

EUROPEAN SEMINAR FOR KINETOGRAPHY

Paper No.13.

The Assessment of Distances in Supports in
Kinetography Laban/Labanotation

by Christine Eckerle, 1995.

Introduction

During the 1991 ICKL Conference in Budapest, my paper on "Some Thoughts on Kneeling as Written in Kinetography Laban" (ESK Paper No.6.), was presented. During the discussion, evolving from this presentation, more information and more examples were requested for a better understanding of the problem.

In our work at the ESK, the topic of distances in supports was actually further discussed, and more clarity in presenting this issue was sought after. I continued working on this topic, and the present paper is the result of my efforts. I found this to be a most enlightening and helpful experience.

It seems of utmost importance first to get to know well the premises underlying the analysis and the notation of "Supports", in the full context of their usage, before introducing any sort of abbreviated means of describing these situations, just for the convenience of the notator.

Sources Explored

Abbr.

AK Encycl.	Albrecht Knust. Handbuch der Kinetographie Laban 8 Bande (Encyclopedia of Kinetography Laban, 8 volumes), unpublished.
AK Dict.	Albrecht Knust. A Dictionary of Kinetography Laban (Labanotation), Plymouth: Macdonald & Evans Ltd., 1979, 2 volumes.
AHG Lab.	Ann Hutchinson Guest. Labanotation, third edition, rev., 1989.
MS	Maria Szentpal. Tancjeliras Laban Kinetographie, Budapest: 1969.
AHG, RvH, KSL	Ann Hutchinson Guest, Rob van Haarst. Kneeling, Sitting, Lying, 1991.
AH	Anja Hirvikallio. The Notation of Floor Work Within the Laban System of Notation, ESK Paper No. 12, 1995.

PART I Survey of Situations arrived at in "Supports"

- 1.1. "Step-length" is a conventional term given for a distance varying in different contexts. It is only applied literally in steps. Even here differences already appear, and cannot be defined exactly.
- 1.2. Most often it is not used as a standard term, but often identified as "the length of a - particular - body part" instead.
2. With steps "1 step length" is the length of the "normal" stride, i.e. the normal distance from one foot to another.
 - 2.1. If the distance should be smaller one uses the \times - scale in the simple form of: $\times = 2/3$; $\ast = 1/3$ of a step-length.
 - 2.2. If the distance should be larger one uses the \surd - scale in the simple form of: $\surd = 1\ 1/2$; $\swarrow = 2$ step-lengths.
Those relations are only approximate.
 - 2.3. The same applies to open positions (see Part III,1).
3. With supports on different body parts "1 step-length" differs practically within each context.
 - 3.1. In kneeling down on two knees "1 step-length" is defined as the length of the lower leg.
 - 3.2. In mixed kneeling "1 step-length" depends on the starting position.
4. With movements of the centre of gravity along the vertical "1 step-length" signifies the different lengths of particular body parts (the legs, the trunk, the arms) = three units.
 - 4.1. Those three units happen to be almost identical with three actual strides, but they are in fact of a different length, whereas the strides are always of the same length. One stride is not identical in length with the length of the legs.
 - 4.2. However, in transferring this scale to other applications one would restrict the usage of the space measurement signs considerably and unnecessarily (see

Part III 2). This would fix a rule for assessing distances according to one special case, rarely used in itself.

5. With supports on all fours "1 step-length" also signifies various distances: in the case of establishing positions it is the length of the trunk; in analysing movements it is an arbitrary distance, not necessarily relating to the length of the trunk, but depending on the moveability and the build of the body (see Part III 5).
6. In my opinion the freedom given in the current usage should be maintained because if one fixes a rigid rule, one would narrow the system considerably, and this would complicate the analysis.
 - 6.1. It would be better to retain an undefined, average measure in every context.
7. The experience I gained during long years in working with kinetography shows, that a general indication for distance is sufficient.
For example: in analysing a movement context it is, in most cases, of real importance to know, whether a new support has to be smaller or larger, than the normal distance.
8. Since moving along is a continual change of situations in space and in time, it is in any way impossible to retain exactly the instruction given in the notation. That is only possible when positions are maintained.
9. Also, it is not always necessary and even impossible to measure exactly the distance according to the definitions of the "step-length" in a given context.
10. Should one really need a precise indication of distance one has the possibility to define the "1 step-length" distance precisely, and one has then to calculate the applicable measurements of distances, accordingly.
The symbol for describing a step-distance is $\boxed{1}$ etc.; and the space measurement sign \parallel is not needed at all.

Part II. Survey of Definitions as used in various Sources

1. Definitions concerning the terms "distance" and "step length"

AK Encycl. Part L

- 1.1. p.1721 "... Here are meant the relations of measures to each other, not fixed measures."
- 1.2. p.1723 "... The natural step length depends on the proportions of the body (firstly), on the height of the body (secondly), and (thirdly) on the temperament of the performer. Also, the level of the step is of significance."
- 1.3. p.1753 "... is meant by a 'normal step length', the length of a step of a person in the medium level support."

AK Dict.

- 1.4. p.249 "... all steps will be the length of the performer's normal stride."
- 1.5. p.253 The basic scale for length of steps.
ex.649
- 1.6. p.253 "... In a combination of small and large steps
ex.649g performed simultaneously, the scale of narrowness is equated with the scale of wideness."
... a small step is 1/2 of a step-length instead of 1/3 of a step-length."
- 1.7. ex.650- a differentiated scale for large or small steps.
652

2. Definitions of "long and short" distances

NOTE: The space measurement signs modify distances.
A space measurement sign in the support column shows the exceptional distance of one supporting point to another.

AK Encycl. Part L

- 2.1. p.1721 "The space measurement signs show the width or narrowness of a movement in relation to the natural reach of the limbs of the moving person, and not the distance in km, m or cm."

AK Dict.

- 2.2. p.252/53 Ex.648a, "A wide sign in a support column indicates a large step, i.e. the new point of support is farther from the previous one:
A narrow sign in a support column indicates a small step, i.e. the new point of support is nearer the previous one."

AHG Lab.

- 2.3. p.159 "An ordinary step is the natural stride of the performer, therefore modifications of its length are based on the build of the performer rather than on any standard length in terms of inches or centimeters."
- 2.4. p.160 "... The two degrees of narrow (× and ※) and the two degrees of wide (ㄣ and ㄤ) which suffice for the general description of length of step ..."

2.5.

THE SIX-DEGREE SCALE OF NARROW AND WIDE

As a rule in Motif Writing only the two degrees of narrowing and widening are used. In the structural description of movement, finer degrees are needed for writing length of step and contraction of the limbs. These are provided by adding dots to the basic signs, thereby producing a scale of six degrees.

Degrees of Narrowing

The General Scale:

Ord.		×		※		◻
------	--	---	--	---	--	---

The Six Scale:

218

Ord.	×	×	×	×	×	※ or ◻
------	---	---	---	---	---	--------

"Ord." represents the ordinary step length, or the normally extended limb. In stepping, the sixth degree is totally closed, i.e. it is equivalent to place.

2.6.

Degrees of Widening

The minimum degree of width for a step is of course place, the maximum, "a split" or "stride" (the length of both legs). When the precise length of step must be observed, the distance of one step in the forward direction is stated as being two foot lengths from heel to heel when the whole foot is on the ground. The longest step is generally considered to be three and a half step lengths (seven times the foot length). More degrees exist for long steps than for short.

Scale for Long Steps. This scale for degrees of length applies only to steps. The limbs can only lengthen two degrees.

The general scale:

The specific scale:

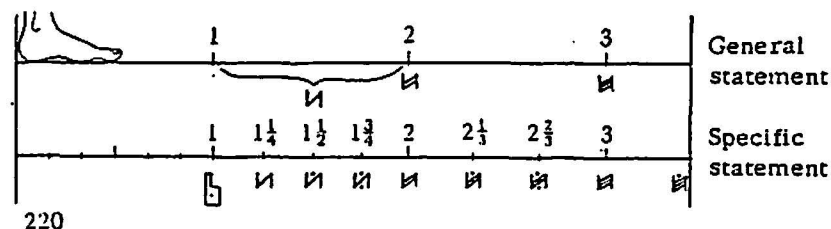
Step length:

219

Ord.		Ⅱ		Ⅲ		Ⅳ	
Ord.	Ⅱ	Ⅲ	Ⅳ	Ⅴ	Ⅵ	Ⅶ	Ⅷ
	1			2			3

2.7.

Fig. 220 illustrates the progression in degrees of widening an open position of the feet until a split is reached. The numbers given here refer to step lengths.



Observe that between place and a normal forward step there are six subdivisions; between one step length and two there are four; and between two step lengths and three there are only three. While this may not seem mathematically correct, it is physically practical, in that the dancer needs to make more distinctions between small steps than large.

Statement of Scale Used - General or Specific

Where no specific indication is given, the general usage is understood to apply. To indicate the specific scale for steps, the following statements should be made:

$$x = \frac{1}{3}$$

$$Ⅱ = 1\frac{1}{3}$$

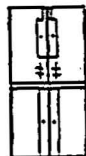
- 2.8. COMMENT: The above listed definitions of the term "step-length" show the same basis: the normal, standard or natural length of the steps depends on the build of the performer's body and the level of the steps, i.e. the length differs frequently from one performer to another, and cannot be specified in absolute measurements. Even the differentiated scales (AK Dict. p.650-652; AHG p.162-163) are not specified in cm, but only in relation to the natural step length and to each other. The symbols for 3 step-lengths etc. are not explained at all (compare KSL). They are not used in KIN. When used in combinations of large and small steps (AK 649g) even the basic scale is modified: instead of $x = 1/3$ step length, it is used as $x = 1/2$ step length (See p.18).

3. Definitions of "step-length" in connection with kneeling, sitting, lying down, and on all fours.

The following examples describe movement progressions, with very few positions included, as Kinetography is meant to be a movement notation.

AK Encycl.

3.1. Kneeling



p.1743

"... The distance of the new supporting point (i.e. the knees) to the old supporting point (i.e. the feet) is exactly the length of the lower leg."

3.2.



p.1745

"... In progressing forward on the knees only short distances are possible."

Note:

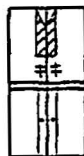
no space measurement signs are needed, but may be used in case the distance should be reduced.

AK Dict.

3.3. Kneeling ex.449d,f



449d



449f

AK Dict.

Kneeling down into an open position: no space measurement signs are used to define the smaller distance imposed by the lower leg, as taken from the starting position.

3.4.



450d

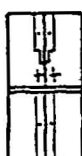
AK Dict.

p.167
ex.450d

"The right knee supports at a distance behind the left foot."

AK Dict.

3.5. Sitting



458a

AK Dict.

p.171
ex.458a

"Simplified way of writing. It is understood that, first, a preparatory knee bend is performed, second, the hips take the weight closely behind the feet, and, third, one slides further back while sitting, until the legs are extended."

AK Dict.

3.6. Lying down

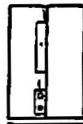


465a
AK Dict.

ex.465a

Lying down with bent legs is analysed as taking support closely behind the foot of the supporting leg. Accordingly it is written with a narrow sign below the direction sign.

3.7.



465b
AK Dict.

p. 174
ex.465b

Lying face down: "For anatomical reasons one cannot lie face down with the hip joints flexed. In moving into lying face down it is understood that, first, the knees take the weight, and then the body is extended forward so that the trunk is away from the former points of support of the feet, by the full length of the legs."

NOTE: There is no mention of a distance in terms of a "step-length" in this case.

AK Encycl. and Dict.

3.8. On All Fours

p.1749
p.182

"... The length of forward steps (i.e. both supporting points) is judged from the point of support which is farthest behind, and the length of backward steps (i.e. both supporting points) from the point of support which is farthest in front.

Simple direction signs (without a space measurement sign below them) indicate a distance of "one step length."

When standing on all fours the distance is established by the length of the trunk.

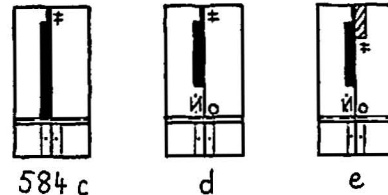
A wide sign below a direction sign means 1 1/2 step-lengths, and the double wide sign means 2 step-lengths.

"A narrow sign below the direction sign indicates a 1/2 step-length."

AHG Lab.

3.9. Kneeling p.385

"In an ordinary sized step the knee will support approximately next to the other foot. A long step must be taken to produce an open forward-backward (fourth position) kneel."



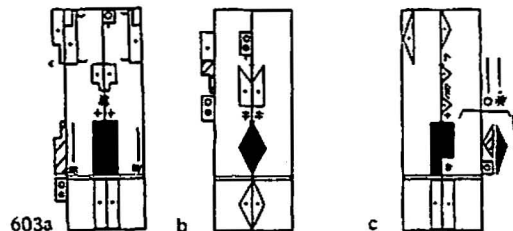
AHG Lab.

AHG Lab.

3.10 Sitting p.390

"A support on the hips may be either close to or far away from a previous support on the feet. For practical purposes the length of the leg has been taken as the measurement of distance, providing a six-degree scale identical with that for contraction of the legs.

When no distance is indicated the hips support at the full length of the legs. The shorter the distance, the more the legs will be bent."



Lying supine after sitting backward Lying supine between the legs after kneeling Lying on right side after dropping on to right knee and hip

AHG Lab.

3.11. Lying down

p.394
ex.603 a-c.

NOTE: The examples always show an intermediate point of support: either the hips or the knees with their analogous distances. Therefore no specified distance is given for the lying down.

AHG Lab.

3.12. No description "on all fours" movements is to be found.

MS Tancjeliras

3.13.Kneeling Paired kneeling: "Distance is shown as in standing
p.22. with the space m.s. x and \surd . In open positions
the normal distance between the two knees is the
length of a foot. (In this only the fourth
position will be an exception)."

3.14.p.24. Mixed kneeling: "The normal distance between the
kneeling knee and the foot of the reposing foot
is the length of the thigh which equals 1 1/2 step
length. Thus in mixed kneeling the degrees of the
6/6 (x-scale are to a certain degree larger than
in standing (as one has to divide the x-scale
from that normal s.l.).
From the degrees of \surd we use the same meaning of
one degree: each degree lengthens the normal
distance with 1/2 footlength.
When the reposing foot has no weight or is only
1/4 weighted, the bending degree of this leg stands
for the distance of the position (distance results
automatically from the degree of bending)."

NOTE: MS identifies the length of the foot with a
"step length."

In Kin and Lab the distribution of weight is 2/3,
1/2. and 1/3. (AK Dict. ex 222,223a,b; AHG Lab. ex
674 a-d)

There is a difference evident between KIN, LN and
MS.

MS

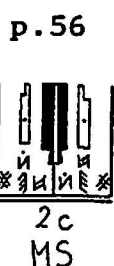
3.15.Sitting down
p.37 "... Distance,however,is not measured according
to standing,but according to the length of the
leg,thus normal distance = the length of the leg.
For this reason,for smaller distances the whole
6/6 scale has to be used."

MS

3.16.Lying down
No distances discussed.

MS

3.17.On all fours
p.55 "... in a position the direction is taken from
place,whereas the distance is taken from one
support to the other."



"... One can relate the farthest to the back body
parts' distance to the farthest in front body
parts and vice versa,getting then the position of
2c."

3.18.p.118 Here a clear definition is given concerning
35 supports, and the distance between the supporting
 points. Movements are continual changes of the
 situation of the body. Therefore the distance in
 supports is generally conditioned by the context.

3.19.p.122 In trying to specify the distances the authors lose
36. the clarity of definition in section 35.

Besides, here are superfluous symbols being
invented like those for 3 and more step-
lengths, not taking into account the already
existing means within the system.

The differentiation between the general scale and
the exact scale of distances, causes another
complication within the system.

36.9. Statement of exact distance. ⁸⁸ Statement of exact distance is made
by adding a pre-sign to the direction symbol indicating the step, as follows:

×	=	1/6	of the standard steplength		
×	=	1/3	" " " "		
×	=	1/2	" " " "		
×	=	2/3	" " " "		
×	=	5/6	" " " "		
∩	=	1	standard steplength		
∩	=	1 1/4	times the standard steplength		
∩	=	1 1/2	" " " "		
∩	=	1 3/4	" " " "		
∩	=	2	standard steplengths		
∩	=	2 1/3	times the standard steplength		
∩	=	2 2/3	" " " "		
∩	=	3	standard steplengths		
∩	=	3 1/3	times the standard steplength		
∩	=	3 2/3	" " " "		
∩	=	4	standard steplengths		

(increment 1/6)

(increment 1/4)

(increment 1/3)

Note: The increment between symbols is first 1/6, then 1/4 and finally 1/3 of a
steplength. ⁸⁹

36.10. ×, *, ∩ and ∩ can mean different things depending on
whether they are intended to be part of the *relative* scale of distance measurement
signs (see 35.6) or the *exact* scale (shown above in 36.9). It should be clear to
the reader which is being used.

The wording in the x scale above, should read in
fact: 1/6 less than the standard steplength, etc.

4. Definitions of distances in conjunction with movements of the centre of gravity

Note: The three "step length" units are used only when analysing the movements of the c. of gr. along the vertical.

AK Encycl.

- 4.1. p.1807 "... the space measurement signs above the centre of gravity have a special meaning."
"... they show in any case the particular small or particular large distance of the c.of gr. from the supporting point."

AK Dict.

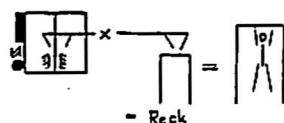
- 4.2. p.204 Dict.
"If the body is completely extended, it is about 3 step-lengths long from the feet to the fingers.

If, for the sake of simplicity, one measures rather roughly, there is 1 s.l. each for the length of the legs, the trunk, and the arms. With this practical rule for the description of the various situations of the c. of gr., it is assumed (not quite in agreement with the fact) that the c.of gr. is situated in the lower half of the trunk."

- 4.3. SUMMARY: distance with the movements of the centre of gravity

The division of the body into three step-lengths, i.e. three parts is only a means to describe the movements of the centre of gravity along the vertical axis in as simple a way as possible.

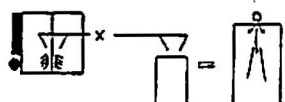
Since the possibilities of moving the centre of gravity along the vertical are limited, there is no need for more detail.



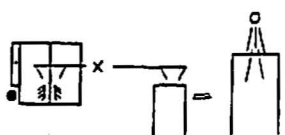
The distance between the c.o. of gr. and the supporting point: 2 s.l. = 2 body parts.



Distance: 1 1/2 s.l. = bent arms.



Distance: 1 s.l. = one body part.



Distance: 0



Distance: 2 s.l.



Distance: less than 1 s.l. = body part = the length of the legs.

NOTE: It is not feasible to apply this scale to steps or any other supports. If one were to use this scale (3 step-lengths = the length of the legs, the trunk, and the arms) in connection with steps, a $\frac{1}{2}$ would mean 2 step lengths = twice the length of the legs = split. Also, how would one know which body part indicates the 1 step length?

AHG LAB.

4.4. p.400

"The distance of the c. of gr. in a normal standing position is considered to be the length of the legs from the point of support."

4.5. p.411

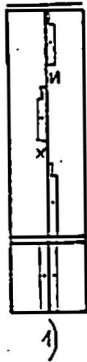
"The distance may be greater or less if the support is on other parts of the body. Description of such distances, sufficient for the recording of all movements other than the most scientifically detailed, is based on the convention of using body lengths to determine distance for the c.o. of gr. from the point of support.
The Three Lengths in the Body:
Arms, Torso, Legs."

PART III Survey of Examples

1.1. Distance with steps and jumps

The distance of the normal stride depends on the build of the body.

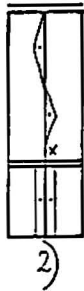
X will be $\frac{2}{3}$ of a step-length; M will be $1 \frac{1}{2}$ step-length. (Compare K.Dict. 649 a-f).



1 $\frac{1}{2}$ of the normal stride

$\frac{2}{3}$ of the normal stride

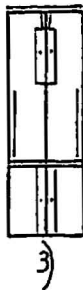
Without space m.s.: the normal stride (step-length)



1 step-length, judged from the place of the right leg.

$\frac{2}{3}$ of a step-length, judged from the starting position: both feet on "place".

1.2.



In travelling jumps:

The distance for both feet is the same: 1 step-length from the previous point of support. The feet are kept together.



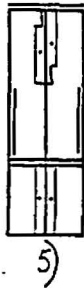
The distance is $1 \frac{1}{2}$ step-lengths from the starting point.

both feet are kept together.

AK Dict. ex.173. "In standing on both feet, the centre of gravity is above a point between the two feet. Therefore, this point is place. In cases of this kind, place must be distinguished from the points of support of the two feet."

NOTE: The direction of the travelling is shown by the direction signs: both supporting points have the same direction, as judged from the last achieved place. The distance is indicated by the space measurement signs: both supporting points have to cover the same distance.

1.3.

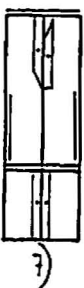


Jumping into a fourth position:
The legs spread out in opposite directions.
The centre of gravity is kept above the same place.
The distance between the feet is 1 step-length.



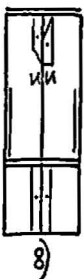
Jumping into fourth position:
The same as above.
The distance between the feet is 1 1/2 step-lengths.

1.4.



∞ →

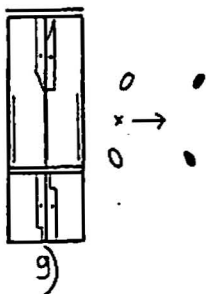
A travelling jump starting from a closed position, coming down into a fourth position.
The distance between the feet is 1 step length.



∞ →

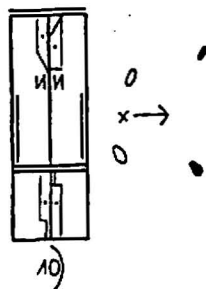
As above.
Coming down into a fourth position, the distance between the feet is 1 1/2 step lengths.

1.5.



A travelling jump starting from an open position.

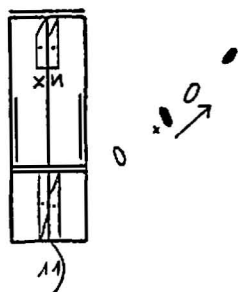
The distance between the feet is the same as in the starting position = 1 step length.



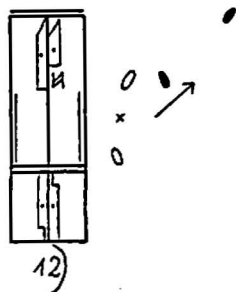
As above.

The feet spread out, the distance will be 1 1/2 step lengths at the end.

1.6.

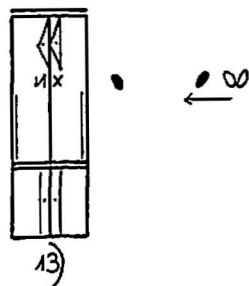


A travelling jump from an open position along the diagonal: the left foot covers 1/2 step length, and the right foot 1 1/2 step lengths, as judged from the left foot in the starting position.



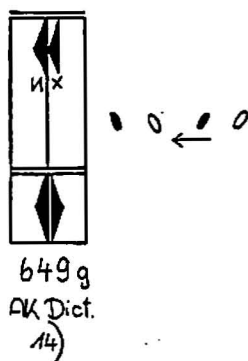
A travelling jump from a fourth position: the distance for the left foot is 1, and the right foot 2 step lengths, as judged from the left foot in the starting position.

1.7.



A travelling jump from a closed position into an open position:

the distance is judged from the starting position: the right foot covers only 1/2 step length, and the left 1 1/2 step lengths. The distance between the feet is 1 step length.

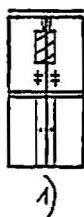


A travelling jump in an open position.
The distance for the right leg = 1/2 step length, for the left leg = 1 1/2 step lengths.
Both are judged from the farthest point to the right, i.e. the right leg in the starting position.

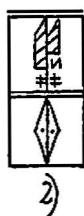
NOTE: Depending on the movement context the scale of the narrow signs changes when jumping in an open position, and progressing along the same line.

2. Distances in kneeling

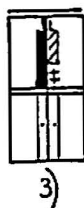
- 2.1. In kneeling there are certain anatomical limits which affect the distances. When kneeling down on both knees the distance from the starting point of support can only be the length of the lower leg. In exceptional cases, however, an indication of distance has to be added (see ex.2, below).



Kneeling down in front of the feet in the starting position.
Distance = the length of the lower legs, identified as "one step-length."



Kneeling down diagonally from the second standing position into a second kneeling position. \swarrow is needed because both knees go in the same direction but cover different distances.
(Compare AK Dict. ext.214,215).



In kneeling down with mixed supports, there are diverse possibilities. Here both supporting points are at the same distance from the starting point, which is the length of the lower leg (see AHG).

NOTE: When moving onto two supporting points, along the same line, not only the direction is indicative, as the distance will depend on the movement context, i.e. whether there is a jump or a kneeling down, and if it is the same distance for both points of support.

2.2.



Moving forward with the two new supporting points at different distances. The right knee can be placed only at the distance of the lower leg; the left foot at the distance of the right lower leg and the left thigh. Here λ cannot be exactly $1 \frac{1}{2}$ step lengths, i.e. it cannot be specified as a "step-length."



The distance of the step for the left leg is approximately 2 step lengths. Therefore the level of the kneeling has to be kept at medium level, if the knee is to carry weight. The distance for the right knee can only be the length of the lower leg, because the right foot keeps the contact with the floor. Here, too, no precise definition for λ as being exactly 2 step lengths is possible.

2.3.



Jumping into mixed supports kneeling: both new supporting points come down at the same place, as in the starting position. There is no travelling of the weight, and no moving away from place.

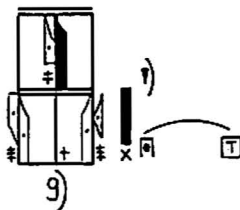


Coming down in a fourth position (in opposite directions) at the same place. The distance between the left foot and the right knee is the length of the thigh = "1 step length."

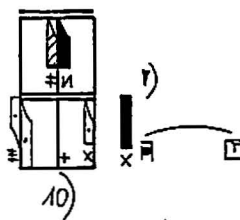


Again: coming down in a fourth position. The distance between the two supporting points is more than 1 step length. This "step length" is relative to the length of the thigh.

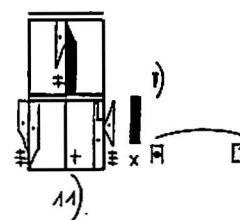
2.4.



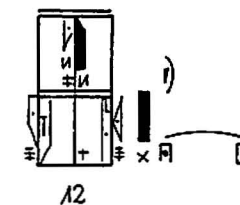
Coming up from a sitting position into a mixed kneeling. Both supporting points go in the same direction, no special indication for the distance is needed: both supporting points are at the same distance from the starting point. Left knee and right foot are together.
(Comp. A.Hirv.'s Not. of Floor Work p.7).



Both supporting points go in the same direction, however the distance is different: the right foot is further away from the starting position. Result: a fourth position.



The supporting points go in opposite directions from the right hip as the original support. The distance is judged from each other: 1 step length between the left knee and the right foot. Here, too, the "step length" cannot be specified. It is approx. the length of the right thigh.



In the starting position the legs are even more apart. When coming up into a fourth position with mixed kneeling, the distance between foot and knee has to be larger than above. It cannot be specified exactly. It depends on the flexibility of the performer.



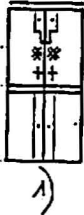
When coming up from a sitting position onto both knees, no indication of distance is needed because it can be only the length of the thighs.

NOTE:

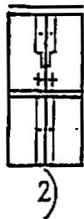
In kneeling down "one step length" is mostly the length of the lower leg. That means one cannot apply the definition that "1 step length" = the length of the leg. In mixed kneeling 1 step length is the length of the thigh. The definition of "1 step length" is thus different in each context.

3. Distance in sitting

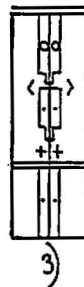
- 3.1. With sitting down there are in fact only very limited possibilities: sitting down backwards on both hips, and sitting down sideways, or forward, on one hip.

- 3.2.  When sitting down backwards there is a difference possible in defining distances.

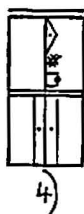
Sitting down very near behind the feet: a narrow sign has to be placed under the direction sign.



Sitting down at the utmost possible distance: the full length of the legs has to be applied. The "step-length" in this context is defined as the length of the legs.



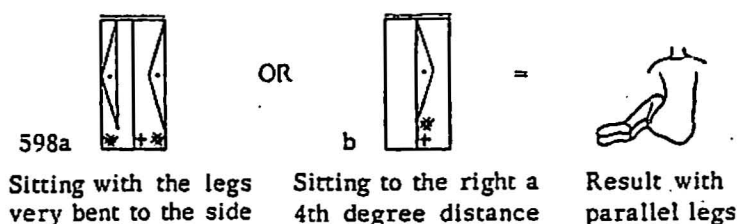
If one wants to move further one has to do a second movement: the sliding back on the hips. As it is only possible to slide a very small distance, the absence of a space measurement sign cannot stand for 1 step length. This situation is conditioned by the movement context.

- 3.3. 

Sitting down sideways (or forward) is only possible at a very small distance. Here, too, the distance cannot really be specified.

3.4. AHG LAB. Description of Starting Position

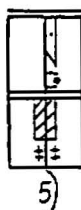
"The starting position for sitting may be described in two ways. Fig. 598(a) shows weight on the hip with direction and degree of contraction for the legs; (b) shows direction and distance of sitting from an unwritten but understood standing position. The latter method will produce the desired direction and degree of contraction for the legs. If leg rotation is important it should be added."



COMMENT: 598 a) says: "legs very bent"
b) says: "4th degree distance".

Why are different ways of description used for the same example?

3.5.



When sitting down from a kneeling position no space measurement sign is needed because the distance can only be the length of the thigh.

4.

Distance in lying down

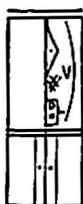
Also in lying down there are only a few possibilities.



comp. 465a
AK Dict.

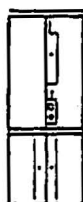
Lying down backward. The preparatory bending of the knees and of the body, the lowering of the centre of gravity, are understood.

Here the * shows the distance of the lower part of the trunk to the feet.



2)

Also lying down sideways is only possible at a very close distance to the feet.



3)

comp. 465 &
AK Dict.

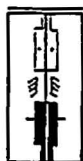
Lying down forward is only possible in a fixed distance, namely at the length of the legs. Therefore no space measurement signs are applied. (This is a generalised way of writing).

NOTE: * is the fourth degree of distance (narrowness) but represents also, in this context, only a relative distance.

5. Distance in "on all fours"

For the definition and explanation see K.Dict. p.182, and this paper II, 3.8.

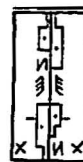
Here the step-length is defined as the length of the trunk, but only in standing on all fours.



1)

483a
AK Dict.

The distance amounts to 1 step length, i.e. the length of the trunk.



2)

483c
AK Dict.

The distance:	left hand	-	right foot	=	1 1/2 s.l.
	left hand	-	left foot	=	1 s.l.
	right hand	-	right foot	=	1 s.l.
	right hand	-	left foot	=	1/2 s.l.



3)
483d
AK Dict.

Left hand - right foot = 2 s.l.
left hand - left foot = 1 1/2 s.l.
left hand - right hand = 1/2 s.l.
right hand - right foot = 1 1/2 s.l.
right hand - left foot = 1 s.l.
left foot - right foot = 1/2 s.l.



4)
483e
AK Dict.

Left hand - right foot = 1 1/2 s.l.
left foot - right hand = close together

AH., Floor Work
p.25, ex89a.



5)

A. Hirv. Floor Work
p. 19, ex 29a



A two-beat gait on the diagonal. The starting position has 1 step length distance between the four supporting points.

The distance for the right hand becomes 1 1/2 step lengths only in the first movement.

Note: The definition of "1 step length" as the length of the trunk works even when standing on all fours only, relatively. The larger distances (1 1/2 and more) cannot be precisely pinpointed. (2 trunk lengths in ex.3?)