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FOREWORD BY
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LABAN/BARTENIEFF MOVEMENT ANALYSIS IN
PERFORMING ARTS EDUCATION AND CREATIVE ARTS THERAPIES

III

Among Rocks, Reptiles and Connective Wind Currents

THE BODY

I saw, at the puppet theater class,
a lizard through the glass window.

It was ready to jump

Legs sucking the air in

Homolateral

Slow

Slow

Spell

I stared

Emulated

Remembered

Body Technique for the Actor!

Joselma Coelho, Body Technique for Stage I (1997)

The Body category (that which moves) refers to the body principles and practices developed by Laban, Warren Lamb, and Irmgard Bartenieff (1900–1982), a disciple of Laban, and more recently by Bonnie Bainbridge Cohen, founder of the School for Body–Mind Centering®. The category includes:

- Bartenieff Movement Principles
- Bartenieff Fundamentals™
- Posture, Gesture, Posture/Gesture Merger
- Basic Body Concepts and Symbols.

Activities for a better understanding of this category, besides the practical exploration of the concepts and exercises described in this chapter, may be observing them in animals, children playing, or babies learning to move about, and applying them to everyday life for lying down or getting up from bed, sitting, climbing stairs, for resting

positions (lying down or sitting), etc. In his class journal, Márcio Campos, a student of Body Technique for Stage II (1997), associates Bartenieff terms with the movements of an animal that he chose to creatively observe and explore:

Knowing our connections in detail enables us to use conscious movements. The Head/Tail connection gives us a general notion of our body, working from the whole spinal column. The reptile man is fast, a human/tail, leading a double life and multiplying his experiences in space. (Campos 1997)

1. Bartenieff Principles

According to Janis Pforsich (1994a), the body technique created by Bartenieff (Bartenieff and Lewis 1980) and refined by her disciples is based on ten basic principles, which evolve from breathing and alignment to Effort and relation to Space. For more detailed examples of the application of the principles that follow, see section 2, this chapter.

The principles are listed below and discussed later on, according to the degree of neuromuscular complexity:

- 1.1 Breath Support and Kinetic Chains
- 1.2 Core Support
- 1.3 Dynamic Alignment
- 1.4 Developmental Movement Patterns
- 1.5 Bony Connections
- 1.6 Weight Shift for Locomotion
- 1.7 Initiation and Sequencing
- 1.8 Gradated Rotation
- 1.9 Effort Life for Body Connectivity
- 1.10 Spatial Intent

1.1 Breath Support and Kinetic Chains

Breathing as support for body movement is fundamental in body training for the performer, establishing a synchrony for simultaneous body and vocal expression. All of Bartenieff's exercises are based on abdominal breathing, that is, breathing deeply from the abdominal region. The vast majority of the movements occur during exhalation, taking advantage of the impulse from the iliopsoas muscle in order to unleash movement and connect different parts of the body. Bartenieff named such continuity as "kinetic chains" which stem from deep breath support. Every exercise from Bartenieff Fundamentals™

(section 2, this chapter) begins with and evolves according to breathing. The breathing process stimulates the deep abdominal and pelvic muscles, facilitating all movement.

The Core Support is the responsibility of the iliopsoas muscle, of the diaphragm and the quadratus lumborum. Besides these, six other important muscles constitute the posterior external rotators: the obturator externus, the obturator internus, the gemelli, the piriformis, the quadratus femoris, and the coccygeus (Bartenieff and Lewis 1980, pp.270, 271). Different from the body techniques that emphasize the rectus abdominis muscle, the Bartenieff technique is built around the iliopsoas. Although described as a single muscle, the iliopsoas is composed of two muscles with distinct origins: the iliac, of the pelvis, and the psoas major, of the lumbar spine. Due to their common locations and actions on the femur (flexion), they are seen as one single muscle. During inhalation, the performer prepares himself/herself for the movement, expanding and allowing deep breathing. During exhalation, the diaphragm is used to engage the iliopsoas and the quadratus lumborum in a kinetic chain down to the deep pelvic muscles. This support facilitates the entire body Weight Shift, from a simple flexion of the hip joint to changes in level, sitting, rising, walking, and interacting in three-dimensional space and back to the floor.

1.2 Core Support

Different from body training that emphasizes superficial musculature (as occurs in bodybuilding), Bartenieff technique enhances the use of the internal muscles for stabilization and support. That frees up the superficial muscles from an inappropriately attributed support function, allowing their full engagement in the diverse nuances of body expression. Using these two Bartenieff Principles, an action that is sometimes carried out with difficulty, such as getting up from the floor, becomes fluid and easy, and allows the performer to polish the details of gesture, facial expression, among others (Chapter VII, 3.3).

1.3 Dynamic Alignment

According to Laban, alignment is a continuum between two extremities: "One pole is a postural balance relating all directions to the vertical axis in uprightness. The other pole is an idea of readiness to change with the ability to maintain a constellation of limbs in space and motion" (Ehrhardt 1990). For that reason, it is called *Dynamic Alignment*, constantly modified by and interacting with the environment. This dynamic may be understood and developed through imaginary lines of movement that project the body from bony points towards space, as also used in the Alexander Technique and the Todd-Clark-Sweigard Neuromuscular Reeducation.²¹ For example, in anatomical position, imagine that the head "falls" up from the nape of the neck, as if an inverted gravitational force pulled the head to the sky; the tail (coccyx) "drops" down; the scapulae separate to the sides; the shoulder joint opens to the sides while the arms "fall," hanging with no

tension from that joint; the iliac crests and the ischium rise while the legs “fall,” hanging and stretching down to the heels until the big and little toe of each foot.

What is important about these three approaches—Laban/Bartenieff, Alexander and Todd-Clark-Sweigard—is the association of images while the body is apparently at rest (in Laban Movement Analysis—LMA—called Dynamic Pause or Dynamic Stillness), without the use of voluntary muscular force. In fact, the body in Dynamic Pause stretches itself through the imaginary stimulation, connecting its diverse parts and preparing itself for movements out of the vertical axis.

1.4 Developmental Movement Patterns

The development of the human embryo (ontogenetic) during pregnancy may be associated with the evolution of the species (phylogenetic), arising from a single-celled organism into a fish, a reptile, or even more complex organizations such as mammals. In the same way, during the first years of life a child moves itself in a gradually more complex form, organizing the motor coordination patterns and establishing the structure of its neuromuscular system. The term Developmental Movements or Basic Neurological Patterns (BNP) has to do with the simultaneous modification of the nervous and muscular systems evolving towards complexity. Little by little, babies go from a resting position with very little locomotive ability until they are able to slide, to shift the weight of alternating parts of their bodies upon sitting, crawling, even standing upright with the support of an adult or objects until supporting themselves on their two legs and walking. This is not a linear process, but a spiral one, where one always “returns” to the previous stage, however modified by the new discovery:

In the developmental progression, each stage underlies and supports each successive stage. Each stage is necessary. As adults, it is beneficial to re-member each stage. Having the abilities of each stage available allows for integration, that is, timely use in accordance with context. (Hackney 1998, p.42)

The six stages identified for characterizing different “body organizations or Fundamental Patterns of Total Body Connectivity” (Hackney 1998, p.13) are listed below and described on the following pages:

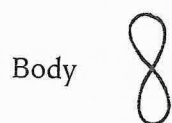
- 1.4.1 Cellular Breathing
- 1.4.2 Navel Radiation or Core/Distal
- 1.4.3 Spinal or Head/Tail
- 1.4.4 Homologous or Upper/Lower
- 1.4.5 Homolateral or Body Half
- 1.4.6 Contralateral or Crossed Sides

1.4.1 Cellular Breathing

This consists of "bulging" and "hollowing," bringing life to the whole body. In the exercise, the mover breathes while lying on the floor with the arms and legs open in an "X," feeling the two moments in association to the inhalation (bulging) and the exhalation (hollowing). In this evolutionary moment, one is not conscious of the different parts of the body or any organization that is more differentiated among them, only a oneness expanding or contracting in a liquid medium.

This organization can be found, in its simplest form, in unicellular beings or in a single cell (part of more complex beings), expanding and contracting. This cellular movement corresponds to a multicellular being such as a newborn baby whose cells are in total expansion and contraction. This pattern, called Cellular Breathing, is present in all of the other subsequent patterns of movement and posture.

To draw the symbol for this phase, just add a circle to the center of the body symbol, representing breathing:



Body in cellular breathing



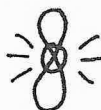
1.4.2 Navel Radiation or Core/Distal

This consists of the Core Support through the center of the navel. Breathing radiates to the six extremities—head, tail (coccyx), upper and lower limbs—on inhalation, and returns to them through the center (navel) on exhalation. The process is still of "bulging" and "hollowing," but a Body Connectivity of Core/Distal, Navel/Limbs begins. Those six points are not yet differentiated; there is only a distinction between the center and the extremities, creating pathways in the form of a six-point star.

The starfish has this organization. So has the baby, who, little by little, moves from his navel, as if the head were not more important than any of the other extremities; all six are equal—head, two hands, two feet, and tail—having the navel as center.

As for the symbol of this phase, just add rays emanating ("radiating") from the cellular breathing circle, indicating a subsequent phase that develops out of the previous one:

Body in navel radiation



1.4.3 Spinal or Head/Tail

From the Navel Radiation, the head and the tail gradually differentiate. The term "tail" is used to give value to an imaginary and dynamic stretching of the coccyx as a point of reference in diverse movements that begin in the pelvis. Little by little, the two differentiated extremities create a dynamic connection, which gradually builds the spinal column, allowing serpent-like movements.

During this stage, the baby moves his/her head and tail, still without being fully able to lift his/her head and chest from the floor when facing down. Whales and dolphins are examples of spinal Body Connectivity. Cats possess a great emphasis in this pattern, but are in a much more complex stage.

The symbol for this phase consists of two short vertical lines, one added to the top and the other to the bottom of the figure of 8 that represents the body, clearly symbolizing the head and the tail:

Body in spinal organization (head/tail)



1.4.4 Homologous or Upper/Lower

This consists of the movement differentiating upper body, above the waist, from lower body, below the waist—for example, a movement where one part (lower or upper) stabilizes while the other part mobilizes, as when a frog jumps or a rabbit runs. One can observe babies in this phase lying face down supporting their weight on their abdomens (stabilizing the lower part) and trying to lift their chests off the floor (mobilizing the upper part), or vice versa.

The "body architecture" (Bartenieff and Lewis 1980, pp.17–22) of an adult differentiates the upper and lower parts in structure and function. The pelvic girdle is composed of two iliac bones, each one made up by the fusion of three primitive bones—the ilium, ischium, and the pubis—and by the sacrum. The latter is formed by the fusion of five vertebrae and is responsible for the stability of the pelvic girdle and its capacity to sustain the body's weight. The shoulder girdle is composed of the clavicles at the front and the scapulae at the back with no bone connection between them. Besides this difference between the two girdles, the pelvic girdle ligaments are stronger and more numerous than those of the scapular girdle. The bones of the limbs also differ in structure: the feet are more capable of supporting weight while the hands with their long phalanxes are more capable of mobility and fine abilities.

For these reasons, the scapular girdle is much more unstable and functionally more mobile than the pelvic girdle. According to this constitution, the lower part of the body gives support and locomotion, while the upper part gives mobilization and fine muscular activities such as writing, gesticulating, etc. However, these functions are constantly

inverted or temporarily alternated, creating interesting forms of artistic expression. Due to the differentiated constitution and function, the pelvic girdle and the scapular girdle are also treated as the Center of Weight and the Center of Levity, respectively, with reference to the body Weight Shift, another of the Bartenieff Principles discussed in the following pages.

The animal that best represents the Homologous Organization is the frog, clearly alternating the upper part and the lower part when jumping. This may also be observed in rabbits. In this phase, the child has the ability to lift his chest from the floor when lying face down, supporting his weight on the hands and legs (mobilizing the upper part and stabilizing the lower), or when sitting (on a lap, toy car, or on the floor), moving his/her arms and chest in the direction of some object or person.

The symbol for the homologous stage divides the body's figure 8 into two equal parts: above and below the center, through a horizontal line:

Body in homologous organization (upper/lower)



1.4.5 Homolateral or Body Half

The control over homologous movement takes the child naturally to the next stage, differentiating the right side and the left side of the body in homolateral movement. This is not only the differentiation of the left limbs from the right, but of *all* the right side of the body from *all* the left—that is, starting from the spinal column (Spinal phase), the body is divided into the right side of the brain, neck, thorax, abdomen, arm, leg, and its left homolateral.

Attracted by aural stimuli, the child tends to contract him/herself to one of the sides, expanding the other, similar to a lizard when in locomotion. It is in this phase that the child begins to slide along the floor, back and forth, associating the other stages as support. For example, he/she moves the spinal column in spinal organization, and alternates the upper part and the lower part of the body in homologous organization, in intervals between homolateral movements (right side/left side).

The symbol for this stage has a vertical line dividing the symbol of the body into two equal half sides, left and right. This symbol differs from the spinal one—where only two short lines are above and below the symbol of the body, also vertically:

Body in spinal organization



Body in homolateral organization



1.4.6 Contralateral or Crossed Sides

This stage associates the two previous organizations: the division between the upper and lower part (homologous) and between the right and left sides of the body (homolateral). In this way, one differentiates the crossed sides: Right Upper and Left Lower/Left Upper and Right Lower, as in crawling or walking with the arms in opposition to the legs. That is, we take a step with the right leg, while taking the left arm forward, followed by a step with the left leg, taking the right arm forward. This is the most complex stage, sustained by all of the others.

To get to this stage, the child alternates between all of the previous ones until he/she reaches the necessary neurological maturity. He/she supports his weight on two legs and two arms, crawling homolaterally and contralaterally; supports his/her weight on two legs and one arm (monkey-like) or on two legs with the help of an object for support or an adult's hands until he/she is able to walk by him/herself. In animals, one may observe this organization in monkeys, cats, and horses. The sounds of a horse's hooves demonstrate the alternating sequence of its crossed sides, transferring the front right weight to the back left, and the front left to the back right, even in short time intervals.

The symbol for this stage divides the body symbol into crossed sides by two crossed lines:

Body in contralateral organization



1.5 Bony Connections

The Bony Connections are imaginary lines between different Bony Landmarks, connecting areas of the body, simultaneously providing support (stability) and facilitating body movement in space (mobility) (see Chapter VII, 3.4). Associated with Kinetic Chains and Core Support, the Bony Connections form the basis for the execution of Bartenieff Fundamentals™ discussed later. They also relate to Dynamic Alignment by structuring the most consistent and deep system of the human body—the bones. From this solid base, interrelations of certain key points create a well-articulated body fully capable of three-dimensional movement.

Initially, perception of the Bony Connections takes place through the simultaneous touch of the two points in question, associated with the image of a moveable line. The student's body contour is drawn on newspaper or long sheets of paper on the floor, and the imaginary Bony Landmarks and lines connecting them are drawn after experiencing each one physically. Gradually, the physical perception of these Bony Connections is accompanied and enhanced by the construction of a body chart (Figure III.1). The development of this awareness is done through the practice of Bartenieff Fundamentals™.

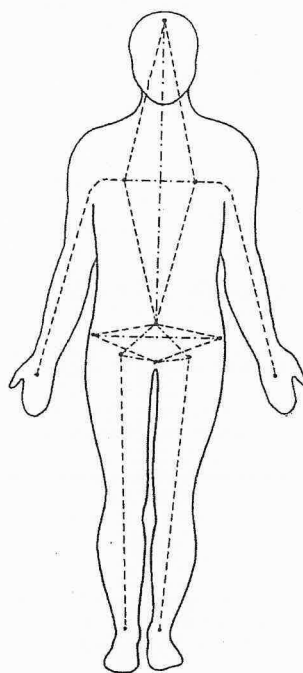


FIGURE III.1 BONY CONNECTIONS

Drawing by Márcia Ribeiro

The Bony Connections identified by Bartenieff are:

- Head–Tail
- Heels–Sitz Bones
- Scapulae–Head
- Heels–Tail
- Pelvic–Femoral Rhythm
- Scapulo–Humeral Rhythm.

Other Connections deduced from the Laban/Bartenieff exercises are:

- Scapula–Scapula
- Head–Heels (passing through the coccyx and sitz bones)
- Head–Tail–Scapulae (Great Vertical Diamond Shape)
- Trochanter–Trochanter
- Trochanters–Tail–Pubis (Great Horizontal Diamond Shape of the Pelvic Floor)
- Sitz Bones–Tail–Pubis (Small Horizontal Diamond Shape of the Pelvic Floor)

- Hands–Scapulae
- Head–Hands (Eyes–Hands).

The Connections are lines in several directions. However, they are always straight and flexible, connecting two points interconnected among themselves. The Great Vertical Diamond Shape connecting the two scapulae to the Head and the Tail form a base for body projection in the vertical and horizontal dimensions. In the case of the horizontal diamond shapes, pyramid-like bases are created, filled by the pelvic Core Support extending to the vertical points, stabilizing the head, the scapulae and the heels. From the torso's basic axis, the Connections are extended to the legs (Heels–Sitz Bones) and arms (Scapulae–Hands).

The Pelvic–Femoral and Scapulo–Humeral Rhythms refer to the constant play between the bones of these joints, only possible due to the deep muscles responsible for leg and arm rotation. The Pelvic–Femoral Rhythm consists of the movement relation between the thigh and the pelvis. This Rhythm occurs with fluidity stemming from the efficient use of the iliopsoas, of the six deep pelvic muscles, facilitating thigh movement initiated by Breath Support and Kinetic Chains through the pelvis.²²

The Scapulo–Humeral Rhythm concerns the fluidity of arm movement from the shoulder joint and the appropriate use of muscles. Through corrective exercises, an attempt is made to reduce use of the trapezius and stimulate the use of deeper muscles of the shoulder joint—the external and internal rotator group of the Scapulo–Humeral joint (Bartenieff and Lewis 1980, pp.261, 267).

In an overview of the Bony Connections in the body, we have two pyramids, one inside the other at the base and connected equally to the Head at their top: one base created by the Small Horizontal Diamond Shape of the Pelvic Floor (two Sitz Bones, Tail Bone and Pubis); the other base created by the Big Horizontal Diamond Shape of the Pelvic Floor (Trochanters–Tail–Pubis). In that manner, we connect the Pelvic Floor to the Head, as a core for Vertical Stability. These pyramids include the Head–Tail Connection and expand themselves into the stabilizer Bony Connections between torso and limbs (Heels–Sitz Bones, Hands–Scapulae). These pyramids connect the heaviest part of the body—the head—to the pelvic floor, through the PSOAS muscle, distributing the weight deeply through the femoral joint down to the legs and heels (Head–Heels Connection). The horizontal line drawn by the Trochanter–Trochanter Connection helps the body awareness of the deep ball-socket femoral joints. Through this connection, we get a sense of the top of the legs within the pelvis, therefore avoiding the common misunderstanding that the legs start below the pelvis. This connection also defines the side-to-side (horizontal) pathway, fundamental for Weight Shift for Locomotion (the next Bartenieff Principle to be discussed), in any level and in transitions between them. The same horizontal clarity given by the Trochanter–Trochanter at the lower body is provided by the Scapula–Scapula at the upper body.

The Great Vertical Diamond Shape, connecting head, scapulae and tail, stabilizes and projects the body in four directions, in Dynamic Alignment: the head “falls” upwards,

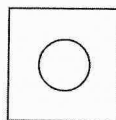
the tail “roots” downwards, and the scapulae spread away from each other, opening to the sides (the basis of the left scapula opens to the left and the basis of the right scapula opens to the right). This protects the body from an idea of “correct” alignment based on the forward projection of the chest, pushing the shoulders backwards, or from the common unhealthy posture of the forward projection of the shoulders and inward curve of the chest. Focusing on the basis of the scapulae, instead of in their tops on the sides, facilitates the movement of the arms from the tail and all the deep Core Support already mentioned, instead of from the shoulders and the trapezius muscle. In other words, the scapulae “insert” themselves in the torso, in a deep (base of the) Scapulae–Tail Connection. Within the Great Vertical Diamond Shape, the bases of the scapulae move the arms (Scapula–Scapula and Scapulae–Hands Connections) initiating at the tail bone (base of the Vertical Diamond Shape as well as Horizontal Pyramids). As a consequence, the head connects to the hands, even if they turn in opposite directions, as in the third case of the Body Half exercise (see this chapter, 2.2).

1.6 Weight Shift for Locomotion

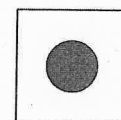
This principle involves use of Core Support, especially the deep pelvic muscles discussed earlier, for shifting body weight at different height levels. Related also to the Developmental Movement Patterns, this principle involves familiarization of the body with gravity in diverse forms of locomotion but without direct concern for neuromuscular evolution. The emphasis here is the body weight shifting itself in Space. For this, a dynamic is created between the pelvis (Center of Weight) and the thorax (Center of Levity), alternating the initiation of the movement stemming from one and followed by the other, or vice versa, or both of them simultaneously. Thus, this Principle is related to Initiation and Sequencing, dealt with later.

The terms “Shoulder Girdle” and “Pelvic Girdle” may help visualize the symbols for these two Centers. The Center of Weight is filled as if it were full of earth, in reference to the function of stability and support in connection with gravitational weight. The Center of Levity, as its name suggests, remains empty, light as air, in reference to its function of mobility.²³

Center of Levity (thorax)



Center of Weight (pelvis)



1.7 Initiation and Sequencing

These two functions organize body movement taking into consideration the initial impulse and its continuity. The same action may be carried out in totally distinct ways, depending on which part initiates and what part(s) give continuity to the movement.

Initiation concerns the part of the body that leads the movement, and can be:

- Core Initiation (torso, shoulders and hips)
- Mid-Limb Initiation (medial area of the limbs—elbows and knees)
- Distal Initiation (feet and hands).

Sequencing concerns continuity of the initiation of a given action and can be:

- Simultaneous (two or more parts move at the same time)
- Successive (non-adjacent parts move one after the other, as in the right hand, head, right foot)
- Sequential (adjacent parts move as if in a wave, as in the movement of vertebra to vertebra, or from the Center of Levity through the arm to the right hand).

For example, we may pick up a glass in front of us in one of several ways:

- Beginning with the thorax and continuing to the elbow and hand (Central Initiation and Sequential Sequencing)
- Beginning with the elbow and continuing to the hand, bringing the thorax afterwards as a consequence (Medial Initiation and Successive Sequencing)
- Beginning with the hand and continuing with the elbow, shoulder and thorax (Distal Initiation and Sequential Sequencing)
- Beginning with the elbow and continuing with the simultaneous movement of the hand and thorax (Medial Initiation and Simultaneous Sequencing).

1.8 Gradated Rotation

In the initial stages of BNP, flexion and extension are developed. Rotation only takes place in the last neuromuscular pattern, the contralateral phase. The term rotation indicates that a bone revolves around its longitudinal axis, or around the longitudinal axis of another bone. Rotation is relevant especially in the ball-socket joints of hips and shoulders, which connect the torso to the limbs. A large range of movement is necessary in these two joints and in the spinal column so that the body can interact with its surrounding three-dimensional space.

Gradated rotation consists of a neuromuscular Kinetic Chain that allows the body to trace rounded pathways, smoothing falls and changes of directions, facilitating its projection in three-dimensional space. This principle indicates the total use of the transversal and deep muscles that allow the rotation of the joints (shoulders, hip, and spinal column) with three-dimensional movement and full rotation of the body around its axes. This is particularly important in executing the Spatial Scales of the Cube and the Icosahedron discussed in Chapter VI.

1.9 Effort Life for Body Connectivity

This principle consists of the use of expressive qualities (Effort category) to promote connections between different parts of the body. For example, it is possible to execute a given exercise with different speeds (time factor) and control (flow factor). Students who tend to do the exercises quickly, tripping up over important details, may try them out over a longer period of time. Those who tend to lose body connectivity due to excessive slowness may try them more quickly. In fact, the Laban/Bartenieff warm-up (see this chapter, 2.1) begins with the use of free flow in order to limber up the body's joints and muscles. The initial impulse of a movement in the warm-up can be, for example, light, and the return to the initial position, strong. This dynamic facilitates the execution of each exercise in a search for variations and possibilities, broadening the performer's expressive abilities (see Chapter VII, 3.3).

1.10 Spatial Intent

Oftentimes in LMA, Space is used as a motivator for movement, maintaining body emphasis. This principle concerns the muscular tone of the parts which, when in movement, are projected into Space. The emphasis is on the intention of the body in prolonging itself through Space, even though apparently at rest, rather than locomoting towards a certain direction. All of the Bartenieff Fundamentals™ are performed with a clear Spatial Intent, which stems from a specific Bony Landmark, helping the body to connect its parts during movement.²⁴

2. Bartenieff Fundamentals™

The Bartenieff Fundamentals™ consist of six exercises performed after a preparatory series, and which can unfold into many variations. Thus, we have:

2.1 Preparatory Exercises

2.2 The Basic Six (The Bartenieff Fundamentals™ *per se*).

All of these exercises were initially developed by Irmgard Bartenieff during the great poliomyelitis epidemic of the latter half of the 1940s in the United States. This Laban disciple, a refugee in the US since the German Nazi period, worked with rehabilitating paralyzed patients and establishing body training which contained the basis of human locomotion and movement. Eventually, her technique was expanded and applied to postural correction, facilitation of body movement, and expression in diverse areas, including dance and theater techniques, choreography, developmental movement (preventive and therapeutic), physical therapy, and dance therapy.

The following exercises described here put into practice all of the Bartenieff Principles previously presented. Here are some hints for carrying out the exercises:

VI

The Architecture of Moving Spaces

The Space category (where we move) or Space Harmony involves an “architecture of spaces” created by Laban from his “body architecture” studies, in a “harmonic” relation. It deals with the spatial architecture of human movement, which involves concepts such as Kinesphere, Movement Reach, Crosses of Axes, Crystalline Forms, Spatial Pathway, and Spatial Tension.

1. Space Harmony

SUSANNE SCHLICHER

The historical background for Laban's Space Harmony can be seen in various sources, linked by his overall scientific, artistic, and spiritual interest in the world of movement. His first concern with the Arts (study in architecture) met perfectly with his search for scientific explanations for nature-given laws in movement. The mathematical-geometrical ideas of ancient Greek philosophy presenting a comprehensive view on the world, finding and stating that the same general laws are effective in the Arts, in nature, astrology, mathematics, etc. were highly valid for Laban in his endeavors. In his book *Choreutics* Laban explicitly refers to the philosopher Plato (who had already described the icosahedron), the mathematician Pythagoras and the Greek artists Phidias and Polyclectus, as well as Leonardo da Vinci, who also had referred back to the Greeks' knowledge in his artistic and scientific search for general truth (Laban 1974, p.vii).

Generally speaking, you can summarize the sources as being related to mathematics, architecture, nature, and his time—the beginning of the twentieth century, with its desire for scientific progress and recognition of the interaction between Science and the Arts. A lot of Laban's ideas can be found in other theories developing at the beginning of the century. One main theme, which is also basic for Laban's Space Harmony, is the theme of body in space, the relationship of the human being to space (Oskar Schlemmer, Gordon Craig, Adolphe Appia). At the same time the three-dimensionality of space was discovered, on stage as well as in science.

Laban put a lot of these ideas together, and applied the concepts to movement, on man moving in space. Thus, for instance, he talks about the architecture of the moving body in space. Thinking of the human body in terms of three-dimensional architecture

(length, width, and depth of the body, Vertical, Horizontal, and Sagittal Axes) is a major issue in order to dynamically present the moving body in space. From here you are already in the concept of the Kinesphere, the Personal Space around your body, which presents the model for the general space and of movements in space.

In my view, three basic beliefs are fundamental for Space Harmony. First, Laban's deep trust in the existence of a natural cosmic order reflected also in movement. Second, his opinion that space and movement determine each other, stating that empty space does not exist. And third, his belief in the presence of movement in every aspect of our lives, stating that complete stability or stillness do not exist. Therefore, balance is the result of two contrasting qualities of motion.

When Laban first developed his theories in Germany, during the 1910s and mainly in the 1920s and early 1930s, he and his students referred to three major parts of it: *Tanzschrift* (notation), *Choreutik* (study of the moving body in space), and *Eukinetik* (study of the dynamics and the rhythm in movement, of the expressive qualities of dynamic movement). With the terms *Choreutik* and *Eukinetik* he was consciously referring back to the Greek language. Even today in Germany, his theories are addressed in these terms and concepts. The idea of harmony was also crucial in this early stage. Kurt Jooss talks about the study of "choreographic harmony" in the mid-1920s, including both concepts. The idea of harmony has been present in Laban Theory from the beginning, indicating the ideas of balance, proportion, of being natural and organic:

A movement makes sense only if it progresses organically and this means that phases which follow each other in a natural succession must be chosen. It is, therefore, essential to find out the natural characteristics of the single phases which we wish to join together in order to create a sensible sequence. (Laban 1974, p.4)

He sees movement as "living architecture," following the same laws of proportion among its parts balancing the whole (Laban 1991, p.150). No wonder that later on in Choreutics he elaborates on the Golden Mean, finding this harmonious proportion in the icosahedron as well as in everyday movement pathways (for instance, he compares the flexion/extension capacity with the angle between dimensions and diagonals in the icosahedron) (Laban 1991, pp.110, 111). He sees body architecture following the Golden Mean in terms of the relationship between the body parts as well as in coordinating the interplay of different joints in one simple action.

One major issue of proportion in Space Harmony is related to the balance of Stability/Mobility as well as Exertion/Recuperation. Space Harmony explores in the different scales the wide range of extremes, represented in the different scales but also to be found in each scale itself. For instance, Girdle and Axis Scale match each other (peripheral versus transversal, more mobile versus more stable), thus modifying the solid stability presented in the Dimensional Scale and the high mobility of the Diagonal Scale. Laban called the dimensional and the diagonal tension the two contrasting basic principles of Space Harmony, representing natural movements in reference to body architecture (Laban 1991, p.53).

The scales are often addressed in comparison to musical scales, being a broad practice tool for moving the body through space.

Thus, the fullness of these forms brings out the fullest in human movement potential, and the variety of these forms allows for explorations of that full potential in various types of pathways and with a wide range of dynamics. (Brooks 1993, p.38)

The comparison between Space Harmony and music is again related to the idea of harmonious proportions between the parts. Laban explains, for instance, the order of numbers in Space Harmony in its relation to musical harmony (Laban 1991, pp.120–122). More interesting is the attempt of Lynn Brooks in her article “Harmony in Space: A Perspective on the Work of Rudolf von Laban” of finding equivalents to the vertical and horizontal musical harmony in Laban’s Space Harmony (1993). For the vertical relationship (the chord harmony) she claims the many layers of ideas in Laban’s philosophy as a corresponding aspect. Specifically, she names three main layers for Space Harmony: geometric space, body architecture and the dynamic quality of human motion (the aspect of dynamosphere, which is included in Choreutics). For the horizontal relationship (melodic harmony) she states that motion is infinite, including the traceforms in space as a correspondence.

Wherever one starts with explaining Space Harmony and its harmonious logic you end up with the same list of keywords. Still, the major starting point seems to be the perception of the human being as an architectural body moving in space, thus defining movement as living architecture, seeing the law of proportions in space, body, and in their interaction, as well as honoring the importance of communicating in and with space.

1.1 Space Harmony and Bartenieff Fundamentals™

Coming from this basic aspect, the relationship of Space Harmony and Bartenieff Fundamentals™ (BF)⁴⁰ is clear. Both address the relationship of the body to/into space. Perhaps one can say that Bartenieff addresses this aspect more on a body level, looking at how people relate physically in/to their environment. Also, in the BF the body is three-dimensional architecture, having length, width, and depth, working with dimensional tensions as well as with diagonal tensions through the body. This is mainly expressed in Developmental Movement Patterns, such as homologous, homolateral, and contralateral, which underlay the BF exercises. The BF exercises use the different Developmental Movement Patterns, the dimensional, and especially crosslateral, tension to make the body move into and through space. The principle of spatial intent, which states that the interaction with space can be used as a motivator for movement, is an important link between Space Harmony and BF.

Space Harmony is a tool to practice or access the whole range of our physical potential for motion and for dynamic expression (if one includes the dynamosphere). The BF exercises strive for the same goal, bringing man into uprightness and preparing locomotion through space. “The Bartenieff Fundamentals...also point out

the developmental process of space and Effort relationships in increasingly complex body movements" and "Articulation makes the space available to the body segments" (Bartenieff and Lewis 1980, pp.87, 26).

The underlying BF concepts further the full range of mobility in the human body in order to move fully through space: perhaps one could say on another level, to find more body or internal connections, proportions, balance, and harmony inside oneself. If we look for inner connections such as Bony Landmarks, Kinetic Chains, as well as breath flow or contralaterality inside the body, we address our inner body architecture, mirroring the outer space, the outer Crystalline Forms and their internal scaffolding systems (the scales). The inner body architecture is the base for going into the outer space, for moving three-dimensionally in the outer space. Bartenieff states:

Laban perceived the skeleton as a crystalline structure created by the numerous (one- and multi-dimensional) pulls of active muscles on individual bones, spreading muscular tensions through larger or smaller segments of the skeleton in ordered tension sequences. (Bartenieff and Lewis 1980, p.103)

She talks of an inner shaping process, which, by means of the body reaching in space, can create an outer process of shaping space. This reminds me of the concept of shadow movement (Davies 2006, p.39), stating that out of the plasticity of the body comes the energy of choreutic forms, the character of the traceforms. In practicing the scales we refer to the support of this inner shaping process, for instance, when we work with the volume and inner shaping qualities of our body, thinking of the organs and their homolateral or crosslateral organization in the body. Another important relationship can be seen in the theme of Mobility/Stability, being crucial to Space Harmony and to BF. Bartenieff followed Laban in his belief that there is no pure stability or stillness in life, but that there are always contrasting forces or tensions balancing each other. Bartenieff refers to this by emphasizing the importance of counter-tension in the body. You can experience this in a simple Body Half, or in a more complex way, in the Knee Drop and Arm Circle. Counter-tensions serve to stabilize the moving part of the body, thus creating interplay of stabilizing/mobilizing forces in the body itself.

In general, the relationship of Space Harmony and BF is characterized by functioning as mutual support systems. Both look for an organic approach towards movement, based on natural movement sequences inside and/or outside the body. Both build up from very basic experiences and simple movement sequences towards high complexity, integrating all developmental steps in between. Bartenieff used space, the interaction of body and space, the concept of spatial intent, and the body architecture as tools in her therapy work, approaching physical problems from an inner functional knowledge and the motivating power of interacting with one's body in space. The BF exercises use specific spatial directions, such as forward high for the Pelvic Forward Shift, right or left forward for the Knee Drop, the Horizontal Dimension for the Pelvic Lateral Shift, and the four endpoints of the Vertical Plane for the big "X." Space Harmony underlies all BF work. On the other hand, the BF exercises, and more, the BF concepts, support the performance of