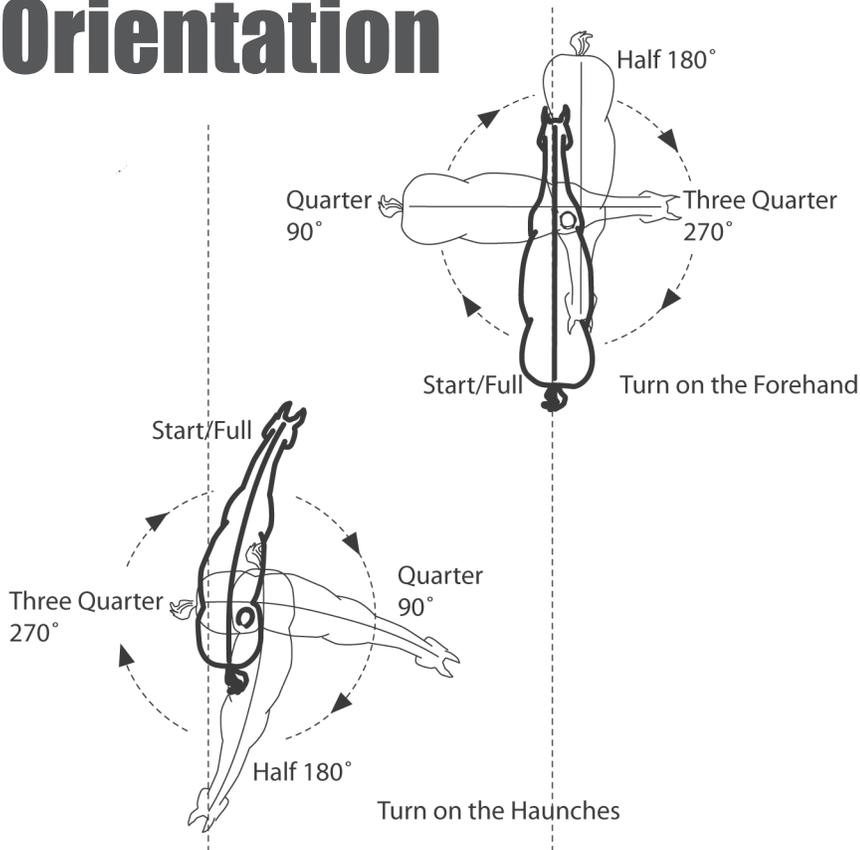
Orientation

Orientation requires working within a defined space such as a dressage arena or large square pen. You can use cones or poles to mark corners if you are working in an open space, to give you orientation. A square or rectangular arena can be divided lengthwise into 4 equal portions. The centerline bisects the arena into two halves. The quarter lines bisect the halves into quarters. Therefore, the arena can be divided into four equally wide segments running the length of the arena. The imaginary demarcation of a centerline and quarter lines are useful when moving laterally. Typically, a leg yield would be ridden from the quarter line to the wall and then from the centerline to the wall.

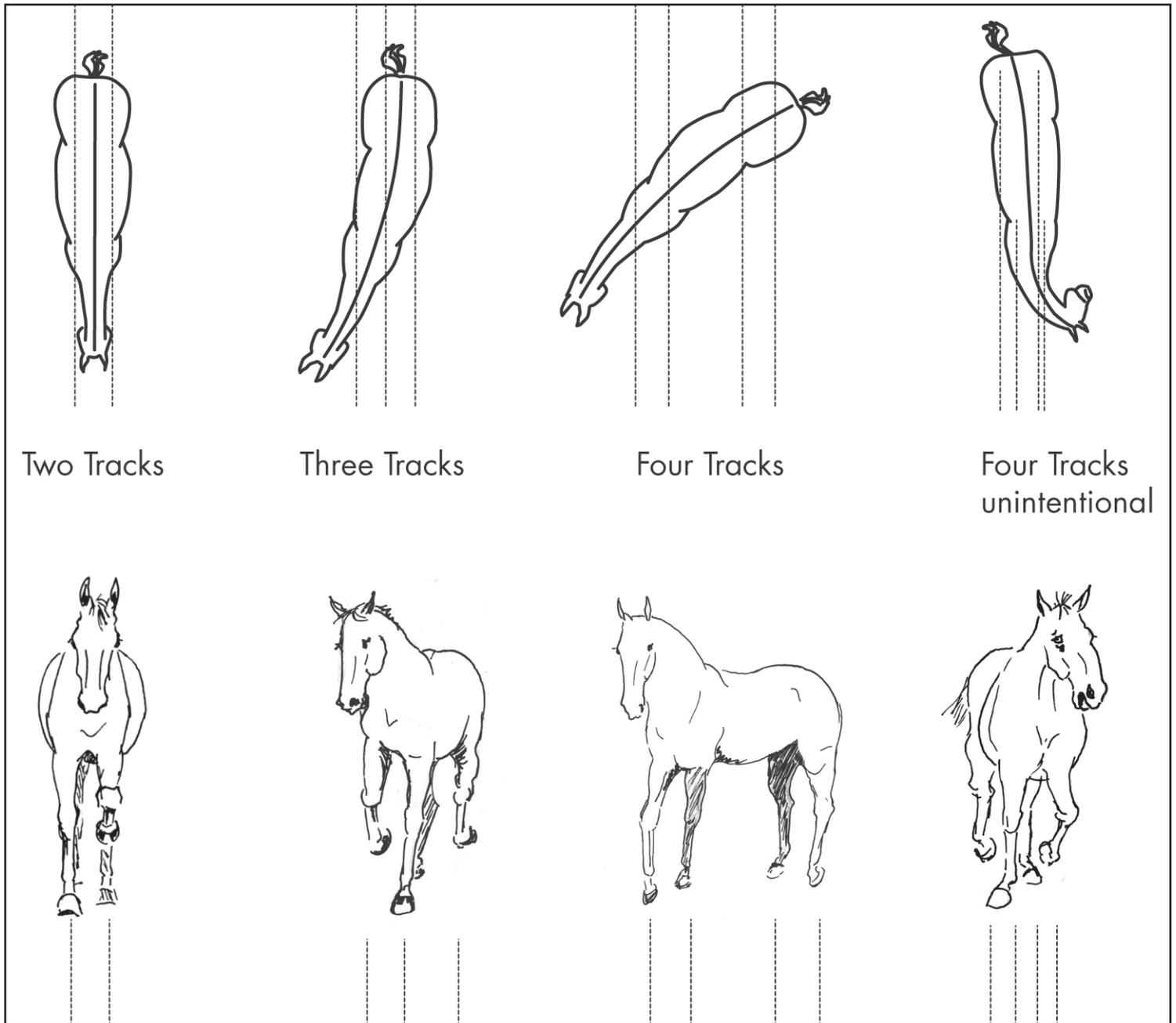
The terms “in” and “out” come from the 18th century when a classical riding arena was a small square. “In” refers to inside the line of a circle, while “out” refers to outside the line of the circle.



Orientation



Tracks

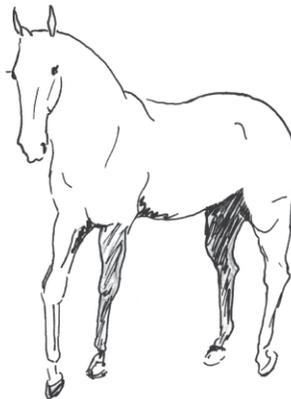


Two Tracks

Three Tracks

Four Tracks

Four Tracks unintentional



Hence a shoulder-in means that you would move the shoulders onto a line to the inside of the circle line. If you were riding a shoulder-out, you would move the shoulders onto a line to the outside of the circle line. For some students “in” and “out” can get confusing. In these cases I use the terms “right” or “left” to indicate which lateral position should be performed, i.e., “shoulder-in right, shoulder-in left.”

When riding circular movements, you also have to consider the amount of rotation in addition to “in” and “out”. The amount of rotation is determined by where the circle starts and how much of a circular turn ones does. For example, a turn on the forehand can be a full turn (360 degrees). You end facing the same wall at the end as when you began. In a half-turn (180 degrees) you

end facing the opposite direction. A three-quarter turn is 270 degrees. You stop at the third wall of a square. In a quarter-turn (90 degrees) you end facing the first wall to the right or left of where you started. (See diagram page 9.)

Tracks

Each lateral movement can create a different number of tracks based on the path of each leg and the horse’s degree of angle to the wall. Tracks generally refers to the number of separate lines formed by the horse’s legs and feet. This is different from “tracking up,” which refers to the hind foot stepping into the print of

the forefoot when watching from the side. It is also different from “the track” meaning the path along the wall of the arena.

Many times you will hear an instructor tell someone to “stay on the track,” meaning ride straight along the wall of the arena. Sometimes you will hear “ride off the track (to the inside),” which means ride at least one horse’s width to the inside of the track along the wall. The word track can be used to mean which way around the arena you are traveling. Track to the right or “track right” means that your right hand is closer to the center of the arena, or clockwise. Track to the left or “track left” means your left hand is closer to the center of the arena, or counterclockwise. Finally, tracks... for lateral work is usually determined by watching the horse from end on (front or rear).

The problem with talking about tracks for lateral work is that there are different ways to refer to the number of tracks the horse is traveling on. Some people refer to a half-pass as “two-tracking.” Sometimes an actual three-track movement is called two tracks as in a shoulder-in. This is because the hips remain on the track, against the wall of the arena, while the shoulders are on a track to the inside of the wall track. However, a correct shoulder-in is three tracks if you watch the limbs.

In order to minimize the confusion, I will make the following distinction for this series of articles:

Two tracks—The hind feet follow in the track of the front feet so that when looking from the front you will not see any displacement of the hindquarters or shoulders to either side. This is the case when a horse is moving straight forward on a line or a circle.

Three tracks—When viewed from front or rear, there are three distinct lines that the legs are on. This is regardless of which part of the horse is displaced (fore or hindquarters).

Four tracks—There are four separate tracks, one for each leg.

None specified—In some lateral movements, such as a spin or turn on the forehand, the number of tracks is irrelevant. In these cases the size of the area traveled by the front or hind feet is the critical factor. In a spin if the hind leg does not remain in place, then the horse might actually be turning on center, not spinning.

Sometimes a horse will displace his hips to the inside without the rider’s intention. This can often be observed in a horse with a poor canter; the hindquarters will be on an inside track and the back will be dropped. This is the result of crookedness, stiffness, and/or pain. The horse is attempting to compensate by traveling with the quarters in, thereby avoiding longitudinal flexion. With proper exercise and training this kind of problem can be corrected through lateral work. Generally, the rider will not appear very skilled and it will be obvious they are not intentionally asking for this kind of position from their horse. This is not to be confused with someone intentionally asking the horse to move his quarters over. (See diagram page 10.)

Gaits

Most lateral movements can be performed in different gaits; walk, trot and/or canter. Some lateral movements are limited to one or two gaits. For example, the spin is only done at the walk or trot. Soft-gaited horses can also do lateral movements. I am not an expert in soft-gaited horses. Therefore, I will limit my discussion to the three basic gaits: walk, trot and canter.

Lateral movements and their characteristics

In the chart on page 10, I have attempted to list as many lateral movements as I can think of. I have included basic straight movements for completeness. All movements can be ridden on the left hand and on the right hand (tracking left or right or turning left or right); therefore, I have not specified this in the chart. For example, the turn on the forehand can be ridden turning the hindquarters to the right away from the right leg or turning to the left away from the left leg.

In order for you to understand this chart, the best thing to do is grab your “zucchini horse” and follow along (I am not kidding!). For example, if you roll the zucchini so that its bend is to the left and move it straight ahead you have a left bend moving straight. If you roll it to the right, you have a right bend moving straight. If you orient the curve toward the table surface (neither left or right) and move it straight forward, you have a straight line with no bend. As far as orientation is concerned for a straight line, it doesn’t matter where the wall is; the hind legs follow in the track of the front legs so you have two tracks and you can ride a straight line at walk, trot or canter.

For something a little more complicated, let’s look at shoulder-in. Take the zucchini and roll it so that the bend is on the left. Place it on the track on the right-hand wall of your “arena.” Move the “shoulders” in off the track. Now move it straight forward in this position. Since the bend is on the left and you are moving forward, you are moving away from the left bend. Make sense?

Now roll the zucchini over so the bend is on the right. Move the shoulders so that they are closer to the wall than the hindquarters. Continue straight forward. You are now in shoulder-out.

If you pick up the zucchini and place it on the left wall without altering its relative position, you will be in shoulder-in tracking to the right. The only thing you changed here is which hand you are traveling around the arena, right hand around instead of left hand around.

In the next installment I will demonstrate how many of the lateral movements relate to each other. In the meantime I will leave you to ponder the importance of why I have chosen to list the movements in this particular order.

If you have any specific questions you would like answered about this article or within this series of articles, please feel free to email me at wendy@wendymurdoch.com.



Laterally Related Part 1:

A Characteristic Grouping of Lateral Movements

by Wendy Murdoch

Lateral movements are when the horse moves sideways as well as forward. Lateral work can be used to improve the horse's athletic ability through specific exercises and to enable the rider to perform specific tasks such as closing a gate. Lateral work improves the horse's flexibility, strength and overall function in order to achieve self-carriage.

In the last article I established 5 characteristics in order to help comprehend and compare the different lateral positions. These characteristics are Direction, Bend, Orientation, Tracks and Gaits.

A brief definition of each characteristic follows:

Direction— the direction of travel; Forward, Backward, or Diagonally (circles can be Forward or Backward).

Bend— the curvature of the horse's spine. Bend can be Left, Right, or Straight (no bend).

Orientation— In or Out. This refers to the line of the circle. "In" means to the inside of the line of the circle, while "Out" means to the outside of the line of the circle.

Tracks— the number of paths created by the legs of the horse. Two tracks—the hind feet follow in the track of the front feet; Three tracks—there are three distinct lines that the legs are on with two legs on the same path; and Four tracks—each leg forms a separate path, one for each leg.

Gaits— I have limited the discussion to the three primary gaits; walk, trot, and canter and halt. Lateral work can be performed by soft-gaited horses. As I am not well versed in the soft-gaits; therefore, I will limit my discussion to the three primary gaits.

As we proceed through the different lateral positions, I will utilize these five characteristics to demonstrate the similarities and differences between the lateral positions.

In the last article I suggested you acquire two small zucchini (or summer squash) to help you sort out the different lateral positions. Well, now's the time to go to the grocery store and buy some new ones. While you might find this amusing, I am really not kidding. I have taught this lecture for a number of years with zucchini. Vegetables really help make the information stick because you are physically moving something around as you sort out the different movements. Physically moving something helps you embody the information.

Groupings

In the last article I listed 21 different movements. Four of these are not lateral movements. I included them for completeness. The 21 movements are:

- Straight line
- Circle
- Counter bend circle
- Rein back (backing up)
- Leg yield
- Side pass
- Full pass
- Half-pass (Two Tracking)
- Turn on the Forehand
- Turn on the Haunches
- Pirouette
- Pivot on haunches
- Spin
- Turn on the center
- Lateral displacement
- Shoulder-fore
- Shoulder-in
- Shoulder-out
- Haunches-in (Travers)
- Haunches-out (Renvers)
- Rollback

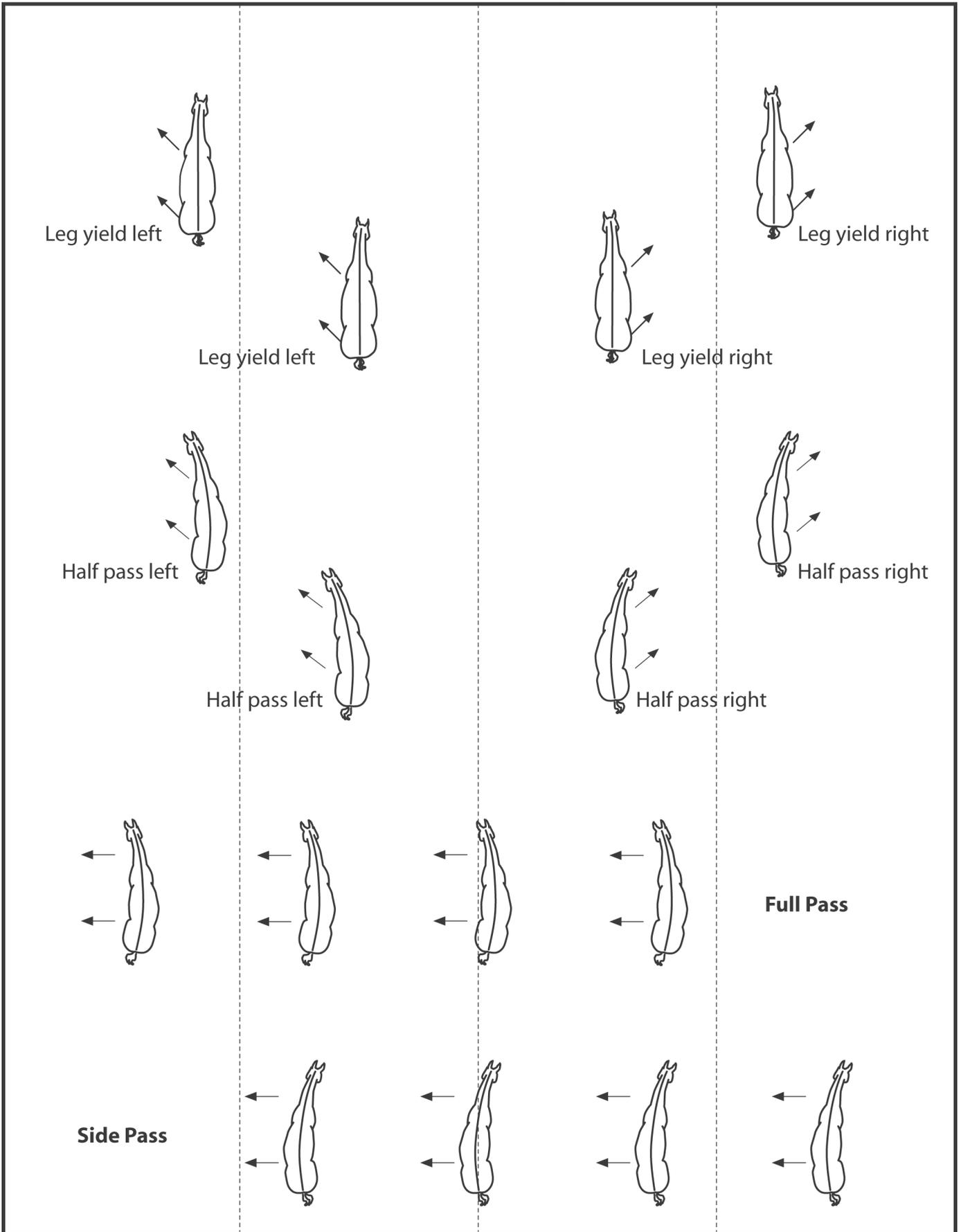
The four basic movements not considered lateral movements are:

- Straight line
- Circle (left and right)
- Counter bend (left and right)
- Rein back (backing up straight)

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Lateral Movements Related By Direction



The reason these are not considered lateral movements is that the horse does not move sideways. The left and right pairs of legs essentially follow in the same track. Note, however, at this time that I am not talking about the degree of difficulty for any of these movements. I will reserve that for later because you could say that riding a straight line is the most difficult movement of all. For now I simply want you to think how these movements are related. Don't worry about how, when or why you would ride in different positions. We will cover that in future articles. I plan

to take each movement separately and discuss it in greater detail.

Suffice it to say that riding around an arena or on the trail, you are basically going straight. In riding a circle, the horse follows the line of the circle, hind legs in the track of the forelegs. When counter bent, the horse is still following the line of the circle. This is because the bending occurs in the spine rather than a displacement of the legs. Rein back can be ridden straight or on a circle but still the horse essentially follows the path of nose or tail.

Therefore, in basic non-lateral movements:

Direction: Forward, backward (on straight lines and circles)

Bend: Left, right or straight (no bend)

Orientation: None (you are on the line of the circle itself; therefore, you are not oriented "in" or "out" in relation to the circle)

Tracks: Two (the hind feet follow in the track of the front feet)

Gaits: All (walk, trot, canter, soft-gaits)

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It's time to get out the zucchini

Words can get really confusing, especially in this type of discussion. Therefore, it is time to get the zucchini and figure out the different movements. Create an "arena" on the surface of a table. Place your "horse" (zucchini) at the end closest to you. Roll it from left to right so that you get the sense of left bend and right bend. Now place it so that the ends curve down toward the table. This would symbolize straight.

Next place the "horse" along the right side of your "arena." Again switch from right to left bend, noticing how it changes where the head (stem end) is oriented. Put the "horse" on a left bend (concave side on the left). Move it on a circle keeping the bend toward the inside of the circle. This would be traveling on the line of a circle straight with a left bend. Switch the bend, but continue in the same direction (right bend). Keep making a circle to the left with the bend on the right. You are now "counter bent" (bending to the right) on the circle tracking left. Return to a left bend.

Come out of the circle and continue moving your "horse" along the wall of the "arena."

When you get down to the bottom (closest to you), continue along until you get to the bottom right-hand corner of the arena. Now turn and head toward the upper left corner of the "arena." Keep the "horse" straight (shoulders in line with hips). Change the bend (roll the zucchini from left to right so the concave side is to the right). Track right when you reach the corner. You have now made a change of direction and bend across the diagonal of the "arena." Notice that the "horse" was aimed from corner to corner following a diagonal line from bottom right to upper left. Therefore, the horse remained "straight" moving on a diagonal line.

Next, follow along the right side of the "arena" until you are at the bottom again (closest to you). Begin to travel up the

centerline of the arena. You are still in right bend. Stop. Slowly begin to move the "horse" diagonally sideways toward the upper left-hand corner of the arena, still in right bend. Make sure you keep the "horse" parallel to the sidewall of the "arena." You are now leg-yielding to the left. Stop. Without changing bend, move the "horse" diagonally to the right toward the upper right-hand corner of the arena. You are now in half-pass right.

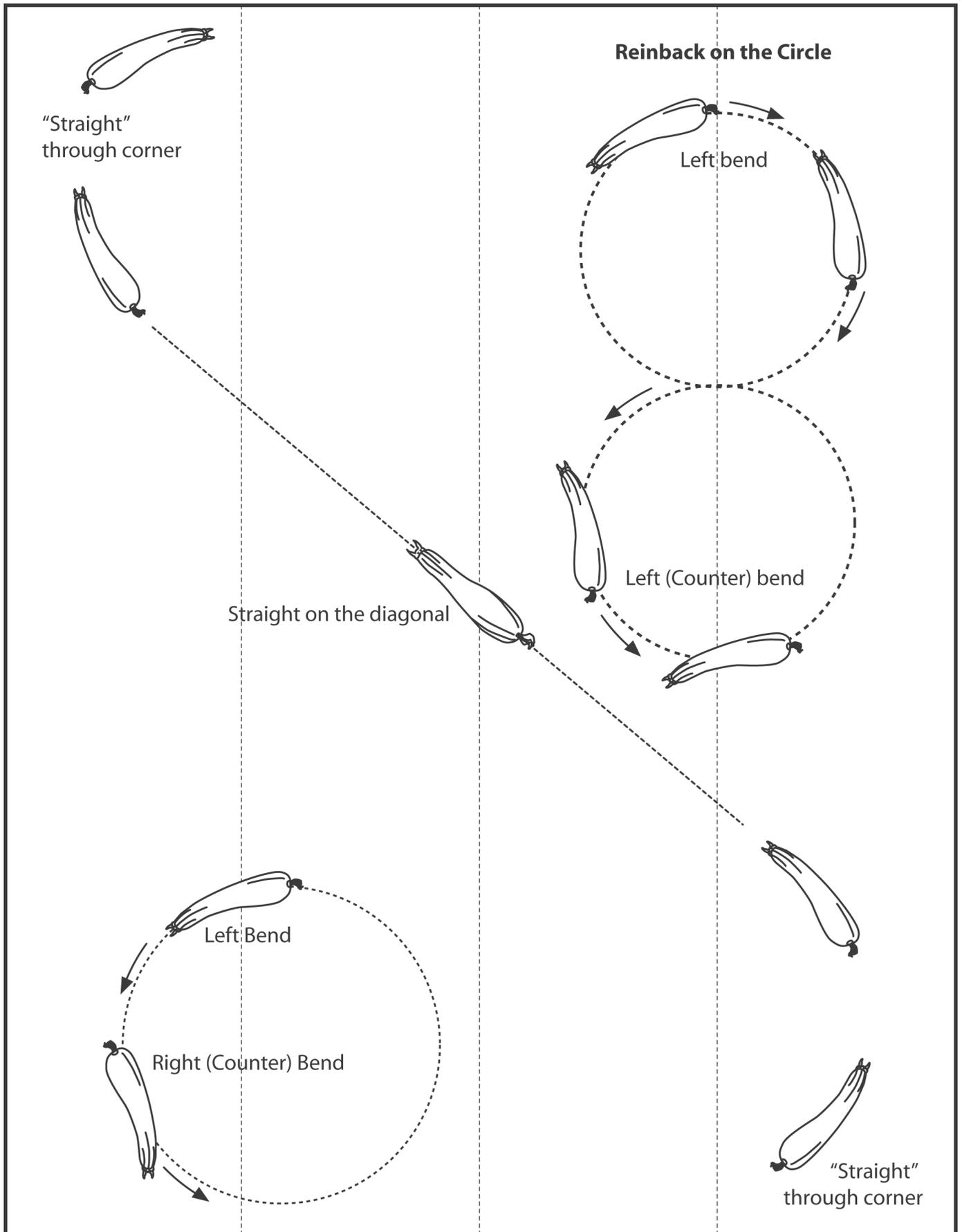
If you did a very gradual leg yield, you may have run out of room to begin half-pass. Begin again, this time moving more sideways than forward so that you reach the center of the long side in leg yield, then move diagonally to the right in half-pass. If you did your leg yield with too much sideways motion and not enough forward motion, you will not have traveled very far up the arena, in which case you will have lots of room for half-pass to the right. Experiment with different amounts of sideways vs. forward motion to see how the angle of the sideways movement influences where you will wind up when you reach the long wall of the arena.

Once you get the feel for simulating the different positions, challenge yourself by using two "horses" simultaneously (a pas de deux!). Move your "horses" through all the different lateral positions and see how they relate to each other, not only as movements but also as they are oriented in the arena. For example, if you take your "horse" into a left shoulder-in position while on the right wall of the arena and then pick up the "horse" and place it on the left wall, you will have a left shoulder-out. Simultaneously, position the two horses in shoulder-in on the two different walls to see how they mirror each other (right shoulder-in on the left wall and left shoulder-in on the right wall).

If you simulate first with the zucchini and then with yourself acting as the horse, you will have a much clearer picture of what you want your horse to do the next time you ask him to go laterally.



Zucchini Time - Straight in the Direction of Travel



Lateral Movements Related by Direction

The next four movements are similar to each other in several ways. First, three share the word “pass” in the name. Second, the direction of travel is on a diagonal line or sideways. Third, there is no need for orientation. Fourth, they are all on two tracks. Side pass and full pass have no forward movement (completely sideways). Half-pass and leg yield have forward and sideways movement. All four movements can be ridden either to the left or the right. The front and rear legs will cross over in front of each other. How much they cross will depend on how collected the horse is and how much the horse is moving forward vs. sideways. Traveling more forward than sideways as in a very shallow leg yield will result in very little to no crossing of the legs. Side pass and full pass are completely sideways and therefore the legs must cross since there is no forward motion.

Leg yield is typically considered a “beginning” lateral movement. The horse is straight with slight flexion away from the direction of travel. In other words, if you are traveling left hand around the arena (left hand toward the middle of the ring), you just want to see the horse’s left eye. As you begin the leg yield (e.g., on the quarter line), you turn onto the straight line, then begin traveling to the right, away from your left leg. Continue to see the inside (left) eye while maintaining the horse’s bodyline parallel to the wall, moving diagonally forward/sideways until you reach the wall. Often leg yield is ridden with a slight bend, in which case it is easy to remember which way you are going. Leg yield is always ridden away from the bend. The horse needs to stay upright (not lean) in the leg yield in order to develop thrust from the hind legs.

Side pass means the horse moves completely sideways away from the rider’s leg with no forward movement. The horse would be flexed slightly away from the direction of travel as in Leg Yield. If you again think of a slight bend, you would move away from the bend.

Half-pass is similar to leg yield except for the bend. The horse is traveling on a diagonal line, remaining parallel to the wall, into the bend. This makes half-pass a much more difficult exercise than leg yield. The horse needs to have the hindquarters engaged (coming underneath) and reach forward/sideways with the hind legs. The shoulders slightly lead the hindquarters as

the horse moves diagonally forward/sideways. Correctly executed, the horse lifts the back, which allows for greater reach of the hind legs across and underneath the body.

Full pass is similar to side pass except for the bend. The horse is traveling sideways with no forward movement into the bend. Moving into the bend makes full pass much more difficult than side pass.

So you see that leg yield, side pass, half-pass and full pass are related by bend and direction. It is easier for a horse to move away from the bend as in leg yield or side pass, than... to move into the bend half-pass or full pass. Moving into the bend requires a greater degree of collection and flexibility in the rib cage. In the strictest sense of the movement, leg yield has no bend at all. However, it is often ridden with too much flexion (bending the neck), falling or leaning. In all these movements, keeping the horse upright (withers pointing toward the sky rather than on an angle) is important.

To better understand the direction of these four lateral movements, think of a straight line up the center of the arena. (Again you could use your zucchini “horse” or draw this on a sheet of paper.) If you were to draw a line perpendicular to the centerline (left or right), you would have either side pass or full pass depending on if the horse was moving away from (side pass) or into the bend (full pass).

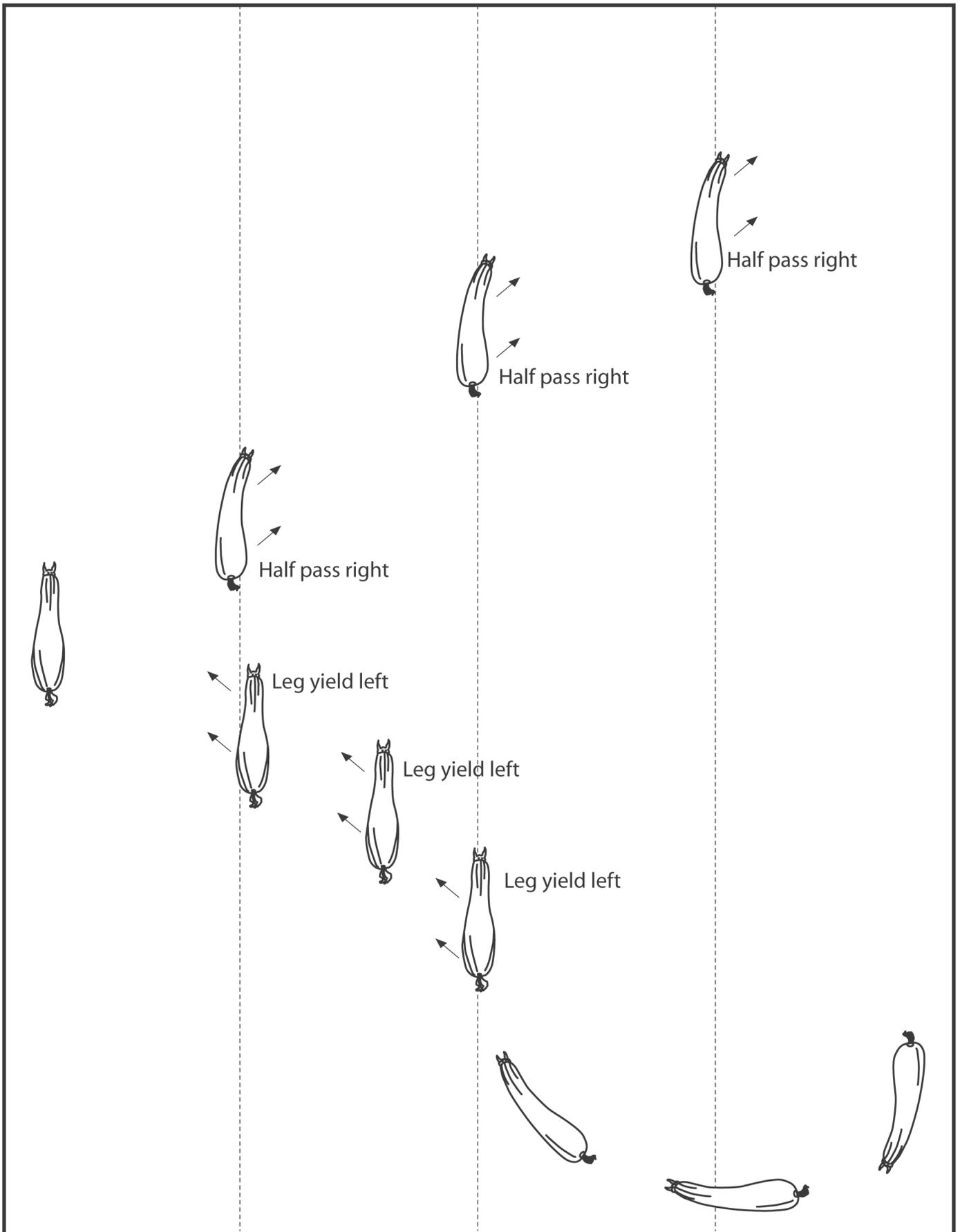
Next, from the original straight line, draw a diagonal line toward the upper corners of the arena. The “horse” must remain parallel to the sidewall as it moves forward/sideways along these diagonal lines in order for it to be a lateral movement. It could be either leg yield or half-pass again depending on if the horse was moving away from the bend (leg yield) or into the bend (half-pass). If you change the bend as you move the “horse” along the diagonal line, you could switch from half-pass to leg yield or vice versa. If the horse turns so that it is oriented nose to tail on the diagonal line (spine in line with the line of travel), you are now moving straight on a diagonal line instead of remaining straight in relation to the wall, moving laterally.

Next time, we will look at the circular lateral movements. For now, why not ponder on moving laterally sideways/forward as you walk down the barn aisle?

Movement	Direction / Traveling	Bend	Orientation	Tracks	Gaits
Leg Yield	Diagonal/ Left or Right	Straight (away)	None	2	W,T,C
Half Pass	Diagonal/ Left or Right	Left, Right (into)	None	2	W,T,C
Side Pass	Sideways/ Left or Right	Straight (away)	None	2	W
Full Pass	Sideways/ Left or Right	Left, Right (into)	None	2	W,C



Zucchini Time - Leg Yield and Half Pass



Laterally Related Part 2:

A characteristic grouping of circular movements, or “are you dizzy yet?”

by Wendy Murdoch

Lateral work can improve the horse’s balance, suppleness and strength. In order to effectively utilize lateral positions, it is important to understand what the positions are, how they relate to each other, why and when you would utilize the different positions and how to execute each of these movements. In this series of articles, I hope to do all that in a way you can easily comprehend.

In the Introduction, I established 5 characteristics and used them to compare the different lateral positions. These 5 characteristics are direction, bend, orientation, and tracks and gaits.

A brief definition of each characteristic follows:

Direction - the direction of travel; forward, backward, circular, diagonally or vertical.

Bend - the curvature of the horse’s spine. Bend can be left, right, or straight (no bend).

Orientation - in or out. This refers to the line of the circle. “In” means to the inside of the line of the circle, while “out” means to the outside of the line of the circle.

Tracks - the number of paths created by the legs of the horse. Two tracks—the hind feet follow in the track of the front feet; three tracks—there are three distinct lines that the legs are on with two legs on the same path; and four tracks—each leg forms a separate path, one for each leg.

Gaits – I have limited the discussion to the three primary gaits: walk, trot, and canter and halt. Lateral work can be performed by soft-gaited horses. As I am not well versed in the soft-gaits, I will limit my discussion to the three primary gaits.

Circular lateral movements

The next grouping of lateral movements have a circular direction and form partial or full circles. These include turn on the forehand, turn on the haunches, pirouettes, pivot on the haunches, spin (inside hind leg, outside hind leg), rollbacks and turns on the center (center point is the middle of the horse rather than any particular leg).

The fundamental similarity is that the horse does not advance on the line of travel. Instead, he turns around a pivot point. The pivot point could be the front leg, hind leg or center of the body. The radius of the circle is approximately the length of the horse’s body except when turning on center. Then it is about half that distance.

In order to perform all of these movements correctly, the horse must have the intent to move forward, thereby creating the necessary force to propel the horse around the pivot point. Without enough forward thrust, the horse becomes heavy, dull and on the forehand. Well ridden with sufficient forward thrust, these exercises help teach the horse to be responsive to the rider’s aids, develop the necessary differentiation of moving the limbs

Movement	Direction	Bend	Orientation	Rotations*	Gaits
Turn on forehand	Circular	Left, Right away	None	1/4, 1/2, 3/4, 1	H**, W
Turn on haunches	Circular	Left, Right into	None	1/4, 1/2, 3/4, 1	H, W, T, C
Pirouette	Circular/Vertical	Left, Right into	None	1/4, 1/2, 3/4, 1, multiple	W, C
Pivot on haunches	Circular	Straight, into, away	None	1/4, 1/2, 3/4, 1	H, W,
Spin	Circular	Straight, Left, Right into	None	multiple	H, W, T
Turn on center	Circular	Left, Right into	None	1/4, 1/2, 3/4, 1	H, W, T
Rollback	Circular/Vertical	Left, Right into	Out	1/2	H, C

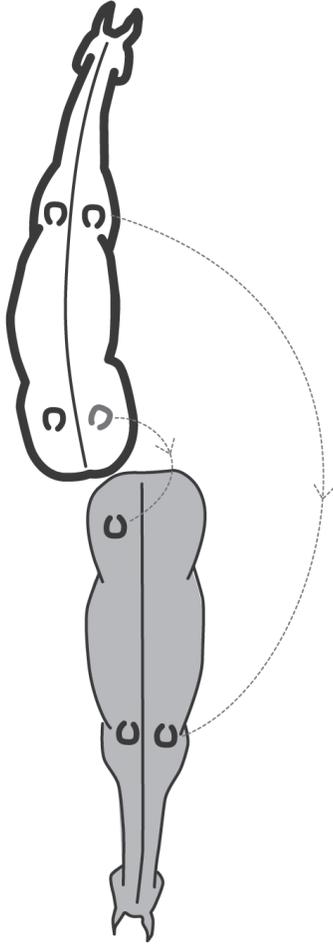
* Rotations in parts of a circle 1/4 = 90°, 1/2 = 180°, 3/4 = 270°, 1 = 360°

**H = Halt



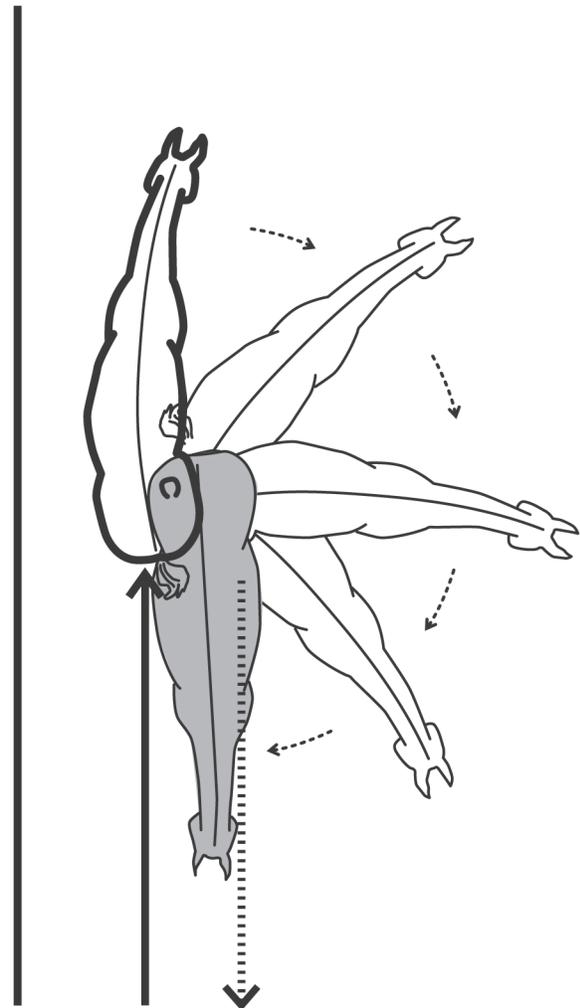
Right Rollback (180°)

Right flexion and bend through neck and ribcage, lope off on right lead.



Right Half Pirouette (180°)

Right flexion and bend through neck and ribcage. Horse returns to track one chest width off original track.



across, underneath the body and transferring the weight to the hindquarters in order to lighten the forehand.

Turn on the forehand is a movement where the horse pivots around one of the front legs. The horse is slightly flexed (in the neck) and bent (through the rib cage) as he moves away from the rider's inside leg. The inside foreleg becomes the pivoting leg (e.g., if horse is bent left, he is moving to the right, pivoting around the left front leg). The horse should not step forwards or backwards, the front legs do not cross. Turn on the forehand is a pivoting movement; therefore, the front leg should remain on the spot as the horse moves around it. This teaches the horse to displace the hind legs forward, across and underneath his body. This is an excellent exercise to teach the horse to move away from the rider's leg so that you can easily open gates and maneuver your horse in tight areas.

Turn on the haunches is when the horse moves his forelegs into the bend around the hindquarters. For example, if the horse is in right bend, he moves the forehand to the right around the right hind leg. The hind legs must maintain the movement of the gait while remaining on the spot or describing a small circle. The inside hind leg is the center of the turn; however, the horse must not pivot on the inside hind leg. Forward motion is imperative (no backward steps). Perfectly executed, the collected horse maintains forward motion as he moves into the bend (i.e., right bend moving to the right). The hind legs continue to step in the rhythm of the gait with the radius of the turn equal to the length of the horse. The inside hind foot steps in place. This is then called a pirouette.

In a half-pirouette (180°) the horse ends up being one chest's width away from the original track upon returning in the direction he came from. Pirouettes are performed at the walk and canter. In a canter pirouette the horse must be sufficiently collected and strengthened to produce the necessary vertical impulsion to lift himself up and around in the inside hind leg. A correctly executed full pirouette will maintain the rhythm and tempo of the collected canter, consist of 5 – 7 canter strides and describe a small circle of approximately 1' radius. It is an extremely difficult movement.

If a dressage horse were to pivot on the inside hind leg while executing a turn on the haunches, it would be considered a major fault. However, a Western horse is supposed to pivot. Therefore, a pivot on the haunches is the Western equivalent to the turn on the haunches for English riders.

A horse can pivot around the inside or outside hind leg. Pivoting around the inside hind leg is a forward movement. Pivoting around the outside hind leg will draw the horse back even while maintaining forward motion. Depending on what type of activity you enjoy will determine whether you want to pivot around the inside or outside hind leg.

When working cattle it is best for the horse to pivot over the outside hind leg so he won't push on the cows. Reining is an extreme sport, which, like so many sports, is no longer associated with any particular function other than itself. The requirement for a good reining spin is a pivot around the inside hind leg. However, it is rare to see a well-executed spin which remains pivoting over

the inside hind leg throughout the maneuver. A poor reining spin often becomes a turn on center instead of a spin over the inside hind leg. A turn on center is an old dressage movement used to turn around in very small spaces. It is when both the front and hind legs are crossing while the horse turns around a pivot point in the middle of the horse's body. Here's how to feel the difference.

Imagine you are on a scooter and you want to push yourself around in a reining spin. Plant your inside foot on the ground with your weight a little bit forward on your toes. Now use your outside leg to push yourself around in a spin. Notice that you are moving forward around the pivoting foot. As long as your weight remains over the planted inside foot, you will spin around that point.

Now shift your weight to your outside foot. Do not change your bend and continue turning in the same direction as you were before. When you maintain the weight on your back foot, you will notice that you are no longer able to "scooter" around. Instead, you will need to move your inside foot in the direction of the spin. Without front feet, you won't be able to keep spinning unless you transfer some weight to your inside foot and then spin your back heel on the floor.

Next, cross your hind feet as you continue to spin. In other words, neither hind foot is pivoting or staying in place. This is an approximation of turning on center. If you were on all fours on the floor, both your front legs and back legs would be crossing with the center approximately where the rider would be sitting on your back. Finally, return to spinning around your inside hind leg while standing up, only now mark the step of the movement with that leg as well. In other words, keep marching time with your inside leg in the same spot as you turn around. You are now doing a pirouette.

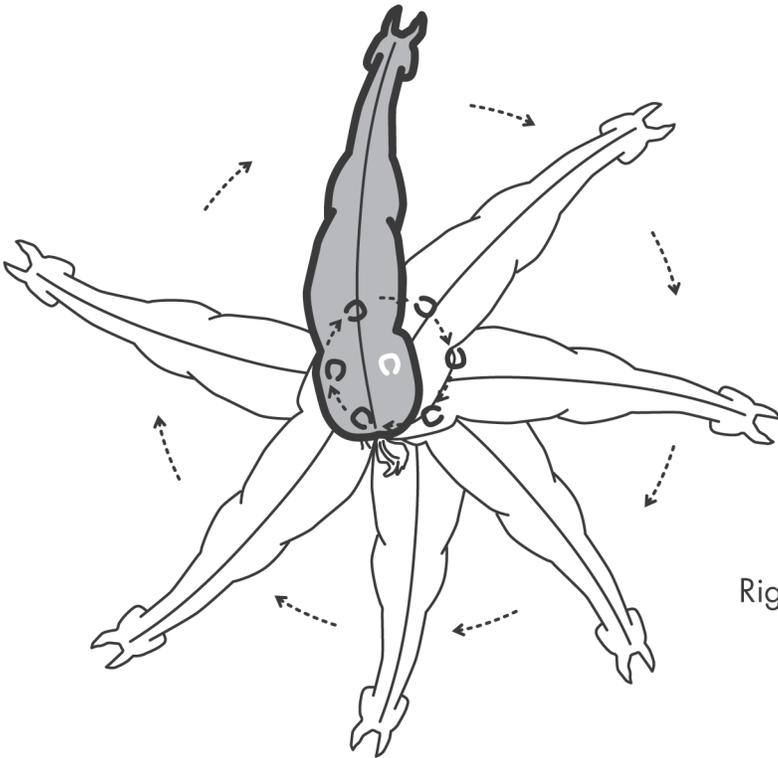
Rollbacks and spins differ from pirouettes in that a spin or rollback has one hind leg remaining fixed to the ground during the execution of the movement. In a pirouette the horse continues to mark the beat of the gait with the hind legs. A pivot on the hindquarters is a slow version of a spin. It may be a full circle or a 1/4 or 1/2 turn and can be executed bent to the inside, outside or straight. A turn on the haunches is the preparation for the pirouette just as a pivot on the haunches is a preparation for a spin. As with turn on the forehand and turn on center, turn on the haunches and pivot on the haunches can be used to maneuver the horse in tight spaces.

There are three main differences between a pirouette and a spin: rhythm, speed and the gait in which it is performed. A pirouette is ridden in a steady, even rhythm. There should be little to no difference between the rhythm and tempo (speed) at which the horse was moving before, during or after the pirouette. Pirouettes are performed at walk and canter. Spins and pirouette are related in that they can be partial or multiple rotations. They differ in that the fast spin is more like trotting than walk or canter and that there is no vertical direction in a spin while a canter pirouette must have a vertical direction in order to be executed correctly.

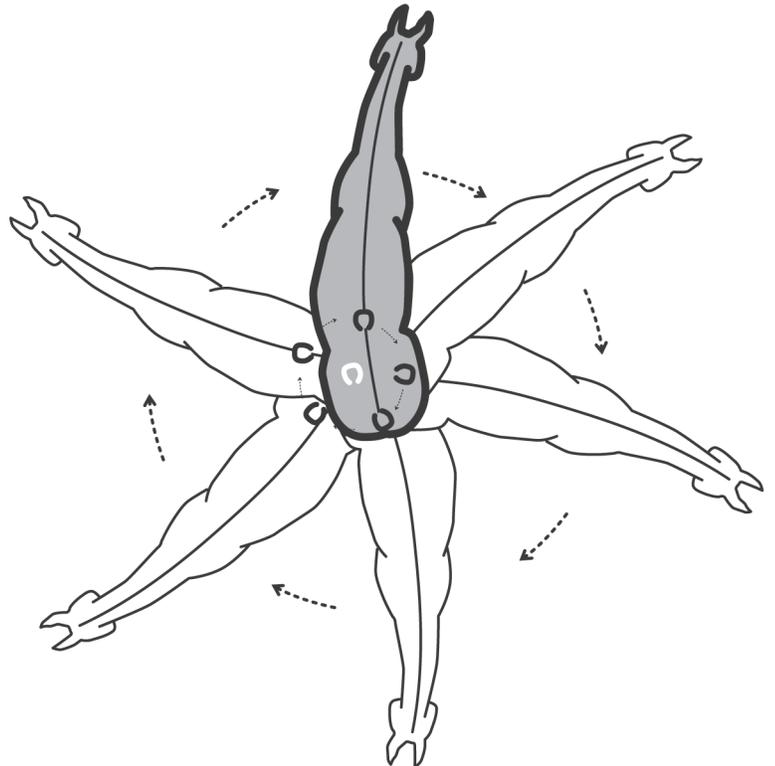
A rollback or spin is typically executed after a halt or rein



Pivot (360°) on right hind leg
Right flexion and bend through neck and ribcage

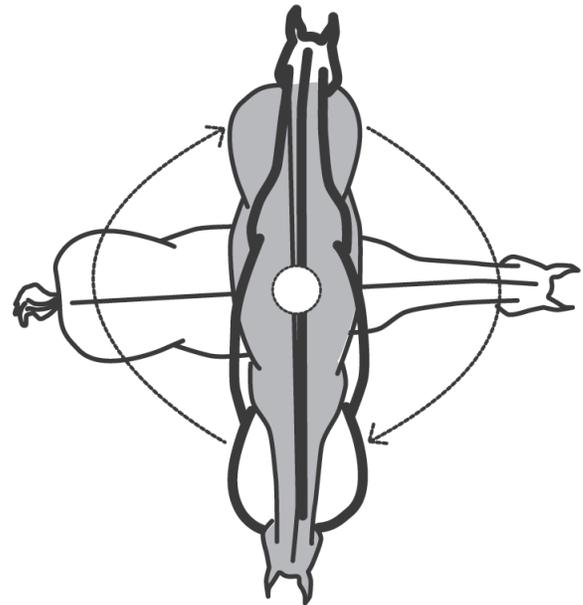


Pivot (360°) on left hind leg
Right flexion and bend through neck and ribcage



Right Turn on Center (180°)

Slight flexion to right,
rotate around center



back. In reining competitions, rollbacks are executed after a sliding stop away from the center of the arena so that the horse canter off on the opposite lead from the approaching line. A rollback or spin can also be performed from a walk. In a fast reining spin, the front legs of the horse are trotting, not cantering. For a few reasons, the rollback and canter pirouette have more in common than a spin and canter pirouette.

A rollback is similar to a canter pirouette in that a rollback also has a vertical direction, just like a canter pirouette. In a correct rollback, the horse's front feet should not touch the ground until the horse has completed the 180° rotation around what was the outside hind leg and what will be the inside hind leg in the canter depart with the horse now facing the opposite direction. The horse will return in the direction of travel one chest's width away from his original path. In order for the horse to complete the 180° rotation, he has to be sufficiently balanced over the hindquarters and have the vertical lift necessary to keep the front legs off the ground until the turn is complete.

In a rollback the horse has to raise the front end off the ground as he turns, whereas in a reining spin you want the front end to stay low to the ground. Also, part of the rollback is the canter departure, which occurs as the horse is turning. You could think of a rollback as the equivalent of a 1/2 canter pirouette in one stride from halt. However, this would be a terrible fault for a dressage horse, as the 1/2 canter pirouette should be done in 3 – 4 strides, not one! A spin over the outside hind leg is also related to the rollback, since the horse has to pivot over the outside hind leg in a rollback in order to execute the turn.

An incorrect rollback is ridden as a slide (stop), turn-around (1/2 spin) followed by a canter depart. By stringing these three separate movements together, horses can appear to have done a rollback. However, horses executing a rollback in this manner will almost always fail to fulfill one of the primary requirements of a well-executed rollback. That is, not touching the ground with the front feet until the horse has come around 180° to the original track.

By now you are probably spinning inside your head from all of these circular movements. If you think you are having a hard time reading this, just think of me trying to write it down! I have spent many hours pouring over my library, wandering around my office in circles and talking it out with my illustrator, Fran Loftus and graphic artist Andrea Parker. By the way, they deserve a lot of credit for all their hard work, especially since we have only just begun.

I suggest you walk in straight lines for a while. Then once the dust has cleared, look this article over again. Start on the ground with your own two feet and see if you can act out the different movements yourself. You might grab a couple of broom handles and use those for front legs. That way you won't have to crawl around on the floor (although I highly recommend this way of working things out also). Think about gravity and where the weight is. Figure out which direction you want to move and how you are going to get there. The results will depend on which leg is weighted, which leg is free to move, how the horse is being

influenced by the rider's weight and whether or not the horse is able to use his back.

If you can work out the basics of these movements off the horse, it will be a lot easier to understand how to do this when you are on his back. As I said, how to do these different movements will come later in this series.

During the course of my research, I have discovered that there are many different movements, names for things and a range of descriptions. I have attempted to simplify the whole mess so that most anyone can follow along. In that process I am leaving out some of the more obscure lateral movements and gone with the more generally accepted definitions. I am sure some of you might disagree with what I have written or have something you want to add. If you would like to tell me about it, please email me at: wendy@wendymurdoch.com. I am always open to suggestion. I know I have more to learn and am more than happy if it comes from my readers. In the meantime, I am listing a few of the references I have used for this series of articles.

- *Horse Gaits, Balance and Movement* by Susan Harris
- *The Essence of Horsemanship* by Waldemar Seunig
- *Dressage: A Study of the Finer Points of Riding* by Henry Wynmalen
- *Dressage Terms Defined* by Eleanor Russell and Sandra Pearson-Adams
- *Effective Horsemanship* by Noel Jackson
- *The Athletic Development of the Dressage Horse* by Charles de Kunffy
- *Reining* by Bob Loomis



Laterally Related Part 3—Moving on Three Tracks

“Put the right foot in, take the right foot out,
put the right foot in....”

by Wendy Murdoch

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Bend—the curvature of the horse’s spine. Bend can be left, right, or straight (no bend).

Orientation—in or out. This refers to the line of the circle. “In” means to the inside of the line of the circle, while “out” means to the outside of the line of the circle.

Tracks—the number of paths created by the legs of the horse. Two tracks—the hind feet follow in the track of the front feet; three tracks—there are three distinct lines that the legs are on with two legs on the same path; and four tracks—each leg forms a separate path, one for each leg.

Gaits—I have limited the discussion to the three primary gaits: walk, trot, and canter and halt. Soft-gaited horses can perform lateral work. I am not well versed in the soft-gaits; therefore, I will limit my discussion to the three primary gaits.

In Laterally Related parts 1 and 2, the various lateral positions discussed were considered based on direction: forward/backward

(i.e., straight lines), diagonally (i.e., leg-yield) or circular (i.e., rollback). Please refer to the chart on page 5 to review this information for the entire list of lateral positions being discussed. The remaining lateral positions are shoulder-fore, shoulder-in, shoulder-out, haunches-in and haunches-out. Direction is not a distinguishing factor for this grouping because they can all be ridden on straight lines, diagonal lines and circles. Instead, the more significant characteristics are orientation and tracks. I will first define the different terms and then show you how they can be viewed using the 5 characteristics above.

Definitions

Shoulder-in is known to the old masters as “the mother of all lateral work.” It was invented in the 1700’s by De Le Gueriniere to supple the horse’s shoulders. Gueriniere recognized that in order to supple the shoulders, the inside hind leg needed to move in front of and close to the outside hind leg. Therefore, he placed the horse’s haunches near the wall and moved the shoulders onto a separate track away from the wall. The horse is bent (longitudinally and laterally flexed) throughout the entire length of the spine. The suppling of the shoulders results from the inside front leg crossing over, in front of and above, the outside foreleg with each step. The shoulder-in also prepares a horse for placing his weight on his haunches because he brings the inside hind leg forward under the belly and places it over the outside hind leg, which he cannot do without lowering the haunch. Correctly executed, the shoulder-in prepares the horse for collection. It is generally accepted that on a straight line the angle of the shoulders away from the wall is approximately 30 degrees to the wall.

Shoulder-fore is a lesser cousin to the shoulder-in. It requires less engagement and flexion of the pelvis and spine. Sometimes

Movement	Direction	Bend	Orientation	Tracks	Gaits
Shoulder-fore	F, D, C	L, R, away	In	2	W, T, C
Shoulder-in	F, D, C	L, R, away	In	3	W, T
Shoulder-out	F, D, C	L, R, away	Out	3	W, T
Haunches-in (Travers)	F, D, C	L, R, into	In	3, 4	W, T, C
Haunches-out (Renvers)	F, D, C	L, R, into	Out	3, 4	W, T, C

* Direction is (F) forward, (D) diagonal and/or in a (C) circle.



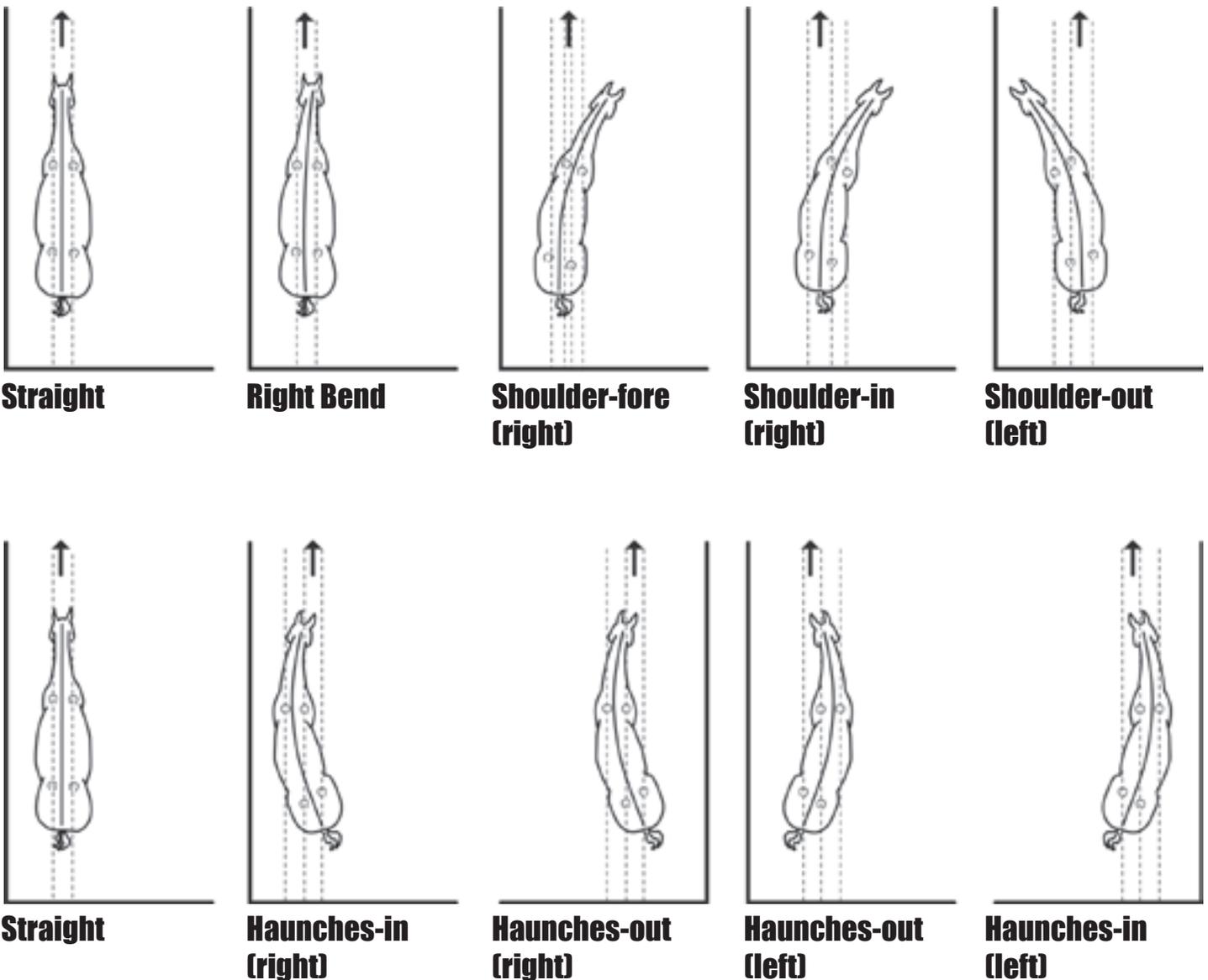
known as “first position” (although this can also be differentiated as yet another lateral position), the shoulders are only moved to the inside enough that the inside front foot and inside hind foot are on the same track. As a result, the inside hind foot will be stepping slightly more under the horse’s body. In *The Basics*, K.A. von Ziegner states that in shoulder-fore the inside fore foot should be 1/2 hoof more to the inside so that the inside hind leg is on a separate track (4 tracks). This could be splitting hairs, as he also says you need a ground person or mirrors in order to differentiate the two.

I think Gustav Steinbrecht describes the shoulder-fore best in his book *The Gymnasium of the Horse*. “If we now increase the removal of the outside shoulder from the wall to the extent that the inside shoulder is positioned just in front of the inside hip, this requires the first degree of rib cage flexion (bending) to prevent the outside hind leg from falling out. This position of the

horse is the basis for all flexion exercises ... and is the first stage of the ‘flexed straight position’ of the horse. Let us give this position the name ‘shoulder-fore’ once and for all.”

Remember that the horse’s body is wider in the haunches than in the shoulder and that the hind feet step wider than the front feet. Therefore, the horse’s shoulders can line up between the two hind feet, slightly toward the outside hind foot (considered crooked) or slightly toward the inside hind foot. In shoulder-fore you position the shoulders so that they line up with the inside hind foot.

The purpose of all of these lateral exercises is to produce a straight, balanced and collected horse that moves in self-carriage. Henry Wymalen in his book *Dressage: A study of the finer points of riding* points this out when he states, “The shoulder-in is essentially a schooling movement, not used as a rule for exhibition purposes and not demanded in dressage tests.” His



Haunches-In or -Out

book was written in 1952, obviously before the modern-day dressage tests were created!

Shoulder-out is simply shoulder-in traveling the other direction. Orientation to the wall determines if you are in shoulder-in or shoulder-out, not changing the position of the horse. More on this when we get to the zucchini lesson.

In Travers, or haunches-in, the horse's hindquarters are moved off the line of travel onto an inside track instead of the shoulders. The outside hind leg crosses in front of the inside hind leg while the forequarters of the horse remain straight on the line of travel. The horse is evenly bent from poll to tail inward and is moving in the direction of the bend. The difficulty is moving into rather than away from the bend. Poor haunches-in generally results from loss of bend through the body. Well ridden, haunches-in increases the engagement of the inside hind leg and is useful in developing the weight-bearing capacity of the hindquarters for further collection.

Haunches-out (Renvers) and haunches-in (Travers) are related to each other in the same way as shoulder-in and shoulder-out. Haunches-in and -out differ only by orientation to the arena not by the position of the horse. The "finished" haunches-out should be at an angle of 45 degrees.

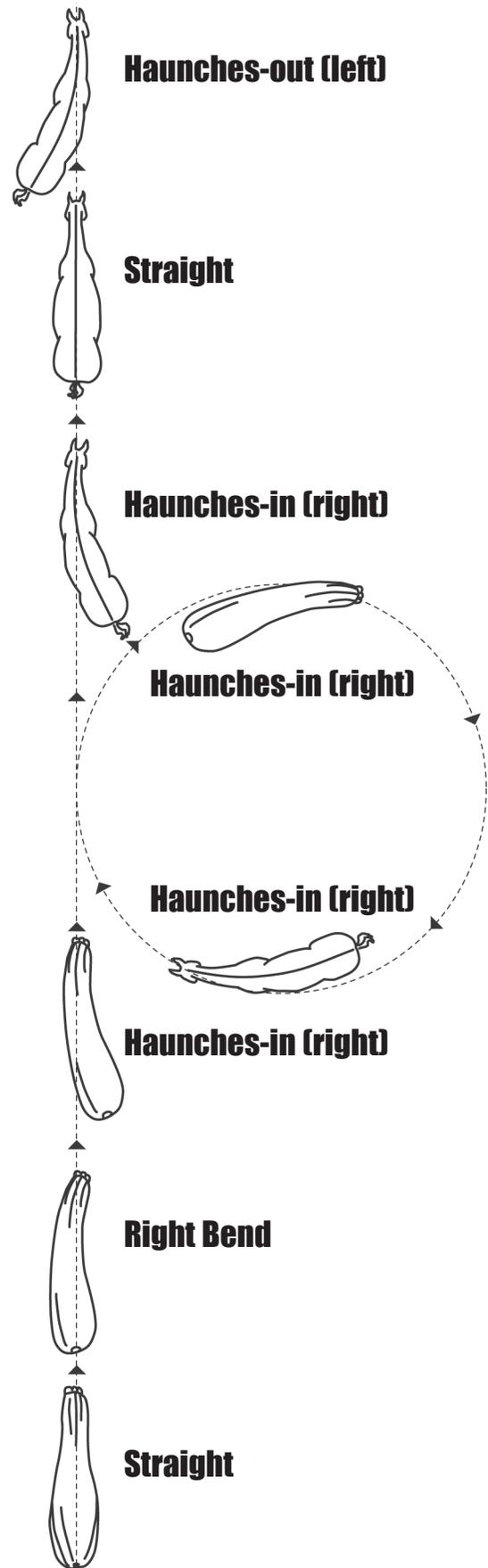
There seems to be debate about the number of tracks a horse should be on for haunches-in/out. Anthony Crossley in *Advanced Dressage* claims that it should be ridden just like the shoulder-in, meaning only three tracks with only a line across the ears at right angles to the track. Charles de Kunffy in *The Athletic Development of the Dressage Horse* claims that the neck should proceed straight, and only from the withers back is the horse's bending allowed to curve away from the wall. He also states "the haunches-in must always be on four tracks." And you wonder why we are confused about lateral work!

Zucchini Time

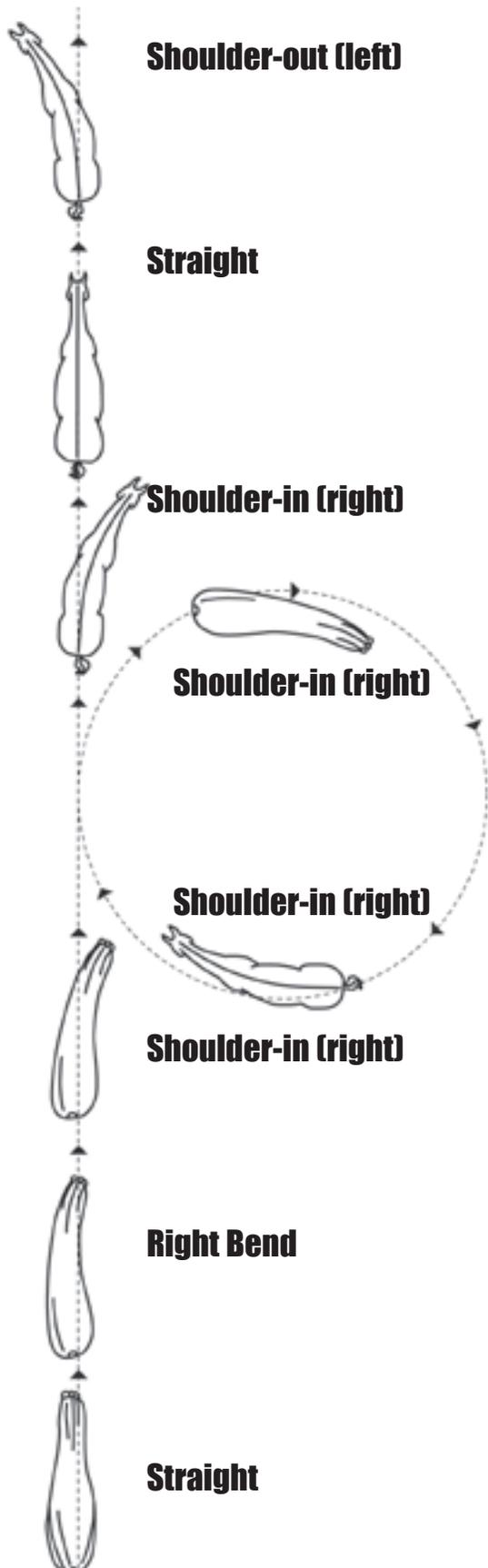
Once again I think the best way for you to understand the differences between these different positions is to go to the refrigerator. If you don't have any zucchini, then a banana is the next best thing. However, remember that the bend on a zucchini is more accurate than a banana. Mark off an "arena" on the dining room table. Give yourself enough room for these exercises, as you may travel around the arena quite a bit.

Start by standing at the short end of the arena. Place your horse (zucchini) on the left wall with the concave side facing the table (back rounded toward the ceiling). In this position your horse is straight with no bend. Roll the zucchini so that the "bend" (concave side) is on the right but the horse is still straight. The head of the horse may have a slight right flexion, but the body of the zucchini is on the straight line. Proceed forward a little. This is the horse traveling straight along the left wall with a right bend.

Now keep the bend on the right, hold the haunches of the horse in place and move the shoulders onto an inner track. Depending on how much you move the shoulders to the inside while keeping the hindquarters on the track will determine if you are in shoulder-fore or shoulder-in. Some people like to mark a spot on the zucchini for each of the legs. If you do this, then you



Shoulders-In or -Out



can determine if you are in shoulder-fore or shoulder-in. In the shoulder-in the inside hind leg and outside foreleg will be on the same line of travel, the inside foreleg and outside hind legs will be on separate tracks. Therefore, the shoulder-in is three tracks (outside hind, inside hind and outside foreleg and inside foreleg).

Place two fingers over the horse's back to simulate your legs. Have the finger on the inside placed at the crook of the bend in the rib cage. Keeping the shoulders on an inside track so that you continue to maintain three tracks, proceed forward. Notice that as you move the horse forward, you are moving away from the bend rather than into it. Therefore, you are on a (right) shoulder-in moving forward on three tracks away from the bend. You can do this at walk and trot. Look at the chart and see that the direction a shoulder-in can be ridden is on a straight line as above, on a diagonal line or on a circle. On the circle the shoulders are in relative to the circle and the horse is still on three tracks.

Place your zucchini on the left wall again in a shoulder-in position. Now pick up the horse and move it to the right wall without changing the relative position of the horse. In other words, maintain the three tracks. You will have to move slightly inward off the track so that there is enough room for the shoulders. This is now a (right) shoulder-out. The only difference between shoulder-in and shoulder-out is the orientation to the wall or the line of the circle.

If you were to put the horse on a circle, he would still be on three tracks but the shoulders would be to the outside of the circle. This is sometimes called a counter shoulder-in, similar to the idea of counter bending. Notice that the bend is still to the right, the direction of movement in relation to the bend is away, the number of tracks is three and the gaits at which you can perform the shoulder-out are identical to the shoulder-in, walk and trot. The only difference is that the shoulders and bend are now oriented toward the outside of the circle.

Return to the right wall in shoulder-out. Roll the zucchini over so that it is now on a left bend. Move the shoulders in so that you form three tracks (outside hind leg, inside hind leg, outside foreleg, inside foreleg). You are now in (left) shoulder-in. The shoulders are placed on an inner track to the left rather than the right. When you have no walls, as when working in a field, it is often easier to refer to positions as left and right rather than out and in. Therefore, I have put (left) and (right) to make this clearer.

Again, shoulder-fore is a lesser degree of shoulder-in, so you would reduce the amount of inward displacement of the shoulders to have (left) shoulder-fore. The number of tracks reduces to 2 or 2.5, all else (bend, orientation, direction) remaining the same except for gaits. De Kunffy states that shoulder-in is too extreme in canter; therefore, he only recommends shoulder-fore in that gait.

Return your horse to a straight line (two tracks) on the right wall on the long side with the bend to the left. Now take the haunches off the track to the inside, keeping the shoulders on the track until you create three or four tracks (outside hind leg/inside foreleg, inside hind leg, outside foreleg or each leg on a separate track) and proceed forward. This is a Travers or haunches-in (left).

From the track, pick your horse up (airs above the ground!), and maintaining the same position, place the horse on the left-hand



wall. You are now in Renvers or haunches-out (left). In haunches-out (as in shoulder-out), the hindquarters have moved toward the wall. Therefore, you will ride a straight line that is a slightly inner track in order for the horse to have room to move the hindquarters toward the wall.

Haunches-in/out is similar to shoulder-in/out in that the orientation in the arena is the determining factor between in and out. All else remains the same. The haunches-in/out movements could be described as left or right if there were no wall. All these movements can be performed on either bend.

To Recap:

The significant similarities between haunches-in/out vs. shoulder-fore/in/out are:

1. The name indicates which end of the horse is deviated from the straight line (haunches or shoulders).
2. All can be ridden on a straight line, on the diagonal or on a circle.
3. All orient the same way in the arena. In or out is determined by whether the shoulder or hip is moved towards or away from the center of the circle or wall.
4. All can be performed on either bend.

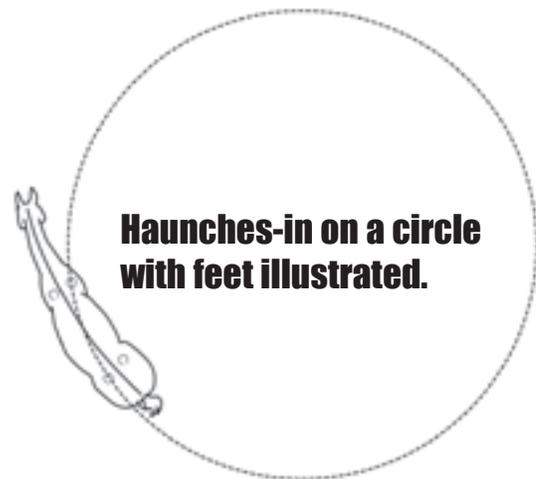
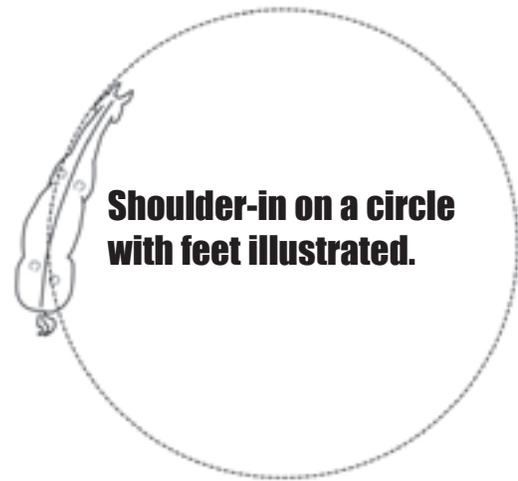
The significant differences between haunches-in/out vs. shoulder-fore/in/out are:

1. Either the haunches or the shoulders have been moved to an inner track.
2. Haunches-in/out is moving into the bend whereas shoulder-fore/in/out is moving away from the bend.
3. The number of tracks can differ between haunches-in/out and shoulder-in/out.
4. Different degree of angle off the track (shoulder-in 33 degrees, haunches-in/out 45 degrees).

By the way, in case you were wondering, there is a preliminary movement for the haunches similar to shoulder-fore. It is called “second position” and is comparable to “first position,” described above for the shoulders. According to Waldemar Seunig in *The Essence of Horsemanship*, the horse has a slight evenly distributed bend in second position. The inside hind foot tracks the corresponding front foot. The outside hind leg tracks 1/2 hoof width inside the track of the outside front leg. Seen from the front, the outside hind foot becomes visible between the horse’s two front legs. The horse moves on two tracks, and like haunches-in, the horse head is facing the direction of movement.

If you are still unclear about the differences between positions after this, I suggest you get on all fours and act out each lateral position. Feel where your balance is and what happens if you shift your weight in different ways. Then walk around using two sticks for front legs and see if you can re-create the positions. Notice how the shape of your spine (rounded or arched) changes the balance. See if you can embody the essence of the balance necessary for your horse to carry you and move freely.

This concludes examining lateral positions according to the 5



characteristics of direction, bend, orientation, tracks and gaits. If I have learned anything from writing these articles, it is that there are more positions than I thought (or discussed in this series); there are a variety of names for the same thing; and there are differing opinions as to what, how and when each position should or could be used. Hopefully, as we begin to examine each lateral position more fully, the essence of each movement and what it is attempting to accomplish will come to the forefront.

Ultimately, lateral work needs to produce a horse that is supple and straight, willing to go forward with impulsion. And there seems to be at least one thing all the masters agree on: the importance of the shoulder-in. In the words of De La Gueriniere, “[The shoulder-in] lesson produces so many good results at once that I regard it as the first and the last of all those which are given to the horse...”

In the next installment I will begin to describe a progression of the lateral positions as might be used in training the horse. Now that we know what the basic differences are between the movements I want to make it clear that they are not ridden in isolation or only between two letters in the dressage arena. All of the lateral positions had a purpose, either to develop the horse’s athletic ability and/or for military purposes. Until then, enjoy the ride!

Laterally Related Part 4:

Moving From One Lateral Movement to Another "Which Way to Millinocket?"

by Wendy Murdoch

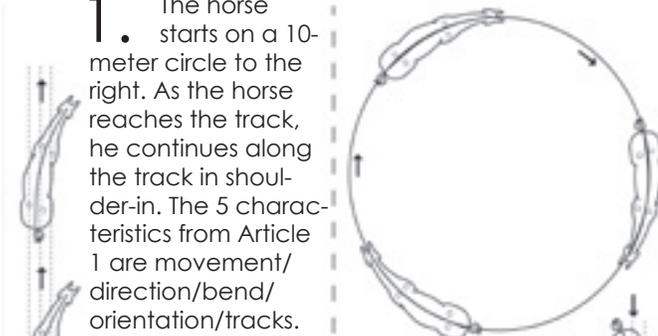
I come from New England, where people have a very dry sense of humor, especially in Down East Maine. You may remember Bert and I. It was a comedy routine with the joke line, "Which way to Millinocket?"

The reply, in a very dry drawl, was "you can't get there from here." May that not be the case with your lateral work!

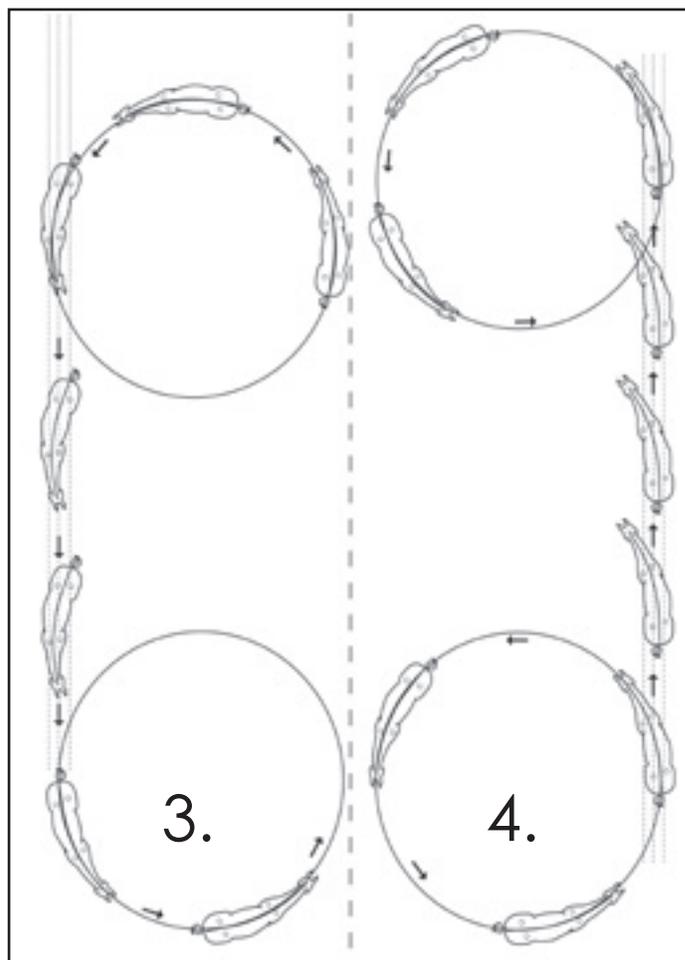
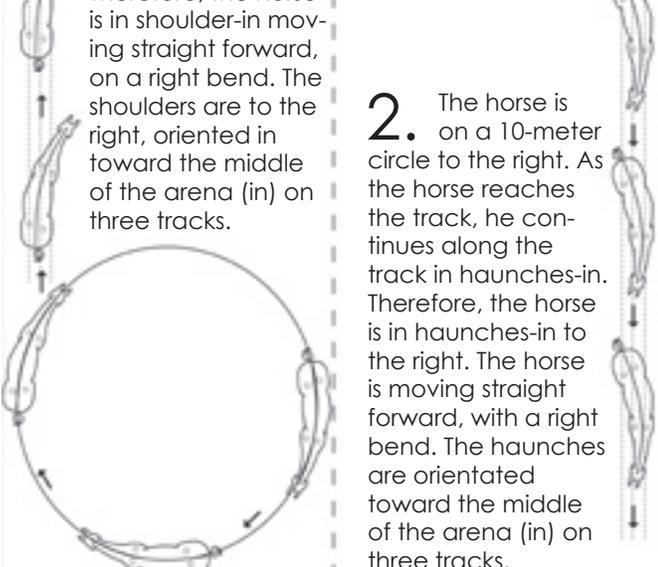
Lateral positions are not typically a means in and of themselves. They were developed, created and constructed to address specific balance issues in the horse while bearing the weight of a saddle and rider. You could think of lateral work as analogous to drills used by sports coaches to train athletes. There is a progression to the skill sets for each level of athletic performance. As an athlete progresses the exercises may not change,

From circles to shoulder-in or haunches-in

1. The horse starts on a 10-meter circle to the right. As the horse reaches the track, he continues along the track in shoulder-in. The 5 characteristics from Article 1 are movement/direction/bend/orientation/tracks. Therefore, the horse is in shoulder-in moving straight forward, on a right bend. The shoulders are to the right, oriented in toward the middle of the arena (in) on three tracks.



2. The horse is on a 10-meter circle to the right. As the horse reaches the track, he continues along the track in haunches-in. Therefore, the horse is in haunches-in to the right. The horse is moving straight forward, with a right bend. The haunches are orientated toward the middle of the arena (in) on three tracks.



3. Starting at the top (above left) the horse is on a 10-meter circle to the left. As the horse reaches the track, he maintains the haunches-in (to the left) as the shoulders return in the track. The haunches are to the left, the horse is moving straight forward. The horse is bent to the left. The haunches are oriented towards the middle of the arena (in) while moving on three tracks. As the horse nears the bottom of the arena, he moves from haunches-in to straight on a 10 meter circle. Note that the haunches-in position has already set the horse up for the shape of the 10-meter circle.

4 Starting at the bottom (above right), the horse is on a 10-meter circle. When the horse reaches the track, he continues straight along the track in shoulder-in. The horse is in shoulder-in, moving straight forward, bent left. The shoulders are oriented toward the middle of the arena (in) while moving on three tracks. As the horse approaches the top of the arena, he returns to the line of a 10-meter circle (straight on the circle line).

but the degree of difficulty can increase (i.e., increasing degrees of collection in the horse). Other skills are precursors to more advanced movements. The goal is to make a well-trained athlete that can excel in his sport or an agile mount as in the case of the war horse.

The training of the horse was elevated to art when the Great Masters educated horses to perform all the school figures including the low and high airs in the manège. Airs included piaffe, passage, pirouette and leaps such as courbette and capriole. There are few schools today that continue to uphold this art of Classical Riding. In these schools horses are recognized for their individual talent in one air rather than being asked to perform them all.

Modern dressage competition is considered a sport rather than an art and is limited to a few of the low airs with pirouettes, piaffe and passage being the most difficult of these presented in a dressage test. Horses are ridden to a generalized standard of performance rather than a specialty. Modern dressage horses have to do all the movements in the test to a passable standard rather than being shown in the movements most suited to the individual animal.

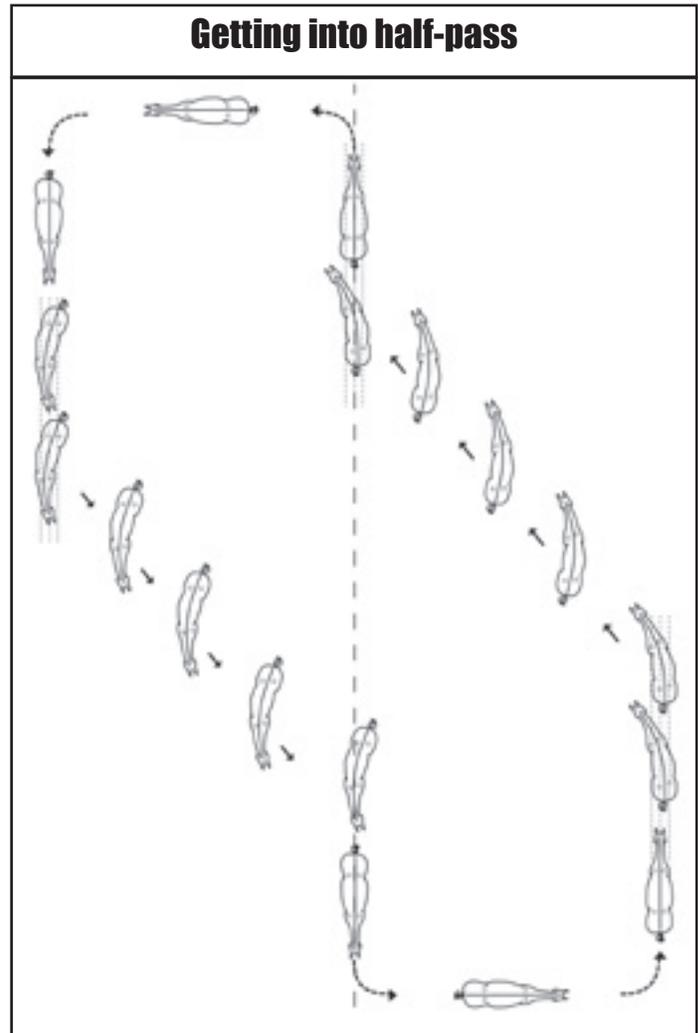
Lateral work was developed to make horses agile and responsive war machines. Horses carried soldiers when hunting or into battle where the object was to defeat the enemy. The soldier needed a horse that could adjust his balance to the needs of the rider with a minimum of effort in order to be wherever was needed on the battlefield. Therefore, the horse had to be able to move in any direction rapidly and efficiently. This efficiency of movement is not unlike the martial arts or the Feldenkrais® Method.

Moshe Feldenkrais, a Judo Master, founded the Feldenkrais® Method. Feldenkrais believed that one should be ready and able to move in any direction in a moment's notice. Otherwise one was vulnerable to attack. For example, if you are reclining on your cushy couch reading this article and you had to get up suddenly, it would take a lot of effort to overcome the reclined position you are in. If you were sitting on the edge of your chair with your feet on the floor and you had to get up, there would be no preliminary movement necessary before you stood up. The Feldenkrais Method improves one's movement for riding as for well as other activities.

In the way of the martial artist, we would like the horse to be willing, ready and able to move in any direction we choose, fully giving himself to our desire, when we ride. We don't want to ride the horse that is stuck on the couch munching chips or worried that the sky is going to fall at any minute. I like the kind of horse that enjoys his work and is a willing partner in the process. That requires a certain kind of work ethic on the part of the horse and the rider. Both need to be disciplined enough to face the idea of continual training.

In order for the horse to willingly give of himself and trust us that much, we must take responsibility for his well-being and

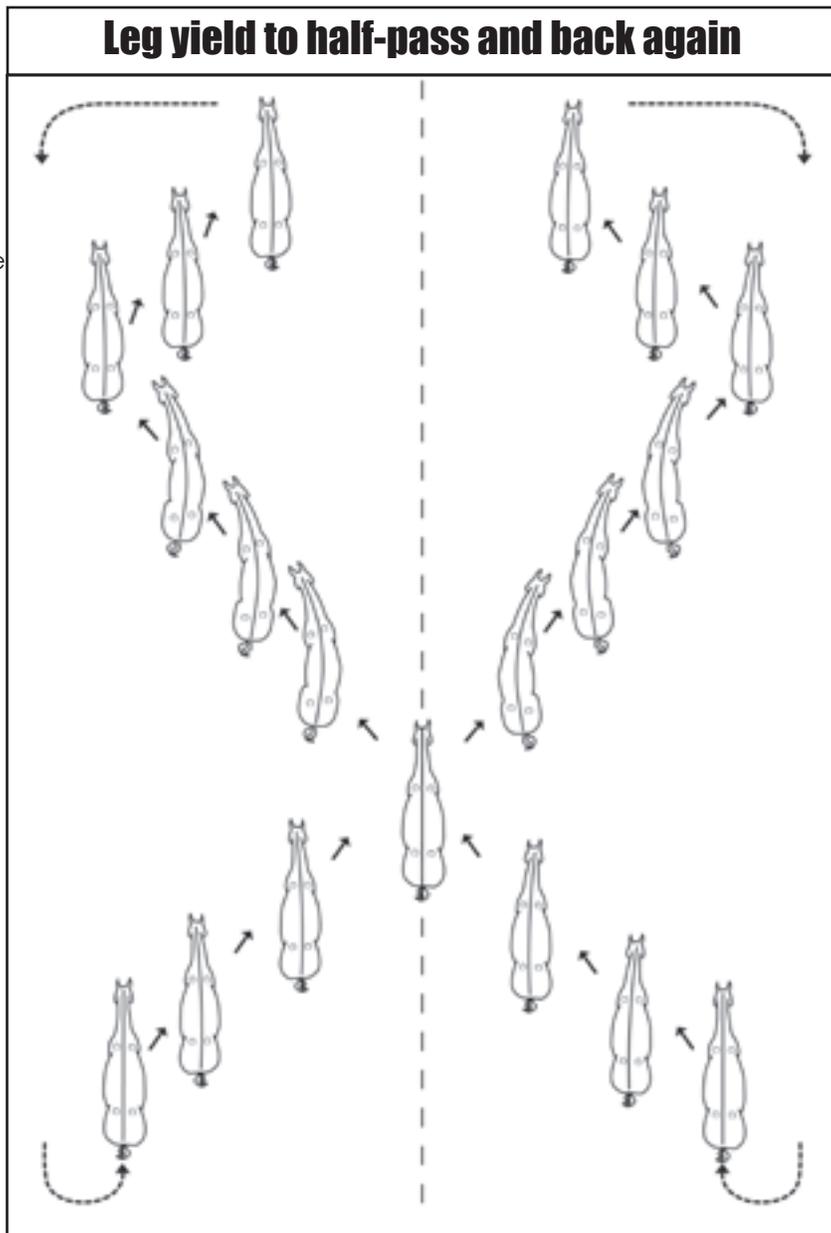
Continued on page 31.



5. (Beginning from bottom on the short side to the right of the center line)... The horse is straight through the corner (bottom right-hand corner). The horse continues on the long side in shoulder-in on three tracks then moves the haunches in to travel along the diagonal line in half-pass left. In the half-pass the horse is on a diagonal line, into the bend, bent left. When the horse arrives at the center line, he continues along the line in shoulders left (in if oriented toward a circle to the left) and then straightens.

6. (From center top to left of center line) After turning straight (the corner on the straight line), the horse continues in haunches-in, moving straight forward, bent left with the haunches in toward the middle of the circle (in) on three tracks. The horse then brings the shoulders off the track and proceeds in half-pass left (same as described above) until reaching the center line where he travels on the straight line in haunches-in (left), then straightens before turning onto the short side of the arena. Caution must be taken not to let the horse lead the half-pass with the haunches if you approach it this way.

Leg yield to half-pass and back again



7. (Starting from the straight horse on the center line toward the upper right-hand corner of the arena) From a straight position on the center line, the horse can bend right and proceed in half-pass right, moving diagonally toward the track, into the right bend on two tracks, then change to leg yield to the left. Note that in the leg yield the horse also moves diagonally, now to the left, away from the rider's inside (right) leg. The horse must keep a slight right bend and move away from the bend toward the center line. There are two critical points to keep in mind. If leg yielding, at the end of the arena, turn in the direction of bend (right if leg yielding to the left away from the right leg) so that you don't have to make an abrupt change of bend. Second, you must plan where you are going or you will run out of room before you know it! If you arrive at the wall in half-pass, straighten the horse and continue in the direction you are facing. In this instance, tracking to the left.

8. (Starting from the straight horse on the center line toward the upper left-hand corner of the arena) From the straight position on the center line, the horse can bend left and proceed in half-pass left, moving diagonally toward the track, into the left bend on two tracks, then change to leg yield right. Essentially everything remains the same as the first instance except that the bend is now left instead of right. Therefore, the leg yield would be to the right and you would turn left as you approach the short side of the arena.

9. (Top of the arena, left of center line) Beginning from upper left hand corner, proceed straight forward along the left side until you reach the quarter line (bottom left). Turn up the quarter line and move into leg yield right (diagonal line, left bend traveling right toward the center line on two tracks). Upon reaching the center line without straightening, the horse can proceed in half-pass left (moving diagonally, to the left into the left bend). The horse could move from half-pass to leg yield and then track left upon reaching the short wall or continue along the diagonal in half-pass until reaching the track, then straighten and track right.

10. (Top of the arena, right of center line) This pattern could be repeated in the opposite direction. Tracking right, proceed to the quarter line. Turn up the quarter line and begin leg yield left (diagonal line, moving to the left away from the right bend), then change to half-pass right (moving diagonally into the right bend toward the wall on two tracks).

11. (Moving from one bend to the other, diagonally across the illustration) On a very well schooled

horse, you could ride the entire diagonal line in this illustration, which would require a change of bend in order to ride from leg yield into half-pass. Beginning from the bottom right-hand corner traveling straight on the quarter line, the horse continues on the diagonal line in leg yield left (moving left away from the bend). Upon reaching the center line, the horse straightens and then changes bend. Upon the change of bend from right to left, the horse proceeds in half-pass left. Leg yield (moving diagonally to the right,) could be used to keep the horse upright if he loses the bend during the half-pass left.

12. (From the other direction, the horse is tracking left.) Beginning at the bottom left-hand corner of the diagram, the horse proceeds straight on the quarter line. Then the horse moves diagonally to the right in leg yield. Upon reaching the center line, he proceeds straight until the change of bend has occurred. Then the horse proceeds in half-pass right. Again, leg yield left can be used if the horse loses the bend during the half-pass right.

Continued from page 29.

safety. While that is not the subject here, I will leave it for you to ponder for a while. I will say that ensuring the horse is physically prepared for the task (whatever that is) is of vital importance to his mental and emotional well-being. Asking a horse to perform when in pain or unfit for the task creates tremendous mental and emotional stress and thereby dissolves the trust between horse and rider.

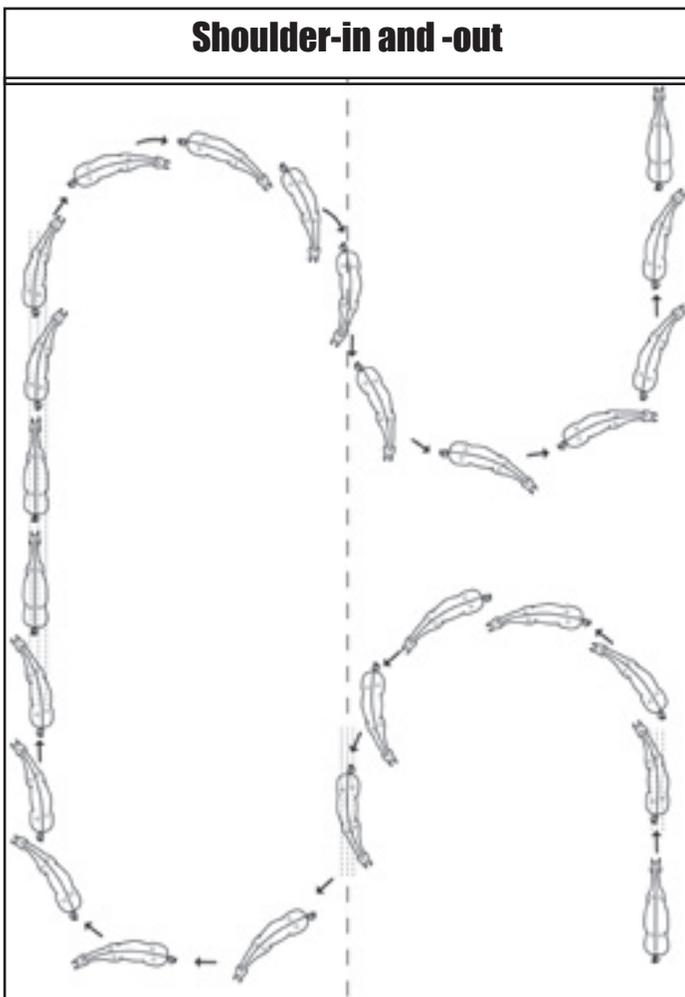
For the horse to achieve a high degree of responsiveness requires training. Some people believe that every horse is innately able to do everything already just because they occasionally play in the field. The reality is that horses are just like us. Very few are born athletes, and even those who are still have to go through intense training to make it to the top of their sport or art. Take Lance Armstrong, for example. (You all do know who Lance Armstrong is – right?! Seven-time winner of the tour de France.)

Even at the lower levels of physical demand, a certain amount of fitness, conditioning and coordination are necessary to avoid injuries and enjoy the work. In order to give a stunning performance routinely under the weight of a rider and minimize the

harmful effects of extreme exertion requires training of mind, body and soul. It is essential to properly condition ligaments, tendons, muscles and bone to avoid injuries, especially in young, untrained horses.

Lateral work forms part of the basic training program for many equine disciplines. Lateral work is heavily employed for the training of dressage horses, as many of these movements are now part of a dressage test. Most jumpers are trained with lateral movements to improve their ability to turn quickly and rebalance themselves between jumps. Lateral work is even used with gaited horses to improve the soft-gaits. From a practical perspective, lateral movements are useful for getting on, closing a gait, chasing a cow or mounting from a fence.

Lateral work used wisely can help strengthen the horse and produce a light, balanced horse. Used poorly, lateral work can destroy a horse. From a training perspective, far less harm and much more good would be done by simply schooling your horse in accurate, round circles of various sizes in all three gaits than in performing poorly ridden lateral movements.



13. (Shoulder-in left to shoulder-out left, lower half of the illustration) Beginning at the bottom right of the illustration, the horse is straight, then proceeds in shoulder-in (moving straight forward bent left, shoulders in toward the center of the circle on three tracks). The horse continues in shoulder-in on the arc of 1/2 of a 10-meter circle. Upon reaching the center line, the horse maintains the shoulder-in left for a few strides. Then the horse begins to move to the right on the arc of 1/2 of a 10-meter circle but without changing his position. In other words, the horse maintains the shoulders to the left, which now makes the movement a shoulder-out (traveling on the arc of the circle and then straight, bent left, the shoulders are oriented toward the wall, moving on three tracks).

14. The horse could continue in shoulder-out (left) and repeat the change of direction by riding a 1/2 10-meter circle to the right followed by a 1/2 10-meter circle to the left and once again be in shoulder-in (left). Throughout the entire sequence of movements above, the horse maintained the shoulders to the left.

15. (Shoulder-in right to shoulder-out right, upper half of the illustration) You can repeat the above sequence; however, this time begin with the shoulder-in to the right. Beginning on the left side of the illustration, the horse is moving straight. Then he proceeds in shoulder-in (straight, bent right, shoulders toward the middle of the circle to the right on three tracks). Then continuing in shoulder-in right on the line of 1/2 of a 10-meter circle. The horse maintains the shoulder-in right on the center line, then continues on the arc of 1/2 of a 10-meter circle to the left. The horse is now in shoulder-out (right), then straightens upon reaching the corner.

When is it right?

How do you know when you are doing a lateral movement correctly? This is something that is going to take time to learn, sense and feel. The key to correct lateral movements is not what is happening with the legs. Having the horse cross his legs over one another is possible even when the horse is falling sideways and doing a lateral movement badly.

Poor lateral work is somewhat akin to trying to drive a racecar without a transmission. You can rev the engine all you want but it won't be able to go anywhere. With horses it is a little different. You may be able to move the wheels all over, but you won't have any power (water in the tank) to drive the car; you will get flat tires all the time (joint, ligament and tendon injuries) and have linkage problems (back pain) if the transmission (rib cage and spine) doesn't connect the engine (hindquarters) to the wheels (legs).

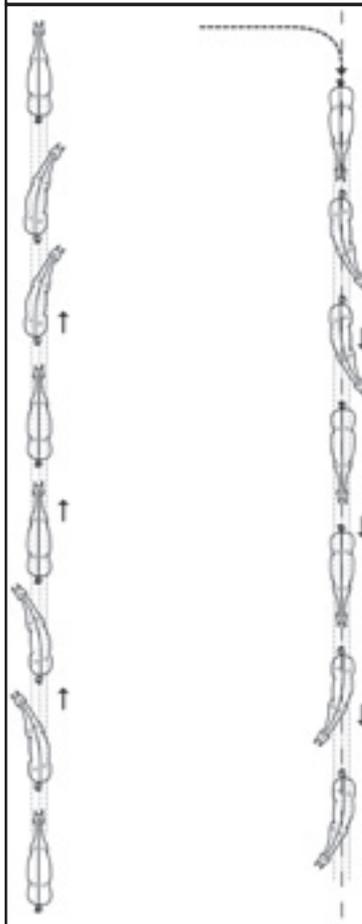
Learning to feel what the horse is doing with his spine and rib cage is essential. The rider must learn to sense and feel the lift in the horse's back. This is critical for all lateral movement when ridden correctly. Why? The weight of the rider and the saddle are born on the horse's rib cage. In order for the horse to be able to carry more weight on his hindquarters (thereby making the front end lighter), he has to lift the back. If the horse moves his legs around but does not lift the back it is not correct because the basic purpose of the exercise is not being fulfilled—to improve his weight-bearing capacity and thereby harness the horse's maximum power in a state of calmness.

To reiterate this point, is to say if the horse's back is not up, the legs experience much more strain. The back can be damaged because it is not capable of bearing weight efficiently when it is down. Finally the horse will have little to no free forward movement, never mind impulsion. I have talked about this before in previous articles and gave examples and exercises in my book, *Simplify Your Riding* (page 25), in order to help you understand this more fully.

If you really want to know what it might feel like to the horse, the best thing to do is get on your hands and knees. Crawl around on the floor in the different lateral positions and feel what happens to your balance. Do the movements with your back down, then with your back up. Have someone place their hands on your back and make the weight of the two hands uneven so you can feel what it is like when the rider is not sitting correctly. Finally, have the person place their hands evenly on your back and lift your back as you crawl around in all the various lateral positions. Then look for a similar feeling in the horse when you ask him to do these movements.

As you begin to explore different lateral positions, notice if your horse's head goes up an indication his back has dropped. Also watch for improved free forward movement when you return to the straight line. Finally, if you are having to lean, pull

Shoulder In and Out on a Straight Line



16. (Changing from shoulder-in to shoulder-out on the straight line, left-hand side of arena) Beginning in the bottom left-hand corner, the horse is straight on a slightly inner track to make sure there is sufficient room for the shoulders when they move off the track to the outside. The horse proceeds in shoulder-out (straight on the track, bent left, shoulders oriented to the outside of the arena on three tracks). The horse then straightens before proceeding in shoulder-in right (traveling straight along the track bent right, oriented toward the center of the arena on three tracks).

17. (Changing from shoulders-left to shoulders-right on the center line) On the center line, "in" and "out" can get a bit confusing. It really depends on whether the horse is going to continue on the straight line or onto a left or right circle from the center line. If the horse is continuing straight, then "in" and "out" lose meaning, since they are neither away from nor toward the center of a circle. If, however, the horse were to proceed on a circle to the right in shoulders-right, it would be shoulder in. If the horse were to proceed on a circle to the left with the shoulders-right it would be a shoulder-out. Conversely, it would be shoulder-in if the shoulders were to the left and then traveling on a circle to the left and shoulders-out if the shoulders were to the left on a circle to the right. Congratulations if you followed what I just said! Personally, I find it easier to refer to shoulders-left or -right when on a straight line to keep from getting too confused.

or kick to get the horse into or out of the movement or to go forward, you will want to reevaluate what is happening.

As I discuss each individual movement in detail later on in this series, I will remind you of things to look for. These will help you to determine if things are going wrong or right in your lateral work.

How do I get there from here

From circles to shoulder-in or haunches-in

(Please refer to illustration on page 28.) When you ride a correct 10-meter circle (half the width of a dressage arena (small arena = 20x40 meters or large arena = 20x60 meters), your horse will be bent on the line of the circle. As you go from the circle to the track (straight line on the rail), you can straighten the hindquarters to the line (leaving the shoulders in) or straighten the shoulders to the rail (leaving the hindquarters in). This will result in shoulder-in in the first instance and haunches-in in the second. This can be done tracking right or left, creating shoulder-in right or left and haunches-in right or left.

Getting into half-pass

(Please refer to illustration on page 29.) Half-pass can be developed from either shoulder-in or haunches-in. I like to think of it as a combination of both shoulder-in and haunches-in together. Remember half-pass is moving on a diagonal line. From shoulder-in on the track, add haunches-in so that the horse will bend around the inside leg moving diagonally forward sideways into the bend.

You could do the reverse and start with haunches-in on the track, add shoulder-in and proceed on the diagonal line. Many books do not like this approach because it is a severe fault if the haunches lead the shoulders in the half-pass movement.

Leg yield to half-pass and back again

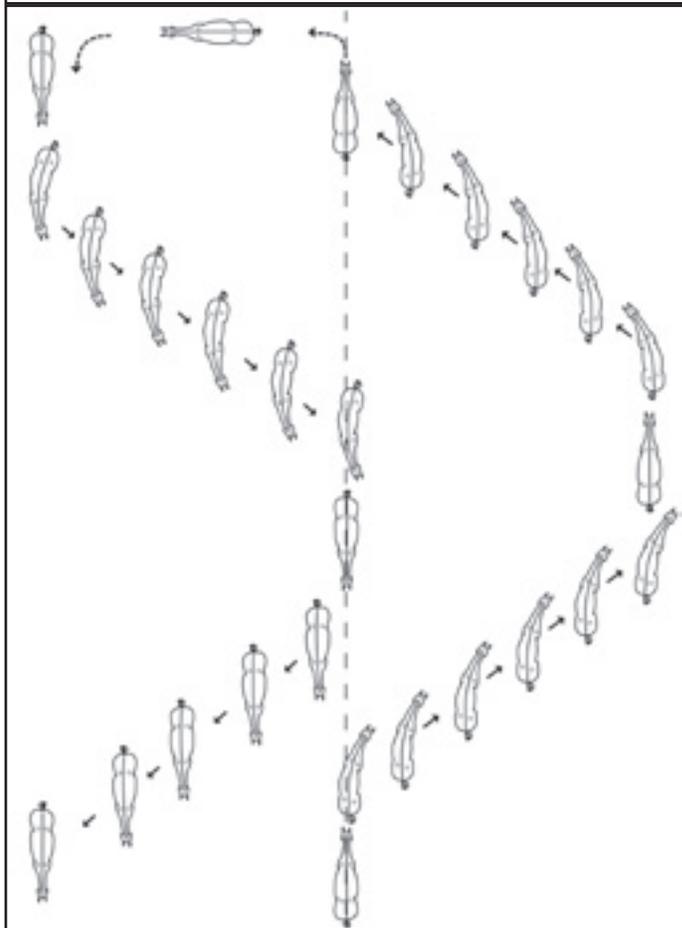
(Please refer to illustration on page 30.) I quite like taking horses back and forth between leg yield (moving away from the inside leg with the spine straight) to half-pass (moving into the bend). Both are on a diagonal line, and by going from half-pass to leg yield, you teach the horse not to fall against the rider's inside leg.

Is my shoulder-in or shoulder-out?

(Please refer to illustration on page 31.) While conceptually many riders find this quite hard, it is actually quite easy (conceptually that is!). Riding this figure accurately, however, is another matter. Start with shoulder-in (i.e., shoulders left tracking left). Turn down the center line in shoulder-in (left), then ride a 1/2 10-meter circle so that you are now traveling in the opposite direction along the wall still in the same position that you started, only now going in the opposite direction making it shoulder-out (shoulders left tracking right).

You could also go from a straight line to shoulder-out.

The lateral movement test



Now it's time to test your understanding of what we have done so far. In this diagram there are all the lateral movements I have just described. See if you can label the movement for each individual horse in the diagram. If you really want to challenge yourself, be sure to name the following characteristics for each horse in the figure: movement name/direction/bend/orientation/tracks. Good luck! Go to www.wendymurdoch.com for the answer.

However, you have to make sure there is enough room by moving to a slightly inner track so that the horse has enough space to move the shoulders closer to the wall. You can also go from shoulder-out (shoulders left tracking right) to shoulder-in (shoulders left tracking left) by coming down the center line in shoulder-out then riding 1/2 of a 10-meter circle and proceeding in the same position in the opposite direction. Once again, instead of changing the horse's position relative to the wall, you change your direction and, therefore, go from shoulder-out to shoulder-in.

Next time we will continue to look at the relationships between the remaining lateral movements. In the meantime I suggest you break out the zucchini again and ride it around a countertop to get a handle on how you can go from one movement to the other. Think again of what the characteristics are of each movement and see if you can't work out the relationships on your own. This will go a long way in your overall understanding of lateral work and how to combine different positions for optimum improvement in your horse's self-carriage. That way when I ask you how to get from

Laterally Related Part 5: Pirouettes in Your Parlor or Connecting Circular Figures

by Wendy Murdoch

“To have a trained horse is not only to collect the movements (gaits) or to have extended gaits but especially to have it balanced, happy and without resistance.” —Nuño Oliveira

In the last article I described how several different lateral positions related to each other in movement (i.e., riding from one movement to the other). I discussed shoulder-in, haunches-in, shoulder-out, haunches-out, half-pass and leg yield. I hope that everyone was able to pass the quiz presented at the end! In addition to naming the position, did you test yourself on the different characteristics of each movement: Direction, Bend, Orientation and Tracks?

Maybe you even got out your zucchini and “rode” these movements around your kitchen table. When I was a kid, my dad used to do that with navigation maps for Long Island Sound, NY. Late at night he would take a “trip” on the kitchen table before boating the next day. That way he knew what buoys to look for and where he wanted to fish.

The best way to learn the different lateral movements is through movement, whether you use a zucchini, walk around on all fours, use two brooms for front legs marching up and down the barn aisle or work with a friend who “pretends” to be your horse. Physically sorting out the details improves your feel, understanding and awareness of how these movements relate to each other. Challenge yourself by creating combinations other than what is presented here. See if you can figure out what has to happen in order to ride from one movement to another. What degree of difficulty might your combination be? What characteristics remain the same and what change?

Obviously, I don’t expect everyone to be riding all of these lateral movements on your horse yet. But I think it helps if you can understand the bigger picture—how all the lateral work relates to each other. When the time comes for you to ride these movements, you will have a better sense of what you are doing and where you are going. In the meantime you might find that when you are watching a dressage competition or someone training a horse, you have a clearer understanding of what the rider is asking the horse to do and why. You may even find yourself recognizing why the horse is having trouble responding to the rider; for example, not taking the correct lead, because the horse is not in the balance necessary to answer the rider’s request. You might even guess what lateral position would help that horse, but

I highly recommend you keep your suggestions to yourself! Not everyone will be open to your “backseat riding.”

The Bigger Picture

Seeing the bigger picture will also simplify the future discussions about rider position, aids and how to apply them for all the different movements including straight and lateral positions. In order to move easily from one movement to another, we need a consistent set of aids or signals, which we use to communicate to the horse. These consistent aids need to be precise. But more importantly, the aids used at the beginning for the “easy” exercises need to fit with the aids that are going to be used later on for the more difficult movements. Otherwise, we may cause a tremendous amount of confusion for the horse and the rider as each progress.

In addition, our aids need to be universal to all horses, not something that completely changes from horse to horse or discipline to discipline. The primary reason for consistency in the rider’s aids is that we are all subject to the universal law of gravity and the construct of our bodies. Every horse and rider has a skeleton, muscles and a nervous system that runs the show. These are not altered because one horse is a jumper and another is a cutter. Of course, there is individual variation for teaching each horse (and rider) how to do something, based on his unique makeup. And the response time may be different in different horses. Some horses are great jumpers while others have no desire to leap off the ground at all. This is the same in humans where muscle type determines in what sport we will excel. Some people can jump and others simply can’t (like me).

However, when the lesson is learned and the horse is confirmed, there should be a similarity between how you ask one horse and any other schooled horse for a particular movement. I have witnessed this same kind of phenomenon over and over in my Feldenkrais® training. Each time we began an Awareness Through Movement Lesson® we began as 60 people moving in 60 different ways. But as each person learned the lesson, we all moved in a very consistent way. Variations were individual, based on limitations in each person’s structure (fused vertebrae in the spine, broken hip, etc.), but that didn’t change the overall pattern in the group. The pattern was the influence of gravity, the con-



straints imposed in the lesson and the way in which our skeleton is formed.

These factors ultimately determined the outcome of the lesson. So, too, it is with the horse. His individual structural issues and muscle type determine which sport he excels in, but the way in which he moves will be consistent horse to horse based on gravity, the constraint of the lesson (your aids) and his skeletal structure. We will talk about how to ride each movement in great detail later.

Combining Circular Figures

Before we move on to the other topics, I am going to outline a few more combined lateral positions and some variations on one we've already discussed. These patterns will now include circular movements such as turn on the forehand and pirouettes. For anyone interested in more on the subject of the use of different lateral positions, I recommend Charles de Kunffy's book, *The Athletic Development of the Dressage Horse, Manege Patterns*, available on my Web site: www.murdochmethod.com.

In *Laterally Related Part 2* I defined a turn on the forehand as follows: Turn on the forehand is a movement where the horse pivots around one of the front legs. The horse is slightly flexed (in the neck) and bent (through the rib cage) as he moves away from the rider's inside leg. The inside foreleg becomes the pivoting leg (e.g., if horse is bent left he is moving to the right, pivoting around the left front leg). The horse should not step forwards or backwards, nor do the front legs cross. Turn on the forehand is a pivoting movement; therefore, the front leg should remain on the ground as the horse moves around it. This teaches the horse to displace the hind legs forward, across and underneath his body. This is an excellent exercise to teach the horse to move away from the rider's leg so that you can easily open gaits and maneuver your horse in tight areas.

In addition to moving away from the bend, one can also ride a turn on the forehand into the bend. In other words, the horse would be bent left and stepping left, crossing the outside (right) hind foot in front of the left hind foot while pivoting around the outside (right) front foot. This is referred to as a turn on the forehand with opposite or counter flexion (W. Müseler, *Riding Logic*). There are two significant differences from a turn on the forehand and a turn on the forehand in counter flexion. In counter flexion the horse is moving into the bend, and while he is still pivoting around the same front foot, it changes from being the inside front foot to being the outside front foot.

I strongly suggest you get yourself a fresh zucchini and work out turn on the forehand and turn on the forehand in counter flexion. Better yet, stand as if on all fours and move through the two different types of turn on the forehand. These are excellent exercises for teaching you how to maintain the horse in a stationary position and move the hind legs away from and into the bend. One of the key requirements is to keep the horse from moving forward or backward during either type of turn on the forehand.

A turn on the forehand can be performed from the walk. Here we are combining a simple movement, walking on a straight line

with a fairly easy lateral movement. For example, you are riding your horse at the walk on a straight line. Then you begin the turn on the forehand without halting, which means you have to ask the horse to stop stepping forward with the front legs but cross over with the hind legs away from the bend, then proceed straight back on the line you were just on. The difficulty lies in the fact that you need to pause the forward progression of the horse but not the forward motion so that he keeps marching his hind legs around his front legs. It is also important that you have sufficient room for the horse to move his hindquarters around. If you are riding too close to the rail, the horse won't be able to turn.

Another move related to turn on the forehand at walk is called a counter change of hand. These two moves are similar in that the horse turns around the forehand. However, in a counter change of hand the horse steps around the forehand while moving into the bend, similar to a turn on the forehand with counter flexion. Also, instead of marking the spot with the front feet, the fore legs describe a small circle while the hind legs describe a larger circle. The outside fore and hind legs cross in front of the inside legs. As a result, the horse will change direction while maintaining the same bend.

Turn on the Forehand With Shoulder-In

Turn on the forehand can also be combined with shoulder-in. The shoulder-in has already established that the horse is moving away from the bend similar to turn on the forehand. The inside hind leg is stepping into the print of the outside forefoot. As the horse enters the turn on the forehand, he steps farther under and across with the inside hind leg. The forward progression of the horse is interrupted for as many turning steps as desired. The degree of turn on the forehand could be a 1/4, 1/2, 3/4 or full turn, in which case the horse would exit in shoulder-in continuing on the same line he was traveling prior to the turn on the forehand. The forward motion must be maintained throughout the turn on the forehand in order to correctly execute this exercise. (See Figure 1.)

Haunches-In to Pirouette

A similar exercise is haunches-in to a turn on the haunches or pirouette (Figure 2). Haunches-in is when the haunches are displaced to the inside so that the outside hind foot steps into the print of the inside front foot. Turn on the haunches is when the horse moves his forelegs into the bend around the hindquarters. For example, if the horse were in right bend, he would move the forehand to the right around the right hind leg. The hind legs must maintain the movement of the gait while remaining on the spot or describing a small circle. The inside hind leg is the center of the turn; however, the horse must not pivot on the inside hind leg. Forward motion is imperative (no backward steps). Again, the amount of turning could be 1/4, 1/2, 3/4 or full. Increasing the amount of turning greatly increases the degree of difficulty for the horse. While turn on the forehand is an excellent exercise to teach the rider how to use his aids separately, turn on the haunches is valuable for training the horse.



Turn on the haunches is an important exercise in developing the horse's ability to carry weight on his hindquarters for collection. The horse has to hold his weight back on his hind legs as the forehand steps around. As the horse strengthens, the size of the turn can decrease until it becomes a pirouette. Perfectly executed, the collected horse would maintain forward motion in haunches-in as he moves into the bend (i.e., right bend moving to the right). As he executes the pirouette, the hind legs would continue to step in the rhythm of the gait with the radius of the turn equal to the length of the horse. The inside hind foot would step in place. In a half-pirouette (180°) the horse would end being one chest's width away from the original track upon returning in the direction he came from. This exercise is similar to the shoulder-in to a turn on the forehand in that the displaced portion of the horse (forehand or hindquarters) becomes the center of the circular movement.

If this were a western horse, the above exercise could be performed with a pivot on the haunches instead of a turn on the haunches. The difference is that the inside hind leg would remain stationary as the horse moves his forehand around the hindquarters, instead of continuing to mark the steps as in the turn on the haunches. In a pivot on the haunches, the outside hind leg would

need to powerfully push the horse around the turn so that the pivot leg remains in place. I would like to conjecture that entering a pivot on the haunches from haunches-in would encourage the horse to pivot on the inside hind leg, whereas entering the pivot from a shoulder-in would cause the horse to turn around the outside hind leg due to the different positioning of the two hind legs. Of course, both of these scenarios would depend on the rider's weight distribution during the pivot on the haunches.

Haunches-In to Counter change of Hand

Riding haunches-in to a counter change of hand is another way one can change from haunches-in to haunches-out without changing bend (Figure 3). In haunches-in the horse's haunches are toward the middle of the arena. Turning up the quarter line, the horse continues in haunches-in (right). To ride the counter change of hand, the horse must step the haunches around the forehand into the bend. Completing a 180° turn results in a change of direction. The horse would then proceed along the wall now in haunches-out. In his book, *The Athletic Development of the Dressage Horse, Manege Patterns*, de Kunffy points out in reference to this exercise and similar patterns that "regardless of how elaborate or how simple the combination of patterns, we

Figure 1: Turn on the Forehand with Shoulder In

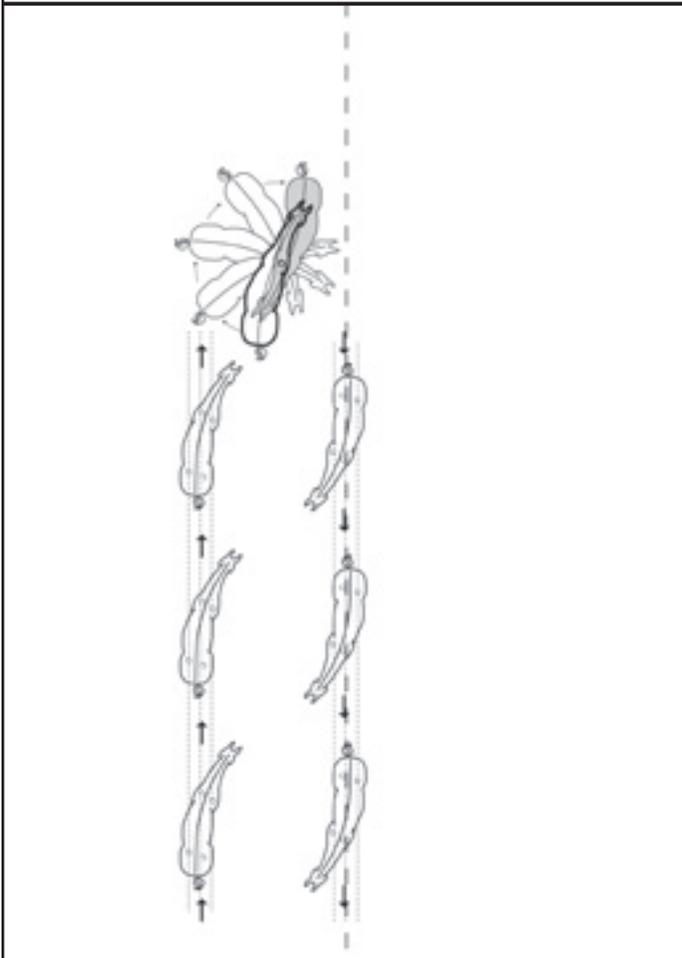
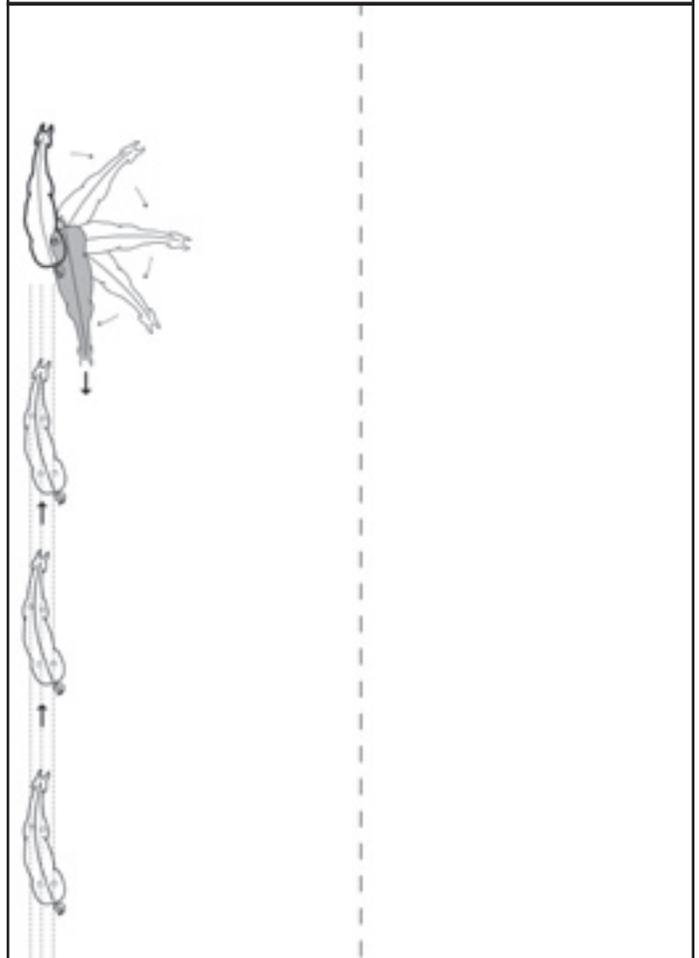


Figure 2: Haunches-In to Pirouette



“Before starting to collect the horse, he must be able to go calmly and easily from one gait to another in both upwards and downwards transitions. Calmness must be obtained before anything else.” – Nuño Oliveira

always should emphasize to the horse the importance of bending, the finest engagement [stepping well underneath the body] on the crossing outside hind leg and the best possible weight-bearing on the inside hind leg.”

Half-Pass to Half-Pirouette to Half-Pass

The last lateral combination I am going to present is half-pass to a 1/2 pirouette to half-pass back in the direction the horse came from (Figure 4). Remember that half-pass is a variation of haunches-in (travers) executed on a diagonal line. In fact, haunches-in, half-pass and pirouettes are related. According to de Kunffy, they are “strongly related by two uncompromisable standards. 1. They are all performed with the horse laterally bending toward the direction of his progress. 2. They all leave four tracks behind. The difference in lateral bending is substantial.” Haunches-in requires the most bending, half-pass modest bending and pirouette the least, equivalent to that of a 20-meter circle. However, the pirouette requires the greatest amount of collection. De Kunffy continues: “Pirouettes, in spite of turning the horse around on a

tiny spot, are not at all about turning. They are all about collection, lumbar flexibility and assumption of weight in the haunches.”

In Summary

Through this series on lateral positions we have gone from no collection (turn on the forehand) to a very high degree of collection (pirouette). We have also moved from exercises where there is a maximum amount of bend, shoulder-in and haunches-in, to a low degree of bend (pirouette) while moving from a low to high degree of difficulty. The timing of the progression, the exercises themselves and in combinations, and duration of use differ from horse to horse. One cannot put a time frame on when, how long and how much you ride haunches-in. This is where rider tact becomes critical. The ability to feel the improvement or loss of improvement while riding is essential to the correct application of lateral work. Above all, maintaining a positive mental attitude is essential. Therefore, I will leave you to meditate on the quote (above) from *Horses and Their Riders* by Nuño Oliveira.

Figure 3: Haunches-In To Counter Change of Hand

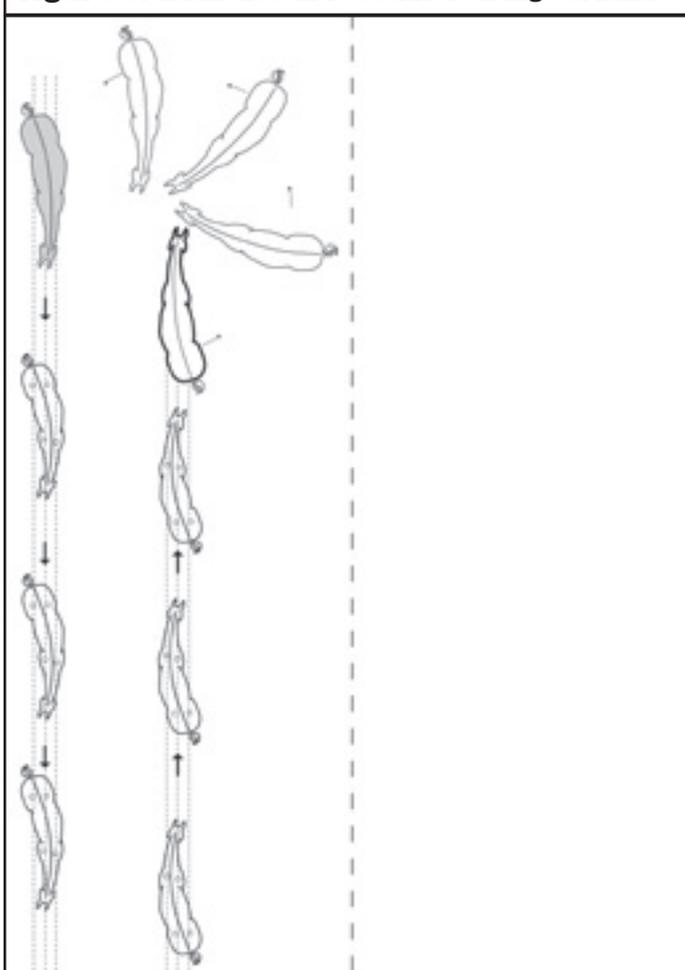


Figure 4: Half-Pass to Half-Pirouette to Half-Pass

