

A Summary of "DOGSTEPS"  
Film study of structure and gait by Rachel Page Elliot

This programme is a discussion of basic principles of structure and how it affects the way a dog moves, personally narrated and illustrated with 16mm slow motion film.

The programme demonstrates how differences in functional type and purpose can influence gait, and emphasises the qualities needed for normal action in any breed, large or small. There are contrasts throughout in good and faulty movement as the subjects are viewed from the side as well as coming and going. Included in the film is a study of bone and joint motion showing the moving skeleton, similar to moving x-rays. This is done through cineradiography, a method of simultaneously fluorescing and photographing dogs as they move at varying speeds on a treadmill.

The subjects are viewed from the side as well as from beneath their bodies. This study takes the guesswork out of what really goes on beneath the muscles and consequently challenges some long held theories and concepts about movement. The problem of semantics is also discussed, relating to terms that can cause confusion and misinterpretation.

BALANCE

Symmetry and co-ordination between the front and the rear quarters, with correct placing of all four feet upon the ground whether standing or moving

SOUNDNESS

Freedom from defects caused by injury, disease or inheritance that would interfere with normal physical activity, or impair a dog's usefulness for a given purpose. This category includes temperament as well as physical traits.

FUNCTIONAL TYPE

Dogs fall into groups according to the purpose for which they were developed through selective breeding to meet the needs and whims of man.

BREED TYPE

The characteristics that distinguish one breed from another in general outline, size, head, expression, coat, colour, temperament and way of moving.

CONFORMATION

The way the dog is built, the length and relationship of the bones one to another that reveal balance, or the lack of it, and efficiency of movement

ANGULATION

The angles formed by the slant of the bones and the size of the joints. The term usually refers to the scapulo-humeral joint in front and the pelvic-femoral (hip) joint in the rear, together with the more visible bend at stifle and hock.

## THE THREE DIMENSIONAL POSITION OF THE SHOULDER BLADE

### 1. SHOULDER LAYBACK

The slant of the scapula from the shoulder joint to the uppermost point of the blade. There is much confusion in the dog fancy as to methods of determining the degree of layback because of different points from which measurements are taken.

### MOVING ON PARALLEL TRACKS

Though there is a natural tendency for all dogs to reach towards a centre line of travel beneath their bodies as they move faster, width of footfall varies with chest width and leg length. As a result the footprints appear as parallel tracks either side of a straight line

### MOVING STRAIGHT

Going and coming the legs should move as straight as possible even as they tend to draw inward towards the centre. There is some flexing of the joints to avoid interference as the swing-legs by-pass the supporting limbs, but this action should not be exaggerated. Exceptions to straight limb support are characteristic of a few breeds such as the Basset, Peke, Bulldog and some terriers.

Remember – it is not whether a dog single tracks or whether he moves wide, it is WHY and HOW he accomplishes the action that must be understood and evaluated.

## COMMON FAULTS THAT REDUCE GAITING EFFICIENCY

### CRABBING

Moving with the rear quarters on a bias to the line of travel

### PADDING

Front feet tend to flip or swing upwards as they approach the ground

### HACKNEYING

Bouncing action, with exaggerated lifting and flexing of forelimbs. Often the result of steep front or tied elbows.

### POUNDING

Front feet strike the ground without resilience

The same confusion pertains to measuring the angle at the shoulder joint. Measurements should be consistent and the methods understood, as different determinations on the same dog could have identical meaning.

### 2. 'LAY-IN' OF SHOULDER

As the blade angles up and back from the shoulder joint, it also slants in towards the withers. The position as a whole is influenced by shape of the chest, which on all dogs, regardless of width, narrows towards the front.

### 3. OBLIQUE SETTING RELATIVE TO THE SPINE

Because a dog's chest narrows toward the breastbone, where the ribs are quite flat, the blades do not set parallel to the spine. It is because of this oblique position that

the forelimbs tend to converge as the blades glide medially over the ribs and swing the limbs inward. The scapula is a very mobile bone, attached to the chest wall only by muscle. There is no collar bone.

### HUMERUS

Emphasis on the shoulder blade sometimes overshadows the importance of the upper arm. The length and slant of this bone, in combination with the scapula, determines the setting of the elbow against the chest wall. Completing the front assembly is a remarkable pattern of muscles, inside and out, that help support, lift and transport the central body of the dog, at the same time serving as a shock absorbing mechanism to resist wear and tear on joints and ligaments.

### LIMB CONVERGENCE

Also referred to as the tendency to single track, or actual single tracking. The paws strike the ground on or close to a centre line of travel as the dog gains speed. This is nature's way to maintain balance over a central support to conserve energy

### OUT AT THE ELBOWS

Elbows twist out as the legs swing or land

### MOVING CLOSE

Carpal joints or hocks break inward causing pasterns to move parallel. Often results in brushing or interfering

### COWHOCKS

Hocks turn excessively inward causing lower legs to turn out

### SPREAD HOCKS

Rigid hock joints that bend outward causing toeing in and often crossing.

### TWISITING HOCKS

Weak hock joints that twist in and out

### KICKING HOCKS

Exaggerated high action of the hocks, similar to hackney action in front

### SICKLE HOCKS

Hocks tend to remain at rigid angle, not bending or extending to give drive from the rear. Distinction should be made between the sickle-hocked stance typical of the GSD and the lack of flexion in the sickle hock as a fault.

The gait film also includes illustrations of dogs afflicted with more serious disorders such as patella luxation, hyperextended hocks and hip dysplasia

## **EXAMINING THE DOG**

This is where a knowledgeable exhibitor or spectator has an admirable chance to estimate the judge's true ability. For fingers that are competent need only touch lightly, checking each feature with speed and accuracy. No need for heavy handling or prodding at the dog, this may only frighten the dog to the extent that he may be ruined for future shows, so be gentle at all times.

Always approach a dog from the front. Do not rush over, grab at him or come up at him suddenly from behind, startling him. Offer the back of your hand to him first, talking to the dog to give him confidence. Never struggle with a dog if he won't let you look in his mouth. First ask the handler to show you his mouth. If he completely refuses to let you go over him, penalise him accordingly.

Commence examination with the head. Is it to type as described by the standard? Is the skull of correct width? Are the eyes dark? Are the eyes free of entropion? Is the muzzle broad and of correct length? Is his pigmentation good? Is his bite correct? Are the ears correctly set? Are the ears small and thick? (unfortunately not always in chows) Check the stop.

The neck is examined for length, substance and muscularity. The withers should be firm, close together and set high. With your fingers lightly trace the shoulder assembly for angulation. Are they well laid back? Note depth and breadth of brisket.

Feel for bone and muscle on forelegs. Note whether pasterns are firm and tight. Legs should go straight down to the toes without too much bend in the pasterns, feet should be neat and round. Check between the front legs. Can you get your hand comfortably between them?

Examine the top line which should be firm and straight, no sagging in the middle or roaching of the back. Check the dog's balance. Is he nice and square or is he too short on the leg or too long in the back? Check the ribcage. Is he slab sided or barrelled? He should have a nice spring of rib. The loin is checked for strength and tuck-up. The angulation should be noted including conformation of stifle and hocks. Are the hocks too long? Check the tail placement. Is it too low? Is the carriage correct? Handle the coat for texture and quality

We like a free moving dog with a stilted rear action and true front action....no bicycling, toeing in or hackneyed gait. Temperament of the dog has also to be assessed. In conclusion stand back and view the posed dog from both sides, front and rear

On writing a critique, be kind, there's usually something good to say about the dog, even if its only well presented or good temperament. No need to regale a list of faults the next judge will find them for himself anyway (maybe!)

(Written for the CJTS by a course tutor 1991)