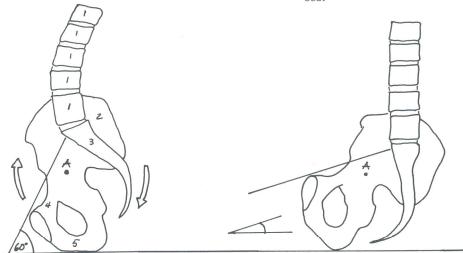


By pushing the knees down, the pelvis will tilt to distribute the weight more over the centre of the seat bone



Knee all the way down: vaulter sits on the front of the seat bone. If he tilts off it altogether, the weight rests on the upper legs only: 'fork' seat



Normal position of pelvis in standing body

- 1 lumbar vertebrae
- 2 haunch bones 3 sacrum (tail bone)
- 4 upper branch seat bone 5 lower branch seat bone

Position of pelvis of sitting body A: axle around which we can tilt the pelvis

The exercise of the basic seat consists of the mount, discussed in the last chapter, the seat itself and the basic dismount (if performed outside the block), which will be described in the next chapter. Train your vaulters to understand this sequence as a *whole* right from the start.

As mentioned before, the judges traditionally count the mount into this exercise with about forty to fifty per cent. The exercise of the seat itself is mainly judged according to mechanics (the way to execute the motions) and essence (suppleness, elegant posture).

In the basic seat the vaulter must be able to show balance and suppleness (especially in the waist and the hips), to pick up the motion of the canter stride while holding the upper body still (not stiff!) at the same time. It is of course a static exercise, and must therefore be held for four full canter strides. The judges start counting the strides, when the exercise is *fully built up*. It is very important to teach your vaulters this concept, otherwise they will lose points in competitions.

'Sitting' on the horse sounds like such an easy thing for a vaulter, but nevertheless even the best most often do not achieve the best scores in this exercise. In order to understand what is mechanically correct in the seat, one must understand a bit what we sit on.

### Basic score

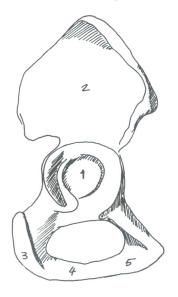
The judge will give a basic score of not more than 4.0 for an extreme 'fork seat' and of not more than 5.0 for an extreme

'chair seat' from which then all the other performance faults are deducted. In order to understand what the judges are seeing here, we must first have a look at the bones which we are sitting on. There are often great misunderstandings when we say 'seat bones'. The lower part of the seat bones is formed like a runner on a sled or on a rocking chair, and the pelvis can tilt around an axle point to accommodate various movements from standing to sitting. The leg rotates around the hip joint and the lower part of the spine curves more or less, according to the position of the other body parts.

The ideal basic seat will distribute the weight more or less onto the middle part of the seat bone 'runner'. In the illustration you can see how the pelvis tilts with the upper leg stretching down — this is of course the position of the leg which we are striving with to achieve the correct alignment of 'head-hip-heel'. So if the back is held straight and the knee pushed down to make a 'long leg', the weight will end up on the right part of the 'runners'! If the upper leg is pulled up, the pelvis will tilt back, and in the 'extreme chair seat' the vaulter will 'fall off' his seat bones and end up by sitting mainly on his buttock muscles. In the 'extreme fork seat' the vaulter tilts off the front part of the 'runners' and ends up supporting his weight on the inside of his thighs, rather than the seat bones. Both positions are very wrong — and make it hard to balance correctly in a seat position.

In the correct seat the vaulter will slightly rock forward and backward on these 'runners', as his pelvis follows and absorbs the movement of the horse's canter stride. (This applies of course just the same in walk and trot.) As the weight must remain on the seat bones, there will be no extreme movements to either front or back, and therefore also no extreme curvature of the spine either way. The legs must be extended down as far and as long as possible, turned slightly outward at the hip to correctly 'wrap' the horse's belly. They should be turned out as little as possible, to allow the feet still to be positioned in a forward direction: the top of the foot should show to the front and the

### Seat bones: correct alignment in the basic seat



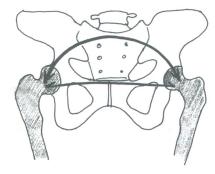
- 1 socket of hip bone 2 haunch bone

- 3 front of seat bone 4 seat bone (lower branch) 6 to 8 cm long 5 back of seat bone

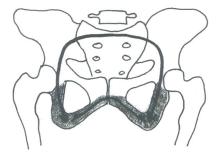


#### Pelvis from the front

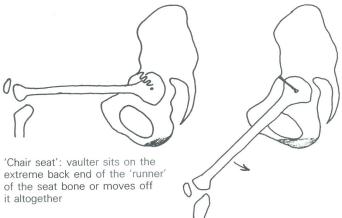
- 1 hip bone sockets
- 2 haunch bones 3 os sacrum (tail bone)
- 4 upper branch of seat bone 5 front of seat bone
- 6 lower branch of seat bone
- 7 back of seat bone



Distribution of weight in a standing body: over hip bone sockets into the legs



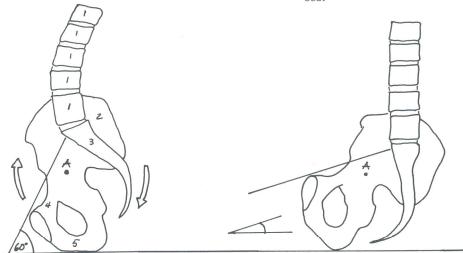
Distribution of weight in a sitting body: over the sacrum into the seat bones



By pushing the knees down, the pelvis will tilt to distribute the weight more over the centre of the seat bone



Knee all the way down: vaulter sits on the front of the seat bone. If he tilts off it altogether, the weight rests on the upper legs only: 'fork' seat



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Position of pelvis of sitting body A: axle around which we can tilt the pelvis

heels to the back. The inner seat bone will take on a bit more weight than the outer, to make up for the horse's curvature on the circle, so watch that the vaulters do not pull up the inner leg. This is a typical beginner mistake, in which the vaulter clings with his inner leg to counteract centrifugal force, rather than 'balancing', which means distributing his weight correctly (putting more weight on the inner seat bone) to remain with his gravity point aligned directly over the horse's centre line.

The correct position for the buttocks is as directly behind the surcingle as possible, without the knees hiding the sides of it. The toes must point down, the heel to the back. This means that the seat is positioned approximately one hand's width behind the surcingle. The back must be straight, neither slouching nor hollow, overemphasizing any pelvic tilt. The alignment seen from the side is basically the same as in riding: a vertical line runs from the head, through shoulder and hip to the heel. Seen from the front the vaulter must be centred on the spine of the horse, without any kinks in the hip.

The legs touch the horse's belly lightly (not clinging!) but stay in contact constantly and in the same spot. The legs may not swish along the horse in the rhythm of the canter stride. It is *only* the pelvis, which rocks with the canter movement. Many otherwise very flexible people are very stiff in their pelvis — tell them to belly dance at home... If the pelvis absorbs the movement correctly, the upper body will be perfectly still, pony tails will hang limply, legs will be quietly resting in one place and shoulders and head will move around on a circle like on a record player. You should be able to position a glass of water on the vaulter's head and not lose a drop. The only problem is to get the water up there in the first place!

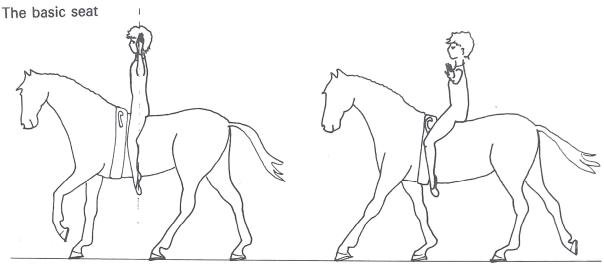
As boring as little vaulters find these sitting exercises, as important they are for the understanding of the concept of balance. If the movement of the horse is not absorbed (and this by the joints closest to the contact: the pelvis in the seat, ankles and knees in the stand, wrists and elbows in the handstand), the

vaulter will bounce, and start sliding to one side or the other. This in turn will throw the horse off-balance, who will then start falling out of rhythm and cramp his back muscles! Which in turn will throw the vaulter off even more and get bouncier...and so on. Make it clear to your vaulters that the horse must counterbalance each of their mistakes as well — that in fact two living beings are balancing together to make a perfect vaulting exercise work.

The seat is considered fully built up when the arms and hands have reached the prescribed position. The hands should rise in a direct line from their position on the grips to the end position, which is at eye level and square with the shoulders. Arms are extended outward in a straight line (elbow, hand), the hand with fingers together and palm facing down. Arms, neck and shoulders should be stretched elastically, not rigidly. This means that although the hands are held up, the shoulders must stay back and down in a relaxed manner, making the neck long. Right and left arm and hand should be at the same height, seen from front and back.

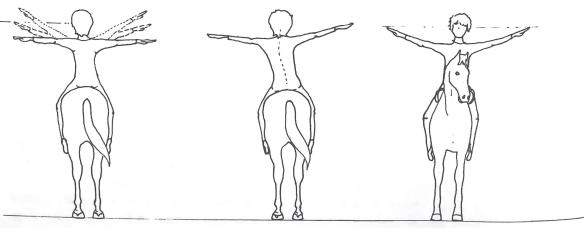
The highest level for the hands you should ever permit your vaulters is that of the top of the head, the lowest at shoulder height. Correct height is eye level and the face should look straight ahead, eyes parallel to the ground. Don't tell your young vaulters to 'keep their chin up', as they then often kink their neck to stick the chin out. The image should rather be that someone has a fish-hook in the crown of their head and is pulling them up to the ceiling. That way they will look straight ahead and the chin will be in the correct position with a long, straight neck.

After holding the exercise for at least four complete canter strides (five is better than three and a half, so the judges have no doubt about the count), the arms are taken down back to the grips, again in a direct line. If the compulsories are not performed in a block, the basic dismount is then begun without wasting time.



Correct alignment: vertical line from head through shoulder, hip and heel. Arms straight out sideways, correct height, palms down

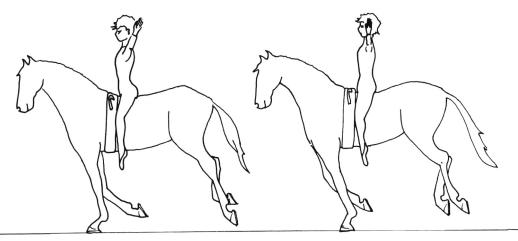
Wrong: 'chair' seat: vaulter sits on buttock muscles only, not on seat bones. Therefore the back curves and the knees are pulled up to keep balance. Legs cling, feet are too far forward, arms are bent and too low, and too far to the front



Correct alignment from the back vertically and horizontally. Minimum and maximum height of permissible arm positions are shown, ideally the fingertips should be at eye level

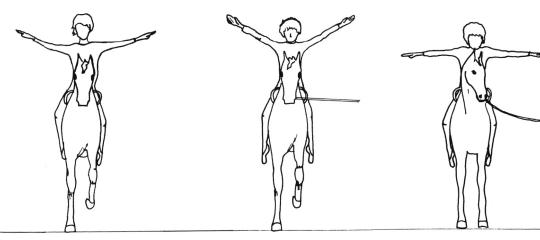
Wrong alignment of seat: vaulter bends spine to compensate, shoulders are tense and pulled up, arms at uneven height

Correct alignment vertically and horizontally, seen from the front: shoulders and legs are relaxed



Wrong: 'fork' seat: vaulter falls off the seat bones to the front: therefore overarches the back and holds the arms too far back to keep balance

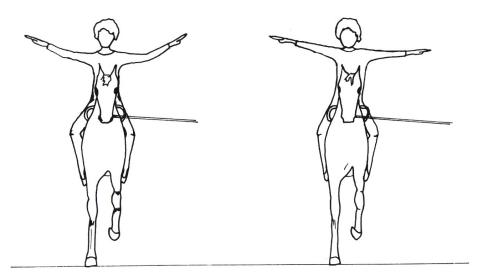
Correct alignment: the vaulter stays in the vertical regardless of the horse's up and down movement by gently absorbing it in his own pelvic movement. Upper body stays still



Wrong: twisted seat: spine is bent sideways, one arm kinked to make up for mistake

Wrong: arms too high, palms not down, shoulders pulled up. Bad 'wrap' of the legs, feet are not to the horse

Wrong: cramped shoulders, chin and hands too low, tense back



Wrong: bad posture, insufficient body tension, arms bent, head tilted, knees pulled up

Wrong seat off centre: inner knee pulled up, shoulders cramped, arms uneven height

### Arm position for basic seat and stand

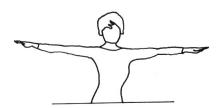


Lowest arm position at shoulder height

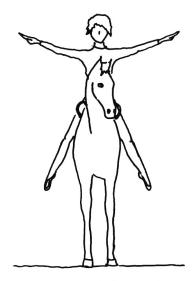
Ideal position: at eye level

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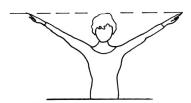
Correct hand position: fingers together, palms down, thumb at the side



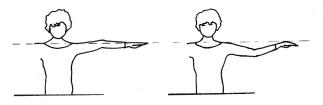
Wrong alignment



Practise balance and alignment by stretching the legs away from the horse



Highest position: top of the head



'Double jointed' elbows

Lacking tension

'Duckie bum'!

Before and after *each and every* exercise which does not end in a direct dismount itself (like the flank), the basic seat position (without arm extension) should be assumed for a split second. No exercise should be started out of an incorrect seat position.

Exercises to improve: Belly-dancing — no joke! Let the vaulters sit straight and extend the legs away from the horse, first in walk, then canter, to find their gravity point and align with the horse. Later let them close their eyes when practising this. In the beginning they must do the 'pelvic push' quite actively, if they are stiff. This movement must go down straight from the back and forward. The idea is *NOT* to overcurve the spine to the back and stick out a 'duckie bum'. It must feel as if the pelvis pushes the horse into the next canter stride.

## Common mistakes

• Curved back and round shoulders: slouching posture, shoulders forward, or cramped back. This often occurs with beginners, when they are still afraid of losing their balance. Let them rest their open hands on the grips lightly (this gives them a sense of security) and tell them to breathe. Since beginners are anxious and tense (which leads to uncomfortable bouncing and hence to more cramping), let them do pelvic pushing movements downward and forward with their hips (practise this in the warm-up time), sit behind them or run along holding on to their leg, if necessary for reassurance. Young girls in puberty often curve their shoulders forward to hide developing breasts — they have to overcome this awkward period somehow...chest out! They have to get used to it sooner or later...

Arched back: thereby producing what I call the 'duckie-bum'. Goes along with overdone pelvic tilt to the front. Tailbone of the vaulter lifts off and correct vertical alignment is not achieved.

• Light seat: bouncing, a sign of lacking suppleness in the hips, occurs when the vaulter cramps up and pulls up his knees. Also gets more pronounced the further back the vaulter sits. Correct for long legs and right position on the horse's back.

- Pelvic tilt: tilting forward on the crotch results mainly from lack of suppleness. Usually it goes along with an overly curved back and lower leg positioned too far back. It indicates evasion of difficulty, as the vaulter tries to get around having to catch the motion in his hips. Correct all of the above. Use images for small children. Pelvic tilt to the back goes with rounded back (see above) and pulled up knees. It is often an indication of soreness or back pain, especially in the young child. Ask about this! They may be too shy to mention it...
- Off centre: Usually a kink in the hip. Many vaulters (and riders) have a tendency to lean to one side, which is usually a mannerism and a very bad habit. Often goes along with other ways to make up for the resulting imbalance, like twists etc. Becomes dangerous when vaulters start to lift and carry as undermen, so don't let it pass even at the beginning. Look at vaulters from front and back too to determine the problem.
- Uneven height: in arms and hands. Often lack of concentration, but also an indication of lacking directional awareness. Can your vaulter touch the tip of her nose with eyes closed? Can he make the two index fingers meet with outstretched arms and eyes closed? Many vaulters, especially little ones, don't have a clue where their own body parts are in space in relation to each other. (More about this when we discuss rolls, hangs and jumps later on.) Let them train even height in front of a mirror, then repeat with closed eyes, then open eyes and check. Children love these exercises, and it usually corrects the mistake quickly, as soon as they get the feel for it. Also check the previous point, uneven height can result from a combination of hip kink plus lacking directional awareness. Correct all points in older vaulters, use images for children.

- Arms: too far back, often in very flexible children. They should be able just to see their wriggling thumbs out of the corner of their eyes when looking straight ahead. Let them check this way often! arms too low: often sign of insecurity; arms too far to front: also insecurity. Let them test in walk how quickly they can reach the grips from the correct arm position, to prove to them that they are not safer through persisting in the wrong one! All these things are purely in the mind and must be dealt with accordingly.
- 'Riding': another mistake which is often to be seen, is the vaulter riding the horse. This is not his job (unless you ask them to help you with training a new horse), and looks very bad in vaulting. Neither should the vaulters hammer their feet into the side of the horse (as the horse must learn to listen to the lunger!) nor should they overtly push with pelvic movements. (This becomes very evident in many vaulters when they later have to sit backwards on the neck in kur exercises vaulting should not look like a mating dance...). The pelvic movements should be just pronounced enough to catch the movement of the horse's motion, not go over and beyond that. When suppleness turns into slackness, it will diminish the vaulter's strength for lifting or supporting partners.

Of course the vaulters can help the lunger invisibly by squeezing their legs to the horse, if the horse has a tendency to slow down or fall into trot. Their main help however will be to keep themselves perfectly centred and aligned, as many inconsistencies of the horse stem from disturbance of the vaulters throwing their weight around up top.

• Head down: is a sign of insecurity with young vaulters. Teach them that looking at the surcingle does not make an exercise more secure, that potential trouble rather manifests itself in the horse's ears! Make them repeat exercises in walk grasping the grips with closed eyes, until they believe you that looking is not necessary to find them. Use the example of a driver looking down to find the brakes in case of emergency...