

Why is breeding according to the standard important for performance?
-by Erich Orschler (von Batu kennels). SV Breed Judge and Koermeister

Translated by Elke Effler from the SV Zeitung, June 1998 issue

I don't care what the dog looks like, so long as it can work, bite, track, be able to cope with stress and, if possible get 298 points!"

Are you familiar with this saying? Of course you are and I am aware of this attitude, and also know dogs who most definitely do not reflect the standard of the German Shepherd Dog; dogs who have serious anatomical faults but who still demonstrate exceptional performance results. They impress with their behaviour, their temperament, their joy in working, their courage and combative drive, their performance ability and together with the expert assistance of their handler, are exceptionally successful.

The German Shepherd Dog - after all, it was because of his universal ability, his widespread and versatile usefulness, his courage and his endurance that he became so well known!

How important is it then whether he reflects the Standard (whatever that may be) or not? Does it matter if he is steeply angled, has loose ligaments, is too large or too small, too long or too short, whether he has missing teeth or hanging ears?

Not really!

Truly not?

In Germany alone, 30,000 (worldwide, several hundred thousand) German Shepherds are bred every year. Are then the anatomical facts not really important?

Assertion: If the SV had not exactly prescribed the Standard and so carefully watched over it, our dogs would most certainly not look like the Standard and he would also not reflect the performance Standard. The predictability of phenotype and temperament, the related performance ability, and above all the dog's universal usability, would be lost; at the very least it would be markedly diminished. Shall we therefore look at our dog and ask again whether there are correlations, why the Standard wants it this way, why the proportions, the anatomy, the movement and of course also the temperament should be thus and not otherwise.

Shall we play the judge and look at our dog in the following chronological order:

Size:

The German Shepherd Dog belongs to the medium size breeds. The important measurement proportions are set as: males 60-65 cm, bitches 55-60 cm wither height. The trunk length exceeds the wither height by approximately 10-17%. Improved breeding and feeding conditions, but also without doubt the preference for the larger, stronger dog have in the last decades, contributed to the fact that our dogs have - to word it somewhat carefully - reached the upper limit in size.

Is this correct, or where can there be problems in size?

Dogs which are too large: Even if the dog is harmoniously constructed, he becomes too heavy. There is an over proportional weight gain. Mobility/agility suffers. Although giants are very powerful, they are never agile or fast. If these over size dogs are not too heavy, then they will usually be leggy, have little bone strength, the chest will be only moderately developed, they will be narrow and usually such dogs will also not be firm or well knit.

Dogs which are too small: We also have two possibilities here: If there is harmonious construction, the males appear bitch-like and the bitches are little suited to being brood bitches. If strength and substance and therefore also weight present, then the proportions of the limbs are incorrect; this means that the trunk is too pronounced, the dog's legs are too short and the length of stride suffers. A balance between size and strength, agility and speed-already limited by size alone - is therefore a requirement for performance.

Proportions:

Our dog is bred to be a trotter. All theories expound this, but also experience has shown that the slightly elongated dogs are best able to tirelessly trot over long distances. Dogs which are too short and square, are barely able to trot. They have a tendency to either gallop or to pace. They are capable of being fast and agile over short distances but for longer distances their mode of movement is not economical enough. Very elongated or long dogs are even less able to perform. Usually their back ligaments are not firm and the transmission of the hindquarter action to the forehand is missing. Result: The dog falls or lies on the forehand - the centre of gravity is disturbed. It is exactly this 'centre of gravity' (our colleagues from the former East Germany correctly use this definition more often) which plays such an important role in the assessment of movement. English speaking countries have the definition 'well balanced movement', which also perfectly describes what is meant, namely the straight, level back combined with harmonious movement. Incidentally, for performance sport people, it is only a matter of time before their too - long dogs develop loin or vertebrae problems. It is irrelevant what the dog looks like - oh really?

Strength/Substance/Firmness:

These are also prerequisites for the performance dog. Under 'strength', bone strength is understood. The bones form the framework of the body and should therefore be strong and dry. Finely boned dogs therefore have no place in breeding. "Substantial" is a dog when he possesses a lot of body. Pronounced chest development, the under chest reaching well towards the hindquarter but only rising moderately, give the inner organs such as the heart and lungs, enough room. It is exactly these organs which must be well developed in order to facilitate high performance. The moderately developed chest and/or short under chest is not only optically but also functionally less good.

Firmness/Unity:

Loose ligaments, lacking firmness, overweight, flabby, little trained muscles, substantially restrict the working ability of the dog. Even if the dog is able to produce performance in his early years, he will soon fall away, (or can you imagine a person with, for example, fallen arches or flat feet, able to run the 10,000 metres over many years?)

Jumping ability, trotting, galloping, and the joy in moving and in work - all are impaired when overall firmness is lacking. Genetically given firm ligaments with developed and trained muscles and combined with good condition, are essential prerequisites for optimal results - this also applies to the dog being handled for working performance. It is therefore no accident that fitness and show training is being done more and more by performance people. This is a development which should be supported by the branches.

Coat/Pigment:

The Standard also demands a correct coat, that is, pronounced top coat with undercoat - a 'working jacket' as the founder of the breed demanded - offers the body corresponding protection. Whoever has had a long-coated dog, will know how easily the coat becomes knotted and how difficult it is to comb out. Dogs which have too short a coat, are too exposed to weather changes and are possibly more sensitive.

We want a dog with strong pigment. Critics may say that this does not play a role in the dog's performance and only serves beauty. However, pigment plays a very important role in the whole domestic animal breeding (this also applies to humans). Pale skinned people and animals have a tendency toward skin diseases, be it genetic or environmental eczema, allergies or other skin changes. Even the inner firmness of horn material such as hooves or nails appears to be less.

It is therefore also a demand arising out of performance when we want a healthy, that is, well pigmented normal-coated dog according to the standard. If beyond this, the dog also has a beautiful colour - everyone is happy.

Type/Expression:

Have you now caught me out?

Primarily, the Standard does not say anything on this subject however, from the description of the head, eyes, ears, the nature of the coat and colour, it is easy to see that von Stephanitz wanted an expressive and typey dog. Critics say that in the last decades, our dogs have become too uniform in appearance and that a greater variety should be created. This is surely a matter of opinion, an attitude, and is up to every breeder to breed whichever type (phenotype) he desires. The Standard offers a very wide field of possibilities.

There is however one essential which I maintain:

If the breeder wants to be successful, he must have a goal. He must set an exact goal - which type (phenotype) of dog he wishes to breed - and he must rigorously pursue this goal.

The brood bitch, the prospective sire and any line breeding should reflect this goal and the whelps should be chosen accordingly. It is an indisputable fact that aspects such as performance willingness and ability, joy in working, hardiness, courage and trainability must all play a role. This is the only way that a breeder can establish himself for the long haul.

The Kennel groups competition demonstrates the breeder's goal in an impressive way.

It is exactly this phenotype, and here I would like to again be allowed to use the concept 'beautiful', combined with universal ability which has made our dog beloved worldwide. Shall we preserve this!

Head:

It is not without reason that the head is described with such detail in the Standard. A well developed head is very important for performance. It starts with the taking of food. (Processed food is not the only food available!) A well developed male head can create a pressure of 1.6 tonnes per square centimeter between the jaws (P4/M1). No wonder that bones crack! Have you ever observed how long it takes a dog with weak jaws to do this? Our bite helpers feel the difference in grip between dogs with strong and weak jaws.

Therefore demand: A broad skull, correct proportions of skull and foreface (50-50%), good depth of muzzle and above all, a strong lower jaw. Strong jaws offer sufficient room for well developed, strong teeth. Logically, weak lower jaws offer only a minimal bony foundation for the teeth. In this scenario, the teeth are more weakly developed and sit less strongly in the jaw.

For the observer: When the mouth is closed and when viewed from the side, the lower jaw must be clearly visible.

Is it unimportant for the performance person whether his dog has tip, hanging or pointed ears? Primarily yes! Nevertheless, the possibility of ear infections is much greater in those dogs with hanging ears than with those having pointed ears. Beyond this, it is the correctly carried pointed ear which gives our German Shepherd his characteristic appearance. Compare this with the appearance of a dog with deep and wide set ears. It is only right that such ear carriage are, (and also the very close-set or the soft ears) in the spirit of the Standard, faulty.

42 Teeth: (26 milk teeth)

The adult German Shepherd has 42 teeth. In a scissor like action, the upper incisors grip over the lower incisors. The incisors stand in regular spacing around the curve of the jaw. In this way, and similar to a vaulted ceiling, they are given a particular firmness. Teeth with irregular spacing in the lower jaw are therefore faulty because they can easily break off or out. The remainder of the teeth can then shift position, form gaps and then loose their firmness. In a faulty bite, the incisors are often worn down and partially or totally broken off. Herewith we have the same problem as just described. For the same reason, premolars and molars with gaps are undesirable. Optimal, resilient dentition - with minimal risk of losing teeth - has its home in a strong jaw with the teeth standing in a gapless row next to each other. This is essential for performance, isn't it?

It is frightening how little attention is paid to mouth and tooth hygiene. Regular tooth care, the removal of plaque and the treatment of infected gums should be a routine program of care by the breeder and exhibitor as well as the performance person. In this connections, more attention should be paid to the Schutzhund sleeve. An often used, damp sleeve, possible stored in such a way that it cannot dry properly, forms a source of infection for the mouth's mucous membranes, or for the well known eczema of the corners of the mouth.

Neck:

According to the Standard, the neck should be strong, well muscled and be without loose skin at the throat. The angulations of the neck to the trunk (horizontal) is approx. 45°. It is important for the performance that the neck be sufficiently long. A correspondingly long neck offers those muscles which reach to the shoulders, a good base for lifting height and for power. An extremely long, slender (swan like) neck without power and 'oomph' diminishes working performance. Too short a neck is also faulty as it restricts the movement of the head e.g.. when tracking.

Wither, Back, Croup:

"The top line flows from the join of the neck over the well developed wither and over the back which (in stance) is just slightly angled from the horizontal, to the slightly angled croup, without there being any noticeable interruptions."

A well developed wither is of utmost importance as it plays a significant role in the closure of the forehand. It is formed by the dorsal extensions of the first back vertebrae. If these dorsal extensions are pronounced, there is room for much muscle development: are they too short, the muscles barely have room, the wither is level and the forehand cannot firm. During movement it then becomes clear that the shoulder blades reflect upward and push through.

Missing forehand firmness (level wither = a back which is not firm as well as loose elbows) is a quite considerable, performance diminishing fault as it negatively influences endurance.

Already in middle age, such dogs often refuse to jump, set down on the jump, lose their joy in working and are often burned out early.

Repeatedly, dogs which stand high in the forehand, are incorrectly described as being 'high in the wither.' This can also be a dog with steep forehand angulations who has very steep back. A dog with very good forehand angulations usually has in stance (as desired) a slightly angled top line which during movement reverts to a fully horizontal line. These are the dogs who as a rule have a pronounced wither with an angled, well muscled shoulder blade which is exemplified by fully knit forehand and a far reaching step combined with good centre of gravity.

The back is firm, strong and well muscled. It builds a bridge between the fore - and hindquarter and also transmits movement. The muscles must be well developed and trained. Under no circumstances should the back be long or too long. A back which is too long buffers the action of the hindquarter, the dog does not carry himself, he falls out of the centre of gravity and places uneconomical stress on the forehand.

Result: Deficient endurance.

Croup:

The correct length and lay of the croup is very important but admittedly not always easy for the observer to recognize. It does however play an essential role in the dog's movement, be it the walk, trot, gallop or the jump. A correctly placed croup gives the most rational and optimal transfer of the power generated by the hindquarter, to the forehand.

What forms the croup?

The ilium forms the skeletal structure of the croup. A sufficiently angled lay is about 45 degree from the horizontal. This must be so, as thus it forms the ideal angle. (Imagine that you have to push your car because it has run out of petrol. What do you do? With your body - leaning against the car - you form an approximate 45 degree angle because this is how you will have the greatest chance - if at all - of moving your car.) Therefore, only the 45 degree angled ilium offers the optimal base for transmission.

The appearance of the croup (the ilium at a 45 degree angle) is moderated by the sacrum, the muscles and the coat, so that the ideal angle of the croup, as the observer sees it, appears to be 23 degrees to the horizontal. If the croup is level, the ideal transmission up and to the front, is also lacking.

Tail:

It can already be observed in whelps that the tail serves to hold the sense of balance. The tail also serves this function in the adult dog. Observe in slow motion filming how the tail is used to balance out movement. This is why the Standard demands that the tail should be sufficiently long but not too long. The bony skeleton (18-22 vertebrae) should reach at least to the hock joint but at the most to the middle of the hock. The tail appears to be longer because of the longer hair on the end and under side of the tail, but it should never lie on the ground.

Forehand:

The essential role of the forehand is to catch and project the movement and power generated by the hindquarter which has been transmitted over the back.

Different from the hindquarter, the forehand is NOT connected to the spine by a joint. This is why it is essential for performance that the forehand be firmly bound to the body via firm muscles, tendons and ligaments. A prerequisite for this, apart from a pronounced wither, are correspondingly long bones which are in correct proportions; the shoulder blade and upper arm should be of equal

length. A long shoulder blade is angled and well muscled. The optimal angulations between the shoulder blade and the upper arm is 90° and should not exceed 110°; this is a favourable prerequisite for good forehand closure, a large-opening angle and the therefore expansive reach. The upper arm connects in the elbow joint to the lower arm. When viewed from all sides, the lower arm should stand parallel; this is the only way that they can fulfil their function of feathering and transferring movement.

Take a look for example, at the film 'The German Shepherd Anatomy and Movement', specifically the slow motion of the dog jumping a 1 metre hurdle. You will easily see that a well-knit forehand is of decisive importance for continuous performance ability over many years.

Bowed lower arms (similar to baroque chairs) are extremely faulty as such a stance means that the weight of the body movement can no longer be evenly caught. A familiar fault is the front pastern which is too long and therefore too angled, as the cushioning angle is too large. The short and steep front pastern is also performance reducing as it does not feather the power sufficiently. (Make a few steps on your own heels and you will soon notice in your back how much the feathering action of the foot is missing).

The above mentioned fault impairs working ability and particularly endurance, quite considerably and it is this requirement coming from the performance world which causes the Standard to say:

"Both in stance and in movement, the elbows must not turn out, neither are they to pinch in. Viewed from all sides, the lower arms are straight and standing absolutely parallel to each other, are dry and have firm muscles. The front pasterns which has too much angle (more than 22 degrees) or too little (less than 20 degrees), impairs working ability, particularly endurance."

Hindquarter:

In manner of speaking, the hindquarter is the dog's motor, because it is from here that all movement is initiated, be it the walk, trot, jump or gallop. The hindquarter stance is slightly back, the hock is vertical under the hock joint, the upper and lower thighs are approx. the same length and form an angle of about 120 degrees and the thighs are strongly muscled. The over-angulated hindquarter, usually because the lower thigh is too long, seriously affects its performance. Naturally, when viewed from the side, such dogs impress because of the length of stride. However, the alert observer will notice that the extremely angled hindquarter is unstable. In almost all cases, the hock joints are loose and of little use for work. The breed's founder had demanded that, "The dog must be able to stand for long periods!" Have a look for yourself, over angulated dogs usually lie down very quickly! Only the correctly angled dog will be able to stand, move and work for long periods of time. It can be suspected that the over angulated hindquarter has a negative effect on the hip joints as the static's are no longer correct. Just as in the too steeply angled forehand, the too steeply angled hindquarter does not give enough ground cover and is therefore uneconomical. This is logical as more steps are needed to cover the same distance.

Chest:

Well-developed organs of a living creature are of great significance for performance.

The heart and lungs in particular must be well developed. This is why the Standard requires that the German Shepherd have a well-developed chest with a long, only slightly rising under-chest, so that the inner organs have sufficient room.

The depth of the chest should be about 45-48% of the wither height. More would be too much and be a disadvantage as too much body would need to be moved by limbs which are too short. A formula: Half of the wither height minus 10% = the correct chest depth. (Example: The half of a

Formula: Half of the wither height, minus 10% = the correct chest depth. (Example: The half of a wither height of 60 cm would be 30 cm, minus 3 cm = a chest depth of 27 cm).

An under-developed chest, particularly when it is too narrow, leads to an instability of the forehand. The dog tries to cope by tucking in the elbows but must then compensate by standing and moving wide, which in turn again affects working ability. Sometimes very young animals display wide stance and movement which improves as the body, and in particular the chest, develops.

Front:

This section on the anatomy has already been discussed in detail in connection with the forehand.

Movement:

The German Shepherd Dog is a trotter and is bred as such. "The limbs must harmonies in their length and angulations so that the hindquarter can push forward right up to the rump, the forehand reaching forward exactly the same distance, without there being any marked change in the top line. Every tendency to over-angulation adversely affects the stability of the hindquarter, and the steeper the angle, the more uneconomical the movement, that is, the dog would have to make more steps in order to cover the same distance. In both cases, the working ability of the dog is diminished. Correct proportions and angulations ensure far-reaching gait which remains in good balance, moving level over the ground. It gives the impression of effortless forward movement."

The fast, so-called 'flying gait' which is for example, shown at the Siegerschau at the end phase, is in fact unnatural. Unless with the influence of his handler, no dog will show this gait in nature. In no area of work is this type of gait with its extreme length of stride required or used. The question then arises whether this gait should be judged at all. Could it be that this 'fast round' has been made faster and faster by our top dog handlers and that our judges have accepted this? It is interesting to note that no other breed has this gaiting test. Nevertheless, a justification for this 'round', quite apart from its spectacular presentation, can be found in the fact that the dog's condition, endurance and resilience can be tested one more time.

V. Stephanitz recognized early on that a correct assessment of movement could really only be done on a dog moving freely in nature. He also knew that with the quantity of dogs presented at a show, that this was not possible. However, as a matter of self-education, each dog owner should calmly and occasionally do just this.

Temperament:

Anyone who sees only the description of anatomy in the Standard, is wrong.

Breeding according to the Standard of course also means breeding for temperament according to the Standard.

In slightly more than five sentences, the Standard describes it thus:

"In terms of temperament, the German Shepherd must be balanced, have firm nerves, be self-confident, be absolutely easy-going (apart from a provocative situation) and be good natured; he should also be alert and trainable. He must possess courage, combative instinct and hardness so that he can be used as a companion-, watch-, Schutzhund-, service-, and sheep herding dog."

Critics could say that not a word can be found on joy in working, willingness to work, drive qualities, vitality, resilience and such like, all of which are very important characteristics for performance. Admittedly, the description on temperament is very brief, but if one analyses each word correctly and fully, the meaning becomes clear:

The German Shepherd Dog is bred as a WORKING DOG!

And now I seek confrontation and discussion:

In recent years, have we thought too selectively when we spoke of the German Shepherd Dog as a working dog? Did we think only of the Schutzhund trials, and then perhaps only the protection part? Could our today's SchH - working dogs be able to work a sheep herd? Is he still required to trot over long distances? (max 50 steps suffice for a trial!) How resilient or trainable should he be? Does he still need the economy of movement which a body reflecting the Standard, as well as being in the correct proportions, having straight bones or the correct angulations, the balanced chest proportions and efficient movement gives?

It would not be enough to breed the German Shepherd Dog as a TRIAL DOG only!

"Working" does not only mean tracking, obedience and protection, although our dog is specially used - worked, in this field. 'Working' surely also includes his usability in other areas. It is unnecessary to list the other possible uses of our dog here. However it is important that we maintain his versatility - he is not only, but also, the 'tractor' of the tracking field.

Surely it is this universal usability of the German Shepherd - certainly in regard to his anatomy, but also his temperament - which has brought him to this position!

Theory and thorough practical experience have shown that this usability can best be maintained if we breed a dog which has a trotter's anatomy; a trotter who has a predisposition towards being normal in all areas without over, or under, exaggeration.

It is correct that: the Standard also demands the dog who is NORMAL in his temperament, a dog who is in the medium range.

But there is something else which should reflect the Standard:

That the keeping of dogs be spacious - suitable!

This means that the dog has a clean, dry, draft free and sufficiently large kennel, has regular meals, fresh water and sufficient movement and work as well as having intensive contact to people. Included is a regular worming and immunization program and care of coat, ears and teeth - that is the Standard!

In Summary:

The working ability of a dog is determined by the factors of anatomy, predisposition to work, vitality and longevity. It is optimized by responsible dog ownership. These essential factors are, in their quality, dependent on one another and influenced by each other.

This is why breeding according to the Standard is important for performance!