



INTERNATIONAL COUNCIL OF KINETOGRAPHY LABAN/LABANOTATION

PROCEEDINGS OF THE TWENTY-FOURTH BIENNIAL CONFERENCE

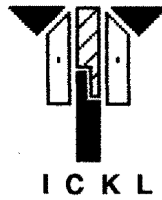


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Marion Bastien and Richard Allan Ploch**

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PRESENTATIONS, WORKSHOPS, READINGS

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CHOREOCINEMA (ABSTRACT)

by

André Austvoll

This report aims to answer the question "how can dance be filmed". The question is approached by analysing three films that emphasise integrated movements of camera and dancer. The three films are "Rock Your Body", "Elektrobank", and "the Very Eye of Night". These three films are examined using Laban Movement Analysis (LMA). The results from the video observations are used as examples for defining the term "choreocinema". Choreocinema defines an approach in which the dance and film are combined to create a single work of art. The focus is on choreographing the shared movement of bodies and camera that is the result of filming dance.

The preliminary research indicates that there is a need for a unified terminology when filming dance. In this report the terminologies of film and dance are correlated. The purpose of correlating is to find the terms that are appropriate for describing the moving relationship between camera and dancer. The terms are compared and contrasted in order to show their individual strengths and limitations.

In the chapter on choreocinematic framing, the video observations are analysed in terms of standard cinematographic and choreographic concepts. There are three main concepts that are examined; shot framing is correlated with proximity; camera angle with kinespheric inclinations; and camera motion with pathways on the kinesphere. The analysis suggests that framing emphasises general space when the camera is far away from the dance, and interpersonal to personal space when moving closer.

The section on reframing focuses on small adjustments of the camera made to follow the movements of the dancer. The analysis indicates that even though reframing is adjusting for the dancer's movements, there are several options for how this is executed. The main options are to follow the centre of the body as a whole, or to track individual gestures. Frame mobility defines general movement of the camera. Frame mobility is analysed as a means for creating depth in the images, and for enabling continuous changes of angle. The camera is found to increasingly reveal gestures and enhance the representation of pathways, when frame mobility is applied.

The chapter on choreocinematic perspectives deals with the representation of the dancer's perspective. Cinematic points of view (POV) are examined with the aim of seeing how the terms, originally derived from literature, can be applied to dance. The first person POV is found useful for representing the inner experience of the dancer. The second person POV functions to represent the viewer as part of the dance. The third person POV is, in general, a means for either representing interpersonal relations, or the alternation between inner and outside views of the dancers. The analysis indicates that there is a bias towards representing the view as it would appear from eye level.

The report concludes that the combination of choreographic and cinematographic concepts aids in clarifying the movements of the dancer, while structuring it sufficiently to avoid nausea. In this report, choreocinema is defined as a useful concept that identifies practical means for improving kinesthetic empathy in dancefilm.

FALLING, RELEASING AND POST-JUDSON DANCE (ABSTRACT)

By

Melanie Bales

This paper draws on Laban Movement Analysis, selected readings and the author's experience as a dancer in addressing the role of certain movement values during and since the Judson era in contemporary American dance. The idea of "orientational metaphors" from Lakoff and Johnson provides a starting off point for a discussion of meaning in movement, which is further examined through the LMA framework. Of particular interest is how those movement values—such as a more relaxed body attitude, softer bodily tone and overt play with gravity—intersected with and influenced technique and training during and since the time of Judson Dance Theatre.

"Release technique" is an umbrella term that captures several concepts since the fertile time of experimentation in the 60s when dance reflected on itself as an art form. During the same period, other movement forms were being incorporated freely into dance, and in turn, contributed to the changing aesthetic. Thoughts from dance writers and professional performers on the idea of release are presented and considered in terms of the aesthetic preferences of dance that finds its roots in the work of figures such as Trisha Brown, Steve Paxton, Deborah Hay and others.

This presentation will derive from a current manuscript on dance training since the Judson era. Besides the Lakoff and Johnson (Metaphors We Live By) and Irmgard Bartenieff's Coping with the Environment, other sources include the writings of Sally Banes, Deborah Jowitt, Wendy Perron, and contributors to the New York City Movement Research Performance Journal. It brings several areas into dialogue with one another: movement analysis, history, aesthetics, and issues of dance training.

**ANALYSIS OF MOVEMENT AND KINESIOLOGY LABAN
FOR STUDENTS OF ETHNOMUSICALITY
(ABSTRACT)**

by

Elena Bertuzzi

Since 1996 I have been teaching Kinetography Laban to student who are in their last year of study in Ethnomusicology in the University of Paris X. All of the students want to conduct research about dance in traditional and contemporary fields and also research areas in which it is important to analyze movement. The course is designed to demonstrate and illustrate the various ways that Laban Analysis and Kinetography Laban (Labanotation) can be used in anthropological research as well as their advantages.

The course meets in 12 sessions of three hours each. Each session has two parts. The first part consists of theory and the second part more practical in which the subject of each research is approached using Laban Analysis. Throughout the course, students use notation in close connection with the methodology of anthropological investigation. For the final examination, students write a paper on their subject using Laban Analysis and structured notation.

The titles of some of the papers are:

- Magali Déruyter : "The Asapinga of Madagascar" (Boys' Dance)
- Laure Carbonnel: " Naqs Possession during the feast in Myanmar" (professionals mediums in Birmany)
- Olivier Féraud : "Deux forains italiens" (amusing analysis of the strategical gestures of two itinerant Italian sellers)
- Martine Jouneau : "Prayer Dance of Bertashi" (Central Anatoly)
- Jean-Marc Potterie : " Bodhràn" (analysis of the movements of an Irish percussionist)

My presentation at the ICKL conference will discuss the contents of these papers and explain the ways in which Laban Analysis and notation assisted their anthropological research.

VISUALIZING THE A SCALE: A VISUAL SUPPLEMENT TO TEACHING CHOREUTICS

by

Leslie Bishko

The beginning

"Let's start at the very beginning
A very good place to start
When you read you begin with A-B-C
When you sing you begin with do-re-mi

Do-re-mi, do-re-mi
The first three notes just happen to be
Do-re-mi, do-re-mi

Do-re-mi-fa-so-la-ti

Let's see if I can make it easy..."

In the film, "The Sound of Music," Maria realized that a linear recitation of the chromatic scale would not work; she needed a method for teaching the notes that would be fun and appealing to children. She also knew that she wanted to teach them more than notes – she wanted to give them a language for music:

"Now children, do-re-mi-fa-so and so on are only the tools we use to build a song. Once you have these notes in your heads, you can sing a million different tunes by mixing them up."

Her method uses words, and the words form rhyming patterns that help cement the notes to memory. They also convey visual images, such as "Sew, a needle pulling thread," and tell a story: "When you know the notes to sing, you can sing most anything." Each method is linked with the sounds of the notes, so that the notes are learned aurally, verbally and visually. Logic and math are introduced as the order of the notes is changed into several sequences, teaching intervals such as thirds, fourths and fifths. The children learn to sing solo and hear their own voice, as well as sing together to create a group sound. Linking them all is the kinesthetic vocalizing of the sounds, repetition and practice.

Howard Gardner's theory of Multiple Intelligences (MI) brought awareness and value to the varieties of ways that people perceive, learn, interact and create in the world. The seven areas of intelligence include verbal, visual, musical, kinesthetic, logical, intrapersonal and interpersonal [1]¹. While "Do-Re-Mi" was never intended to function as a theoretical exercise in pedagogy, the fact that Rogers and Hammerstein managed to entertain and teach us through each of these intelligences speaks to their relevance.

The broad scope of Laban's work and influences suggests that he functioned and created through each of these intelligences. Choreutics represents the synthesis of Laban's theories as well as the seven intelligences which contributed to their formation. This suggests that involving each of the intelligences in teaching the scale addresses the holistic nature of Choreutics. However, visual intelligence stands out for its role in our ability to grasp the complexities of Space, and in relating our bodies to Space. When practicing the Choreutic scales, we are required to imagine, or visualize, the geometric form that imparts unique dynamic characteristics to our movement. Through visualization of the scale, we direct our body to take on its form. It is a practice that engages and exercises the interconnected mind-body.

When it comes to learning the scales, understanding the layers of theory is hindered without visual aids. While an experienced practitioner can let go of the geometry and experience the bodily sensations a scale engenders, a beginner relies on notation symbols and imagining the geometry. This paper explores how visual images can help a beginner develop better comprehension of the A Scale, its geometry and its theory. While theoretical comprehension is not a prerequisite for being able to practice the scale [2], it can offer a variety of memorization schema that can aid in a visual-kinesthetic perception of the scale's flowing Traceform, as opposed to the set of discreet points conveyed by notation.

An image of any Laban theory construct becomes symbolic, and provides a concrete point of reference. Because an image I create reflects my own comprehension of Laban theory constructs, it opens the door for dialogue about whether there is consensual knowledge of the particular theory point in question. While we can view this as a highly useful approach towards a body of material that resists being pinned down, the creation of imagery risks the danger of codifying Laban's language. Thus, it becomes necessary to consider where the personal experience of individual movers should have priority over the concretization of ideas into visual forms.

Background

My early questions about learning the A Scale seemed related to my experience in teaching three-dimensional computer graphics to visual arts students. I wanted to understand why some of my beginning students struggled with perceiving and interacting with three-dimensional space on the computer. In learning how to draw, they had learned how to look at the three-dimensional world and "collapse" it into lines and shapes on a two-dimensional surface. They saw the computer screen in this two-dimensional way, even when the images they were looking at provided believable visual information about perspective. Using the mouse to interact in three-dimensional space was disorienting. Their kinesthetic use of the mouse is a 2D navigation, as if putting pencil to paper, yet the visual information onscreen is three-dimensional. I like to describe this as driving while looking in the rear-view mirror.

Related to this is the ability to flow freely between left and right brain activities or modes of thinking. My belief is that computer animation requires us to have a high degree of information flow between our left and right hemispheres, as we are interacting

with software tools that are an abstraction of the creative whole we wish to achieve. Highly right-brained artists, who create intuitively through putting pencil to paper and allowing an image to flow forth show difficulty in adapting to computer tools, which require an analytical, problem-solving left-brained approach to right-brained creative impulses. I liken this left-right brain fluidity to the active engagement of several intelligences at once. For example, many movement teachers I have studied with integrate verbal, visual and kinesthetic.

I felt that kinesthetic experience of three-dimensional space could help my students form a cognitive understanding of “visual-three-dimensional” computer space. We experimented with images and kinesthetic experience of the Dimensions and Planes. To keep the experience relevant to computer animation, we used the Body Cross of reference, distinguishing it from the Constant Cross. We discussed the difference between giving “relative” directions, (walk 3 blocks, turn right) verses “absolute” (take Smith St. west to Seymour, go north on Seymour). Ultimately, these students gained spatial orientation through repetition and practice. Just as my own dance training influenced my sense of spatial orientation, I have found that students who engage in dance, sports or martial arts take to three-dimensional computer graphics more easily.

My student’s struggles related to my observations of Integrated Movement Studies certification students: my colleagues in the 1994-95 certification program, and the 2003-04 group that I worked with as an assistant. In both groups I was a visual artist among dancers and became keenly aware of how much I relied on a visual learning style. I related easily to the geometry of Choreutics theory and could visualize the transverse pathways of the A Scale. I was curious about how others learned – I observed that some needed to experience what transverseness felt like in their bodies. I wondered if their kinesthetic, experiential approach ultimately offered a mechanism for memorizing the sequence and understanding the theory. For me, this was only accessible through visualization.

I found moments where I could not join in and “do” with the rest of the group – I needed to “watch.” Moving through the A Scale, we spoke out-loud the changing Shape Qualities in order of their dominant proportion. For me this required integrating kinesthetic with logical processes. Not being able to rely on my visual self made this experience inaccessible to me. Similarly, during Bartenieff Fundamentals work, Peggy Hackney would help us mark a sequence by giving connectivity information: calling out which Developmental Pattern of Total Body Connectivity to use in sequence, speaking in Motif language, as opposed to describing which body part goes where. Invariably, learning the sequence required that I look and see with my eyes what shape to create with my body, which had been my learning style through my former years of dance training. Once I could identify a sequence of Body shape configurations, I could integrate qualities of connectivity, Effort, Shape, Space and Phrasing.

Questions arose: was my visual learning style limiting my kinesthetic experience in dance and Choreutics? Would kinesthetic learners comprehend Choreutics theory more easily through visual means? How do visual images relate to kinesthetic experience?

The survey

In 2003 I initiated a pilot project to explore the educational and ideokinetic potential of visual imagery for learning the A scale. I produced a short computer animation that depicts a female dancer as she practices the A Scale, including imagery of the Icosahedron, Planes, Symbols, Diagonals and Traceforms. I then invited several educators teaching the A Scale to include the animated study as part of their curriculum: Ellen Goldman at LIMS, and Kathie Debenham at Utah Valley State College. Ellen and Kathie introduced the scale according to their usual curriculum, and chose a relevant time and context for their students to view the animation. After seeing the video, the students completed a questionnaire that investigates whether, and how, the visualizations of the scale helped them to comprehend Choreutics concepts. *(Please see Appendix: Sample Questionnaires.)*

The questionnaire includes a very simplified learning style test, asking the participants to rate themselves on the following 5 intelligence areas:

1. Visual-Spatial: I typically excel at using images, pictures, colors, and maps to structure information and communicate with others. I can easily visualize objects, plans and outcomes in my mind's eye. I have a good spatial sense, and good sense of direction.
2. Auditory-Musical-Rhythmic: I like to work with sound and music. I have a good sense of pitch and rhythm. I can sing, play a musical instrument, or identify the sounds of different instruments. Certain music invokes strong emotions.
3. Verbal-Linguistic: I find it easy to express myself, both in writing and verbally. I love reading and writing. I like playing on the meaning or sound of words, such as in tongue twisters, rhymes and limericks.
4. Tactile-Kinesthetic: I use my body and sense of touch to learn about the world around me. I like to think out issues, ideas and problems through physical activity. When I am learning a new skill or topic, I prefer to "jump in" and play with the physical parts as soon as possible. I enjoy role play, dramatization, cooperative games, simulations, creative movement and dance, and hands-on projects.
5. Logical-Mathematical: I like using my brain for logical and mathematical reasoning. I recognize patterns easily, as well as connections between seemingly meaningless content. I like to classify and group information in order to learn or understand it.

As mentioned earlier, MI includes two additional intelligences: Intrapersonal-Solitary (introspective, self-knowledge, independent) and Interpersonal-Social (works in groups, seeks input from others). My choice not to include these two intelligences reveals an interesting flaw: being an intensely solitary learner, I felt that the "personal" intelligences were not critical to the questions I was asking. Additionally, the five learning styles described above relate directly to identifiable activities, such as drawing, dance, playing a musical instrument, etc. While initially I did not see the role of Intrapersonal-Solitary and Interpersonal-Social learning styles in this survey, the undergraduate dance students mentioned in their questionnaires that working with a partner helped them learn the scale, which required that I broaden my view. Ultimately, Intrapersonal and Interpersonal are filters through which the other intelligences develop and manifest.

Following the data collection, I contacted IMS 2003-04 Certified Laban Movement Analysts, now a year onwards from completing their studies. They provided valuable insights, which are incorporated into the discussion below.

The survey data

The following is a summary and paraphrasing of the survey results. I have associated each point with a potential intelligence function, or intelligence clusters.

Challenges in learning and moving

- Visual-Kinesthetic integration
 - Memorization – getting the order right. Which direction to go in next. (+ Logical, Verbal, Musical)
 - Making it a continuous progression instead of moving from point to point. How to make it flow, dance it, embody it. Being Effortful.
 - Transverse spatial pathways, instead of Central or Peripheral.
 - Back Low, and back space in general.
 - Levels – high, middle, low (as function of the proportion of the plane)
 - Connecting one's torso into space. Shape Qualities.
 - Embodying Steeple Phrasing. (+ Musical)
- Kinesthetic
 - Letting oneself go off balance.
 - Experiencing countertension.
- Visual-Logical-Kinesthetic
 - Understanding how the transversals are deflected from the diagonals.
 - Integrating the theory with one's bodily experience of the scale. "Thinking" the theory as you move through the scale. "Moving off-balance took my cognitive self out of the movement experience. I had to allow myself to rely on kinesthetic experience."
- Musical
 - Finding one's own rhythm. Finding the Phrasing of the scale. "The scale seemed long in comparison to my habitual Phrase length."

Memorization devices

- Kinesthetic
 - Repetition and practice.
 - Progressive repetition.
 - Adding one more step in the scale with each repetition.
 - Learning it in three-rings.
 - Learning the first half, then the second half, and then piecing them together.
 - Writing the symbols down on paper repeatedly.
 - "How it feels in my body."
 - "Letting my body memorize it, rather than my mind."
- Verbal-Visual
 - Story: assigning images or phrases to individual Transversals, Volutes and Steeples to form a meaningful narrative.

- “The more we talked about Shape Flow support, Shape Qualities and Transversals, the more I grasped it.” (+ Kinesthetic)
- Interpersonal
 - Partnering: giving and receiving feedback, sharing ideas on how to remember it.
- Visual
 - Mental/visual imagery: “going through it in my head,” using images. (+ Intrapersonal)
 - Experiencing the Planes and missing spatial pulls. (+ Kinesthetic)
 - Understanding the theory helped me learn the sequence. (+ Logical)
 - “Steeple phrasing helps me understand and memorize the sequence of the A Scale easily.” (+ Logical, Kinesthetic)

Responses to the animation (all Visual)

- I could see the Icosahedron for the first time. Now I can visualize myself inside an Icosahedron. I could see the whole thing outside myself.
- I could see the Planes for the first time. Seeing the planes helped me to understand the order of the points in the scale. (+ Logical)
- The Traceforms showed me how the scale is a fluid and continuous movement through space.
- “Seeing someone else do it with one thing/example at a time, and all the different angles and colors and specific effects—helped further my understanding—and helped me ‘get it.’ I am a very visual learner so it helped to see it being performed with theoretical computer effects added in. It clicked.”
- “The animation really helped me to be able to visualize all of these things and get a good sense of what needs to happen when I dance the A Scale. It made it very clear to me.”
- “On all these parts to the animation, I was able to see clear pathways and I also saw how the spatial pulls were affecting the body. The animated parts of the Planes, Transversals, etc. help me have an image in my mind about where to move.”

Results of Learning Styles survey:

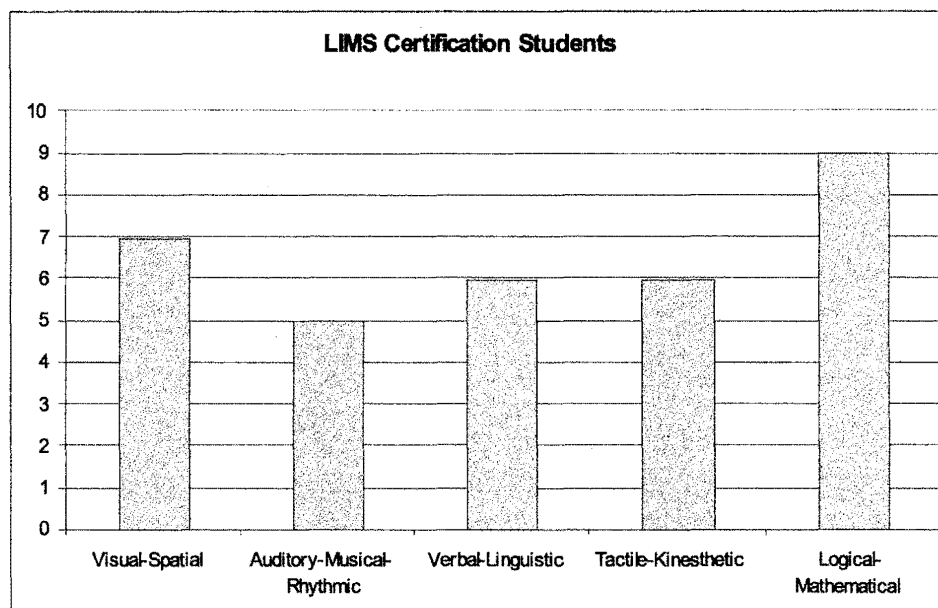


Figure 1: LIMS Certification students' learning styles. Five participants.

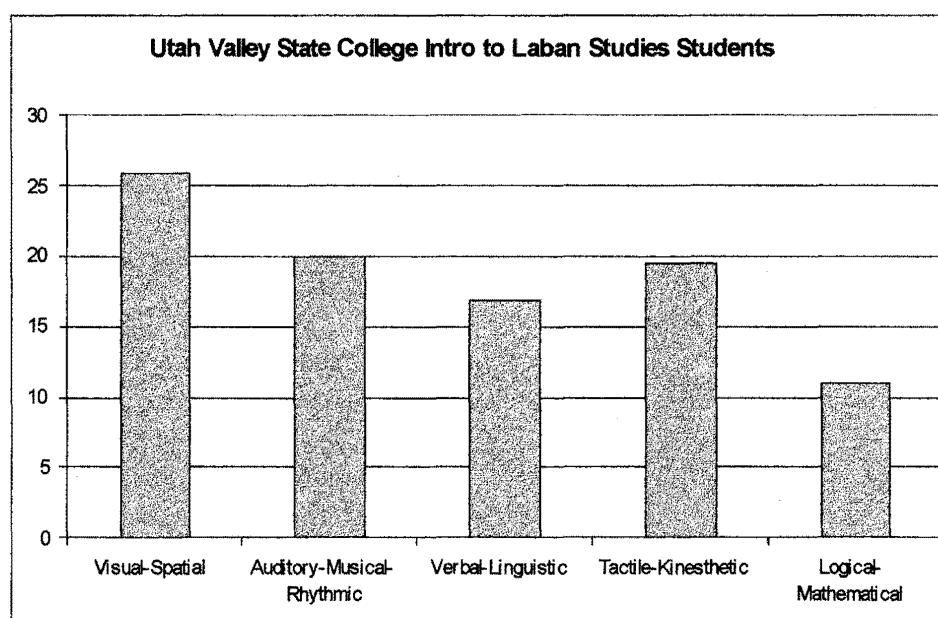


Figure 2: UVSC Intro. to Laban Studies students' learning styles. Sixteen participants.

The ratios of the different learning styles, and the differences between student groups, raise several questions: can we attribute the presence of logical learners at LIMS to their proclivity towards analysis? Are the UVSC students' visual and musical strengths related to their age and contemporary culture?

While it is not the purpose of this study to evaluate demographics and other influences, undoubtedly the answers to these questions have some relevance. Several assumptions can be made about the demographics and motivation of the participants:

- UVSC students are in the 18-21 age group.
- LIMS students are older and most likely have undergraduate degrees, possibly master's degrees as well.
- Introduction to Laban Studies is a required course for all UVSC dance majors. They may not choose to pursue further Laban Studies in the future.
- LIMS students have selected this course of study as a core component of their professional career.

It is important to keep in mind that the participants represent a very small data set. In learning styles test results from 8800 16-21 year olds, Social-Interpersonal, Visual-Spatial and Auditory-Rhythmic-Musical represent the top learning styles (in ascending prominence), although the distribution among learning styles is fairly even. Test results from my computer animation students, aged 19-35 are similar, with the exception that Visual-Spatial is favored. Results from 6500 30-39 year olds reveals Tactile-Kinesthetic, Visual-Spatial and Social-Interpersonal as the top three learning styles, with a less even distribution among them. Evaluating all age groups reveals that Visual-Spatial is the most used learning style. Among all results, Logical-Mathematical is consistently the least used [3]. Therefore, we can assume that the dominance of Logical-Mathematical in LIMS participants is purely by chance.

In the summer of 2004 I had the opportunity to assist with an A Scale coaching session for IMS. I was curious to hear how their learning evolved, as well as their reflections after completing their certification. I asked, "How did you finally 'get' it? Or...is it all still a mystery?" In response, Ana Morel described how the other intelligences participated for her, but lived kinesthetic experience linked them all together:

"While I still perceive mystery in my learning process for the Scales, finally 'getting' it was a matter of grasping that I could play. Play was essential. I needed to **live** the Scale. This is not to diminish the role of theory and analysis, however. Parsing the minutiae of Space Harmony theory with regard to the A or B Scales (some of my favorite theory stuff), also helped. Understanding all that theory in some parts of me (my visual intellect, for example) helped me to comprehend the theory in my kinesthetic intellect (bodily knowing) by providing me with the ideal or goal for what the Scale is. Still, when I thought in pieces, I moved in 'pieces.' When I aimed to integrate all those pieces, I could find a Breath, Flow, and Phrasing for the whole Scale." [4]

From this statement, and the other student responses, my bias as a visual learner leads me to conclude that visualization is an important, if not crucial part of understanding Choreutic theory. Further to this, that comprehending the theory supports our ability to kinesthetically experience the dynamics of Body, Effort, Shape, Space and Phrasing in Choreutics.

Seeing, moving and thinking

Laban's ideas about the unity of the body and mind in movement are well supported by cognitive and psychological theories. What can we learn from these fields about the

prominence of visual learning? Is there a biological/cognitive mechanism through which visual perception and thinking informs movement? How does movement inform thinking?

“Throwing, hitting, typing, writing, signing, singing, dancing, driving a car, playing a musical instrument, and so on, suggest that motor capacities are deeply involved with, and constitutive of, other intellectual competencies. All the aforementioned activities partake of timing, force, selection, and sequencing, orchestration, and integration that lie at the core of human intellectual activity. Therefore, the boundaries between perception, action, and cognition are porous.” [5]

Thus, cognition is deeply embedded in kinesthetic experience, mirrored in movement patterning. At the same time, there is a direct correlation between mental imagery and movement learning. The existence of a porous neurological “core,” where kinesthetic function merges with visual processes, is supported by evidence that neurological processes for creating mental imagery of movement and for producing movement are one and the same:

“Various experimental approaches have been used to show, for example, that the mental representation of an action seems to be based on the same mechanisms as the motor preparation for it.”

“That mental imagery can play a role in the learning of movements and the improvement of motor performance is no longer questioned. Instead, the latest research is attempting to identify the determinants of efficient mental imaging. Studies have already shown that people who are better at generating mental images make faster progress in motor learning, as do people who practice a movement physically before imagining it mentally.” [6]

The use of imagery to affect healthy biomechanical function in movement has developed into the practice of ideokinesis through the lineage of Mabel Todd, Lulu Sweigard, Irene Dowd and Erik Franklin. The effectiveness of postural imaging is facilitated through lying in the Constructive Rest Position, which creates support, eases tension, and prevents one from relying on poor alignment habits that are present when the body is vertical and active against gravity [7]. The practice is similar to the Alexander Technique’s notion of “inhibition.” In a relaxed state, one allows the verbal direction of postural alignment to unfold, yet does not engage muscular action to perform the postural change. It is a process of inhibiting habitual movement, allowing the image to speak to the muscles and retrain their firing patterns.

The relationship of visualization to intent is present in numerous somatic practices. The Vinyasa flow yoga practice of Dona Holleman and Orit Sen-Gupta describes the use of visual imagery to clarify intent and direct it into movement:

“Intent is the projection of a clear picture of the movement that we want to perform, while keeping the body in a state of relaxation and the mind in a state of

quiet alertness ... before we begin any movement or pose, we visualize it, quietly and precisely. This does not have to take a long time; in an experienced practitioner, visualization takes place in just a split second. The more clearly we are able to visualize the movement leading to the pose and the pose itself, the more the result will be Perfect Pose.” [8]

In my experience with this practice, I see myself in motion, as if looking on as an observer. The image and movement never co-exist in time – once movement is initiated, the image is gone. I find yoga a useful way to practice visualization because its pace provides time and presence for mental awareness and focus. The quality of awareness supports the feedback loop between mental and kinesthetic processes.

As an extension of his work with dynamic alignment, Eric Franklin has articulated a complete approach for using imagery in dance, to support both function and expression. He states that intention initiates movement and is required for neuromuscular planning. The dancer who maintains the quality of awareness needed to clarify intent is able to project a transformative experience in performance [9]. Breaking it down further, Peggy Hackney writes that in LMA, intention is manifested within each of the Body, Effort, Shape, Space categories. Through Phrasing of movement, our intent organizes our use of Body, Effort, Shape and Space in action:

“Intent is part of the preparation stage of phrasing and it is at this crucial point that the brain is formulating (even for a split second) the motor plan which will eventually be realized in action.” [10]

“It is in the preparation moment that we claim our intention. Intention patterns the organism.” [11]

Several prominent choreographers have worked with concrete spatial imagery in dance. William Forsythe used Traceform images to document the inner language of space that guides his choreographical thinking as a teaching tool for dancers new to his company [12]. Trisha Brown, noted for her collaborations with visual artists, extends the notion of “dance writing” to her drawing practice, while drawing also informs her choreography. She has also united dance and drawing in performance [13].

In the visual arts, the explorations of numerous experimental animators seek to realize the quality of gesture in the act of drawing as moving cinematic images. Canadian animation pioneer Norman McLaren animated to the sound track in real time by scratching and painting directly on film as it played on a moviola [14]. In the tradition of the vaudeville “lighting sketch” artists, who drew and erased their chalk drawings so rapidly that movement, narrative and story were perceived by the audience, Pierre Hébert performs animation to live improvised music by moving paper cut-outs and objects on an overhead projector [15].

Visualizing the A Scale

The song “Do-Re-Mi” is a remarkable gestalt of the multiple intelligences. It simultaneously demonstrates and delivers its information in the very medium it intends to

teach. Does A Scale practice deliver this level of learning? What kinds of logical-verbal-visual-kinesthetic-musical-intrapersonal-interpersonal imagery can form a gestalt for the A Scale? Recalling Ana Morel's comments that play was her vehicle for collecting the pieces of the scale, perhaps the search for a gestalt lies in the mover's personal domain. "Making meaning" is a process valued by LMA practitioners as necessary for personally integrating the totality of Laban Movement Analysis.

Can we perceive and internalize imagery of Choreutic theory constructs ideokinetically? Franklin provides numerous images to help dancers work with the metaphors of space. In my own experiments with visualizing the A Scale Traceform, my movement achieved a much more Effortful Flow as the direct result. Initially, I practiced seeing the Traceform progress over time (left and right sides, Volutes and Steeples) when trying to fall asleep at night – as a mental discipline to quiet my thoughts. I later became interested in holding on to longer strands of the Traceform – to see the whole scale at once. As an exercise in the duration of spatial memory, the challenge was in the spatial overlapping and reversal of the second half of the scale from the first. I then experimented with the quality of Effort in the progression of my actively seeing the Traceform. I was able to loosely attend to the primary affined Effort quality for each transversal, but generally allowed the progression to take on its own dynamics. I tried to relive my visualizations while moving physically but my mind loved to race through the scale. Instead, I focused on a kinesthetic image of sensing the Traceform, feeling that it supported me where my stability was challenged, and that I chased after it where my mobility peaked.

What is the potential for visual-spatial-logical images to teach Choreutic theory? The geometric theory of the A Scale and the Icosahedron unfolds as a set of spatial relationships, operating as visual-logical "facts of space-movement," [16] which seem abstract to beginners and are difficult to grasp. In print, we are accustomed to seeing the A Scale represented through notation, combined with illustrations that depict separate Traceforms for the first and second half of the scale. Valerie Preston-Dunlop notes the awkwardness of representing the scales as diagrams on a page [17]. Computer animated three-dimensional moving images can bring us closer to knowing theory as a whole, instead of its pieces.

The following is a discussion of key learning challenges for the A Scale with visual solutions posed for each. Where possible, each visual image has an ideokinetic connection to theory.

Placing the dancer inside the Icosahedron. In the absence of a full-scale Icosahedron model, seeing an image of a dancer inside the Icosahedron allows us to imagine ourselves inside it as well.

Planar proportions. A diagram and discussion of the theory of the Golden Mean provides a foundation, and gives relevance to the planar proportions within the Icosahedron. Showing the dancer intersecting with the planes enables us to imagine our own body proportions in relationship to the planar proportions. Vectors leading from bony landmarks to the corners of the planes can provide a more ideokinetic image, where the

landmark initiates or provides support for Shape change towards a spatial goal. Animated diagrams can illustrate the dominant spatial pull of each planar corner, and the gradient change in spatial emphasis along each transversal of the scale.

The order of the sequence. Several memorization devices can be visualized:

- A simple memorization device for the right side A Scale is that the corner of each plane is visited in a clockwise order. If we remember the fundamental V-S-H sequencing, we can puzzle our way through the entire scale once we have finished the first volute. This can be visualized through a combination of animated colors and vectors.
- The first 6 transversals are deflected from both the Dimensional and Diagonal scales; the A Scale fits between them. This can be illustrated by showing both dancers and Traceforms of each scale, side by side as well as superimposed. This also teaches the meaning of Deflection.
- The missing spatial pull at each Icosahedral point indicates which direction to go in next. An animation can step through the scale and indicate each spatial pull along the way.
- Similarly, diagramming the steep, flat or suspended character of each transversal can reveal the order of the sequence. Separate diagrams of all steep, flat and suspended transversals shows their pattern in space. For example, seeing all of the steep transversals at once can provide a more ideokinetic image of what "steep" is.

Transverse. Compare the Transverse A Scale Traceform with a Central and Peripheral version. Show the C-P-T Traceforms inside the Icosahedron. Show the dancer and Traceform together and separately.

Volutes and Steeples. Compare Volute with Steeple Traceforms. Show the dancer and Traceform together and separately.

Diagonals. Show the Cube and Diagonals intersecting the Icosahedron. Show the missing diagonal of the scale. View the Traceform from one end of the diagonal, looking along it to the other end, to see how the Traceform orbits the diagonal. Show the dancer and Traceform in Steeple phrasing, indicating the diagonal from which each Steeple is deflected. Show animation of the Diagonal changing/rotating with each Steeple to create an ideokinetic image of the gyroscopic quality of the scale.

Effort and Shape. Show an animation of the Effort and Shape graphs, indicating primary, secondary and tertiary qualities and gradated change of qualities for the progression of the scale. The animation of the graphs is placed alongside the dancer and viewed simultaneously with the scale. This image represents the concept of affinities and gradated change. However, because they are abstract symbols, viewing the graphs is far removed from lived experience. To make a more ideokinetic image, vary the color and line quality in the representation of the Traceform to create visual metaphors of how Effort changes over time.

Kinesthetic challenges. The survey revealed kinesthetic challenges in working with back space, going off balance, experiencing countertension and in connecting one's torso to space. These can be addressed through metaphorical ideokinetic imagery (animated or visualized by the mover) as follows:

- Back space is challenging to accommodate in the body because we do not see it, therefore we must aim for it kinesthetically, or through imagery. In everyday life, our focus and activities are mostly forwards, so we have not cultivated habitual use of back space. It can also represent fear of the unknown. The mover can imagine eyes located at bony landmarks, such as the scapula or tailbone, to help see and direct into back space. Bright colors or cheerful imagery can be visualized in the back space to create an unafraid, positive metaphor.
- The mover can visualize a net catching them in off balance moments, then flinging them onwards to the next transversal. This image may work best with Volute phrasing. The image of support may work well for Back-Low and Back-Side-Middle.
- Diametrical countertensions form clear lines through the body. These lines can be visualized as connecting the torso to the Icosahedral points. They can also be animated to show the continuity of countertension along the transversals. This image would be complicated to form as a mental picture, so diagramming it may provide an interesting ideokinetic reference.

Making it flow. The image of the Traceform is a clear illustration of how we do not rest at the Icosahedral points, but flow continuously through the scale. The pilot animation depicts a Traceform literally traced from the dancer's movement. I feel that a more dynamic Traceform can be created that appears to interact with the dancer. This may create a more ideokinetic image. Ultimately, memorization, comprehension of theory and experimental play will allow one to engage and flow with the scale.

Conclusions

Without some form of guidance system to lead us, the A Scale is a challenging sequence to learn and engage with. This investigation has explored the function of ideokinetic and visual imagery towards integrating Choreutic theory with movement experience. Because visual and kinesthetic intelligences are integrated components of cognition [18], visual imagery is intrinsic to our kinesthetic experience of the scale. Visual images depicting A Scale theory provide movers with a schema that supports intent in Body, Effort, Shape and Space, moving us towards a conscious experience and comprehension of Laban theory.

The language of kinesthetic experience, though known to all, did not experience the benefit of a symbolic, self-reflective method of expression until the work of Laban and his contemporaries. Laban developed the idea that when (non-developmental) movement learning is initiated through movement principles, knowing "how" to move, as opposed to focusing on "what" to move is facilitated. Imitation, which engages the visual process of copying an image [19] is certainly a practical and effectual approach to teaching dance and is basic to any dance technique class, yet can lead to a passive role for the dancer. Laban brought the language of movement to dance pedagogy [20]. The nature of this language enables a mover to consciously relate intent to action, pro-

viding the opportunity for an internally motivated and engaged approach to learning movement. Therefore, visual pedagogy for dance must represent the language of movement, not images of what dancers do.

Laban's movement theories consist of symbolic concepts woven together to form a cognitive framework [21]. Each symbolic construct can be conceptualized and represented as an "image" of some kind, be it visual, kinesthetic, cognitive, an emotion or a memory. Labanotation symbols are also visual representations of symbolic constructs. Broadening our "visions" of movement concepts may foster new forms of notation.

In the reciprocal relationship between the inner impulse to move and influences in the external environment, Laban conceived that the movement formed by the body is abstracted into dynamic spatial forms. In the generations that follow Laban's direct teaching, we must keep his conception of Dynamic Space alive:

"We must remember that the form of a movement is not one line only; it is not an arabesque or a curve, and also not a single broken or curved surface as we may see on a crystallized mineral, but a cataract of forms, as if a heap of jewels or precious stones had been poured out vehemently, glistening, jumping, breaking. And more than this: it is as if the single forms would grow and shrink, swallow each other or give birth to new ones, changing their shape in a continuous transformation." [22]

NOTES

¹ Gardner has developed two additional intelligences which have not been included in the scope of this study: naturalist, and existentialist. Armstrong, Thomas, "Seven Kinds of Smart: Identifying and Developing your Multiple Intelligences," New American Library, New York, 1999.

APPENDIX: SAMPLE QUESTIONNAIRES

Student Questionnaire

1. What challenges you when moving the A Scale? What aspect of the movement requires further development for you?
2. Briefly describe what you know of A Scale theory. What aspects of the theory do you find are easy to understand? Are there areas of the theory that don't make sense to you?
3. What devices have you used to memorize the sequence of the A Scale?
4. What type of learner are you? Rank each learning style according to the following scale

0. nothing like me

1. partly like me

2. exactly like me

Please circle:

0	1	2	Visual-spatial – I typically excel at using images, pictures, colors, and maps to structure information and communicate with others. I can easily visualize objects, plans and outcomes in my mind’s eye. I have a good spatial sense, and good sense of direction.
0	1	2	Auditory-musical-rhythmic - I like to work with sound and music. I have a good sense of pitch and rhythm. I can sing, play a musical instrument, or identify the sounds of different instruments. Certain music invokes strong emotions.
0	1	2	Verbal-linguistic – I find it easy to express myself, both in writing and verbally. I love reading and writing. I like playing on the meaning or sound of words, such as in tongue twisters, rhymes and limericks.
0	1	2	Tactile-kinesthetic - I use my body and sense of touch to learn about the world around me. I like to think out issues, ideas and problems through physical activity. When I am learning a new skill or topic, I prefer to “jump in” and play with the physical parts as soon as possible. I enjoy role play, dramatization, cooperative games, simulations, creative movement and dance, and hands-on projects.
0	1	2	Logical-mathematical – I like using my brain for logical and mathematical reasoning. I recognize patterns easily, as well as connections between seemingly meaningless content. I like to classify and group information in order to learn or understand it.

Would you like to add any comments about your learning style?

5. Briefly describe whether, or how, the animation helps your understanding of:

- a. The Planes
- b. The Symbols
- c. The Diagonals
- d. Transversals
- e. Flat/Steep/Suspended
- f. Volutes/Steeple
- g. The Icosohedron

6. Do you have any comments or observations to add?

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ABOUT MALKOVSKY'S FREE DANCE AND ITS TRANSMISSION (ABSTRACT)

by

Suzanne Bodak

Born in Czechoslovakia, François Malkovsky (1889-1982) discovered France in 1910. In 1912 he met Raymond and Isadora Duncan. These contacts deeply influenced his approach of an art of movement. Malkovsky observed and analyzed movements of animal life and nature. These were the basis for his own movement vocabulary. Through his technique and his dances Malkovsky aimed for a free body, a "danse libre", a free dance. The choreographic studies created by Malkovsky's between 1922 and 1936 give an insight to the historical dance context and highlight the aesthetics and ethics underlying Malkovsky's research.

From 1959 to 1970, Suzanne Bodak was one of Malkovsky's students in its Parisian studio. Ten years ago, she decided to pass on this heritage. From 1997 to 2000, Suzanne Bodak was helped in this project by Karin Hermes-Sunke, who transcribed in dance notation exercises of Malkovsky's key movements and 10 choreographies, according to Suzanne Bodak's remembrance and interpretations. These notations were published in the book: "Mémoire vive d'un héritage, la Danse Libre de François Malkovsky", (also available in its English version: Living heritage, Malkovsky's Free Dance). To complete and enrich this book, Suzanne Bodak is currently working on a DVD project, which aims at presenting Malkovsky's exercises and dances. The film sequences were shot in October 2004 with two professional dancers trained in dance notation: Emmanuelle Carabin and Philippe Reinaldos, who learned first the dances by oral transmission.

Following these experiences, we ask: what the study of the basic principles, proposed by Malkovsky in 1927 brings to a dancer today? The session proposes to share dancers' experiences during their training period, which were different according to each one's background; to link Malkovsky's "Free Dance" basic principles with each dancer's techniques; to evoke the changes they implement in their teaching methods; to study the notation benefits for each; to find out Malkovsky's dance specificity in the scores.

The presentation will be enriched by the showing of DVD excerpts, notation excerpts and live performance by a dancer.

Information on the DVD "La danse libre de Malkovsky" (Malkovsky Free Dance) conceived by Suzanne Bodak, directed and designed by Frédéric Allinne, 2005, is available at www.malkovsky.com.

ON WRITTEN CHOREOGRAPHY

by

Rose Breuss

Demonstrated through *salome.schichtungen* (salome.stratification) -
a choreography for 15 dancers, realized in Tanzquartier Wien

Salome dances:

This is quoted in the texts of many poets and writers, more precisely -
Salome dances the dance of the seven veils.

Let us briefly follow some of the poets' traces:

The origin of Salome's veils seems to lie in the old Babylonian Goddess Ishtar, she takes off the seven veils at seven gates in the underworld in order to free her lover from death.

In the Bible, Salome doesn't have a name yet, she is called Herodias' daughter, she gets her name probably in the 4th century.

In the same century, Johannes Chrysostomos wrote his famous statements against this dance and the dancing daughter, who is the devil's tool and who uses her feet for ridiculous jumps like camels do and not in order to go on proper pathways in her life.

In the middle ages, she is a member of the ghost host seen in summer nights from midnights to the following mornings in the air above oaks and hazel trees; her name is here - as the German brothers Grimm write - Pharaildis.

Heinrich Heine loves the Jewish princess Salome in his Atta Troll - the dancing bear story - written in 1847. She still rides with the ghost host through the air in the company of the Nordic fairy Abundant and the Greek Diana. But Heine writes enthusiastically that Salome looked at him and nodded as she crossed him.

In Gustave Flaubert's Herodiade - written in 1877 - Salome dances a belly dance, it is said that she rolled her belly like the sea. Flaubert was fascinated by the orient and often travelled there.

In Jules Massenet's opera Herodiade - finished in 1879 - Jochanaan and Salome love each other, and because he is killed by order of her mother Herodias, she kills herself at the end and dies with him.

Oscar Wilde writes in 1893 in his drama at the point where Salome decides to dance for her father to get what he has promised: *Salome dances.*

In a letter to Aubrey Beardsley, who later drew the illustrations for the drama, he wrote that he - Aubrey - is the only artist, except himself, who is able to understand the dance of the seven veils and to see it.

Not only poets and writers but also painters were fascinated by Salome, and there are many examples of celebrated paintings.

Let's quickly turn over some pages and look at some projections:

Image 1:

On an old church portal of the Cathedral of Rouen, Salome dances, bent far back so that the hands touch the feet in front of a gathering of men; her abdomen faces the men.



Salome dancing
Rouen, France

Image 2:

In Renaissance times, she represents beauty and carries a tray with Jochanaan's head peacefully sleeping. Titian 1545



Image 3:

From the innocent abused daughter of the past, she continues her change to Salome, femme fatale, by articulating her sexual desires, as illustrated by Aubrey Beardsley, 1884.



Aubrey Beardsley
Illustration zu Wilde
Mit Genehmigung von John Lane, London

And Salome nowadays?

I found 3 implications and the following connections linking this old dance subject with contemporary choreography and dance.

1st:

The old metaphor of Salome's veils:

The seven veils cover seven regions of the body. To uncover them represents an act of becoming an articulated human being. The body is seen as a lively and cultural potential, is an instrument for being and moving in the world, for grasping, sensing, acting, communicating, seeing and understanding the world.

We have feet to change places and move about in the world, hands to produce, base of the spine area for sexual abilities, a heart to feel, a diaphragm to breathe, a throat to communicate, eyes to see and ears to hear and a crown to perceive the region above our consciousness.

Pattern 1:

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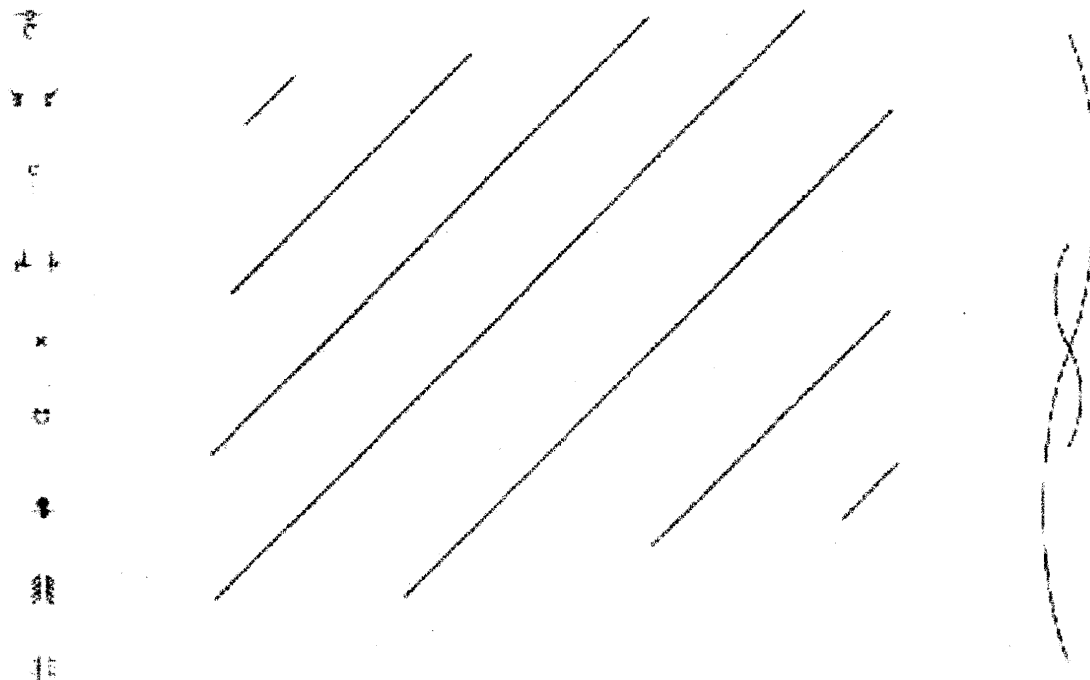
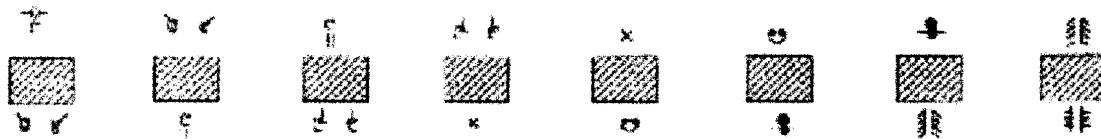
1	2	3	4	5	6	7	
1		2	3	4	5	6	7

Reihen

Pattern 2 -

Within improvisations and an individual movement research the dancers search for specific connections within all possible combinations, in the body and on the surface of the body.

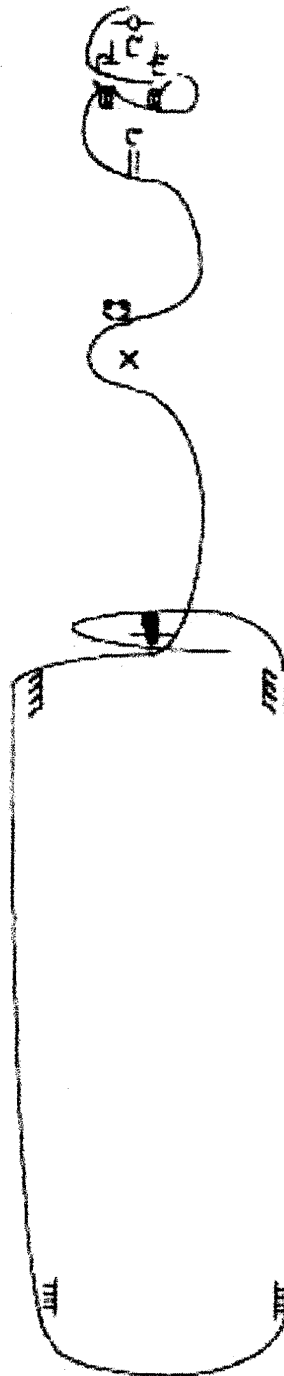
Flächige Verbindungen zwischen
den Körperteilen der Reihe



Pattern 3:

Swaying lines through these body parts:

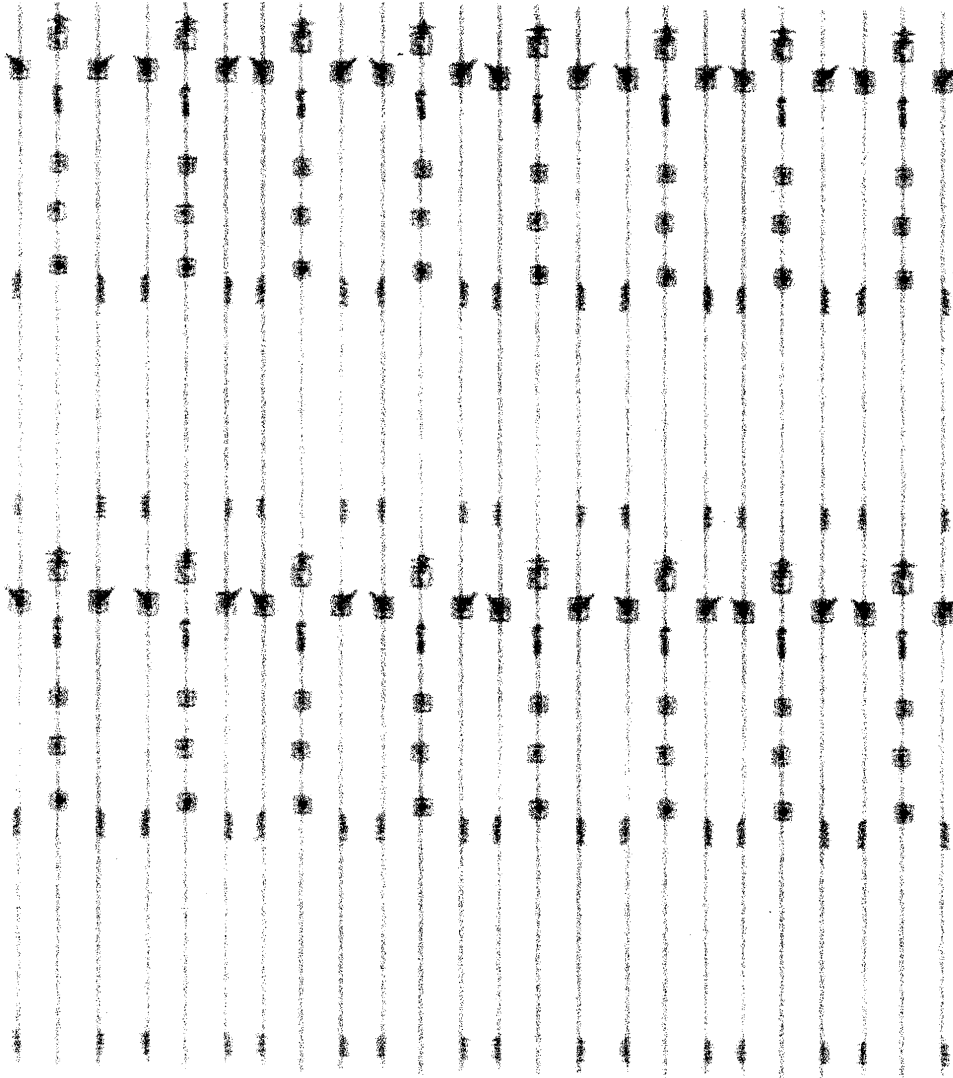
Auf der Oberfläche durch die Reihe



Pattern 4 :**variations of the swinging figure :****straighter****producing always horizontally circling movements from one to the next part****changing direction of the curves****using the right side more****mirroring the figure on the other side of the body.**

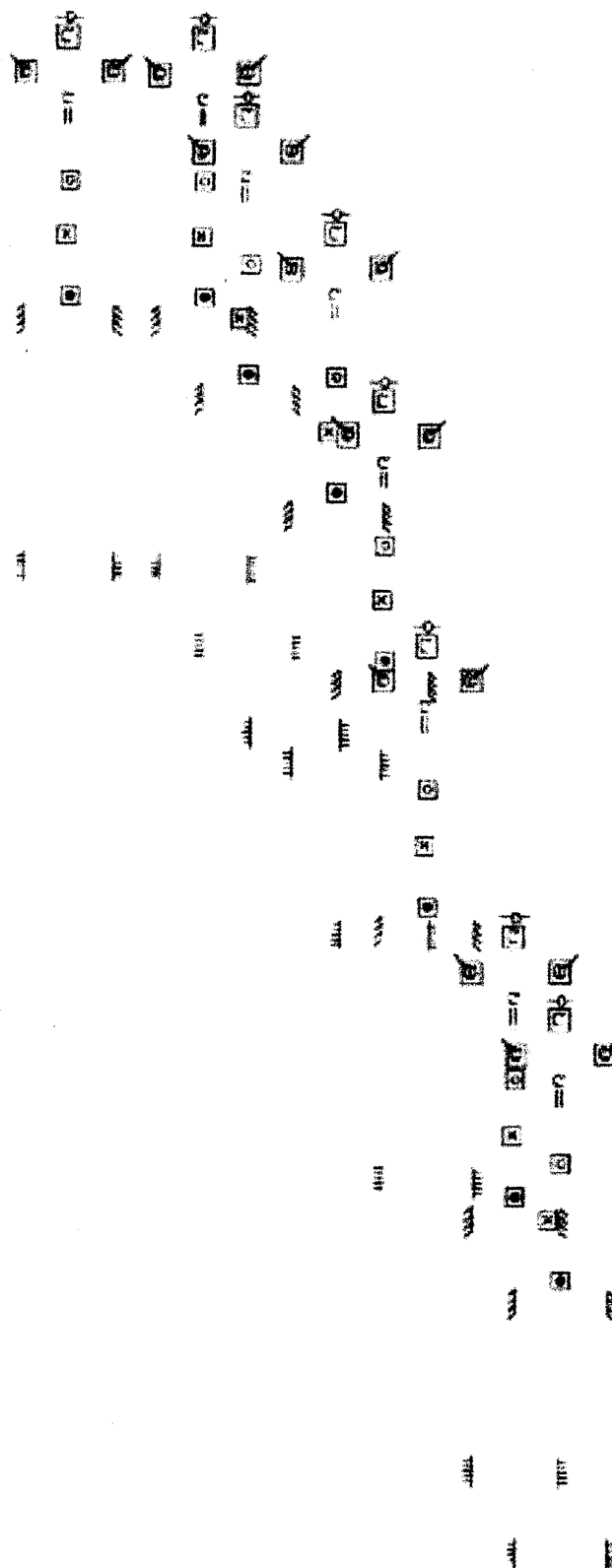
Pattern 5 :

Regular accumulations by regular repetitions:



Pattern 6:

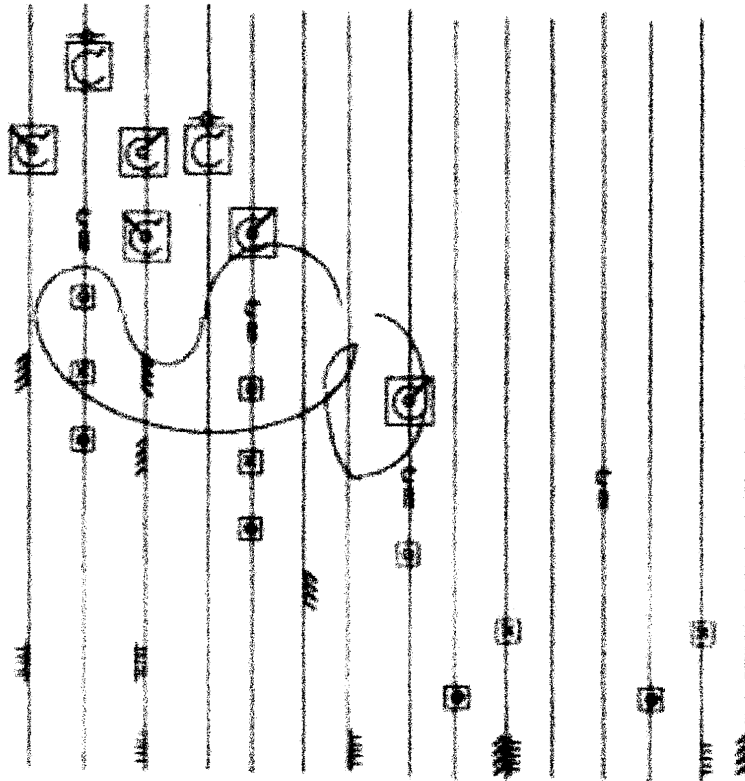
Irregular accumulations by irregular repetitions:



Unregelmäßiges
 Versetzen der Reihen
 fragmentierte
 Musterbildungen,
 Haufenbildungen

Pattern 7:

Mirroring different figures and meanings into each other:



By experimenting within these figurations, the elements of the dance are created by the dancers. They invent specific gestures, ways of coordinating the body and articulating the movements. They modulate energies through the body and create the rhythmic structures of the dancing movements.

The lengths of the solo sequences are not longer than 2-3 minutes.

This material is the substance of the piece.

2nd:

Cyclic repetitions of Salome throughout the history of art.

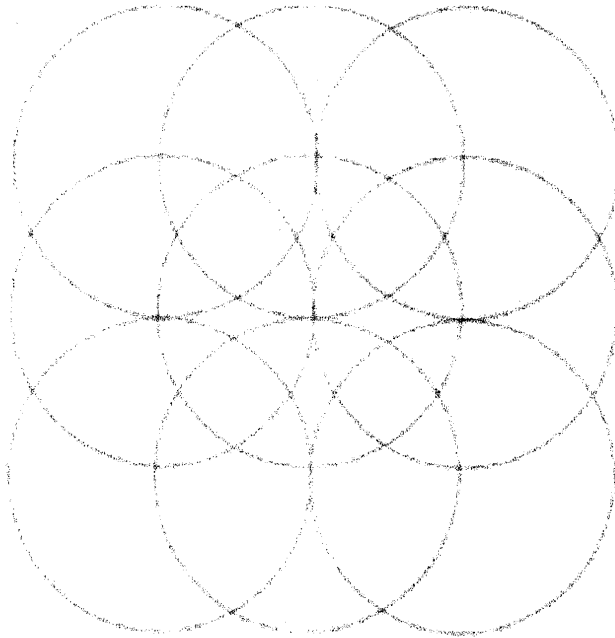
Salome was repeated through the times, and in spite of completely changing attributes and characteristics, Salome remained Salome. Repetitions took place, but always in new places and in a cyclic fashion. Like arabesques, they fill a space with one figure in different places and times.

I choreographically transformed this configuration to achieve a cyclic spacing of the dances:

Pattern 8:

9 circles lie within each other and are projected by the dancers into space. The circles are not visibly painted on the dance floor but are used in the dancers' imagination. The sizes of the circles can change, the construction is not strictly geometrical, but the setting of the circles always remains clearly in the dancers' minds even while performing circles of different sizes.

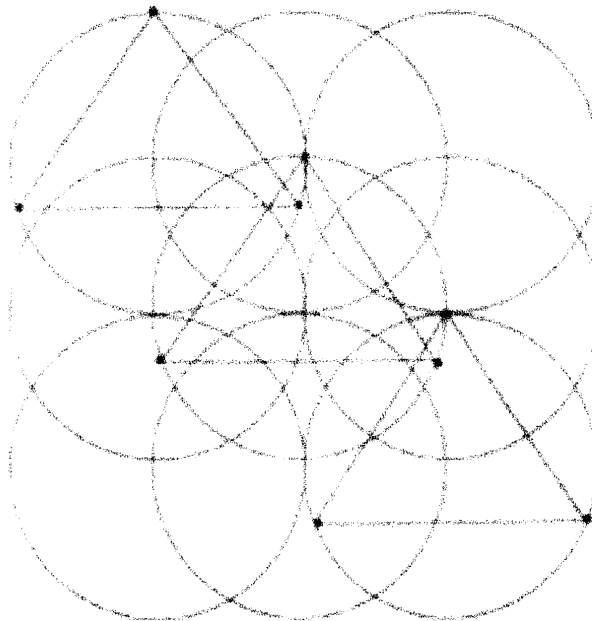
In the process of placing the dances in space, their sizes are determined and they create the order in which the dancers move towards and away from each other or how they pass each other.



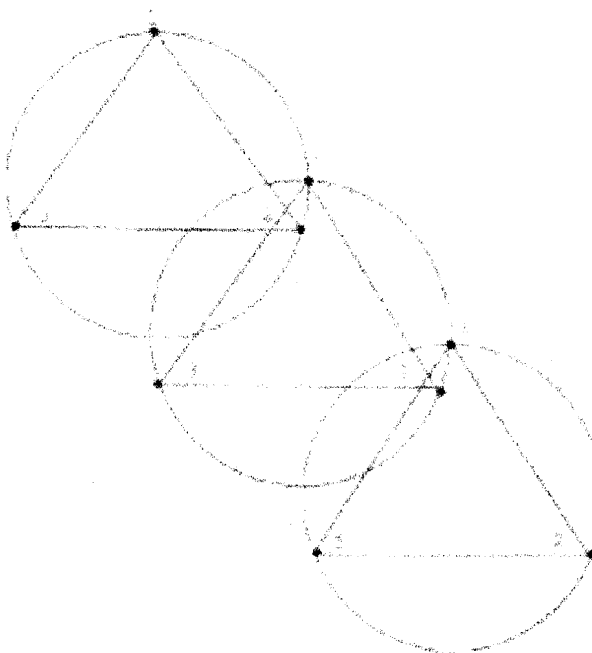
2 examples of how we used this setting of circles:

Pattern 9:

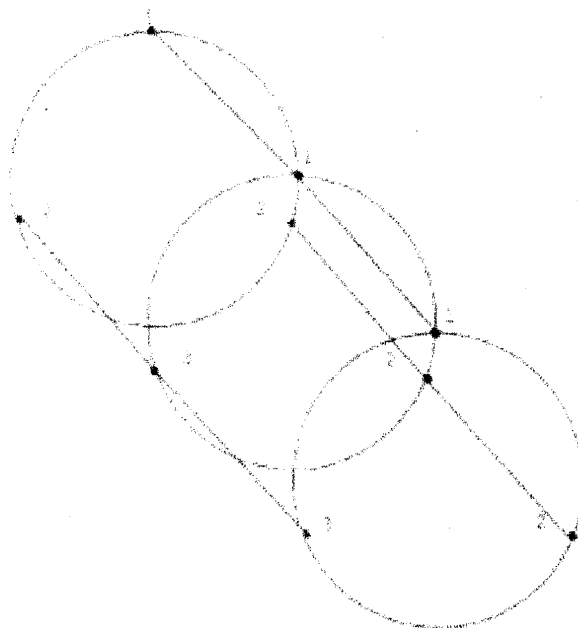
9 men are moving in 3 circles, divided into 3 sections and diagonally in spaces. 3 trios are moving synchronously/at once.



Trio 1 are the dancers on top of the circles, Trio 2 right behind dancers 1, Trio 3 the dancers to the left behind dancers 1.



The spatial constellation is a diagonal one with irregular distances. The material is performed/placed on these pathways



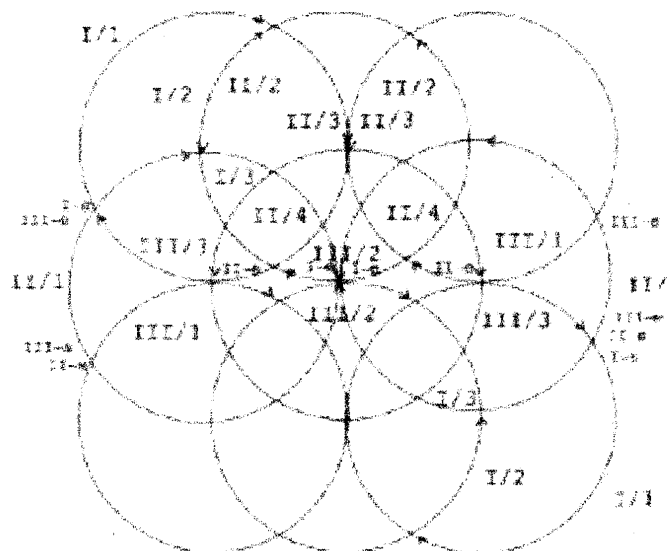
Pattern 10

4 dancers choose a pathway by leaving the circles at crossing points.

The result is irregular, but a strange impression of order arises, while it is impossible to understand the pattern it is based on. The pathways are cyclic in so far as they loop and end at the starting point. The pathways are not even in length, and it is possible that two or more dancers are on the same path, producing a sudden unison movement.

Again, the dance material is set on those constellations.

(dancer I-III; pathways 1-4; starting and ending points of pathways I-IIIs and I-IIIs)



So far, we've seen various solo parts and a certain patterning of the pathways.

In a short example, I want to demonstrate one of several possibilities of connecting 1/ dance material and 2/ dancing space.

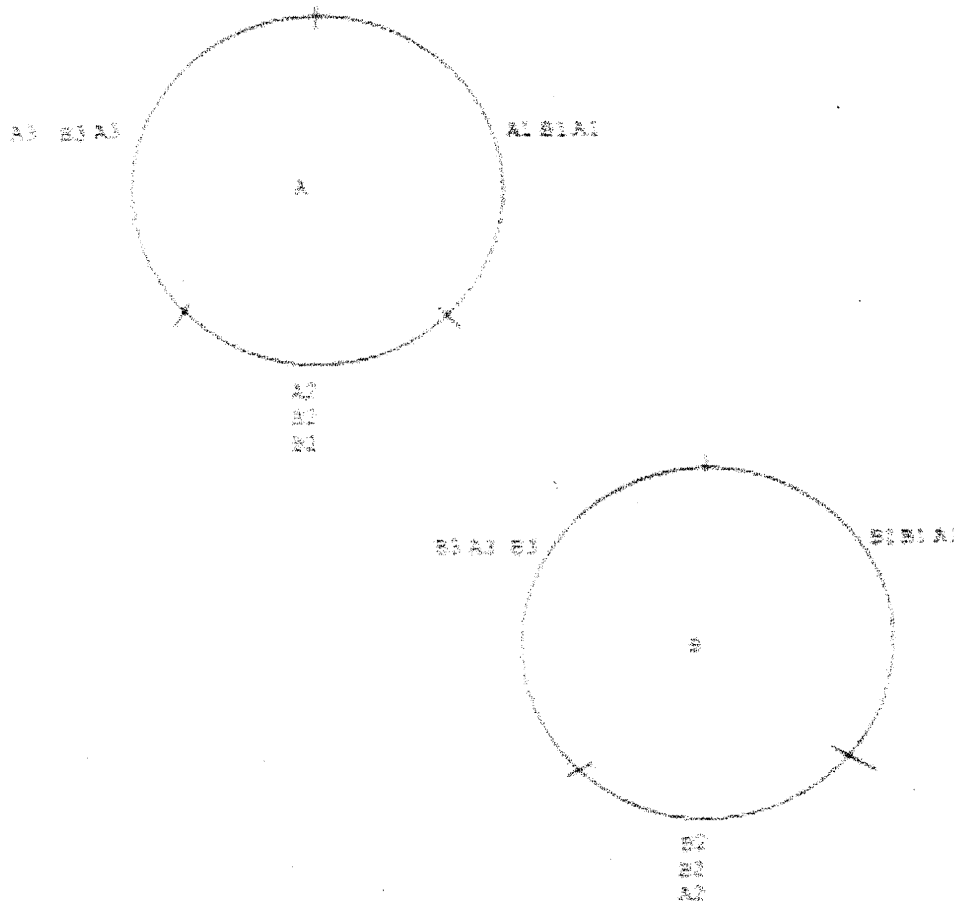
Pattern 11

For spacing, the dance material it is partly fragmented into shorter units. That, as well as a broader range of dynamics, gives more flexibility to the procedures and sequences.

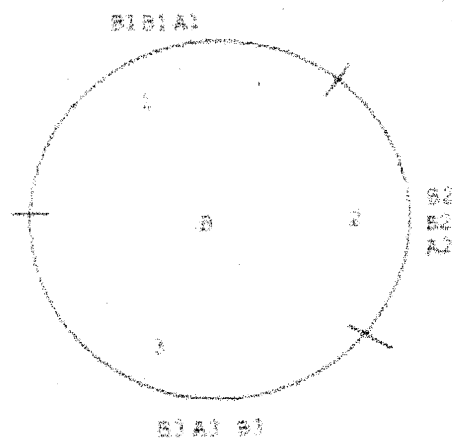
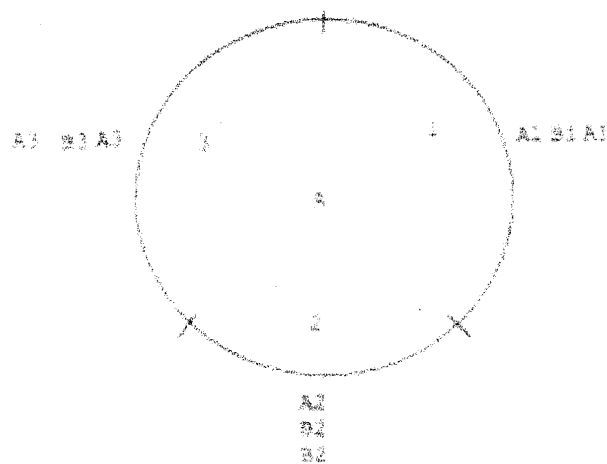
There are 2 dancers, dancer A and dancer B. They move on a circle divided into 3 sections.

Their dancing material is divided into 3 parts which are connected to the sections of the circles.

They can perform the same material



or dancers perform different material:



Pattern 6:

Irregular accumulations by irregular repetitions:



Unregelmäßiges
Versetzen der Reihen
fragmentierte
Musterbildungen,
Hautenbildungen

tabulated:

Tabelle

A	B
A1	B1
B1	B1
A1	A1
/	/
A2	B2
B2	B2
B2	A2
/	/
A3	B3
B3	A3
A3	B3

Salome nowadays?

3rd:

Salomes Articulation of a revolutionary self-determined body concept within multiple interpretations:

The interpretations of Salome through the times have – as we could see in the introduction – a broad range and are multiple. Yet, all Salomes through the centuries have in common that they carry a revolutionary body concept and articulate an alternative to the respective "official" body cultures.

Multiplicity is expressed in my cast:

6 different Salomes.

9 different Jochanaans.

By casting the figures several times, the possibility of a traditional narration of a subject has been ruled out/avoided. It became a piece about dance. The dancers found individual adoptions of these old Salomes/Jochanaans and gained perspectives and facets of body staging, movements and movement behaviour for their dances.

The male dancers mainly worked from the idea of a broken, unusual, disturbed, unconnected relation from head to body as an experimental starting point of losing the head motif. The female dancers created contemporary and distinctive interpretations of Salome; they dance on or in front of the old Salome background, using and adopting her old sensuality, her gestures, movements and body postures through the heritage of the art works.

At the end of this lecture, I juxtapose this overview to a short sequence of movements mainly involving the head. I took all the movements from the piece *salome.schichtung*.

We would write :

Circling the head including the chest

Tilting the head backwards

Fingertips touch each other, describe a straight line in front of the body, while the head tilts backwards again

Lifting the arms, the fingers pull the head forwards and backwards

.....

I started this choreography at another point as a movement research and at this point there was not yet a dance movement to notate.

Images:

Daffner, Hugo: *Salome*. Ihre Gestalt in Geschichte und Kunst, München 1912

Image 1 : Unbekannter Meister, Rouen, Kathedrale, p. 97.

Image 2: Tizian. p.190

Image 3: Aubrey Beardsley, p.349

Image 4: Franz von Struck, p.333

LABANOTATION AND TECHNIQUE: BRIDGING THE GAP TO BUILD ARTICULATE DANCERS

by

Julie Brodie

Labanotation can be a powerful tool for building articulate dancers—both physically and intellectually. Whether or not students continue with Labanotation beyond the Elementary level, the concepts they learn in a beginning course can improve the clarity of their dancing by giving them a method for analyzing movement and providing them with a consistent vocabulary. In my experience as a student and as a teacher, dancers are sometimes alienated by notation, and Labanotation is being phased out of some dance programs. As such, we need to demonstrate to students, colleagues, and administrators why Labanotation should be included in the curriculum. This workshop class and the ensuing discussion centered around finding ways to utilize Labanotation concepts in teaching dance technique and emphasized practical reasons for including Labanotation in the training of our dancers.

In the May/June 2005 issue of *The Journal of Physical Education, Recreation & Dance*, National Dance Association scholar and lecturer Anne Green Gilbert talks about current research regarding the brain and learning. Gilbert recognizes the importance of balancing receiving knowledge with using knowledge in both technique and theory courses. In a given class, if students are provided with theoretical knowledge only, they may then have difficulty using the material as a springboard for creative thought or applying the information to dance. Students encouraged only to create and do will have a shallower perspective on, and approach to, their art. Gilbert notes, “teachers provide a balanced, in-depth curriculum by including concepts, technique, improvisation or choreography, verbal or written feedback and reflection in every dance class. Each class may focus more on one aspect than another, but rather than segregate or compartmentalize these four areas, I advocate including all four parts in an age-appropriate way in every class” (p. 34).

Notation teachers are trained to use this kind of multi-faceted approach, making Labanotation about movement by using physical examples of the concepts and getting to readings as quickly as possible. It needs to be a two-way dialogue, however, with Labanotation principles being applied in the technique class as well. The transfer of notation concepts can be facilitated by using the language and methods of analysis consistently across the curriculum, making conscious connections for the students. This can be accomplished in many ways, but one option is building a movement-based class around a concept being concurrently explored in notation class.

For example, a class can be built around the topic of gestures. More specifically, it might be designed to help students embody the idea of central and peripheral paths and to understand how this relates to direct paths in notation. Many other aspects of gesturing can be addressed and can be reviewed during the session. It is important to consider that

students may or may not have taken Labanotation. If they have, the class material will reinforce their knowledge of notation. If not, students will learn basic terminology and methods of analysis through their participation in technique class.

Sample Class Structure:

Improvisation: Direct Paths--Peripheral vs. Central

Using gestures in space, awareness is brought to the relationship of free to fixed end and the paths taken between consecutive gestures. Attention can be placed on peripheral and central paths as they occur naturally in moving from one position in space to the next, and they can also be the conscious focus of movement exploration. Variations in timing, direction and level, and degrees of arcing can also be encouraged and explained in this preliminary warm-up.

A brief discussion following the improvisation can engage students in reflecting upon and sharing comments about their experiences. This leads into a review or statement of the direct path rule in notation.

Standing Warm-up: Awareness of direct paths can then be brought to a set warm-up phrase. Encourage students to continue thinking about whether the arms are moving peripherally or centrally, the beginning and ending points, and how that path would look in notation.

Other concepts can be the focus of clarification, comments, or corrections. For instance: palm facings, the timing of swings, location of place middle, and the use of relationship pins for arm swings to the side are potentially relevant details to address.

Floor Work: In this phrase focus can be broadened, thinking not only about the path, but also being very specific about whether the initiation is central or peripheral, upper body or lower body.

Across the Floor: A simple locomotor phrase gets students moving, increasing the heart rate and further warming the body. This can be a good combination to have students write as homework.

Foot and Leg Phrase: This is a place where the degree of arcing concept can be clarified through the phrase material. For example, progressively circling the leg through the various positions, starting with arcing from forward low to the forward diagonal, then forward to side, forward to the back diagonal, and finally circling the leg from front to back.

Culminating Combination: The final combination is about really dancing. The movement should be informed by both physical and intellectual awareness of the paths of gestures.

Benefits for Teachers as well as Students:

Being challenged to create material that exemplifies concepts can be helpful in addressing the particular needs of students. It is also a way of staying engaged and fresh as a technique teacher. This method of teaching encourages exploration of new movement and helps teachers avoid falling into repetitive movement vocabulary habits.

Labanotation can be integrated into the curriculum in different ways depending on need, interest, and timing in the semester:

1. One method (as just described) is basing an entire class on a **topic being covered in notation**. In her book *Harnessing the Wind*, Jan Erkert remarks, "Every day in every class, a dance teacher works on everything. But focusing attention on one principle or concept, such as spiral, shifting weight, or confidence yields much deeper results. Identifying a principle to teach each day gives clarity to movement patterns, class structure, and corrections" (2003, p. 30). Because it is a system of analysis, Labanotation is a perfect source of movement principles to base classes around. Examples of Elementary Labanotation topics that lend themselves particularly well to generating class material include:

Timing/Rhythmic Clarity
 Space Holds
 Turning
 Types of Jumps
 Center of Gravity, Place and Weight Transfer
 Paths in Space and Floor Plans
 Circular Paths
 Contraction and Extension

For more advanced notation students the focus can expand further yet, including concepts like:

Floor work
 Falling
 Folding VS Contracting
 Movement of the Torso

2. **Labanotation analysis can also be used to address faulty technique.** For example, some students may exhibit "flowery" mannerisms in their arm gestures, particularly in the carriage of their wrists and hands. Focusing on understood palm facings throughout the week can help them to become aware of their movement tendencies, placing this aspect of their dancing in the domain of choice rather than habit.

3. **Labanotation concepts can also be referenced throughout the semester.** The information in Labanotation is cumulative and should be reinforced. Of course this also

means that the concepts overlap, which can be overwhelming. One solution is planning for the week, repeating and adding onto material in each class. To help prevent confusion, the focus should be on the new concept on the first day of presenting material. On the ensuing days, attention can be directed to other elements previously learned. Toward the end of the semester, concepts can be reviewed as they present themselves as the focus of combinations or corrections.

4. Readings and writings can be a nice addition to the technique class: Learning a short dance or a piece of a dance in class can serve as an “alternative” day—a welcome break in the routine. This provides students with the opportunity to work on learning and performing a dance, not just combinations in class. It is also a great way to expose students to other movement styles. Students taking notation can simply look at the score, or they can be asked to read and teach parts of it as notation homework, depending on the complexity. Students can also be asked to write basic combos from class down as Labanotation homework. In addition to working on their writing skills, the analysis involved makes their performance of the material clearer physically the next time.

5. Connections can also be made between Labanotation and other courses in the curriculum. For example:

*Dance history can be brought to life when supported by readings.

*The overlap in Kinesiology and Labanotation principles can be emphasized (for example, the free to fixed end concept can also be used in the kinesiological analysis of positions—the arm is flexed in a forward high position).

*Notation and motif are wonderful composition tools.

It is important that we articulate the importance of notation, both to our students and our colleagues. Many of our students will go on to teach, even those lucky enough to have careers performing and choreographing. Dancers often understand movement on a kinesthetic level. Indeed, the more gifted the dancer, the more intuitive their understanding of movement often is. Other students need teachers that can break movement down into its component parts and describe every action in detail. In either case, students that have had notation become more aware of what it is that they are actually doing, and this awareness is reflected in, and can improve, their performance. Teachers and choreographers with notation training can access this kind of specificity in their analysis of the body moving in space, so Labanotation is equally important in educating future artists and educators. In addition to understanding movement on another level, Labanotation offers us a consistent vocabulary, which can assist in communication of ideas and concepts. For example, the very basic idea of diagonal being in-between front and side or between side and back, not on an angle up from the horizontal.

A rift can sometimes develop between technique-based and theory-based classes, especially in larger programs. Without an understanding of what they have to gain from the study of Labanotation, many dancers will invest themselves minimally. If faculty can assist dancers with applying Labanotation to their technical training, the subject can take on a new meaning, moving it beyond the land of theory to overlap with the “sexier” land

of practice. Working with other department members, sharing and discussing concepts and terminology can assist with this transfer when different people teach notation and technique. This in turn, can provide a program with greater continuity and consistency, and can also educate colleagues about the many uses of Labanotation. Emphasizing connections between the various aspects of dance education is vital in creating thinking, aware dancers, as after all, we are training minds and bodies in all of our classes.

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EXPLORING THE USE OF LABAN WITH ORPHANS IN UGANDA, AFRICA (ABSTRACT)

by

Begonia Caparros

In my quest to share movement with often forgotten people in our society, I spent three months at an orphanage in 2003 in Uganda, East Africa doing movement and creative dance. Using the Laban system and concepts as my main tools, I worked with over 100+ children several times each week to explore the power of movement to create a sense of belonging, connecting, joy, and a safe place for expression. I will use the film footage of my work in Uganda to make a video which, first, documents the use of Laban system with disadvantaged children in Africa and, second, documents my own journey where I sought, and continue to seek, ways to overcome language, cultural and economic barriers to bring this system and more art to their lives. More often than not Africa is depicted as “without”—with extreme levels of poverty, sadness, suffering especially with the devastating effects of HIV/AIDS. This piece, however, challenges some of these perceptions and seeks to share another face of Africa with the dance community.

Life is very difficult in an overcrowded, under-resourced orphanage in Uganda. These children do have minimal amounts of food and basic shelter but lack time, motivation and spaces to express themselves or explore their creativity. While dance is deep in the fabric of everyday life and cultural celebrations, I wanted to create a space for these children to learn and explore in forms largely unfamiliar to them. We engaged in various forms of movement and dance most new and unfamiliar to them— sometimes the children drew, worked with props, worked in teams to learn new possible movement range and to interact with each other in different ways. To ensure that the project continued and flourished, I created links with various local artists who then came and worked with the children exposing them to various genres of art. Together we launched an ‘artist volunteer program’ at the orphanage where the local artists and I held regular classes with the children on dance, drawing, art. As a consequence of this work, an organization committed to bettering the lives of African children is contributing resources to artists to work with the orphanage. Showing this film at this conference will provide me the opportunity to share this work with the Laban community, and apart from my personal satisfaction, it may serve to open the minds and doors of others seeking to explore the uses of Laban system around the world.

NOTATING INTENTION IN RELEASE-BASED DANCE TECHNIQUE

by

Melanie Clarke

This paper is about my personal on-going research process into Release Technique and the notation of it. This is open ended research that has developed with my teaching practice. I want to be able to articulate what release technique is, what my person teaching of that is like and to be able to communicate that through notation.

Release-based Technique

The technique I teach (which is often labeled as release-based technique although the reasoning and meaning behind this name is often debated), involves the use of an embodied understanding of the internal workings of the body as a basis. It is not a codified technique form but one that works from a set of philosophic and educative fundamental principles. These principles include the concepts of deep learning and of teaching open rather than closed skills. The aim is to encourage students to learn actively through a subjective experiential process that fosters personalized understanding of the subject matter. Basic principles of the body in motion are taught which can be applied to all dance and movement and so learnt concepts are fundamentally open. Movement is conceived using an anatomical perspective and includes precise initiation and sequencing. LMA (Laban Movement Analysis) terminology is also used to describe bodily concepts such as Body Halves -Right/Left and Upper/Lower, Head Tail connection, Cross-lateral connections and Navel Radiation. The teaching process is generally done through motion that flows organically through the body and utilizes the weight of the body in gravity which lends the technique particular aesthetic qualities. Despite this, because what is taught are principles of motion, the actual form of the movement is highly variable. As a notator I was interested to see whether the fundamental principles from which the technique is derived, could be communicated through how I chose to notate it. I have been experimenting with different ways to record the movement I use in order to communicate the material in the way that I teach it. That means attempting to record movement intention through using an anatomical perspective, including precise description of initiations and pathways of movement and also recording body connectivity.

The aim of this technique is not for the student to learn a set of movements and become well practiced at them. The aim is the embodied memory of how the person achieved the movement, whatever the external manifestation of that movement may be. Material is created that deals with ways of moving rather than particular sets of movements. Even though the material can be very particular and/or very detailed, the ultimate objective is not the material but the bodily somatic knowledge that is gained through the experience of that movement. It is an experiential understanding, an embodied memory of movement essences, that is the sort result. Albeit, the method of getting to that result involves the creation of dance material that brings a particular learning experience to the student. The material is created by the teacher from their own body knowledge.

Thus, this technique does not aim for conformity of external image, nevertheless it is not purely idiosyncratic. It is the experiential instigation of movement that is universally shared in the teaching practice rather than the externally perceivable form of that movement. The essence of a particular movement maybe the spreading along a line of bodily connectivity or the motion in a joint which results in the limbs extending into space. These lines of connection or the specifics of a type of joint are universal in that they are shared by every body, however, because of the differences in height, length, flexibility, range etc from individual to individual the perceived movement will have differences. Although this could be said of individuals trying any dance technique form, this particular technique places no particular bias on body type and was not created by one person with a particular aesthetic, thus, there is no idealized image to aim for. This places the emphasis of the motion on the fundamental principles of the technique which are the internal factors. This can lead to issues that must be overcome when recording the movement in Labanotation which although always relates to the body of the performer, does fix level and degree of movement in relation to that body possibly creating an idealization of form.

In my class some aspects of the class work the movement should not always be fixed. The exact amounts of the motion, such as degree of bending and level of gestures, should remain open. What is more important is where the movement is initiated and how it sequences and what the essence, or focus, of the movement is.

Thus, a degree of openness and variation is required but this is coupled with a high degree of specificity. These two aspects of the material work together. Specificity of internal initiation is an important part of the technique as this sort of precision facilitates refinement of body awareness. Other strategies can then be utilized to indicate freedoms such as the use of indications of 'moving towards' an end using increase signs. I have utilized clarity in part leading and body area and bodily action coupled with indications of types of actions without specifying degrees to record the motion.

In exercise 1 you can see that the bend in the torso is recorded as a movement towards a place low direction for the whole spine. Albrecht Knust in "A dictionary of Kinetography Laban (1997) states when describing spreading actions that:

"If one wishes only to characterize the movement without indicating the degree ... which should be reached(...), the space measurement sign is placed in an increase sign of appropriate length."

This manner of recording means that the reader can then initiate an action and work towards an aim, without the achievement of that aim or the external result of that action, being a validation of executing the movement correctly.

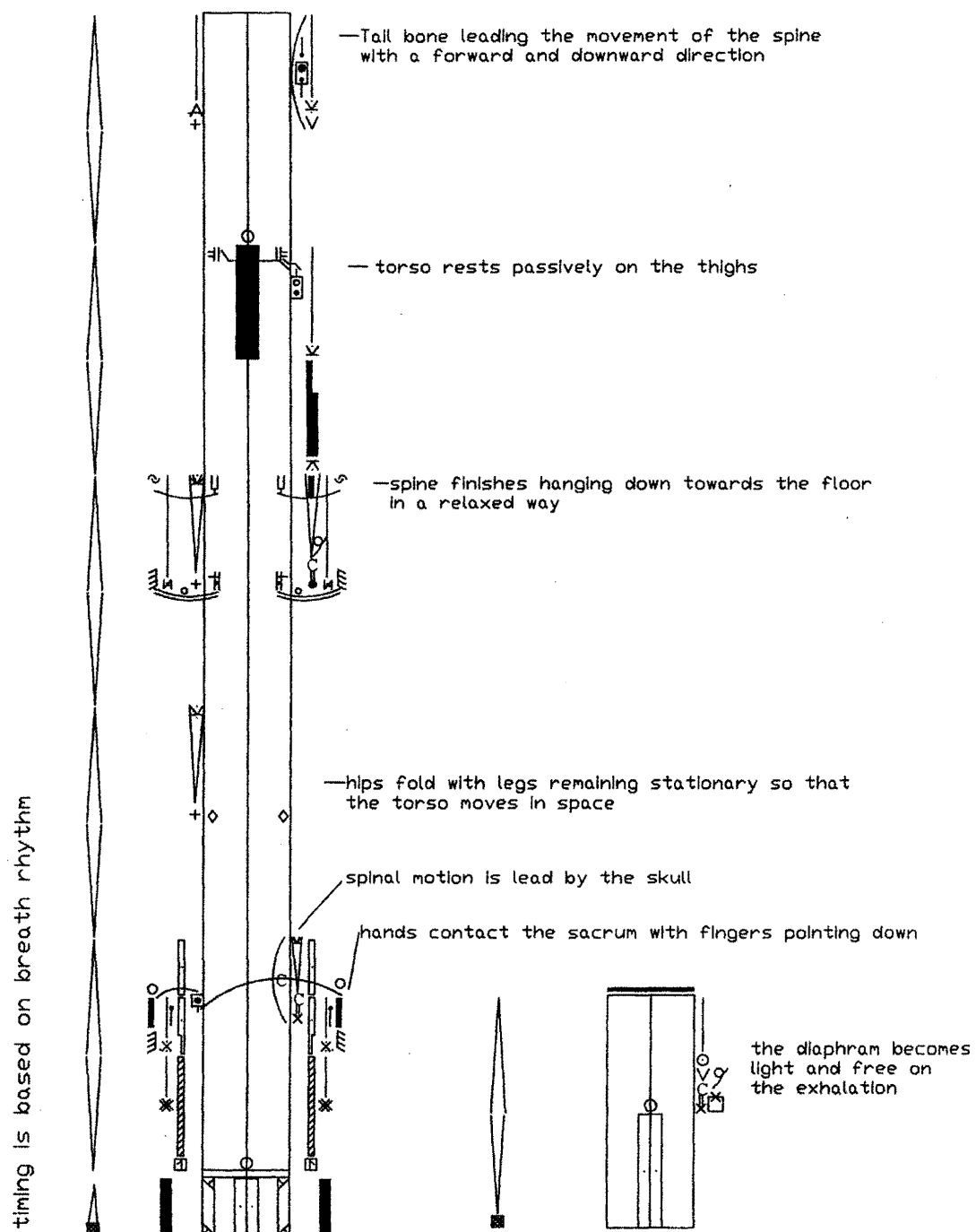
In exercise 1, part leading bows display the initiation that instigates the action and is the purpose of the movement.

EXERCISE 1

Melanie Clarke
Release based Technique Class

First Exercise:

initiation from different ends of the spine, awareness of the distinction between movement of the spine and the hips, use of breath rhythm and connection of breath to movement.



For example, the successional returning to normal for the spine accompanied by a part leading bow indicating that the tail bone leads the action by moving forwards and down.

This technique is not about (at least for me) the copying of an “aesthetic” which includes a particular body posture and relationship to gravity but rather a means of gaining knowledge that enables that aesthetic as a choice. Thus, the focus is on the specifics of how the material facilitates learning in the body and the particulars of movement that do exist as part of the form. Inclusion of breath patterns gained from the influence of somatic work on the technique is highly relevant. The held ribcage of pre-Judson styles of dance performance and technique is countered by the specific usage and union of breath patterns to movement patterns. Breath patterns are recorded for exercises as part of the movement and even become the rhythmic basis for a phrase and hence are written to the left of the staff. See exercises 1 and 2

Torso actions in exercise 1 have been described using pre-signs that denote the spine rather than body area. [The torso area pre-signs that are in common usage denote areas of the torso that are externally perceivable. These are: Chest (the area between the shoulder line to base of ribcage), Waist (-the area between the base of the ribcage to the top of the pelvis), Pelvis, (the area from the top of the pelvis to the hip line). These descriptions do correspond to sections of the spine (i.e. The chest area includes all the thoracic vertebrae and the waist area the lumbar and the pelvis area the sacrum and tail bone) however they do not actually denote movement in the spine but the result of spinal action ie. The destination of the external area of the torso. (ref: Ann Hutchinson Guest “Labanotation: the system of analysing and recording movement” fourth edition, Routledge, New York 2005. P219). For this technique, with the internal perspective that is so much a feature of the form, recording movement as a result of joint action rather than destination of body areas seems appropriate. Labanotation symbols that distinguish the spine from the torso area denote the externally perceivable dorsal spine not the spine as a series of joints, (ref: Hutchinson Guest (2005), p.451 and Knust (1997) p.160 #443). Barracuda in her ICKL paper of 1989 distinguishes between torso actions produced by an articulation of the joints of the spine which happen to carry the weight mass of the torso area along, and, a change in the spatial direction of that weight mass. In order to notate exercises that were conceptualised from an internal perspective Barracuda developed the symbols to indicate the spine as a limb. She used the basic body area descriptions without the area box and connected them with the two vertical lines used to indicate a limb to denote parts of the spine. See examples A.

Movements of parts of the torso can be recorded as tilts in which an area of the mass of the torso achieves a new position in space. For this technique it would seem to be more appropriate to indicate the joint action that results in a destination gained rather than the position achieved by the area above the motion. Thus, spinal action is mostly described using bending symbology rather than tilts of parts of the torso. This usage of the spine is a typical feature of the technique, thus, this manner of recording has relevance not only to the movement intention but also to the aesthetics of Post-Judson dance. Whole torso tilts which are the result of movement in the hip sockets can be recorded as both hip folding and a destination for the line of the spine. Hip folding is possible providing it is clear whether it is the torso or the legs that are displacement in space. This can be

EXAMPLES A

BARRACUDA'S SYMBOLS FOR THE SPINE

-  whole spine -head to tail
-  lumber, thoracic and cervical spine
-  sacrum, lumber and thoracic spine
-  lumber and thoracic spine

EXAMPLES B

THE LMA FIGURE 8 SYMBOLS

- i) plain figure 8 symbol which stands for the body
- ii) head/tail connectivity
- iii) body halves -right and left
 -  right body half
 -  left body half
- iv) body halves -upper and lower
 -  upper body
 -  lower body
- v) navel radiation
- vi) cross lateral connection -upper right to lower left
- vii) cross lateral connection -upper left to lower right

FIGURES a, b, c, d, e, f, g

NAVEL RADIATION, CORE-PERIPHERY CONNECTIVITY

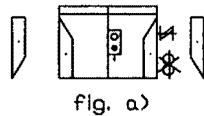


fig. a) uses the LMA figure 8 symbol denoting navel radiation followed by an indication of a 3 dimensional extension. This manner of recording provides recognition of the body connectivity and thus, the purpose of the movement.

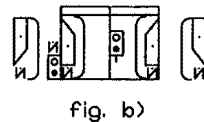


fig. b) uses existing Labanotation symbology to record a sense of the connectivity through extension symbols and inclusion bows. These provide information for the limbs but do not state the connection to the body centre.

CONTRA-LATERAL CONNECTIVITY

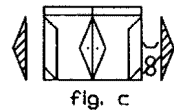


fig c) uses the LMA figure 8 symbol denoting the right shoulder to left hip cross lateral connection along with a spreading indication. This manner of recording illuminates for rapid recognition this body connection and the motion within it.

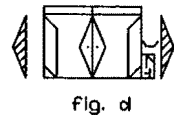


fig d) uses existing Labanotation symbology in the form of a augmented body section along with the spreading indication to evidence the motion along that body connection.

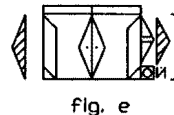


fig e) uses existing Labanotation symbology which indicates some aspects of the externally observable results of the motion but doesn't provide information about the body connection.

BODY HALF / LATERAL LINE CONNECTIVITY

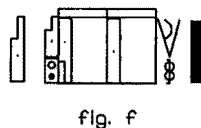


Fig. f) uses the figure 8 symbol to indicate that the left lateral line of the body or left body half lengthens.

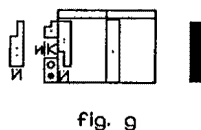


Fig. g) uses Labanotation symbology to record the same action without indicating the sense of the whole body connectivity.

seen in exercise 1, where space hold signs are placed in the leg gesture column as the hips are indicated to fold, meaning that the pelvis moves forward and the spine goes with it.

FIGURE 8 SYMBOLS - examples B

In my teaching I also use concepts of body connectivity. In order to record these I have been experimenting with utilizing the LMA figure 8 symbols (ref: Hackney 1998) to display movement intention and motion along these connections. Bodily connectivity is the result of lines of myofascial connective tissue that link muscle to bone as well as muscle to muscle. Body parts are linked together by these chains of connection through the body (ref: Myers, T 2001). The figure 8 symbols from LMA would not indicate motion by themselves within a notated phrase but can be used in inclusion bows or as pre-signs followed by a description of the motion such as spreading, extending, bending.

The use of the LMA figure 8 symbols seems important to me as there is no specific equivalent of these internal body connections in existing Labanotation symbology. The primary distinction between these being the concept of centre. In Labanotation the body is divided into section and each of these has a centre of motion or a fixed end. With the figure 8 symbols the centre of motion is the body centre. In Examples B Fig a) the figure 8 symbology denoting navel radiation is followed by an indication of a three dimensional extension. This manner of recording provides recognition of the body connectivity and thus, the purpose of the movement. In fig b) existing Labanotation symbology is used to record a sense of the connectivity through extension symbols and inclusion bows. These provide information for the limbs and how the torso moves with them but do not state the connection to the body centre.

Figs c), d) and e) show ways of recording Contra-lateral (or Cross-Lateral) connectivity. Contra-lateral is the term used to denote a connection across the body between the upper and lower torso and the right and left body halves, for example right shoulder to left hip. Movement which includes action along this connection could be recorded from the point of view of the externally perceivable results of the action, using a shift for the chest (which is not strictly accurate) and directions for the limbs with extension and inclusion symbols, as in fig.e). This manner of recording the perceived motion does not provide any information about the connectivity of the body and the intention of the movement although it does include some aspects of the movement. Another approximation of movement across the body in this way could be made using augmented body sections which can be seen in fig. d). However, the area box could imply an external focus to the action. Also, there would be no immediate relationship to the body concept that is the basis of the action. By using the figure 8 symbols as in fig.c) this connection between the two disciplines of Labanotation and LMA is immediately apparent. Moreover, this manner of recording provides a sense of how the whole body is used in the movement. Rather than recording each part of the body separately then relying on the dancer to combine the separate elements, which is the usual practice in the notation framework. This manner of recording provides the essential feature of the entire movement in a simple and efficient way. The figure 8

EXAMPLES C

Melanie Clarke
Release-based Technique class

DESIGN DRAWING

Examples of the use of design drawing to communicate the essence of the movement.

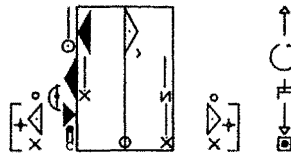


Fig. a

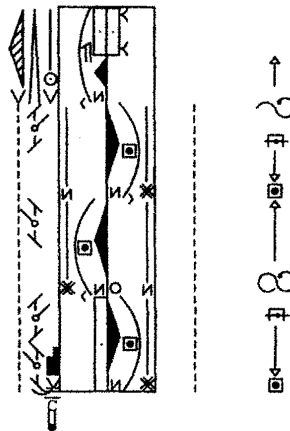


Fig. b

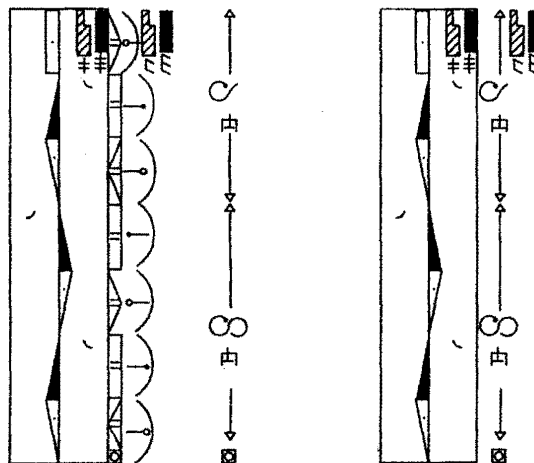


Fig c)

symbols provide an idea of the motion – the sensate experience of moving – alongside the concrete destinational body part analysis.

Without this information the reading of material from this technique form could be approached from an external perspective in which the achievement of the perceivable motion is aimed for and thus, the movement will probably lack the very thing that it was created to instigate. Of course, as with all reconstruction of movement from a notated score, it is the quality of translation of the abstract symbols into embodied motion that reinvigorates the work and breaths new life into it. Therefore it is possible that without recording the essence, a skilled translator could rediscover it through the physical embodiment of the actions (although, of course, they might not). Yet, this process would be aided if the score brought the readers attention to the aims of the material. Moreover, without this information there would need to be an involved introductory description to any piece of notation in order that the notation has any relevance as a record of this technique.

Navel Radiation - exercise 2a and 2b

Exercise 2 shows a simply navel radiation exercise recorded in 2a) using standard Labanotation symbology and again in 2b) using figure 8 symbols. In exercise 2 a) the limbs and torso are drawn as separate elements so that the free end of the arms, legs and spine are consecutively drawn in towards each separate base point of attachment and extend away from it. 2b) describes moving towards a three dimensional extension and contraction in which the indicated centre of the action, rather than being the base of a limb, is the body centre - the navel. Thus, the contraction means a drawing in towards the body centre and extension as a moving away from that centre. So, separate actions for the limbs do not need to be specified, and therefore, fixed in terms of direction in space and level. Moreover, 2a) does not provide such a clear indication of the core peripheral connectivity and the association of the fact that the limbs and spine all connect in the body centre. Rhythm is set following a breath pattern which is recorded on the left of the staff as a time indication.

Exercise 3 here this navel radiation pattern is used within a dance phrase. Because of the figure 8 symbol the fact that this pattern is incorporated in the phrase is immediately apparent. So, the dancer will immediately aim for the sensation of this connectivity during the phrase.

Exercise 4 -Contra-lateral

In this example the contra-lateral connection is utilized in a dance phrase. At the end of the phrase, while standing on one leg the contra-lateral connectivity is used to stabilise the position in relation to the line of gravity.

Design drawing

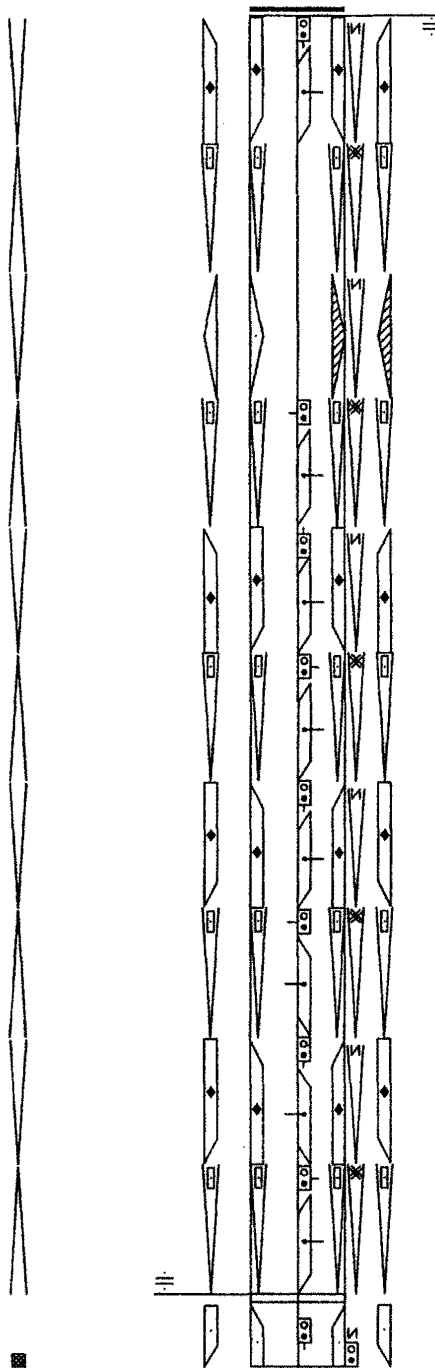
The internal perspective of the technique does not preclude spatial intent. Some movements are spatial in essence even if the part that has a spatial intent maybe internal. For these movements I have utilized design drawings. As the spatial path is the essence of the movement these depictions exemplify the intention and also simultaneously display the part leading the action. The question arises as to how much

NAVEL RADIATION EXERCISE 2a

Melanie Clarke
Release-based technique

Navel radiation exercise - movement away from the centre to the peripheries and
movement in towards the centre.

timing is based on breath rhythm



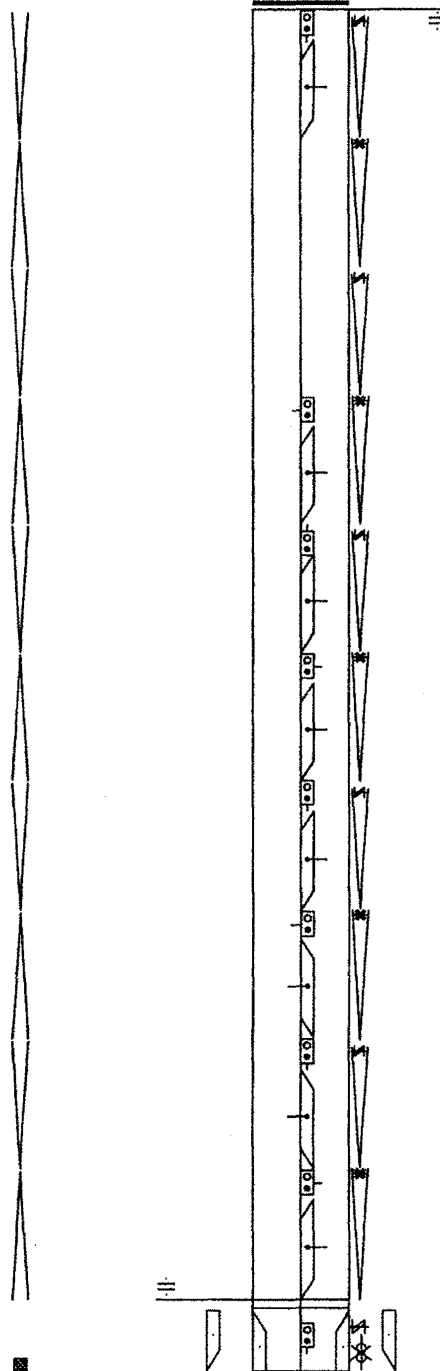
NAVEL RADIATION EXERCISE 2b

2 - 59

Melanie Clarke
Release-based technique

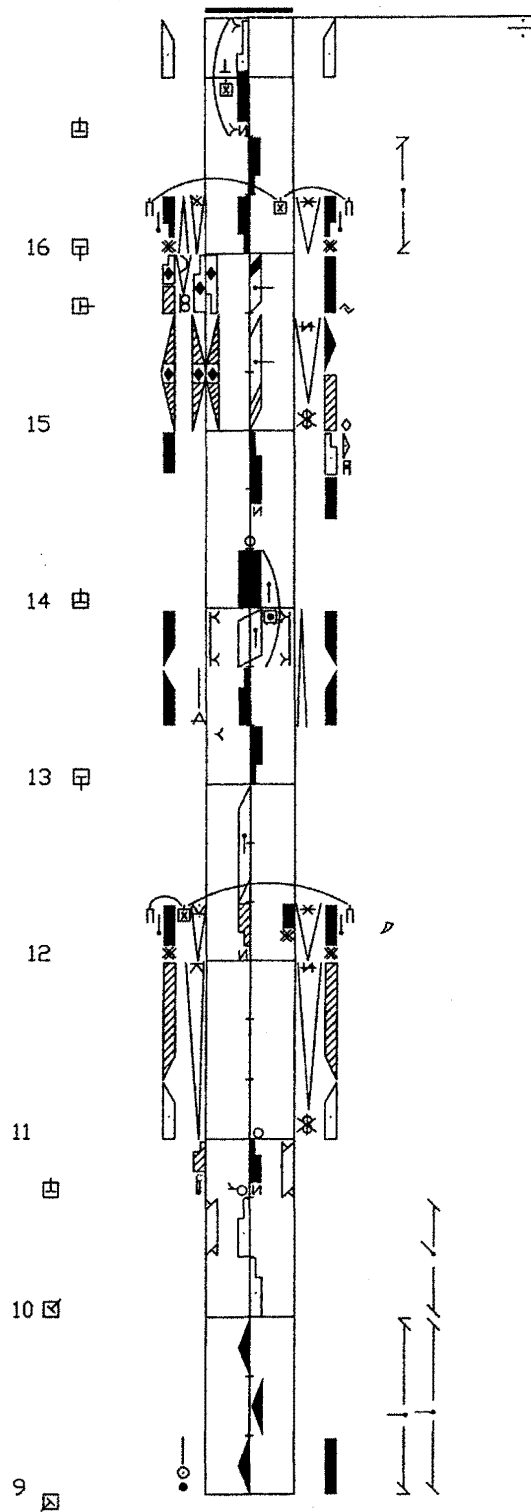
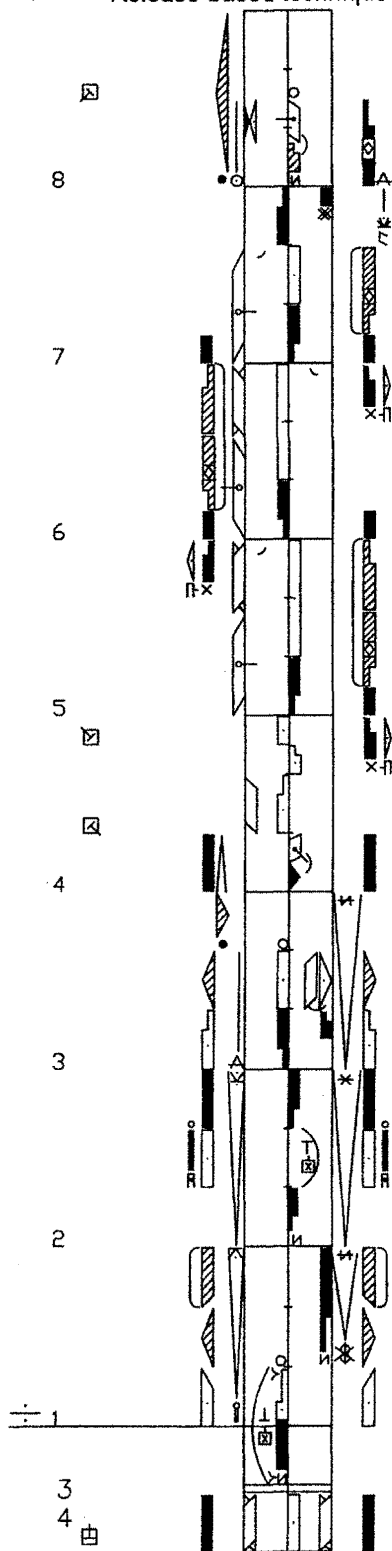
Navel radiation exercise - movement away from the centre to the peripheries and
movement in towards the centre.

timing is based on breath rhythm



NAVEL RADIATION EXERCISE 3

Melanie Clarke
Release-based technique

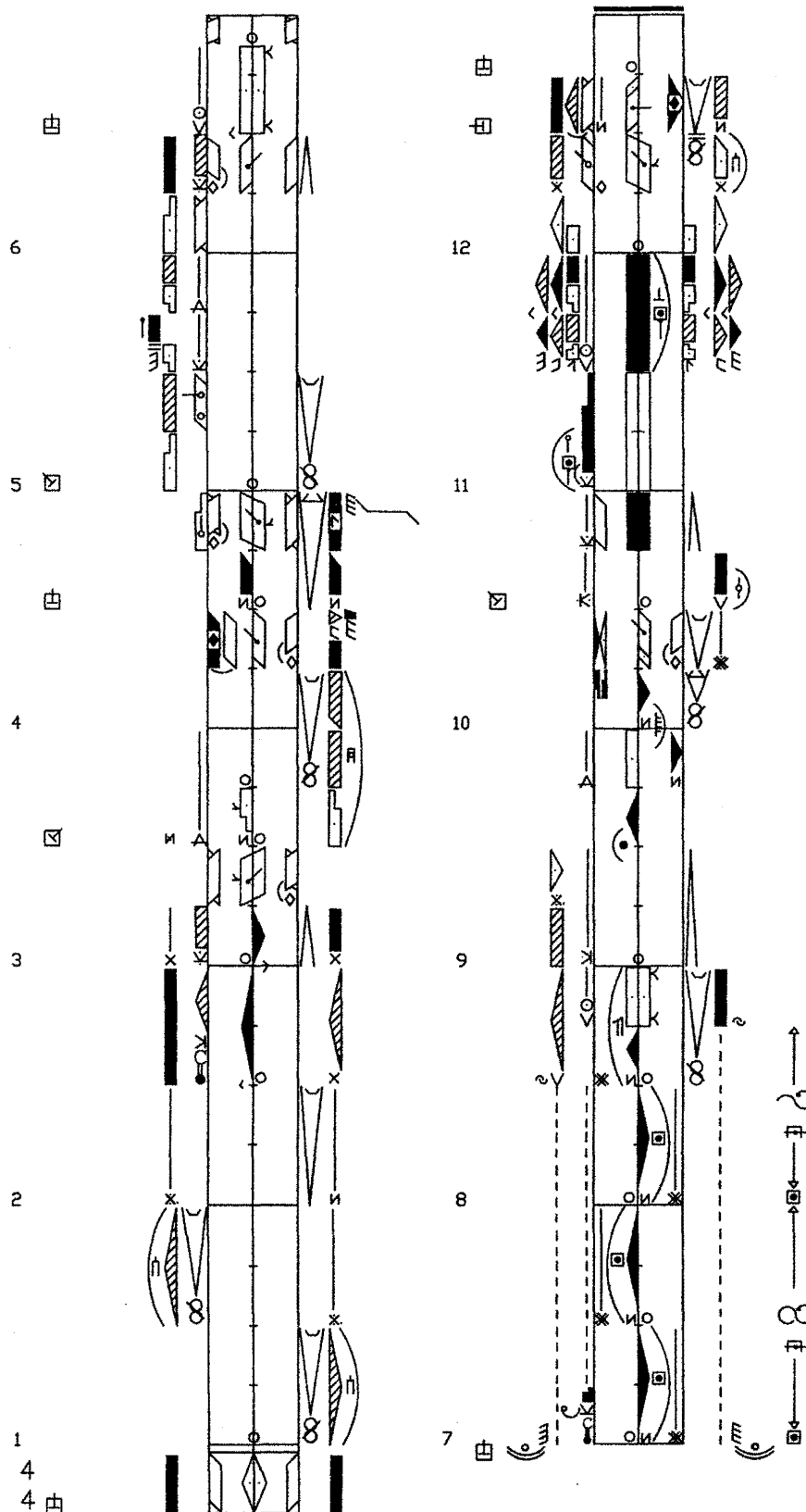


© Melanie Clarke
drawing done on Calaban

Melanie Clarke
Release-based technique

EXERCISE 4

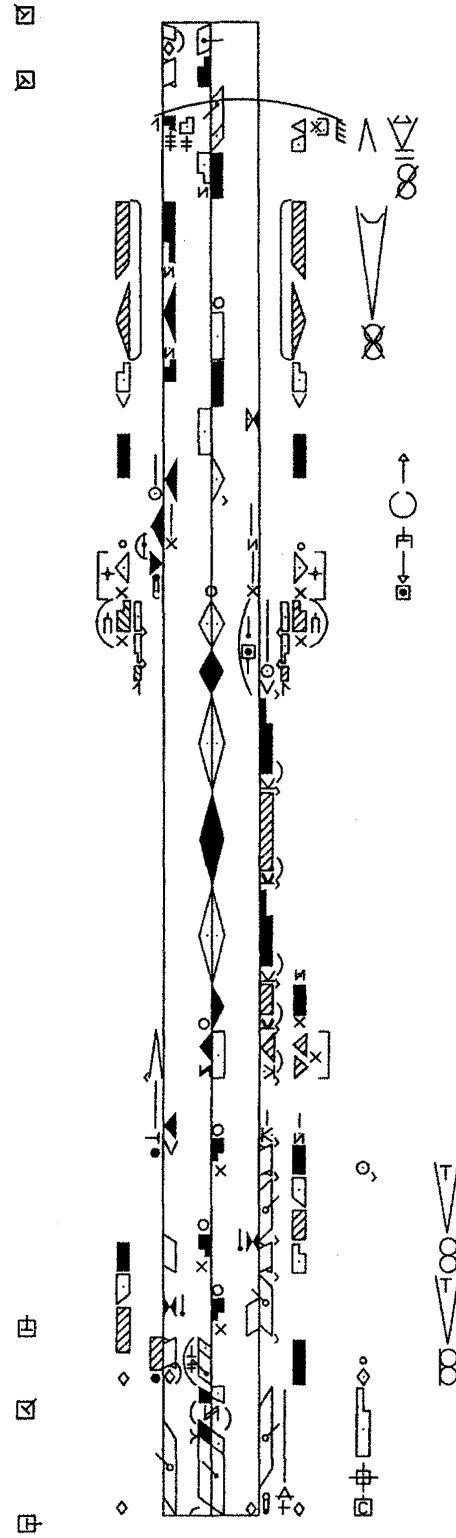
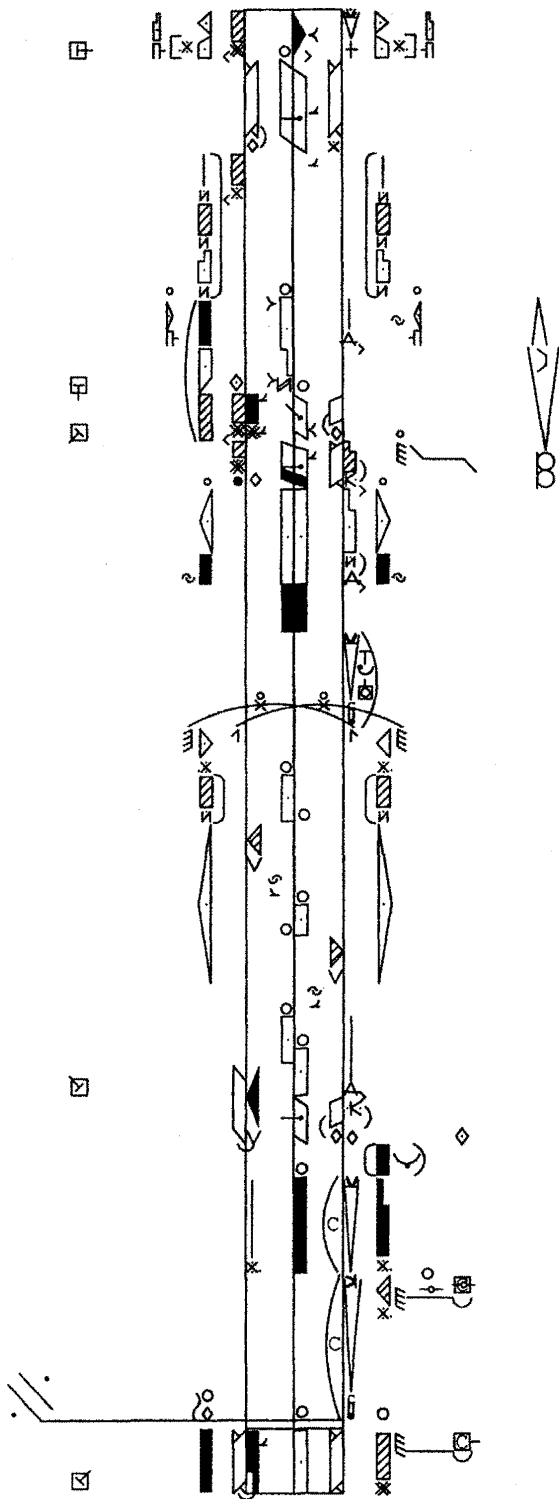
EXERCISE INCORPORATING CONTRA-LATERAL CONNECTIVITY

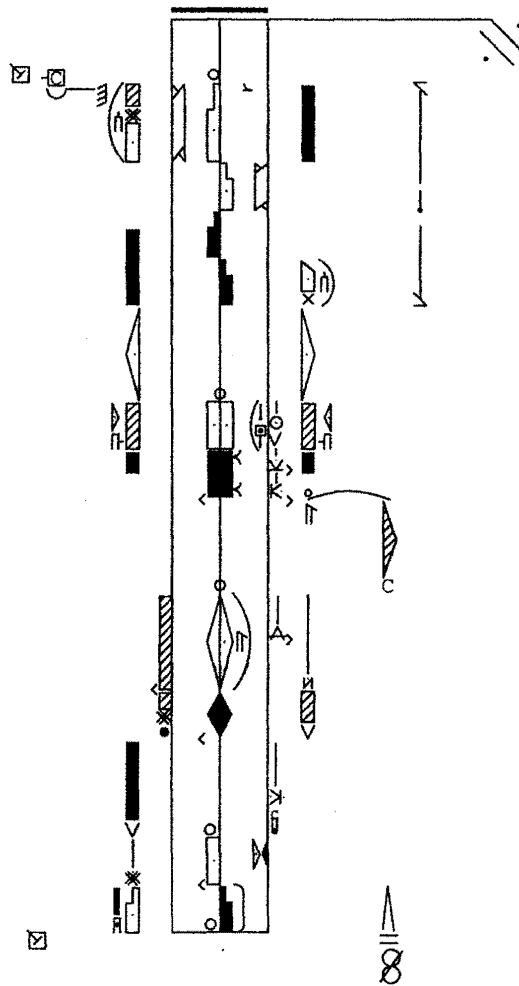


Melanie Clarke

Release-based Technique class

exercise including: movement of the whole spine, spreading along body half, design drawing, navel radiation, contra-lateral narrowing.





information is needed. In design drawing c) the movement indications for the chest could be replaced completely by the design drawing. The shifting and deviations can provide a sense of the movement but the body intention is the design and the design conveys a sense of the motion rather than giving a series of destinational points. So, the use of design drawings works in the same way as the figure 8 symbols bringing the clarity of motion in space and the experiential physical understanding and intention together.

Hopefully, notating this technique will add to the historical documentation of this dance form. And as a historical document it could be said to be vital to exemplify the most significant aspects within the movement that will communicate the nature of that form. In fact the notation can be used to highlight the essential features in a way that is not possible through other means such as in a video recording. In this technique there is a tension between being prescriptive and open. There is an understood decision in the genre not to produce a codification of movement and yet at the same time be clear about what the technique is. Being totally open could lead to the conception that Release Technique is anything made up by the teacher, which it has sometimes been confused with. Actually it is very particular, it is just that that particularity is not bound in set structures of movement. My aims are to clarify what and how I teach through the process of notating. Then perhaps the notation can become a resource for dance practitioners as a way of sharing practice. The nature of this technique form means that it is manifested as a personal expression of shared essences and philosophies, so recording these essences within movement phrases is a way of communicating how they are materialized by a certain practitioner. This will enable comparison of idiosyncrasies alongside recognition of form.

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**TEACHING METHODOLOGIES:
UTILIZING READING LITERACY STRATEGIES TO CULTIVATE
DANCE LITERACY
(ABSTRACT)**

by

Tina Curran

In early childhood education, the analysis of a word provides young readers with multiple ways of knowing, thinking about and understanding that word. The explicit process of word analysis can be transferred, in concept, to dance in order to systematically reveal for students the layering of movement elements in technique class combinations and in choreography. This methodology promotes active learning practices and helps students establish intellectual and creative ownership of movement concepts and combinations.

By explicitly guiding students through this process in a “thinking out loud” manner, students receive modeling for how to analyze a dance combination or choreographic phrase for faster, more accurate and detailed learning. Students learn how to deconstruct movement exercises or phrases in order to reconstruct it within their own body.

This workshop session will present a specific early childhood education literacy strategy and demonstrate how its transference to the dance studio can cultivate dance literacy. Participants will be introduced to this reading strategy and then actively lead through applications in a dance context. The Language of Dance® will be used as the central framework for analysis, though other lenses may come into play to reveal the complexity that exists within the simplest of combinations.

Lesson Plan Outline:

1. Presentation of reading literacy strategy
2. Learn movement sequence #1 – use modified strategy for movement analysis
3. Learn movement sequence #2 – analyze and compare to first sequence, (time dependant – consider other lenses for analysis)
4. (Time dependant) Learn movement sequence #3 – analyze in same way and layer other lenses.
5. Deconstruct the process and share ideas for applications in various dance learning contexts and well as ideas for development.

BOB FOSSE'S CHOREOGRAPHIC SCREEN DEBUT: 48 SECONDS THAT SET A COURSE

by

Pat Debenham and Kathie Debenham

Abstract

This project contexted Bob Fosse within the field of entertainment and focused on the core characteristics and lexicon evidenced in Kiss Me Kate (1953), his choreographic film debut. The intent was to examine and understand how clearly the 48-second duet from Kiss Me Kate established both a style and a lexicon that served Fosse throughout his choreographic career.

My Curiosity

My interest and investigation in this project began with a casual, serendipitous, successive viewing of several dances that Fosse had choreographed. I was reviewing the dances in preparation for a class that I teach for Music Theatre majors at Brigham Young University where I am a Professor of Modern Dance and Music Theatre. The class, Choreographic Styles, is primarily for Music Theatre students and focuses on the movement characteristics and preferences of several notable Music Theatre choreographers. I had seen many of Fosse's dances before but on this particular viewing I became acutely aware just how defined Fosse's movement vocabulary was. On this viewing I was struck by the vitality, clarity and wit of his early works, specifically by the 48-second duet that he and Carol Haney dance in Kiss Me Kate. I wanted to identify what made these 48 seconds so compelling and document how pieces of it reappeared in subsequent dances.

Fosse in Context

The musicals that Fosse choreographed are a subcategory of what we might call "theatrical works." Theatrical works (dance, theatre, performance art, etc.), regardless of where or when we experience them, somehow transform us through Spell, Passion and Vision drives where Time, Weight and Space interchange and shift to awaken us to what is happening on the stage.

Fosse engages us in a specific kind of theatrical moment which has an expressed intent

to entertain. Creating musicals that were entertaining was his life's work and we must first understand something about dances of entertainment before we can fully delineate and understand his style. Webster's defines entertainment as "something diverting or engaging." (277) Entertainment dance diverts the attention of the observer from self, or audience member, to the performer. As an example at the Effort level, works of entertainment appear to inhabit the worlds of Passion and Vision Drive. In them, and this is particularly true of Fosse's work, the choreography requires, of both performer and spectator, a physical investment in the Weight of the action which puts us into our bodies with intention, an emotional investment in the Flow and Time of the moment where we are perhaps enticed to linger longer and an outward investment in the Space where performers attend to themselves, to the environment, or to us in Direct and Multi-focused ways. Dances of entertainment take us out of the dailyness of our lives and offer to us moments when all things crystallize and require that we pay attention.

What's in the forty-eight seconds

Dances that are entertaining have a constant investment in "calling attention" to the performer. Fosse draws attention by being "at the edge," both as a performer and as a choreographer. Not as in pushing the boundaries of the form but as in being at the edges of his personal Kinesphere. He was "out there" inviting the audience to partake. As a performer and choreographer he knew the moment was for the audience. An entertainer connects to someone beyond the foot lights, sharing with them the joy and exhilaration of the moment. This desire to connect and willingness to share manifested itself in many ways.

The "at the edge" feeling that we experience in Fosse's work is supported in part by: the use of the vertical dimension and plane - a plane of presentation; the Spoke-like gestures that bridge and close the gap between performer and audience; and the use of Peripheral Spatial Tension, which supports an entertainment attitude of, "Hey! Look at me." It is through upper body Spoking and a Central Spatial Tension that he arrives at the periphery. Once there he invests fully in it, spending time in both Mobile and Rhythm states. Here the hands, the feet and the head are very active and move comfortably between Near, Mid and Far Reach Space. The distal edges are like sparklers attracting attention and are especially noticeable because the core of the body is maintained with Boundness. Once "out there" he stays there for a considerable time accenting the Flow with impulses. The distal edges are places where connections are made to the audience. It is here that he is most comfortable and highly successful.

Fosse also uses Effort to support his entertainment end. In his work there is a committed investment by the performer in self with a Strength that "calls attention."

Entertainment is "out there", at the edges of one's personal Kinesphere, moving across the footlights with Strength and Directness. The Directness connects performer to audience. The Stability created by the Strength and Directness is often combined with an immediacy, explosively gaining attention with a full investment in the intent of the action. The Strength invested in by the performer helps to ground us and we know that even though they are "out there," there is stability.

In addition to Direct Space Effort, Fosse also uses Indirectness as a way of engaging the audience. Initially, Indirecting seems an unlikely way of engaging someone. The Indirectness is used though in a multi-focused, inclusive way, connecting performer to audience, bringing them along for the ride, dancing the dance for and with them. Through Indirectness the performer has the possibility of connecting to everyone, everywhere, simultaneously.

The use of Quickness also calls attention to the performer. The Rhythm State produced here is a hallmark of dance in entertainment. The quickness of the time step in tap dancing or the syncopation of both Jazz music and Jazz dance have drawn us to musicals and reviews since the early 1900's. When both states, Stable and Rhythm, are considered together their composite is Action Drive. And if the fighting side of this Flowless drive doesn't keep us engaged, then there isn't much that will.

Quickness is used to engage the viewer in two ways other than Rhythm State. First, Quickness and Binding are combined to arrest the performer for a moment. This stillness is just to make sure that, as audience, we are paying attention. Second, Fosse moves with sudden shifts from one Effort configuration to another. The impact or rapid fire of the change attracts attention. This suddenness assists in a phrasing that supports the entertainment intent; an impulse calls for attention. The simplicity and the shortness of the phrasing keep the audience reinvesting in the movement. There is always something new. An opportunity is not provided for inward reflection.

Being "out there" is not the only attribute that connects us to Fosse's choreography. In *Kiss Me Kate* Fosse goes to the peripheral places teasing the audience, only to retreat with an Active Weight Sensing of the core. This self-referencing happens in moments of ecstatic enjoyment and is often expressed with a Rising, connected with a Shape Flow Support that simultaneously Bulges and Widens in the sternum and arms. Other moments of self-referencing are passive, where the torso invests in a Shape Flow that encloses and narrows. It is the Weight Sensing and Strength that the audience participates in from their seats.

This Weight Sensing shifts to Passive Weight, Limp and Heavy, in moments when the

distal edges are almost disassociated from the active, maintained center. It is in these moments that we see clear examples of Fosse's use of multiple systems. This is representative of a reserved, "cool man" generation, wanting to be "out there" but not for too long. Perhaps he tested the limits of his own personal boundaries as a result of being a part of a post-war, cold war era. It was the nuclear age, the Jazz age: contained, restrained, brassy, sullen. It was also an age that was filled with optimism. These moments, where Passivity is apparent, are not moments of pain or of giving in but moments of savoring. Weight Sensing and Passive Weight, when combined with Free Flow is consistent element of his style and surfaced later in his work in a way that was no less entertaining but certainly not as naively captivating as this earlier period. Later, for screen and stage, such as *Cabaret*, *Sweet Charity*, *Pippin*, the self-sensing, would appear as a sensuality that moved to the erotic.

The multi-dimensional aspect of Fosse's choreography can be attributed to contrasts that create complexity. There are numerous oppositional Spatial Pulls as well as phrases that present Mobility and Stability as different body statements move in opposition to one another. It is evidenced often when there are Mobile distal edges and the torso is Stable. Fosse also uses the feet and the hands in counter point against one another, as can be seen in "Steam Heat" from *Pajama Game* where the feet are continually reinvesting in Flow and Quickness and the hands clap, asserting themselves with Weight, in Time. This sets up a somewhat hypnotic pattern. From such moments comes a unique sense of phrasing, pulling the focus in a dramatic way to a moment that he really wants us to attend to. His contrasts and complexity make statements that say, "Here I am Folks. Look at ME! I'm full of surprises."

It is not difficult to identify what is "Fosse-esque". Most untrained observers, after having seen some of his choreography, would most likely be able to recognize a Fosse dance if they were to encounter another. He is stylistically, perhaps the most distinctive of any of the other major choreographer of this period. We see as distinctive the use large and small Kinesphere, a phrasing that explodes with Active Weight and resolves into Passivity, Weight Sensing as a way of self referencing, simultaneous multiple Effort constellations, an aliveness at the edge while the core is held stable in the Vertical Dimension and maximum mobility. All of these elements combined make him stylistically one of the most successful choreographers in the history of Music Theater. How these elements come together in phrased units and sequences also contributes to the clarity and uniqueness of his style.

Meaning Making

My experience with the project was somewhat like dumping a Christmas jigsaw puzzle

of a thousand pieces onto a table and comparing the pile to the image on the lid of the box. Once I "dumped" Fosse onto the table I had the overwhelming sense that the puzzle pieces were far too complicated to sort through. I became keenly aware that my ability to separate figure from ground was lacking and that I was possibly blind to many aspects of the LMA system. My *modus operandi* in the gathering, synthesizing and writing phases was often wallowing with indirectness, passive weight and sustainment. My process moved me continually between viewing and writing. Sometimes writing in evocative language, sometimes writing from images, sometimes in very straightforward words that described what was being accomplished, and sometimes in Laban terminology. I wrote from sensory impressions, from visual to kinesthetic, returning to the visual to reconnect, gather more information and reaffirm what I understood kinesthetically.

The epiphany came when I was able to crystallize a moment of my process in Vision Drive. There, I was able to make progress in a channeled, efficient way. When I worked from Free Flow I was not as anxious. The Free Flow provided an opportunity for information to flow from the inside out and from the outside in, allowing the possibility of meeting in the middle. This middle ground is where new insights and awarenesses were generated. It is where connections were made.

The project affirmed for me that movement must continually be viewed and reviewed from within a context. You cannot take the movement out of context, either a life context or a professional context and have a complete understanding. The task of describing, clarifying and giving meaning to another's actions is delicate. To decipher how the action exists as an ephemeral moment we literally have to "put on" someone else and enter into their territory. I have found that moving fluidly between what I see and what I feel or sense about the movement, in an intuitive, reflexive way provides me more information than I thought possible. The LMA vocabulary assists me in translating with clarity and insight the evocative, feelingful messages I receive from a movement event into a more precise language. In the process of articulation, both in the teasing apart phase and in the subsequent returning to whole phase, the inter-relatedness of the LMA parts assist me in identifying the inter-connectedness of what I have experienced. It is through inter-connectedness and inner-connectedness that we come to the meaning making. It is a complex, multi-dimensional process. When we have entered into another's territory we cannot come out unchanged. Through empathy we begin to more fully value where they are, knowing that perhaps we have been there or may in the future be there ourselves.

Movement is the way we crystallize for ourselves and for others who we are. It offers to us individually the possibility of shaping and reshaping our physical, emotional,

psychological and spiritual lives. Culturally, movement offers the potential to make connections by bridging from self to other and to the environment. What a gift, what a revelation, what a responsibility.

(Reprinted from *Movement News*, Spring 2002)

THE REPRESENTATION OF MOVEMENT IN NOTATION SYSTEMS AND ITS TRANSFORMATION IN DIGITAL PROCESSING

by

Henner Drewes

1. Introduction

Since the 1980s, various computer applications for editing, processing and printing scores of the major movement notation systems have been developed and a number of them are widely used nowadays.

Many *Labanotation* practitioners are familiar with the graphical editors *LabanWriter* or *Calaban*. For some time now, research for more advanced applications has been conducted. For example the *LabanDancer* application (developed in cooperation of the Dance Notation Bureau and Credo Interactive Inc.) is supposed to read and interpret *Labanotation* scores and will subsequently produce animated output of movement sequences.

One of the problems encountered in creating such an application is the need to translate the two-dimensional graphical representation of the score into a format, which can be efficiently read and interpreted by the software developed. While the present programs facilitate basic editing functions for the graphic representation, they only store the shapes of the symbols and their placement in x and y coordinates on the printed sheet. Apparently they do not relate to the inner structure of the notation system. This could be achieved by storing attributes like body parts, time values and other movement related data with the symbols. Some proposals have been made to create a general file format called *interlingua* or *Laban XML* for *Labanotation* scores that is supposed to contain all these and maybe additional information.

This paper will add an additional perspective from a different notation system to the proposed plans of developing this file format and related advanced applications. From 1994 until 1998 I developed the software *EW Notator*,¹ an editor for the *Eshkol-Wachman Movement Notation* (EWMN)². Many of the mentioned problems of transforming a notated score into a digital representation arose when *EW Notator* was created. Nevertheless, the solutions found differed substantially from the approaches used in *LabanWriter* or *Calaban*.

Examining and comparing both notation systems and the respective existing computer applications in their various relations – notation system to notation system, notation system to corresponding software and software of one notation system to software of

the other notation system – will contribute to a more profound understanding. It may help to achieve the required goals during the next developmental stage of producing intelligent notation software more efficiently. But as the very structure of the notation systems is closely analyzed in this process, we may also acquire useful information on the systems themselves, which might be relevant for everyone using and applying notation. In fact, this could influence the basic understanding of notation, and reading or writing practices.³

2. Representation of EWMN in the EW Notator software

a. Score and Symbols

The information of a score in *Eshkol-Wachman Movement Notation* is graphically organized in a table-like staff. The rows represent the limbs actively participating in the movement sequence described. The columns represent the time units while the flow of time is read from left to right.

MM=80

I.

Forearm	(0)	(0)		12	(1/2) ↓[]		12	(3/6) ↓[]		2	(0)	
Left Arm	(0)	(2) ↓2	(5/2) [2]	(2/6)		(1/2) (0) ↓2	(3/2)		(5/2) (2) ↓2	(2/7)		(1/0)
Right Arm	(0)	(0)		(1/2) [2]			(1/2) (0) ↓2	(3/2)		2	(0)	
	(0)	(2) ↓2					(5/2) (2) ↓2	(4)		(5/0)		
Head	(6)			4	“(0)”		4	“(0)”		4	“(0)”	
Pelvis	(4/0)	(2) ↓1	(6/3) 2	(5)		(4)			(0) 1	(2) 1	(2)	
						(2) ↓2	(4)		(3/6) 2			
Right Leg	(2-6)	↓M					↓M					(1/4)
Foot	(7)	W					W			(0) ↓M		
										6		
Left Leg			(1/6)					(6-2)	↓M			
Foot	(0)		(0) ↓ (4)									
			6 (2)				4	W				
Front	(0)					(2)						

Illustration 1: Example of a EWMN score.

Numerals	0	1	2	3	4
	5	6	7	8	9
Other quantitative information	m	M	+		
Parentheses and brackets	()	[]	{ }		
Movement	↑	∩	^	f	
Contact, weight	⊥	=	L	W	
Others	P	-	.	*	R

Illustration 2: Basic symbols used in EWMN

Movement expressions consist of complex combinations of these graphical elements. On one hand, the limited amount of basic symbols very much resembles written text in the Latin alphabet. The combinations of symbols employed in *Eshkol-Wachman Movement Notation*, on the other hand, are far more complex than merely adding up characters in the direction of writing, that is from left to right. Typically, symbols are also written one on top of the other. Parentheses and brackets may enclose symbols or groups of symbols.

$$\begin{pmatrix} 2 \\ 0 \end{pmatrix} \quad \begin{pmatrix} 3 \\ 1 \end{pmatrix} \quad \begin{pmatrix} \cdot \\ 4 \\ 0 \\ \cdot \end{pmatrix}$$

$$(2-6)$$

$$(-0) \quad \underline{(0)} S \quad \overline{0 \begin{pmatrix} 2 \\ 1 \end{pmatrix}}$$

Illustration 3: Examples of EWMN complex symbols

b. EW Notator structured format

The following section describes the way EW Notator stores the information of scores and movement symbols.

i. Staff

The staff in *Eshkol-Wachman Movement Notation* very much resembles a table. Tables in turn are represented in various common data formats, usually by defining a sequence of cells which are organized in rows and in columns. A similar approach was taken in

EW Notator. But because the flow of time suggests a principal direction of reading from left to right, in EW Notator the columns take precedence over the rows.

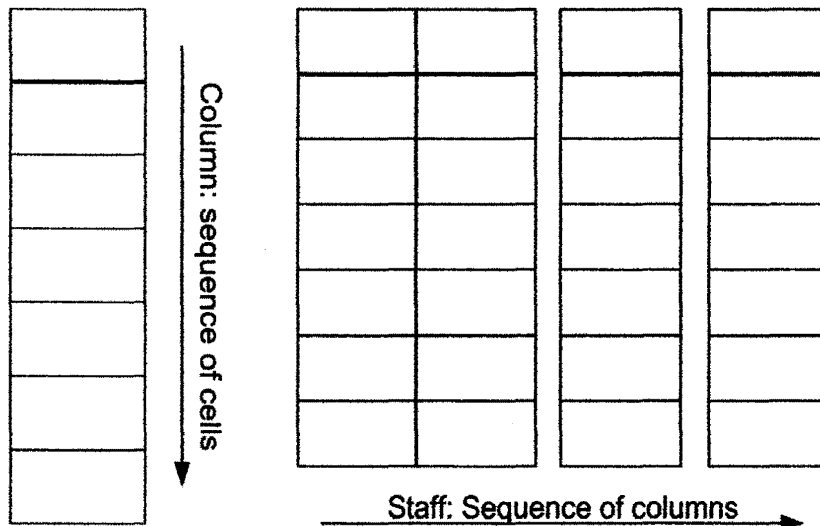
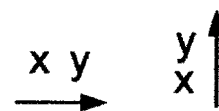


Illustration 4: Sequence of cells and columns in staves

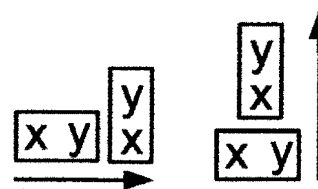
ii. Symbols

While the solution to describe the staff seems quite straightforward, it was necessary to find a way that would allow the representation of the numerous possibilities of combining symbols to complex expressions. A thorough examination of the scores published in *Eshkol-Wachman Movement Notation* led to the following, fairly simple pattern:

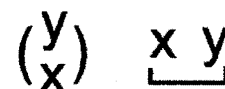
1. When symbols form an expression, they are placed either one after the other (left to right) or one on top of the other (bottom to top).



2. When an expression is formed out of several symbols, it can be combined again with other symbols or complex expressions to form another expression. In other words, the combination of symbols may be nested in several levels.



3. Symbols or expressions may be enclosed in double or single parentheses or brackets, which may appear vertically or horizontally.



These rules describe the overall structure of arranging symbols to a satisfying degree. Minor adjustments to the appearance of the symbols concerning size and distances are necessary in some cases. While these additional attributes are required to produce high-quality scores e.g. for publications, they do not carry any meaning. In EWMN the semantic content of the movement instructions will not change, if these attributes are modified.

iii. Hierarchy of information

The information blocks in EW Notator form a tree-like, hierarchical structure from the document as whole, to its pages, staves, columns, rows, cells, symbol expressions and single symbol elements. Each level contains a sequence of elements in the subordinate level, which are graphically organized in a vertical or horizontal direction.

Thus a page contains one or more staves, a staff contains a number of columns and rows, which form the cells, cells contain one or more symbol expressions that are built, sometimes in more than one level, out of symbol elements.

Using this structured format provides a way to digitally store and process the information of EWMN scores with the following advantages:

- The hierarchy of information ensures that all elements are sorted in a logical way corresponding to the semantic structure of the score.
- Graphical details concerning size and placement of the symbols may be ignored, if one wants analyze only the movement content.
- On the other hand, graphical attributes provide great flexibility in designing the visual output and thus ensure high-quality printed scores.
- Even if interpreting applications or modules are not available yet, this data format provides a solid basis for further developments like automated animation.
- Using a standard XML file format allows exchange of information with other applications. Enhancements to the data structure can be implemented efficiently.

3. Comparing Labanotation and EWMN

The following comparison attempts to outline some differences between the two notation systems. As opposed to other more general comparisons, it will stick to the channel of examining the notations through the graphical representation, and how this affects designing digital representation methods.

However, this specialized perspective will not only provide useful information for the task of creating computer programs, it will also point out some basic properties of the notation systems and their inherent understanding of movement.

EWMN	Labanotation
EWMN uses a method of adding up basic characters to form more complex expressions.	<i>Labanotation</i> uses graphical shapes as symbols.
The elements remain separately visible in the final representation. They are spread out on the score and can easily be identified and extracted.	<i>Labanotation</i> tends to merge its information blocks to form complex symbols. While it is more difficult to extract these elements out of a final score, it provides a very compact representation. A single symbol contains a fairly large number of informational elements.
In EWMN time values are indicated by extra bar lines. Again, a separate symbol is used.	In <i>Labanotation</i> symbol size carries the information of movement duration. Thus this information is also incorporated into the symbol.
EWMN uses rows to assign a symbol to a specific limb.	<i>Labanotation</i> uses columns to assign a symbol to a specific limb.
EWMN always uses a separate row for each moving limb segment.	<i>Labanotation</i> mainly uses columns for entire limb groups, for example the whole arm or the whole leg. Body signs may alter or refine the assignment of symbols to limbs. Once more, this approach underlines the compact nature of <i>Labanotation</i> .

4. Conclusions

a. The development of notation software until today

Apparently, the development of the existing notation software for EWMN and *Labanotation* was strongly influenced by the way movement information is perceived and encoded by the notation.

The graphical approach offered a practical and relatively inexpensive solution for the programs storing and editing *Labanotation* scores. Historically, *Labanotation* scores were drawn on pages of graph paper, and this paradigm was kept, when the notation was translated into the computer.

Building and merging symbols out of basic elements, is a complicated process in Labanotation. Employing this method in a computer application would require a thorough, systematic analysis of all *Labanotation* symbols and expressions. It is not surprising that current applications for *Labanotation* ignore these basic elements and their respective, logical relations. Instead they store the graphical shape of a symbol as a whole.

Experiments to use such a simplified graphical approach on *Eshkol-Wachman Movement Notation* had to fail due to the more evident text-like structures within the notation. Basic elements remain separately visible in notated scores. It was more practical to design a structured frame that should contain the basic symbols and characters of this notation.

b. Conclusions for the development of next-generation notation software

To overcome limitations of current software, a notation system and its structure must be analyzed. Informational elements building up the notation should be revealed and identified. These buildings blocks must on one hand correctly match the notation's structure and on the other hand be suitable for being processed and stored by the software.

To achieve this goal for *Labanotation*, it will be necessary to find a way to bridge between the compact representation and a structured storing method. One could do this by breaking up graphic shapes and symbols into primitives and by defining rules of forming the complex shapes back out of the given primitives. In another possible approach one might store the complete graphical shapes of the symbols, but attach attributes specifying the semantic contents. Regardless of how the symbols will be built up, they will have to be stored in a grid of columns corresponding to limbs and rows corresponding to time values. Probably it will be necessary to store extra graphical attributes allowing slight modifications of sizes and positions. This extra information should not indicate a change in the semantic content, but provide a means to improve the graphical output, for example to prevent overlapping of symbols positioned very close to each other. Modifying symbols like bows, pins etc. should be stored in a way that clearly connects them to the main symbol, creating a hierarchical relationship between them.

Once a data structure based on these and maybe further principles will be designed, an additional issue will open up. Will the underlying structures only be working automatically in the background, or will they be visible and accessible to the user of the software? The first option may try to keep the user interface as simple as possible, in order not to confuse the user with additional tasks. The latter would require the user to actively understand the underlying structures. While this requires a certain knowledge,

it would also provide more flexibility in designing and editing the scores and their structures. An optimal solution would certainly maintain a balance between those poles, allowing more advanced users additional options. But probably we will have to wait for the first stages of program development to see if and how these features could actually be implemented.

In fact, all these questions and problems are not only technical in nature. They touch many philosophical aspects of how notation is understood and perceived, and these should be considered for any technical decision. Software developers for notation systems carry great responsibility because of the influence on the way notation will be used in the future. Thus, a thorough investigation process before and during the development seems essential for a computer application to succeed. Additionally, a deeper and more precise understanding of the notation system itself will inevitably evolve.

¹Enhanced versions of the EW Notator software have been developed since then and are available for download on <http://www.movement-notation.de>.

²Eshkol, Noa / Wachman, Abraham: *Movement Notation*, London 1958.
A complete list of EWMN related publications is available here:
<http://www.movementnotation.com/publications.htm>

³A more detailed analysis of both notation systems and their related computer applications may be found here:
Drewes, Henner: *Transformationen. Bewegung in Notation und digitaler Verarbeitung*, Essen 2003 (available only in German).

RELATIONSHIPS BETWEEN MOVEMENT AND PERSONALITY

By

**Dianne Dulicai, Ph.D., ADTR
Marion North, Ph.D.**

Dr. Marion North and I intended to present this material together, as a part of our book that is in process. However, Dr. North sadly will not be with us today except in spirit due to illness. She sends her regards to all of you.

Many of you are familiar with her book, "Personality Assessment Through Movement" published in 1972. She wrote in the Preface, "This book is an attempt to describe and validate a technique of movement observation which, I believe, has a contribution to make to the assessment of personality"(North, 1972)." Dr. North tested 26 school children based on Laban's hypotheses of correlations between movement and its meaning and compared those results with four standardized educational and psychological tests. Correlations were high and dance/movement therapists in work now use the assessment widely with children. Because it is out of print and yet increasingly requested as a text in dance/movement therapy education, Marion and I planned to update the book -- and now we have decided to include her unpublished baby study and add material that has emerged over the ensuing years.

This equally important work of Dr. North's is her unpublished dissertation, a study of 31 babies all assessed periodically from 3 days to 24 months using the assessment instrument she developed. Two important research questions were investigated: (1) Can you measure an infant's movement qualities while the nervous system is not yet fully developed? And (2) given a stable physical and emotional health through development, will those early patterns remain consistent despite the development and elaboration of movement patterns? We should be mindful that this research, developed in the early 70's, did not have the advantage of neuroscience findings that became more available in the late 90's to present. Thanks to efforts of genetic scientists, we know a great deal more about our genetic endowment of characteristics. A new look at Dr. North's results can now be seen in the light of our information about genetics and will be included in the new book. Also to be included are numerous research projects since her early publication building and expanding on our knowledge of movement and personality and its multiple uses in child development and therapy.

Our first effort in updating the baby research was to contact the original subjects in her baby study starting with the two boys featured on

videotape as examples. One of the subjects, still living in the U.K., agreed to allow us to redo the movement assessment and take a psychological assessment to see if the original predictions of personality characteristics from 3 days to 2 years of age were relevant at 30 years old. The other agreed to take the psychological assessment but was working out of the country and could not participate in a movement assessment. Today, I will present the data on the subject able to fully participate as an example.

For brevity of time, the raw data will not be presented here; rather I will present you with a narrative of one child's assessments over time from 3 days to 2 years and as an adult of 30 years. A poster displaying some of the data for this subject will be in the lobby if you wish to look further. The movement assessments attends to the following characteristics:

- Bodily aspects
- Patterns of phrases
- Efforts
- Changes over time
- Personal interview
- BeMis Personality Report (a self report of 40 items standardized personality characteristics profile)

Assessments

If you had been present with Marion at the first observation of our subject, a 3-day old infant, you would have seen a baby preferring to be on his back, typically with a symmetric, wide, flat body shape. He was calm and slow, almost passive. When he moved, the phrase began slowly and steadily but the quality always faded at the end of the phrase. The shadow movements were in short phrases with quick lively movements, a clear contrast with the larger body phrases. The movement began in the extremities and had predominate inward flow. In response to sound or touch stimuli, he contracted and became narrow.

- Flow: neutral, 39%, bound, 32%, free 28%
- Weight: neutral 40%, strong 43%, sensitive 16%
- Time: sudden 53%, sustained 46%
- Space: flexible 85%, direct 14%
- In order of preference: Weight 37%, flow 35%, time 18%, space 8%

Combinations of two elements:

- Weight/flow
- Weight/time

At three (3) months he had retained all the qualities above with some changes in the phrases that became more extended but remained weak at the close. Elements of weight and time were most frequent

(preferring sensing and intuition rather than thinking and emotion) with support from flow and time (again using intuition combined with emotions). He preferred sustainment with strong weight, flexible space and free flow. When frustrated he became bound with inward flowing strength with repetitions of short phrases. More prominent is the distancing and retreat in response to being held.

- Weight: reduction to 30%
- Flow: excessive bound predominate
- Weight/time: strength/sustained or sudden
- Space/time: direct/sustained with quick adjustments
- Flow/time: up to 21 months only
- Weight/space: strong/indirect
- Space/flow: rare – what agitation exists quickly changes and gives way to strong resistance and into passivity.

By nine (9) months his static body center remained with static peripheral arm and leg movements. He did not accommodate his body to reach for objects or to bring them into his body center. He enjoyed lying on his back manipulating objects with delicacy and precision. There was no change in his response to being held. Marion saw a wider range of shadow movements in facial expressions and limbs suggesting to her an active mental life. Rather than a complete lack of flow at the end of the phrase, he additionally could use sustainment and bound flow to close a phrase. She hypothesized his stoicism and lack of accommodation to the environment revealed his preference for individuality and distance while mentally examining the environment – liking the ‘idea’ of a thing not the pleasure of action with the environment.

- Weight/time: excessive strong/excessive sudden

Changes at 1 year old brought improved mobility more slowly accomplished than the other subjects in such actions as crawling, standing and walking with support. He was less passive in reaching for objects but the pattern of initiating from the limbs with the center following was still present. Phrases most often contained his preference for changing of inner attitudes rather than using actions or drives and he continued to highlight his preference for long focused observation before action.

- Weight/space/sudden or sustained (forceful, focused, aggressive)

The greatest differences at 15 months appeared as a change in response to others – now forming a continuity of stimulus/response in interaction. However his rate of interaction reciprocals remained low. This continuity appeared in his formed sentences and in phrases of movement that became linked, continuous and coherent. Marion speculated, “he will surely be a ‘mental’ worker, evolving and working things out inside himself with some minimal precision action only, and it is unlikely he will be drawn to activities involving gross body activities. He might be highly numerate or verbal.”

The summary at 2 years old contained the same characteristics beginning at 3 days with elaborations evolving. The major characteristic was the contrast of clear organizing and thinking things out compared to the almost reckless launching of himself into these large physical activities. His balance of inward/outward flow continued to be a bit more balanced but inward flow predominated.

- Rich variety of weight/flow
- Weight/time/flow still present (willful to strong urgent controlled)
- Weight/space/time: appears more often
- Weight/flow/space: diminishing
(sensitive/focused/imaginative/forceful/restrained/outwardly considering)

What do you speculate that we saw several years ago when we revisited this subject thirty years on? Both Marion and I were welcomed into the parent's home of the subject, a commodious venue for the interview and assessment. When our subject entered the room Marion introduced me to a person that I felt I knew but had only seen on videotape at 2 years old. During the interview, I had to restrain my inclination to behave as if I knew this person.

He sat opposite us and immediately assumed a symmetrical, wide, flat body shape as we had seen in infancy. As he responded to questions, he began with lively and intricate shadow movements in his gestures and facial expressions while the torso remained quiet, echoing an early response. The calm stable body attitude remained until asked about his schooling. As he described his disappointment with his secondary education and lack of support for his musical interests, his gestures changed from slow strong elements swinging to strong free expression with phrases falling to zero flow at ends of the short phrases. He maintained a forceful and hastily expressive attitude during this period and returned to his more typically forceful, restrained, slow characteristic after pausing between phrases when the interview turned to his plans for his future.

Discussing his interpersonal relationships he stated after several disappointing intimate relationships he now had a relationship with an accomplished and interesting woman. Though their relationship seemed stable he believed part of its success was related to the independence of each of their lives. He also discussed the strengths and weakness of his relationship with his parents. He stated he had been a bit of a loner all his life, which his mother had offered before the subject arrived, mirroring the low rate of interaction reciprocals seen in infancy. Elements suggesting nurturing were very low in his repertoire and during the more conflictual bits about his relationships; he exhibited the more assertive and restraining combination of force, urgency and restraint.

While discussing his job as a manager of a company's parts inventory, he expressed satisfaction with the leadership component of the job and his freedom to work alone but without great physical involvement reflecting Marian's early predictions. He regrets his lack of success with his musical interests, again asserting he should have received support for his talent, but he continues to plan to work toward a recording success in the future.

Let's now return to the original questions: (1) *Can you measure an infant's movement qualities while the nervous system is not yet fully developed?* (2) *Given a stable physical and emotional health through development, will those early patterns remain consistent despite the development and elaboration of movement patterns?* As to the first question, in the example discussed today, the obtained movement qualities observed beginning at 3 days old are present at 30 years of age. As described here the young man maintained the core of characteristics throughout while adding elaborations and complexity through his life. The preliminary results of all the participants in the baby study, through 5 years of age, are similar. 100% of the 36 babies obtained scores on Body Aspects, Phrases, Single and combination of 2 elements that were retained. Only 22% obtained scores on 3 element combinations at 3 days old. All children showed individual variations in all categories.

As to the second question, we have obtained sufficient information from the subject and his family to determine that he maintained a stable physical and emotional health through development in an intact family. He retained 67% of the original movement preferences to adulthood and the original predictions of personality characteristics were in agreement with the psychological test BeMis. An additional 24% of the characteristics predicted were also correct though the prediction was made with partial scores. Only 8% of the original predictions were in disagreement with BeMis. The statistics for all the participants are not yet available.

Research of this kind combined with dance/movement therapy research, all to be included in the new book, offers interesting questions for parents, teachers and therapists. It suggests that if we "see" potentials and weaknesses in very young children, we are in a better position to offer options for helping all children reach their potential. It clearly offers a better assessment to therapists working with children with disabilities for approaching treatment from consideration of strengths as well as deficits. Hypothesis for hope might be a good working title for the upcoming publication of our new book.

**A MEETING OF MINDS:
ADAPTING LABAN'S MOVEMENT THEMES TO DANCE WRITING PROJECTS
(ABSTRACT)**

by

M. Candace Feck, PhD

This paper will discuss the development, application and findings of a project scheduled for implementation in the Columbus, Ohio (USA) Public Schools during winter and spring, 2005. Using Preston-Dunlop's articulation of Laban's movement themes (Modern Educational Dance, rev ed. 1990) as a blueprint for designing pedagogical materials for writing about dance, the project seeks to marry exposure to dance with language arts requirements in the curricula of Ohio public schools, targeted toward students at various points along the educational spectrum.

While dance is sometimes introduced to elementary and secondary students in Ohio as a subject in the Physical Education or the Arts curriculum, it remains one of several options to meet this requirement, and often gets marginalized by teachers who are not confident of their expertise in this area. In addition, the recent curricula of public schools from elementary through secondary levels reflect ongoing budget cuts, while school administrators face increasing pressures to meet standards for excellence in non-arts subjects. Moreover, few schools include adequate studio space for dance education as a physical practice. I contend that a missed opportunity to introduce dance through writing lies in the confluence of these developments.

All Ohio students are required to meet stringent English language arts standards, including consistent work in the development of writing skills. Based on the fact that language arts educators hunger for new topics to inspire student writing experiences, this project has been designed to promote dance as a subject for such activities, thus meeting state-mandated Language Arts standards. Thus, the project aims to develop pedagogical materials that allow educators to introduce dance as a subject, while also supporting the acquisition of particular skill sets in writing. A guiding strategy of the project involves the adaptation of Laban's movement themes, as articulated by Valerie Preston-Dunlop, into specific curricular units that deal with writing.

In section four of "Theme One, Introduction to the Body," for example, attention to specific parts of the body is featured. Using a video of Mark Morris' solo "Jealousy" (1985) as a point of departure, students are presented with writing assignments that focus on identifying the body parts most active in this short dance. A host of English language standards might be brought to bear in writing exercises based on this idea, including state benchmarks for the youngest students such as simple vocabulary acquisition and the composition of writings that convey a clear message and include well-chosen details; standards at the middle school level such as the use of narrative strategies to develop characters, plot and setting, maintaining a consistent point of view; and for those in the upper levels, the expectation to support judgments through references to the work, applying correct grammatical structures to effectively communicate their ideas about the work.

Given inspiring visual examples and well-designed curricular support, the project hopes to support dance as a subject alongside other writing topics, meet state English-language standards, and inform students about a major art form that is largely absent from their current school studies.

**REVISITING ANCIENT TRADITION:
LABAN MOVEMENT ANALYSIS AND BARTENIEFF PRINCIPLES
AS APPLIED TO THE PRACTICE OF INDIAN CLASSICAL DANCE**

by

Ciane Fernandes and Rajyashree Ramesh

INTRODUCTION

This project started in 2001, when I first began the study of the classical Indian dance style called Bharatanatyam, at the Rajyashree Ramesh Academy for Performing Arts, Berlin. As an LMA professor, I used the Laban/Bartenieff material to access such a rich cultural tradition so different from mine. Such challenge is one of the premises of LMA, that is: learn from difference and enhance movement expression towards Mastery of Movement beyond our preferences or habits (daily patterns, cultural patterns, etc.). As we could see also in other presentations at the 2005 ICKL, the Laban heritage – be it LMA or Labanotation – does not intend to create a universal language. On the contrary, through Movement Principles, it enhances differences, clarifies characteristics of specific cultural backgrounds, allowing their understanding, intercultural learning and exchange. Therefore, it is always a two-way street: on one hand, people from the west can access an Asian tradition, on the other, Indian people can revisit it under another perspective, one which enhances its qualities but also inserts it in an international discussion on body movement and intercultural tendencies.

Within such framework, this lecture-demonstration also includes two points of view: that of a LMA professor teaching actors, and that of a Bharatanatyam master teaching Classical Indian dance to dancers and non-dancers. Although I do teach many of the Bharatanatyam principles, I use to say that I do *not* teach Classical Indian dance, but rather *Applied LMA* for actors. That is, I teach body technique for actors at the Federal University of Bahia, Brazil, in which program I include Bharatanatyam through the application of LMA. My main goal is to connect the actors with their own bodies in relation to others and to space, widening their range of expression, providing them with the tools to apply such knowledge to the learning of any necessary technique, character or performance context, as much as to research, writing and criticism.

Mrs. Ramesh, on the other hand, teaches Bharatanatyam to dancers and non-dancers. Her goal is to develop Bharatanatyam dancers, fully equipped with the tradition in all its scope. That is, not only the apparent shape of the dance, but in all its complexity, from abstract to expressive dance, theory and singing. To achieve that, she has been using LMA to facilitate the learning of such complex technique, working from Movement Principles, Dynamic Space, etc. She has noticed that LMA can easily be parallel to the learning of Bharatanatyam, as happened with me. By using LMA, I was able to grasp most of her requests in class, moving through an inner awareness to connect to space,

rather than just following an outer shape. So that after six months of study, I was taking classes with the students of the second year.

Mrs. Ramesh uses this comparative study to illustrate the much quoted geometry of movements known in Classical Dance of India and how its relevance is not just an aesthetic experience for the spectator but also an awareness process for the performer, who learns to feel these lines from within. While in the traditional teaching of classical dance in India, the eye (of the teacher) corrected the movements, their effort, shape, etc., she has in her classes now started dealing with questions like where a movement is initiated, its sequencing, body parts sustaining these movements, inner awareness through connectivity, etc. to enable the practitioners to become aware themselves what the 'outer' eye is correcting, thus enhancing inner awareness and stamina, clarity in movement and expression leading to better understanding of the art form.

According to Ramesh, often the learners of dance in India are learning this art form not out of passion, but due to the historical relevance of dance. Practitioners outside India lack awareness/knowledge and understanding for its movement repertoire. The awareness process triggered by applying LMA helps practitioners to understand the relevance of dance through a better understanding of movement itself, thus taking Classical Indian Dance beyond space and time, making it universal, encouraging creativity and a contemporary approach, enhancing performance and opening vistas in the application of this art in other fields like therapeutic work, community awareness, etc.

In the next session, I will summarize some of the connections between LMA and Bharatanatyam, as devised along the classes mentioned above. It is separated into items to facilitate its understanding, but, in practice, many of these items can overlap each other during the exercises, specially during the *adavus* (units of pure dance, added to each other to create a dance composition) or the practice of the dances or parts of them.

SPECIFIC ANALYSIS OF BHARATANATYAM AND APPLICATION OF THE LMA MATERIAL IN ITS LEARNING PROCESS

Stabilization of the pelvis and Movement Initiation.

In Bharatanatyam, the pelvis remains stable all the time, that is, it does not move along guiding the movements in a visible manner as it happens, for instance, when we perform the Laban Scales. When we dance along the A or B scales of the Icosahedron, for example, the whole body goes along those pathways guided by the tail bone, folding and unfolding at the hip joint. Through Bartenieff Fundamentals, we move from Core Support and pelvic floor muscles, activated by Breath Support.

In Bharatanatyam, the pelvis is also the center of energy, but precisely because of that it remains apparently "immovable", while the so-called "main limbs" – feet, hands, eyes,

head, neck, and waist – initiate the movement. Although the movements do not come from the pelvis in a visible manner, such stable pelvis is precisely the core of complex simultaneous movements.

In a beginning Bharatanatyam class, when students first try to stabilize the pelvis and initiate the movement through such main limbs, their tendency is to bound the flow and hold the breathing, focusing at the periphery (feet, hands, head), while losing their focus on Central Initiation and consequently Core and Breath Support. Therefore, I use the Bartenieff Fundamentals prior to Bharatanatyam as a warm up, and call them up while performing the Bharatanatyam exercises. Using the Bartenieff Principles helps using deep pelvic muscles and Bony Landmarks to stabilize without tensing, facilitating initiation from the core, although not in a visible manner (Theme of Mobilization/Stabilization and Function/Expression).

Bony Connections within the pelvis, or between the pelvis and other Bony Landmarks also help on the stabilization, such as: Trochanter-Trochanter, Trochanters-Coccyx-Pubic Symphysis (creating a losangle on the basis of the pelvis), Sit Bones-Coccyx-Pubic Symphysis (creating another losangle), connect these losangles to heels and to head. These dynamic lines between Bony Landmarks stretch into outer space, with Spatial Intent, as will be seen in the next item.

Basic Position with spine straight.

In the Basic Position of Bharatanatyam, the feet are close together; legs rotated outwards, and knees flexed, in the so-called *Aramandi*. The arms are stretched outwards to the sides at the shoulder level, with the elbows facing upwards, that is, the arms are slightly rotated inwards, with their outward side facing upwards all way till the tip of the fingers, creating a subtle rounded shape upwards from the wrist, in the so-called *Natyarambhe* position. There is no break of the arms' line between forearm and hand. In other words, the wrists are part of the long line outwards, not pushed upwards or downward.

LMA helps achieve and enhance such Basic Position along the training, as well as keep it as a flexible transition rather than a rigid and tensed pose. Bartenieff Fundamentals emphasis on floor work, with Passive Weight and Free Flow, develops a Dynamic Alignment for standing up in the Vertical Axis without tensing, with Core and Breath Support. Besides the Principles mentioned in the previous item, two exercises are specially important as preparatory: The Arm Circles while opened in "X" at the floor associated with the Heel-Rock, and the Laban Scales.

Partnering Work while doing the first combination of Bartenieff exercises is quite helpful. That is, while person A stretches on the floor in "X", facing up, person B places his hands at A's heels, helping on the Heel-Rock, and places one of his feet under A's tail bone. This helps connect heels to tail bone and, more importantly, trigger the arms' movements out of the heels and tailbone. So that person A starts doing the Arm Circles (as if dressing up and later taking off the shirt) out of a Heels-Tail-Scapulas-Hands Connection or Kinetic Chain, rather than from the shoulders. It works like in a tall

coconut tree: roots pushing downward while branches and leafs float free outwards (like Irene Dowd's concept of *Taking Root to Fly*, 1995).

While performing Bharatanatyam's Basic Position, students tend to try to hold their arms out by tensing on the shoulder girdle, which ends up bringing the shoulders up and forwards because of the specific arm position on space (slightly rotated inwards, with the elbows facing up). The combination exercise mentioned above connects upper and lower units, so that instead of tensing at the shoulder level, students learn to move (as well as hold) their arms from Core Support all way down from the heels and tailbone. They use their inner muscles, including the Latissimus dorsi, with an *intention* of outward rotation, while apparently holding the arms slightly outward rotated.

The pelvic floor muscles, as well as the Iliopsoas are basic on providing such Core Support. The "roots" for the arms come from the legs' position: a deep outward rotation on the femoral joints, with both feet well grounded (that is, with the weight spread equally at the soles, instead of mostly in the outward side, or on the front, for example). As the knees flex outwards, the pelvis roots downwards, connecting heels and sit-bones. This also solves two harmful tendencies while performing this Basic Position: pushing the pelvis backwards in a convex spinal shape (*lordosis*) by breaking at the lumbar spine, and holding the body's weight on the flexed knees, instead of letting it go down to the feet.

Out of this Core Support and Bony Connections, the body not only irradiates with Spatial Intent, but also uses the space as an active partner. The Space pushes the Bony Landmarks towards its spatial pulls. For example, within the Crystalline Form of the Octahedron, the Horizontal Dimension sucks the arms out from the scapulas (Scapula-Scapula, Scapula-Hand Connections) into the sides, helping on the Basic Position. The Vertical Dimension pulls head upwards and tail downwards, in a dynamic connection that helps keeping the spine straight and upper and lower units connected. We actually have a big losangle formed by the Bony Landmarks Head-Tail-Scapulas, which stretch into Sit-Bones and Heels on the lower unit and into the hands on the upper unit, opening along Vertical and Horizontal Dimensions.

But the association between body and space are not always so obvious. Of course the Octahedron is visibly applicable in the Basic Position. Although Bharatanatyam movements go into different spatial points with arms and legs, the torso has just a little emphasis on different spatial pulls, depending on the *adavu*, and not really moving along those pulls, as happens in LMA scales. That is, in Bharatanatyam, the torso tends to be stable, in the Octahedron, and most of the movements are through Central or Peripheral Pathways. Nonetheless, when one sees a Bharatanatyam dancer performing, it seems that the whole dynamic Kinesphere is into use, such as the Icosahedron spatial pulls. That happens because of the strong concentration and irradiation of energy in and out of the center, rather than from actual or visible movement shifting the body's Center of Weight. There is a complex interplay of Inner/Outer relationships, Body and Space, visible and invisible energy. This is illustrated by Robert Lawlor's drawing, at the end of this text.

To reach such state, it is quite helpful, if not crucial, to perform different Spatial Scales, including the Icosahedron A e B scales, even though – and precisely because – their transverse pathways are so different from the Bharatanatyam major preferences. In general, by performing the Laban Scales we move the Center of Weight out of Place Center, into different Spatial Pulls. By applying the theme of Exertion/Recuperation, after the Laban Scales, students recuperate by coming into the Vertical Axis without tensing. When doing Bharatanatyam's Basic Position without warm up, students tend to tense up, pushing to keep the spine straight and the torso still. When warming up with the A and B Scales, for example, they naturally recuperate from their Transverse Pathways by coming into the Vertical Axis, which is rather a comfortable position, in Dynamic Stillness, with the whole Kinesphere points active.

The theme of Mobility/Stability is quite important too. Three-dimensional mobility on whole body from spine (Laban Scales) helps maintain stability (without tensing) of the torso in Bharatanatyam, which encompasses mobility as energy, into all spatial directions, from the Center of Weight. This dynamic interplay is present throughout Bharatanatyam exercises and dances, as will be seen in the following items.

Emphasis on bound flow and fast rhythmic patterns.

As Cecily Dell (1977) points out, bound flow does not mean tensed. Bharatanatyam's emphasis on bound flow can be more associated with a clear control over each movement, which are very definite in Shape (mostly Directional, although here again we must think of a Shape Flow support and a Shaping preparation).

Here we have the theme Function/Expression in a more visible way. The Principle of Breath Support, developed through Bartenieff Fundamentals, guarantees the flow of energy throughout the body (Connective Chains), initiating the movement, so that bound flow happens as control instead of gripping.

It also helps the student not to hurry up through movements, which tends to happen on movements performed in short rhythmic beats. In such cases, one must transition quite fast from pose to pose, and fluidity of movement alternates with bound flow. Many times, students tend to tense when not having enough time to perform the movements, and end up not doing them fully, and sometimes even finishing slightly before the precise moment (off beat). For this reason, free flow and Breath Support are basic tools to provide Total Body Connectivity (Hackney 1998) within exact time frames. Bartenieff Principle of Effort Life for Body Connectivity is particularly relevant here, providing the relationship between Body and Effort in Bharatanatyam's complex expressive elements.

Also, by working with the Effort category itself, one can practice different associations between time and flow, going beyond a tendency to associate acceleration with bound flow, for example, and experimenting it with free flow. This analysis of Bharatanatyam shows that Rhythm State (weight and time) is only one of its many expressive aspects, which will be discussed in a later item in more detail.

Tattadavus.

The *tattadavus* are basic warm up exercises of Bharatanatyam, performed throughout the dances. They consist of the strong stepping on the ground, out of lifting one leg at a time, keeping the pelvis stable and the spine straight. They are organized in beats from one to eight, and each one of them has three speeds, from slower to faster. Gradually, one learns to shift the weight faster from leg to leg, maintaining the body along the Vertical Axis, that is, without bouncing the body from left to right or front and back to compensate the alternation of leg support.

Out of the Basic Position, one brings one leg at a time, from heel to sit-bone, increasingly rotating the legs outwards while bringing the pelvis downwards. This is exactly the opposite of what students tend to do: as shifting the weight from leg to leg, flexion tends to substitute rotation, with the knee initiating the movement (instead of the femoral joint), while the whole body goes up and as one tries to stabilize, the tendency is to grip at the pelvis.

Here LMA and its principles of polarities are crucial. First of all, we can use Bony Connections and Spatial Intent to imagine that, out of Breath Support, the tail reaches downwards while the head upwards. That would stabilize the spine and the pelvis, rooting it to facilitate rotation. On the other hand, rotating the legs outwards also stabilize the pelvis (Mobility/Stability). Stabilization is not gripping: it is inner mobilization, deep activation (through breathing into rotation).

So we also use the Graded Rotation Principle, developed during the warm up through all Fundamentals and Scales. Some Fundamentals used for preparation here (and done at the workshop) are: Pre-Thigh Lift, Pre-Thigh Lift with Outward Rotation, Pelvic Shift Forward, Pre-Body Half (only with the lower unit), Body Half, Knee Drop with Sideways Thigh Lift with free flow and Breath impulse (BF variation).

Although the Bartenieff Fundamentals mobilize the pelvis into three-dimensional movement on space, it also organizes its movement, training the body on how to stabilize the pelvis out of its structured mobility. The Forward Pelvic Shift, for example, connects head and tail, upper and lower units, developing Connective Chains through Breath Support, so that it is easier to do the *tattadavus* without losing the balance and the general posture (such as bouncing front and back or sideways for lack of deep body support in the different dimensions). The Forward Pelvic Shift also helps finding our Center of Weight, leaving the pelvis straight down (instead of tucked under or backwards) while dancing Bharatanatyam, especially in this warm up exercise (*tattadavus*).

The other mentioned BF exercises help perceive the movement of the thigh from the ball-socket, without gripping around it. All these exercises facilitate the lifting of the thigh, the stabilization of the pelvis, the outward rotation of the femoral joint (specially the Pre-Body Half and Body Half) as well as the stepping with whole sole of the feet on the ground (specially recommended here is the Thigh Lift with different Effort Life).

When we first learn the Thigh Lift, we are taught to think in both legs simultaneously, and not only on the one that moves. So we imagine, for example, that air is coming out of the sit-bone of the still leg, to help it stabilize for the mobility of the other leg. While doing the *tattadavus*, the same principle applies, because we have the same Body Organization: we only move the lower unit (homologous movement), and one side of it (partial homolateral movement). While performing the *tattadavus*, we should not only focus on the moving leg. We should actually focus on the outward rotation of the supporting leg, responsible for stabilizing the pelvis and facilitating the mobilization of the other leg. It is a rather interesting way of moving, surpassing dichotomies of active and passive, as well as western over-emphasis on activity.

In the same two-way street philosophy, I have noticed that not only the BF's help on Heel-Sit Bone Connection, facilitating the *tattadavus*; but also the practice of this Bharatanatyam exercise has helped western students develop that but also other Bony Connection, as well as their Spatial Intent.

An important detail of these exercises is the stepping on the ground. We do not want to march like soldiers, or hurt ourselves by punching onto the floor. One may think that the stepping is primarily strong because of the sounds it produces. Nonetheless, its main quality is a bouncing flow, which results from all those Principles already mentioned. So that the emphasis of the stepping is actually up, bouncing back from the floor and alternating light and strong weight. This activates the whole body, with a direct effect on the performer's Effort Life and Expression (Function/Expression). So here, again, we can see that a careful analysis, resulting from practice and observation, can reveal aspects of the dance sometimes quite different from a general bias (such as associating Bharatanatyam only to strong weight and bound flow).

Organization in terms of growing complexity.

In the *Natya Shastra*, the Indian Veda of the performing arts (Muni, 200 b.C.), Indian classical dance is divided into *Nritta* (abstract dance), *Nritya* (*Abhinaya* or expressive dance) and *Natya* (theater). The updated division presents the following three categories: *Nritta* (pure and abstract dance), *Abhinaya* (expressive dance, usually telling stories of the Hindu literature through hand gestures, facial expressions, etc.), and *Nritya* (a combination alternating the two previous ones). The training starts with abstract dance, gradually evolving into expressive dance and to combinations of the two. Only after a strong abstract dance background, one is introduced to the nuances of expressive dance.

Abstract dance is constituted by *Adavus* - units of pure dance; "exercises" which are gradually added to each other in complex choreographies. In its ancient wisdom, these Bharatanatyam exercises are learned in class and along years of training following an order of growing complexity in terms of Body-Effort-Shape-Space. In terms of Basic Neurological Patterns (BNP), exercises start in Homologous or Upper-Lower Body Organisation, and evolve into Homolateral or Body Half, and later into Contralateral or Crossed-Sides movements, and to combination of different Body Organisations. By performing the BNP (through Bartenieff Fundamentals or the BNP as devised by Cohen,

1993) as preparatory, the students activate deep neuromuscular connections, which will facilitate their application in Bharatanatyam complex combinations. I actually tend to select specific preparatory exercises according to the Body Organisation of the *adavu* to be taught on each class. For example, I would emphasise Body-Half and its variations prior to the learning of the first and second *nattadavus* (exercises taught right after the *tattadavus*, consisting of opening of leg and arm of the same side in the Horizontal Dimension while the other side stabilises at Place Centre, and then changing sides).

Particularly important in practicing the *adavus* is the Eye-Hand Connection, because they encompass a congruency of movement between head and hands, guided by the eye focus. Bharatanatyam has a whole system for naming each movement of each body part, and that also includes the eyes, which are considered as a main limb. There are eight movements for the eyes in Bharatanatyam, as if gliding them along specific spatial pulls. This is quite interesting, because in Western techniques the eyes are not so emphasized. So I have practiced, for instance, Scales only with the eyes and, when necessary, slight head movements. As part of Total Body Integration through Bartenieff Fundamentals, the eyes are an important element of inner-outer connection, Spatial Intent and movement sequencing. The Arm Circle, its preparations and variations, strengthen the Eye-Hand Connection, develop eye focus, and the association of vision with inner awareness.

In terms of Spatial Pulls, exercises start by one or two Dimensions, evolving into one or two points of the Planes and then Diagonals, and later into complex combinations of the three. Using the same logic as with Body Organization, I use specific Crystalline Forms as preparatory to selected Bharatanatyam exercises. For example, in the case of advanced acting students, we would do full Icosahedron Scales, and then clarify specific points of this form, according to the ones to be used in the *adavu*, exploring variations of BNP, spatial tensions and pathways away or into those pulls. Then I would teach the *adavu*, always referring back into Space Harmony. In the case of intermediate students, I would take the opportunity to teach each plane separately, and then apply them into Bharatanatyam, stimulating the learning of Space Harmony through Bharatanatyam and facilitating the learning of the dance through LMA. In such manner, students can clarify their lines in the dance, making them more precise in space, as it is so important in this dance form. From this Body-Space connection, mapping out the dance, we can then concentrate on complex rhythms, hand gestures, etc.

I usually do not teach the *adavus* to beginning acting students, because at first I concentrate on building up Total Body Integration through BF. But by the end of the first semester I already start introducing Bharatanatyam elements, such as the Basic Position or one of the *tattadavus*.

In terms of Shape or Relationship, the learning of Bharatanatyam follows a growing complexity, with the majority of its exercises in Spoke-Like or Arc-Like Directional Shape (creating straight or curved lines by flexion/extension, abduction/adduction), and evolving into Shaping (sculpting in the three-dimensional space by the use of rotation) in more advanced exercises. Shape Flow support is quite relevant too: the body's inner volume allows the creation of outer shapes, and we must remember that Bharatanatyam is

strongly connected to the various sculptural poses along temple walls. The students' training on the three Modes of Shape Change enables them to fully incorporate those stone figures, in dynamic movement (because Shape in LMA is a moving concept: Modes of Shape *Change*).

In terms of Effort, rhythmic patterns grow more and more intricate, requiring growing promptness and agility, as well as a growing ability to connect movements in ever more complex Phrasings through Exertion/Recuperation. The *nattadavus* concentrate more on simple effort combinations (such as direct and quick followed by bound and quick) in accented Phrasings. Gradually, as exercises become more elaborate in terms of Body and Space, they require more effort variations, till they reach quite demanding sequences, asking for a wise distribution of energy along the Effort Phrase. Only after a long period of such abstract training, one starts to fully develop the subtle nuances of expressive dance (item that will be discussed in detail later). From the beginning students are stimulated to smile while doing the abstract dance units, but only as they learn expressive dance, they start to associate both Effort tendencies - from abstract dance and from expressive dance, till they are able to perform dances that alternate or include both of them, or perform a full-evening concert with the three categories.

Complexity and simultaneity of movements, richness of details and ornaments.

Although the learning process of Bharatanatyam follows an order of growing complexity, from the very beginning it requires a full commitment. As we do just the *tattadavus*, for example, a lot of concentration is necessary. As we do the very first *adavus*, called *nattadavus*, we already make use of simultaneous postural and gestural changes, and the facial expression should not be tensed. Of course the teaching of these *adavus*, at a very beginning level, isolates each one of these, so that the students first learn the stepping to the side without transferring the weight into the side-stepping leg, but keep it at the central one. Only later one learns the movements of the arms, then adding up the movements of the eyes. But the exercise is soon to be practiced as a whole unit, coherent with Bharatanatyam's complex character. Its practice demands and develops concentration and awareness.

We can use LMA, such as Hackney's Total Body Integration (1998), to help us merge movement of core and periphery, function and expression, gesture and posture, movement through space and along different spatial pulls with stability at the torso, etc. Starting from Core and Breath Support, as well as Connective Chains along different Body Organizations, supported by the Bony Connections, we can gradually build up a Total Body Integration into clear spatial pulls (Spatial Intent). We can rely upon this structure to connect the different body parts in their various simultaneous movements. As recommended by Mrs. Ramesh, once we have the lines (the connection between Body and Space), we can start working on subtle expressions, ornaments, and the innumerable details of Bharatanatyam (Effort).

LMA also provides the student with the tools to understand Bharatanatyam by observing its complex combinations, making it easier to follow when necessary. Basic Neurological

Patterns or Body Organizations help the student to Perceive in Action (Cohen 1993) certain “tricks” that embellish Bharatanatyam and make it complex. I remember watching advanced students consistently do a mistake at the same spot of an *adavu* (stepping with the wrong feet). As I analyze it, I noticed that, in the middle of several homolateral movements, there was one contralateral one, in an accented moment of the Phrase. This was a nice climax moment of the Phrase, but too fast to perform in the middle of all the others in different Body Organization. By understanding its nuance, I was able to pay an extra attention to it and give it the necessary emphasis.

***Rasa*, Expressive Dance and Facial Expressions.**

Rasa refers to water, juice, essence, tasty liquid and, in the context of the philosophy of India, to the aesthetic experience of the actor and, mostly, of the public (Meyer-Dinkgraeffe 1994, 85). *Rasa* can be translated to “sentiment”, classified by the *Natya Shastra* in long lists of different “transitory states” with its subdivisions. I compare here this concept of *rasa* to Laban’s *Eukinetics*, in which combinations of inner attitudes provide an expression that reaches the public. He also called these combinations of “states”, with a main quality of mutability – gradations among extremes of a specific expressive factor. While weight is associated to sensation, time to intuition, and space to thinking (Maletic 1987, 203-217), flow associates itself to emotion, and is subliminal to the other three factors.

Flow is the basis of every movement, as subliminal tension and initial impulse present, for instance, in all vital functions. It can be associated to *Shape Flow* or the relationship of the body with itself, perceiving its own volume and moving out of its breathing, organs and body liquids. Bonnie Bainbridge Cohen (1993), disciple of Bartenieff, has proved the importance of the “Fluid System of the Body” – cellular and intercellular fluid, blood, lymph, cerebrospinal fluid, synovial fluid – in the expressive movement, as in the Vedic concept of *rasa*.

The Bartenieff Movement Principles – specially the Effort Life for Body Connectivity – help on activate the inner life, connecting the movements through flow, but also through the other 3 effort factors (space, weight and time). This facilitates performing Bharatanatyam without tensing. From the starting point of Breath Support and Shape Flow (e.g., using Body-Mind-Centering exercises on body fluids), we activate the body’s fluidity to *feel* (related to flow). From these experiences we can work the Effort category, such as states and drives, at first independently and later added on to Space Harmony. This is a preparation to *rasa* and the different facial expressions in Bharatanatyam.

The nine main aesthetic emotions in both Bharatanatyam and Kathakali, present in different facial expressions and accompanied by specific gestures and postures, are: love (*Shringara*), courage (*Vira*), sympathy/compassion (*Karuna*), wonder (*Abduba*), derision/laughter (*Hasia*), fear (*Bhaya*), disgust (*Bibatsia*), fury/anger (*Raudra*), and tranquility (*Chantam*). If we ask western students to express those faces straight away, they might have some difficulties, or resistance, because we have spent all our lives

trying to hide our emotions. So we can use Effort as a warm up to reconnect us with these emotional states, at first expressed in the body, and later on concentrate them on the face.

Of course there is no straight correspondence between the Effort combinations and the Bharatanatyam emotional states, but one can help finding the other. For example, *raudra* is mostly strong weight with other combinations (with other condensing qualities such as quick time and direct space followed by bound flow, in case of Shiva taking the skin of the tiger, as demonstrated at the end of the workshop), while *shringara* is mostly light weight (with other indulging qualities such as indirect focus, looking all around with hands in *Kilaka* – left hand hanging from right hand by the crossed little fingers, meaning relationship, friendship or closeness between two people).

FINAL CONSIDERATIONS

As we have noticed, LMA and Bharatanatyam may have apparent opposite movement principles, but it is precisely their association, which facilitates the learning and performance of each other. Here we come to an important axis of the LMA material, which makes it applicable to anything: that of encompassing polarities into dynamic relationships. This can be seen throughout the LMA material, in themes such as Inner/Outer, Mobilization/Stabilization, Exertion/Recuperation, Function/Expression; movement qualities such as light/strong, quick/sustained, etc. We do not talk about two opposing concepts, but rather about movement along continuums of differences. This is the basis for Laban's Choreutics. In the same manner, LMA provides the structure for Bharatanatyam, or vice-versa.

Along this paper, I have demonstrated how LMA helps the learning of Bharatanatyam. But it also works on the other way around: Bharatanatyam has also helped my students on the learning of the LMA material, in a more integrate movement experience and training. Working with Bharatanatyam hand gestures and facial expressions, for example, has surprised me quite a lot. I have discovered how we under-use our facial musculature (including the eyes) and fingers. In western techniques, we might have focused mostly on Central Initiation and Navel Radiation, and such distal movements have been quite under-developed. On the other hand, in Bharatanatyam, the torso (together with legs, arms and face) is considered a Minor Limb, while Initiation comes rather from feet, hands, eyes, head, neck, and waist, considered Major Limbs.

By practicing Bharatanatyam, I have been able to integrate Central, Transverse and Peripheral Tension, different Initiation and Sequencing, engaging my whole body while doing the Scales, for example, including eyes and hand gestures. That happens because, different from what we may think, facial expressions and hand gesture do not happen as separate units at the face and hands. In Bharatanatyam, we initially learn the different facial expressions and hand gestures as separate exercises, but along the *adavus* and the learning of dances, those are associated to full body positions a complex movement composition. But also, as one practices each hand gesture, one feels that they emerge out of the whole body, that is, their shapes are so demanding, that transform the whole body from within into space. This happens because these gestures are not casual:

The gesture language of the Hindu dance traces its origin to the Yajur Veda, the symbolic formulae of sacrificial rites. Gestures were first devised to evoke spiritual moods through ceremonial acts imaginatively performed as ritual. As intricate ideography of symbols representing the gods and their emblems, heaven and earth, and the nether regions, the five elements, and the sun and moon – of mythical significance, were given pictorial form as symbolic hand poses in Vedic ritual. (Devi 2002, 38)

This has also been included in the training of actors at my classes. Last semester, as their final assignment, they created duet scales out of a play with Laban's *tanz-ton-wort* ("dance-tone-word," in Osborne 1989, 90) and later using those Bharatanatyam elements not as attachments to the main movements, but as emerging out of the core of their bodies in space. The results were so rich in terms of Body-Effort-Shape-Space that we ended up presenting at two academic conferences in Brazil (on dance and on visual arts).

This study has demonstrated how Bharatanatyam is a complex interplay of concepts, and a complete system for preparing the person as body-mind-spirit, just as LMA. In both systems, the body is associated to the cosmos, with an approach that is both scientific and artistic – poetry, words, sound, music, dance, architecture, and sculpture – in a "mathematics of form" that is not to be seen as something rigid and cold, but as a "design imbued with a consciousness of totality" (Vatsyayan 1997, 41).

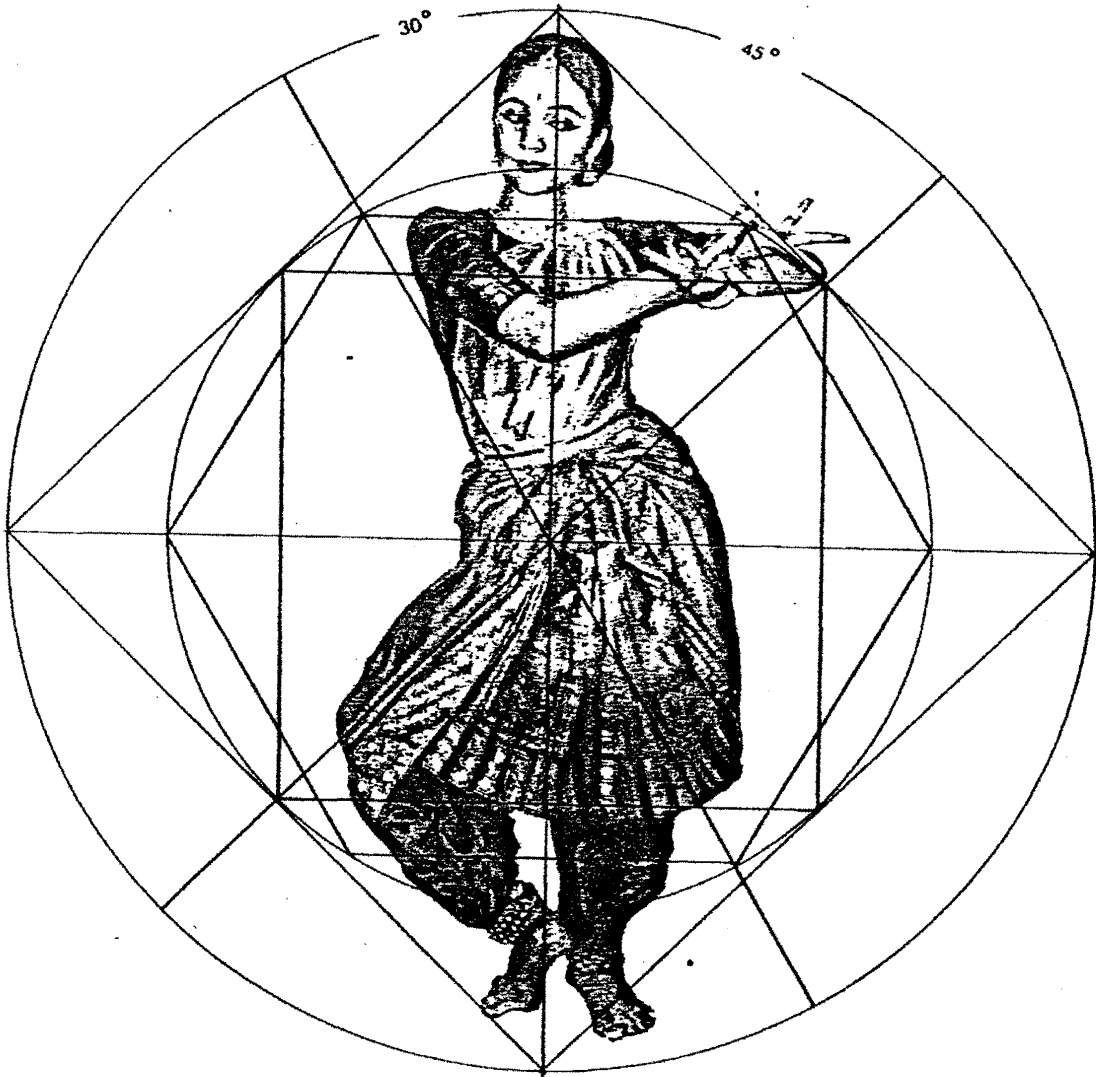
But Bharatanatyam - as a classical dance form -, does train the body to follow certain shapes and positions, while LMA - as an open movement language system -, trains the body into certain Principles which are not learn by following, but by inner awareness and conceptual understanding and creative stimuli. This does not mean that Bharatanatyam cannot become an open system. Indeed, every tradition is in constant change in time and space, and adaptations have been unavoidable, if not necessary (Erdman 1996). According to Vatsyayan (1997, 42), "the possibility of change was inbuilt into the system" devised by Bharata Muni in his *Natya Shastra*.

Many have been the ways in which this change of tradition has been taking place. Intercultural learning, for example, has proved to be a key method to provide change of movement patterns, because these are mostly socially constructed. For example, through Bharatanatyam, my students have challenged themselves enormously, learning to stabilize their pelvises, rather than move it for nearly every movement, as we do in Bahia (the Brazilian state with biggest Afro-Brazilian population). The interesting thing about such cha(lle)nge of patterns is that it does not take the students out of their connection with the ground (which might happen in the case of ballet, which also stabilizes the pelvis, but brings the Center of Weight upwards). As happens in Afro-Brazilian dances, Bharatanatyam brings the pelvis *downwards*, and stimulates the stepping on the ground. Nonetheless, in Bharatanatyam, the heels should come all way till the sit-bones in the *tattadavus*, while in Brazilian dances the stepping is more close to the ground, with more passive weight, shape flow and little space attention. So that Bharatanatyam trains my students on their Heel-Sit Bone Connection, and gives them more promptness to move,

training them on controlling their flow and directing their focus. Of course I have managed to teach Bharatanatyam at all to my students only through LMA, because it builds the bridge between the local and this (very) foreign tradition.

In terms of choreography, using Hackney's concept of "Integrated Totality" (1998, 211-2), we can build Intercultural Flexible Integrated Compositions that include both: tradition and deconstruction, daily life elements and sacred principles, feeling and form. For example, through a study of Effort, I have associated the Hindu god *Shiva* to the Afro-Brazilian chant to the warrior god *Ogum*, in one of the fragments of an hour-long solo piece. That association came out of my daily home training of the *Shiva Slokan* - an expressive dance in honor of Shiva-, to different religious chants, until finding one with the same powerful qualities - that was *Ogum*'s. In performance, the music really seems made to the Hindu dance, which describes Shiva's qualities (as in the original Sanskrit text). Although Shiva's movements are marked by a few sudden strong attacks (as when he kills the tiger), much of the dance carries an atmosphere of serenity and self-control, just as *Ogum*'s chant. Both the dance and the music establish a different sense of time, like Shiva's symbolism - *Mahā Kāla* / 'Great Time', or *Kāla Rudra* / 'all-devouring Time'. Different from a time based on fixed entities, this time cannot be measured. It is dynamic, *moving*, mobile stability and stable mobility in flux.

This study proves, as the wide range of subjects at the 2005 ICKL, the broad application of the Laban material. Although created in a specific place and time in the history of humankind, this method has been further developed in many other contexts and today it can be placed together with contemporary frameworks, such as Performance Studies, Ethnocenology, Body Studies, etc. In an updated approach to movement, LMA can be used to discuss issues of body politics, cultural tradition within globalization, not as a theory that should be imposed on the body as object. Today, when technology, genetics and discourse itself have taken the power away from the body, we can still and more than ever rely upon a language based on movement, which favors the body and its wisdom.

ILLUSTRATION

"The positions of Hindu classical dance (*Bharat Natyam*) describe geometric angle relationships from the axis of the body centre of gravity just below the navel. These positions, while defining principal angles, are also often attributed to various deities, and are meant to convey their characteristic powers." (Lawlor 1982, 95)

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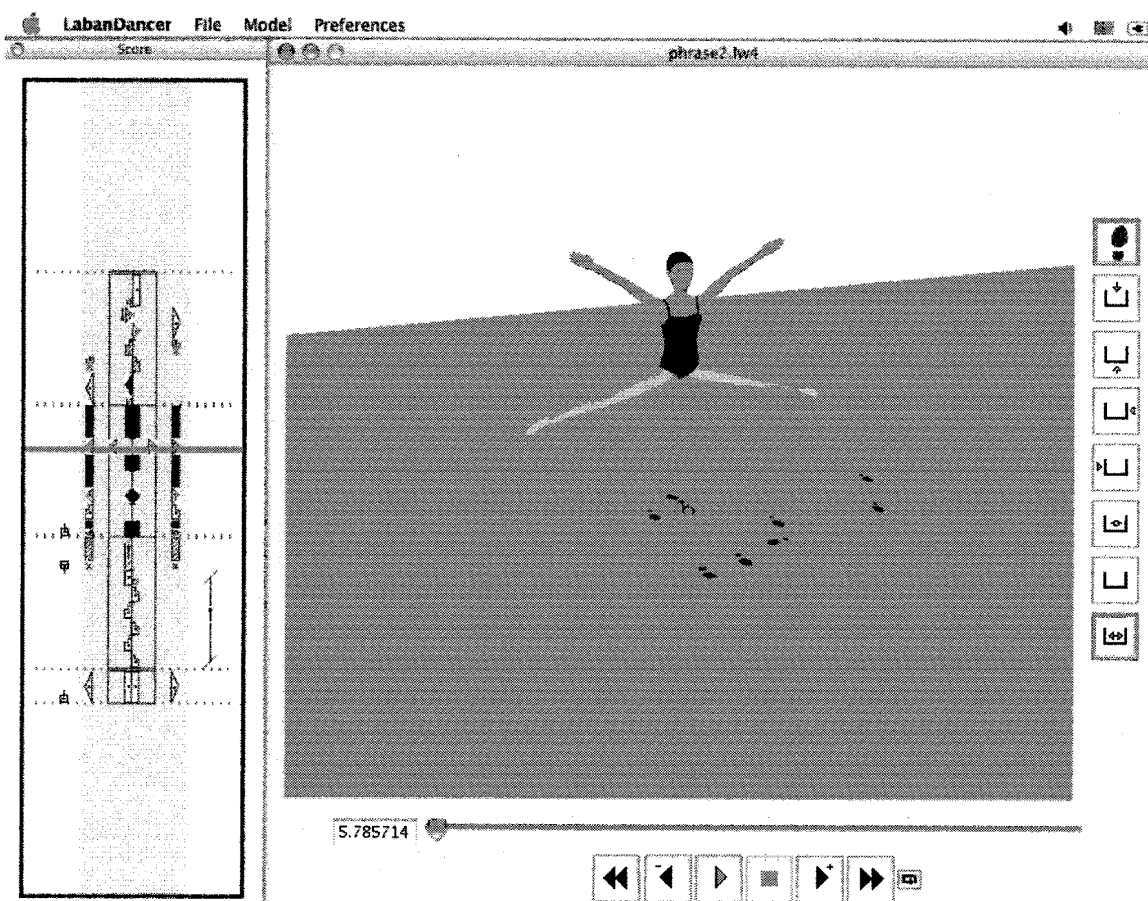
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USING THE LABANDANCER TO VISUALIZE NOTATION SCORES: BETA-TESTING

By

Ilene Fox and Rhonda Ryman

A workshop session was held which allowed participants to explore a beta-test version of the LabanDancer software for visualizing LabanWriter scores. We explained the basic features, encouraged hands-on exploration, and solicited user feedback that will be helpful for further development of the project.



NOTATION ON FILM, NOTATION FOR FILM

by

János Fügedi

The accreditation of traditional dance teacher training at academic level in Hungary generated the need to document not only “what” to teach, in other words the dance material¹, but the “how” as well, the education methods, the phases of the teaching process themselves. The plan for a new methodology literature served a historical possibility to confirm the position of notation in the curriculum²: the use of Labanotation instead of textual description to introduce the steps of the teaching process could nominate notation as an unevadable tool in dance education. Once methods as teaching material which at exams must be given an account of are introduced and illustrated by notation, the state of notation as a separate, stand-alone subject will be exceeded (just as students’ speculation whether it’s worth the comparatively great effort to acquire notation knowledge). The authors – a new generation of teachers, who received notation education during their student years – realized also that notation use makes methods more understandable and exact. Therefore during the past years new traditional dance training methodology books and articles were published, such as Zoltán Farkas’s “Methodology of Basic Traditional Dance Techniques”³, and the studies by Péter Lévai, Zsolt Szilágyi, Mária Zórándi on teaching Ugrós dances⁴, all using notation as illustration of methods.

After the books came out, a logical request emerged: the material should be released in the form of moving picture. So far altogether four films were compiled, two from the “Methodology of Basic Traditional Dance Techniques”⁵ (Fig.1, Fig.2), one from Ugrós dances⁶ (Fig.3), and one from Verbunk dances⁷ (Fig.4), the textbook of the last mentioned has not been published yet. The creators intended the films as complementary material to the books, though the films were expected to represent complex information in themselves. Therefore it was decided to include explanatory text (Fig.5), musical score (Fig.6), different signs – and notation (Fig.7).



Fig.1



Fig.2



Fig.3



Fig.4



Fig.5



Fig.6

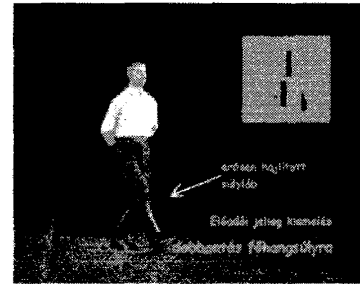
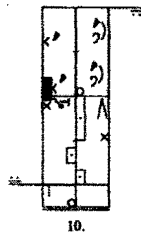


Fig.7

Let's see a short section from the film on Ugrós dances, the performer is Péter Lévai, assistant professor of the Hungarian Dance Academy. The clip illustrates also a basic utility of notation on film, namely that notation can serve as index mark corresponding the text in books and the referring film section. The identity of notation can indicate the correlation. (Fig. 8)

Lévai Péter
4.1. Vertikalitás megjelenése dinamikai hangsúllyal
Tulajdonképpen a már eddig megismert mozdulat-összetevőket használjuk fel úgy, hogy újabb karakterű mozgásanyagot hozunk létre (10. példa).



A leírt példában a gesztusláb iránya és dinamikai töltése változik meg a talpon dobantással. Ez a bedobbantás ráadásul már nem ismeretlen forma, hiszen a 2. példában

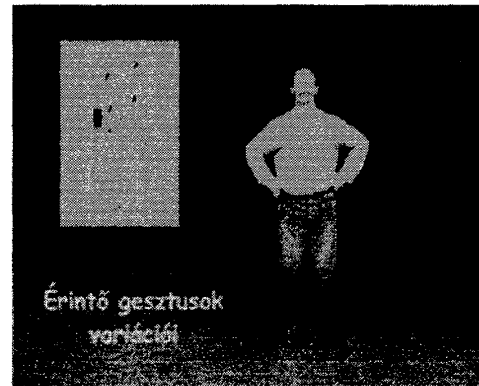


Fig.8

It was assumed, the appearance of notation on the screen helps understanding the movement concept and calls attention to the most important aspects of the presented sequence. In the next clip rolling from half ball to the palm of the foot (Fig. 9) is differentiated from dropping the weight, a kind of spring, where the center of gravity moves only downward⁸ (Fig. 10). The performer is Zoltán Farkas, professional dancer and choreographer, the author of the above mentioned book on traditional dance techniques.



Fig.9

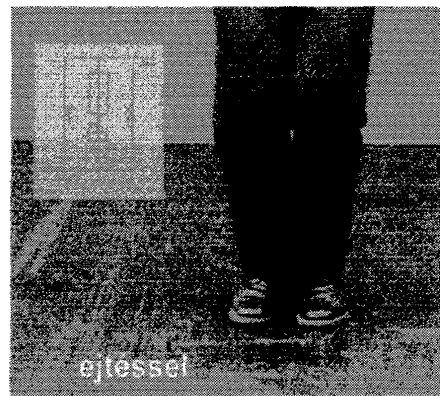


Fig.10

A general concept of dance education is the gradual introduction of more and more complex movement material until the desired level. When the grades are recorded, sometimes it is rather difficult to realize the difference between two consecutive movement sequences. Notation in this case can help realizing what is the point, what is intended to show. In the next clip first a hip rotation is gradually introduced to achieve a complex motive (Fig. 11-13), then a basic support structure is “decorated” gradually with gestures and sliding (Fig. 14-16). The performer is again Péter Lévai.

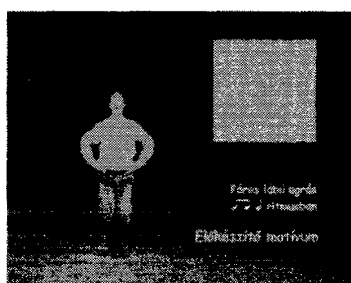


Fig.11



Fig.12

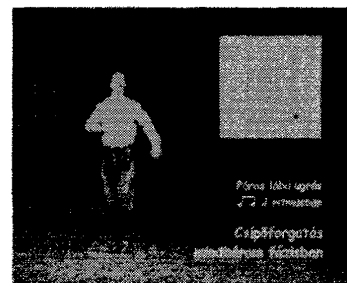


Fig.13

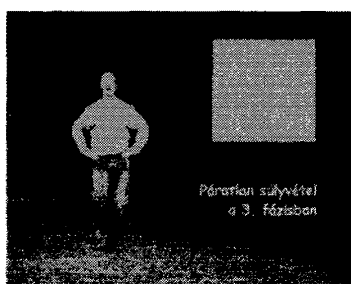


Fig.14

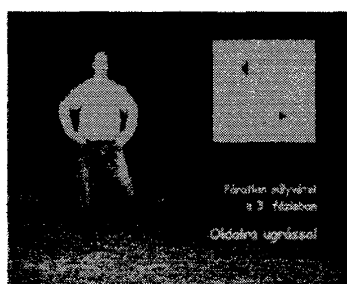


Fig.15

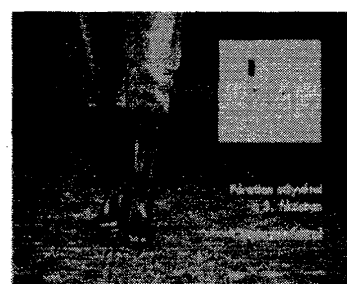
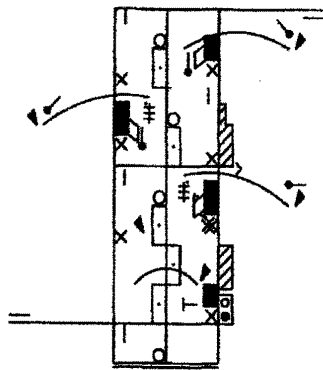


Fig.16

As it is well known, notation understanding is heavily bound to conventions. Therefore notation on dance teaching methodology films can also serve understanding these conventions, that is it can help notation education as well. However the direct correspondence of notation and movement – when the two appear side by side – leads to further problems. Since the textbooks came out earlier, necessarily the notated material had to be reconstructed – though the exact reconstruction proved to be almost impossible. During cutting and pasting notation in the scenes it turned out that in spite of all the cautious attention to details, still some deviations remained – especially spatially – from the expected movements written in the books. The exact reconstruction of notation requires such a concentration and coordination ability which seems unordinary for the anyway very skilled dancers, and may need special training.

The phenomenon raises a basic question of illustrating movement ideas. The pre-notated “movement text” clearly, ideally represents the desired movement concept, but in the practice reconstruction more or less deviates from the ideal. The question is whether the two should be perfectly match each other, or it can be taken understood, that notation is a prescriptive idea and reconstruction is approximation, hence certain deviation can be taken as a consequence of interpretation.

Because this question is still not answered, during the production of the first movies I have voted to the safer, but harder solution: I renotedated or corrected the digitally already available motives to meet the finer details. In the following clip I will show some notation examples from the books parallel with notation on the film corrected after performance. (Fig. 17)



222. ábra

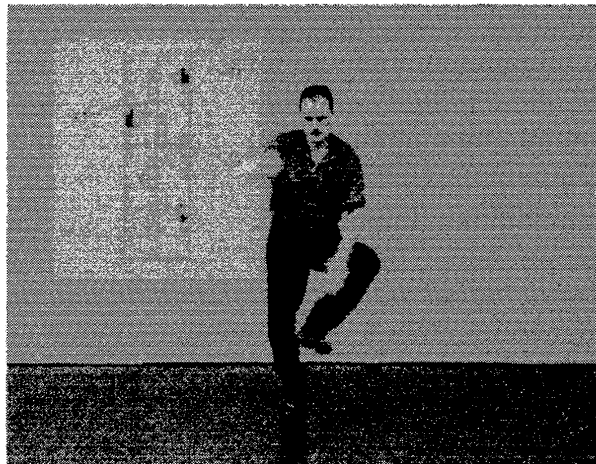


Fig.17

To escape the difficulty of exact reconstructions, in the case of the last education film on Verbunk dances shooting happened first on the bases of the "ideal notation" then the finer details of notation were corrected by need according to the exact performance. Parallel with the "film first, then book" approach we realized that we need a more thorough clip planning. Let's have a closer look at some transitions, when clips were assembled before this approach at cutting. In the first films while the clips belonging to the same subject change, sometimes the music is cut, and it gives a sense of fragmentation. The performers are the students of the Hungarian Dance Academy (Fig. 18-19).



Fig.18

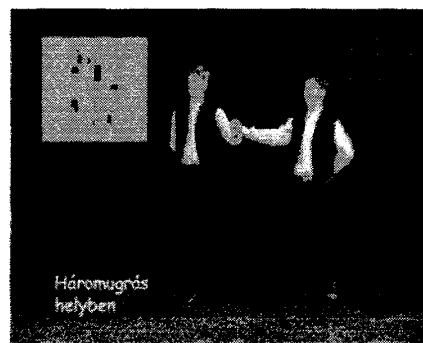


Fig.19

The detailed script of our last movie with the title "Verbunk dances" was made the following way: first the teaching method was formed, the dance material stated, and the motives to be introduced notated. Then the times of the repetitions and change of the

motives (that is the length of the clip) were set in a way, that all follow the metric and the podic structure of the accompanying melody. The next clip shows an example of this practice – the clip was built of eight recordings, and the unbroken melody colligates the changes and sections. This practice can be regarded as an initiative to a “methodology choreography”. The performer is Richárd Kőkény, a solo dancer of the Hungarian State Ensemble (Fig. 20-21).

The main points of the presentation are the following:

1. We suppose that notation use integrated into methodology literature can confirm the position of notation in the curriculum.

Notation included in the methodology films can help understanding the represented movement material in several ways:

2. notation can serve as index mark for matching the text in an accompanying text-book with the moving picture
3. notation can call attention to the movement features introduced
4. notation can help realizing the difference between methodology steps
5. showing notation together with movement helps finding the correspondence between notation and movement and helps understanding notation conventions

Notation can be used very advantageously in the process of making dance films

6. notation helps clip planning
7. based on notation, a very exact, movement by movement script can be made
8. notation use easily leads to rational educational choreographies

Notes

¹ Formerly the method and the dance material had mainly synonym understanding. Though more than a hundred folk dance choreographies and about 500 authentic dances were published in Labanotation, the bulk of dances were and are still taught the traditional imitative way.

² The education of Labanotation itself started about sixty years ago in Hungary. It got an institutional background right after the Second World War, the subject was introduced at the Hungarian Theatre Academy for the choreographer training between 1945 and 1957. When the Hungarian Dance Academy was established in 1951, Labanotation was also taught for the ballet students though this type of education was discontinued at the beginning of the sixties. A long series of middle level folk dance teacher training courses were started in 1951 either, where Labanotation became a constant subject. The notation training was lifted into the curriculum of the Hungarian Dance Academy (HDA) in 1984, from when traditional dance teachers can graduate at about BA level. (Actually higher, but it does not reach the university MA standard. Hungarian high education system is going to change to the BA-MA-Ph.D system in the coming years.) Notation today is a compulsory, six semester subject at HDA.

³ Farkas 2001

⁴ Lévai 2003a, b, c; Szilágyi 2003a, b, c; Zórándi 2003

⁵ Néptánc alaptechnikák módszertana – Ugrós, Kalotaszegi csárdás (Methodology of basic traditional dance techniques – Ugrós and Csárdás from Kalotaszeg) 2002, directed by Zoltán Farkas & János Fügedi; Néptánc alaptechnikák módszertana – Lakócsai táncok (Methodology of basic traditional dance techniques – Dances from Lakócsa) 2003, directed by Zoltán Farkas & János Fügedi

⁶ Néptáncaink tanítása – Ugrós táncaink (Education of our traditional dances – Ugrós dances) 2003, directed by János Fügedi & Péter Lévai

⁷ Néptáncaink tanítása – Verbunk táncaink (Education of our traditional dances – Verbunk dances) 2004, directed by János Fügedi & Péter Lévai

⁸ The classification of springs by performing qualities was introduced by Fügedi (1997, 1999).

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DYNAMIC PHRASING AND FLOW FACTOR FOR A CLEAR DEFINITION OF DRAMATIC MOVEMENT

by
Jorge Gayon

Introduction

On our last presentation about the Project Laban-Decroux for the XXth Bienial ICKL Conference in Hong Kong -1997, we took note of the comments and observations from those who participated to our corporal mime scores interpretation workshop. At this time, it was clear that the way we were approaching our study of the Decroux's movement material could be enhanced by a broader application of the Laban's movement analysis directives, mainly about dynamics-effort. Since then, we have gone throughout a deep study and training exploration on the possibilities of this application. Today, we would like to share with you this experience and talk about our vision of dramatic movement.

ABSTRACT. The conference is intended to highlight the focal point needed to take on count when notating or analysing dramatic movement materials so the resulting scores might lead its readers to its faithful live reconstruction. Today, thanks to the application of the movement quality analysis (effort) and its notation side by side the kinetography scores (¹), we are able to give a clear written definition to dramatic movement.

The complementing workshop (under the direction of **Greta Maes**) will show practically what the dramatic movement's nature is like. Reading and interpreting a kinetography-effort scores is certainly the best way we have to let others know this application's scope.

The Laban-Decroux project

During the last century, several *attempts* were made to reform the western performing arts, by means of alternative physical practices. Some of the contemporary esthetics are the result of those trials. We all know the pioneers of these changes in the dance field. In Europe we have: Laban, Joos, Wigman, etc. in the US: Duncan, Graham, Nikolais, Cunningham, etc.

Less known, is the development of some practices which intended to regenerate theatre by redefining the actor's art and his physical play.

Today, these practices are known as the 'scenic movement' field. Among them, we have the Meyerhold's biomechanics, the Stanislavski's physical actions method, the Laban actors' training, and most recently, the Grotowski and Barba's experimentations.

Yet, there is still a very important work almost unknown by most. It is Decroux's development of the actor's art and physical training method he called 'corporal mime.' About Decroux, Eugenio Barba said that "he is perhaps, the only European master to have created a set of rules that can be compared to those of an oriental tradition' By the way, the Sunday Times quoted Decroux among the 1000 world's most relevant personalities of the XX century and a highlight for theatre.

Two of these 'new' physical disciplines, Meyerhold biomechanics and Decroux's corporal mime have a better set-up than the others. Their foundation and basis were synthesized on movement repertoires; their 'matter' was made concrete by the means of movement sequences, figures or pieces.

But, If we look at the material left by those who researched about the actor's physical play, we can see that Decroux's material is the most concrete, precise and rich. Both, his pedagogic and performance repertoires, include many examples where he gives 'body' to his vision of corporal mime. What we call today 'projet Laban-Decroux', is about the basic questions concerning the 'scenic movement' disciplines and, above all, about their physical transmission.

In this context, we can ask, what is corporal mime? Can we still recognize and name it? And, most important, WHAT should be transmitted to be preserved? (Rather than "how"). And finally, how can Laban's movement analysis (and I talk also of notation, which is only its result) help us to seize this actor's artistic material? This 'material' which Meyerhold, Barba and others talked about? Answering these questions requires the opening of a dynamic research field that links all the related disciplines.

Small history of the Laban-Decroux Project

I launched this projet in 1988. In the beginning, I concentrated on the analysis and notation of corporal mime. The project was presented at ICKL in 1995 in Paris. Two years later, in Hong-Kong, we held an interpretation workshop of corporal mime scores. The observations made by the participants highlighted the specificity of our movement. The most significant remarks concerned the analysis of duration, muscular tension and of phrasing. From here on, Greta and I put ourselves to the study of effort, in order to define more clearly this specificity. During several intensive periods, we went back and forth, from workshops with some of the CMA's, and back to our studio. We also widened our observation field to other practices of *movement théâtre* and physical training for actors, such as Meyerhold's Biomechanics, Japanese Noh and Kabuki théâtre and Indian Kuttyattam. Since then, we have been using the term "dramatic movement" instead of corporal mime. This term takes into account the linking of elements from different approaches to physical acting.

The movement material of the Laban-Decroux Project: What is it?

From the audience's point of view, our material contains several layers, which may be: the story that is told, symbols, evocations, diverse effects, etc. What we look at is "What is played?" meaning, "What are the forces, within the action, that are represented on stage?" When we watch the movement actor evolving, we look to see the connection, where all those forces are in a struggle for equilibrium, such as any manifestation in nature. Therefore, the issue of dramatic movement and of its notation project is not so much What is represented, but moreover How it is represented; using weight, muscular tension, tension in space, both within the performace space as within the actors' articulation of movent, within his organisation of attention, intention, decision, action and reaction.

Let's have a closer look to its principal characteristics:

The first and most basic, is the way weight is linked to action. This link generates or reveals **force**, real or symbolic. Etienne Decroux isolated their variations in movements which he called **counterweights**.

Then there is **rhythm**. The Rhythm in *itself* contains the idea of conflict. By the play of tension and release, our movement reveals resistance, or its absence, either external or internal, real or imaginary. Variations of these rhythms are synthesized in what we call **dynamorythms**.

Third, **causalities**, that link one phrase to another or one actor to another, in a relation from cause to effect. They are the print of rhythm in real action. In between tension and release, they can be sudden or sustained transitions, collapses, contractions, etc.

Next, the **phrasing** of dramatic action, its elements and range of interpretation. Here again, these elements are inspired from primary actions, wherein tension or force, develops a dramatic core with its preparation and, its result.

Last but not least: **articulation**, extremely precise in its shape, it is also significant for the various ways the **spine** is used.

Of all of these characteristics, **the dynamic phrasing** is the most specific one. After years of practice, observation and analysis, I realized that, in its most summary expression, this phrasing is essentially composed of two things only: muscular tension, combined with duration. This comprehension, finally allowed us to begin effort analysis.

Henceforth, we focused our attention on factors Flow and Time, and used these "two lenses" to grasp the fundamental nature of our phrasing. My approach to effort considers muscular tension as the essence of the flow factor. Therefore, in order to define this tension, I overlook the weight and space factors.

Before continuing on this I would like to make a reminder: This analysis requires a clear distinction of the several layers of movement-performance in general (from the performer's point of view). Those layers are:

1. The illusions, symbols, effects, or evocations intended
2. The performers' own sensation
3. The muscular tension employed and the part of the body that is moved

It is this last one, we are focusing on

Nevertheless, this does not mean that tension and part-of-the-body involved is a pure mechanical matter. We can distinguish a clear character of our material, because of its playing nature.

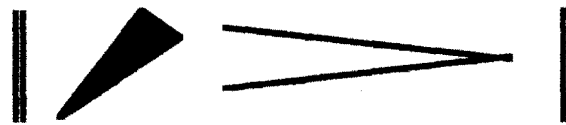
It is the play - translated into phrasing of muscular tension, that makes dramatic movement different from other movement-types.

Decroux and others: Laban, Meyerhold talked about this. Laban identifies and isolates the **qualities** through his effort analysis directives. Meyerhold identifies and isolates the

phrasing elements in *dramatic* action. 'Ötkas, passil, thormos and toshcka', are the elements of dynamic phrasing in biomechanics. Decroux identifies the **qualities**, isolates the **phrasing elements** and develops **concrete examples** in order to give the actor the means of grasping its nature. In corporal mime, the dynamorythms are the smallest synthesis of this kind of tension play.

Pattern notation of dynamorythms

- Toc moteur :



dynamics notation



effort notation

Note: some of these dynamorythms may include values expressing the weight factor on both extreme elements. But these expressions are not essential; so forth they are ignored en the effort notation.

- Ponctuation :

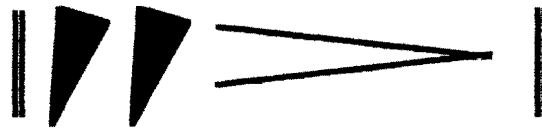


dynamics notation

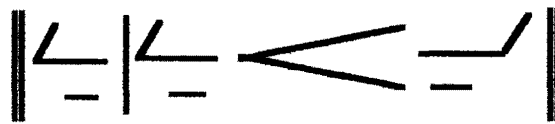


effort notation

- Toc butoir :



dynamics notation



effort notation

- Toc global :

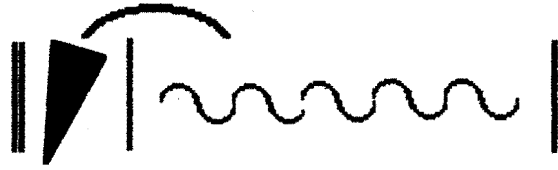


dynamics notation



effort notation

○ Vibration :

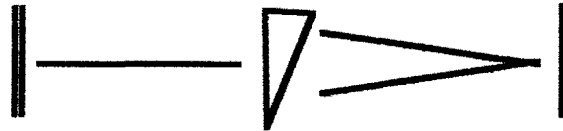


dynamics notation

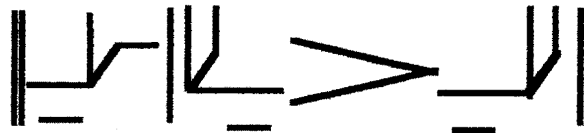


effort notation

○ Antenne d'escargot



dynamics notation



effort notation

The values of the factors flow, weight-force and space, shown on this last examples, are of course depending on their movement context. We have not talked about them as the complete correlation effort-shape of our material is beyond the aims of this presentation.

Interpretation workshop of a dramatic movement score.

Desperate priest

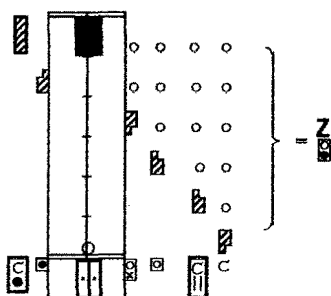
© Greta Maes 1995

Le prêtre désespéré 1

Le prêtre désespéré

exercice by Greta Maes

GLOSSARY NOTES



Building our depart
position called :
"zéro de figure" (= Z)

PROJET "LABAN-DECROUX"
Mouvement Dramatique
Analyse de l'effort

Cin.: J. Gayon
Gand (Belgique), 24/07/2005

Effort and phrasing terms /
muscular quality of movement

— = heavy/sudden/free accent

—] = a strong/sustained/bound
quality is evenly maintained

— = sudden changes to free then
bound quality, "muscular
breathing"

—] = a bound/sustained quality is
evenly maintained, the
muscular nature does not
changes from stillness to
mouvement

— = a free/sudden accent

∨ = the muscular quality builds
up to strong/bound

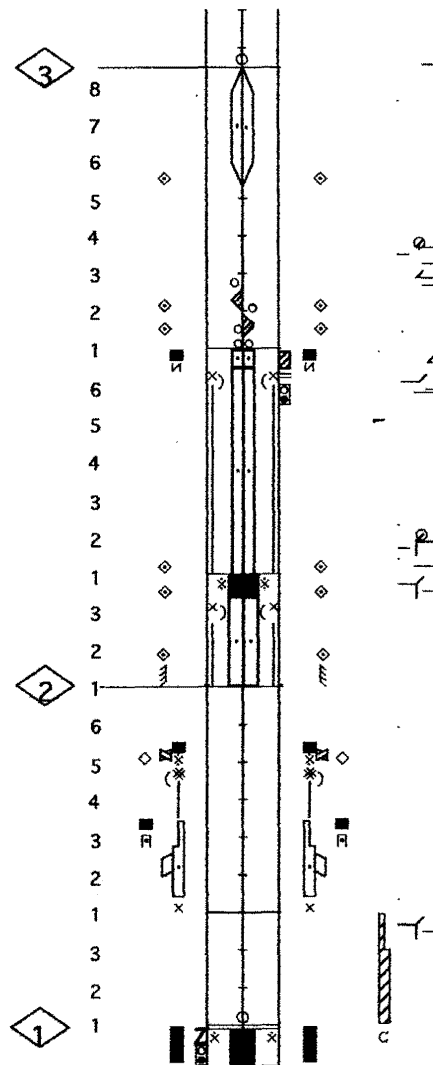
∧ = the bound quality decreases
to "normal", the visible
muscular tension disappears

NOTE: this score has been divided for phrasing highlight, each page was performed by a different readers group during the interpretation workshop.

2 Le prêtre désespéré

© Greta Maes 1995

Desperate priest

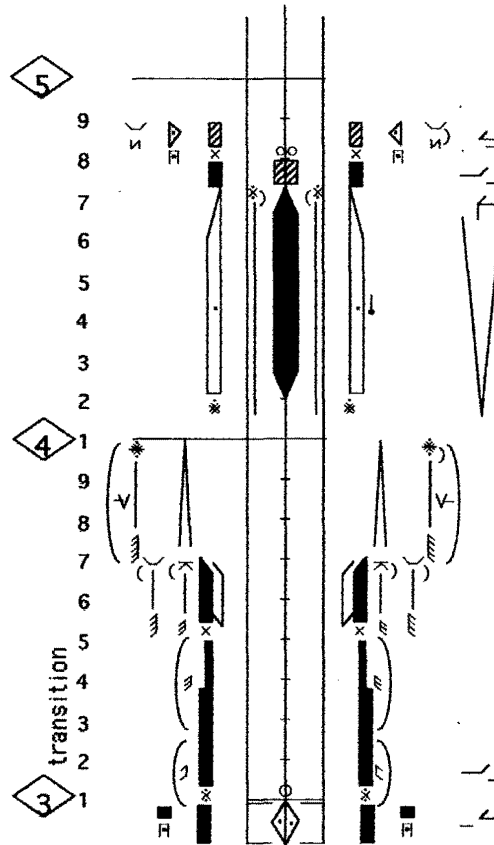


♩ = 90 bpm

Proiet Laban-Decroux. Mouvement dramatique et l'analyse de l'effort. Workshop reading material ICKL 2005 London. ©

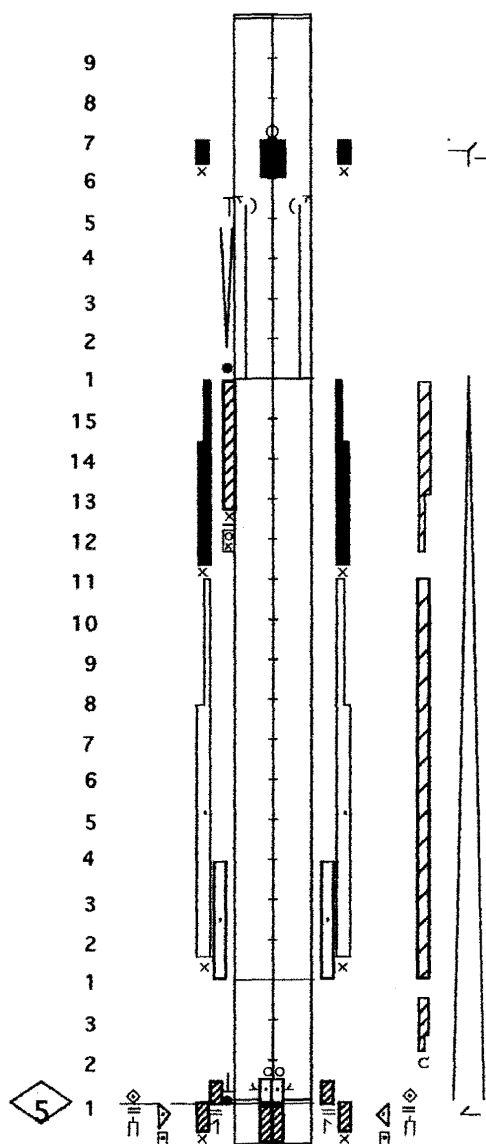
Phrases 1 and 2

Proiet Laban-Decroux. Mouvement dramatique et l'analyse de l'effort. Workshop reading material ICKL 2005 London. ©



♩ = 90 bpm

Phrases 3 and 4



♩ = 90 bpm

Phrase 5.

LMA AS A TOOL FOR DEVELOPING AUDIO DESCRIPTION: MAKING THE ARTS ACCESSIBLE TO PEOPLE WHO ARE BLIND

By

Esther Geiger

A group of children were chattering excitedly about the movie they'd just seen. *Toys* takes place in a toy factory and the film is filled with colorful images, movement gags and sound effects—but not a lot of dialogue. The one blind girl in the group declared, “That was the most boring movie I’ve ever been to!”

Imagine yourself experiencing as she might. The next time you watch television or a film, try closing your eyes for a while and following from aural cues only. You’ll quickly notice how much information is conveyed visually.

Audio description (AD) makes the visual verbal. Visual images in a film, television show, live performance, or museum exhibit are described (without interfering with dialogue or other audio elements) so that everyone, whether sighted or not, can more fully experience them. For television and film, an audio describer reviews the program and writes descriptions of visual elements and action, timed to be read between dialogue and other audio elements. The AD script is then recorded by a professional voice talent on an auxiliary sound track. In live theatre performances, audience members who are blind or have limited vision use headset receivers to listen to a live describer reading program notes and describing sets and costumes before the show, then narrating the action (during pauses between dialogue) throughout the performance.

Laban Movement Analysis offers description writers and live describers a valuable tool for observation, selection and description of important movement elements in theatre and film. My AD involvement began through my husband, Joel Snyder, who has worked in the field of audio description since its inception 25 years ago. I’ve recently been using LMA to collaborate with him, both by training describers and by writing description myself.

Joel is the Director of Described Media at the National Captioning Institute; NCI Described Media works in broadcast media and DVDs, developing description for television and film. My interest was sparked a few years ago, watching a broadcast of the audio described version of the 1977 film *Saturday Night Fever*. A turning point in the story occurs during a dance contest, when the protagonist (played by John Travolta) discovers something about his own limitations—and unearned advantages—by watching the performances of the black and Hispanic couples that place behind him and his partner. To my movement analyst eyes, it was clear that the stylistic differences between the performances served as an important device to convey character and further the plot. But what I heard in the description was a focus on naming the moves the

dancers were making; I couldn't hear as much difference between the couples as I could see. My concern about this missed opportunity in description led me to learn more about AD techniques and to contemplate how I might contribute.

I have since offered workshops for NCI's description writers, using the LMA framework to help them find broader ways of looking at movement and more expressive words to say what they see. Because description happens in "real time", describers must be clear and succinct—especially if a program contains a lot of dialogue or other pertinent sound elements. I liken what they do to motif writing (as opposed to notation). There isn't time to describe everything; they must choose what's most important to convey the essence of the visual experience. Then they must find words that are concise, vivid and imaginative to elicit images in their listeners' minds' eyes.

The describers I've worked with are already practiced observers, and they quickly understand the motif idea—looking for essence and pattern so as to home in on the main thing. What my LMA approach offers them is an expanded range of seeing and a more specific vocabulary for describing movement. In a recent workshop we talked about the difference between just saying what someone is doing (body actions), and describing how they do it (looking for which aspects of Space, Effort or Shape clarify the movement's meaning). I assembled clips of people walking, where just hearing "walk" doesn't give nearly as much information as seeing the image. For example, watching Charlie Chaplin in *City Lights*, we agreed that his body organization and phrasing are essential elements of his signature character. In *My Fair Lady* it's Audrey Hepburn's body attitude and Effort qualities as much as her costume and speech that demonstrate how Eliza Doolittle has changed after being groomed by Professor Higgins. In other examples, we focused on gait patterns, use of Shape qualities, spatial interactions and other movement ideas that inform characters' walks. (For a challenge to your own observing/describing skills, watch John Cleese in the "Ministry of Silly Walks" sketch from Monty Python's Flying Circus and decide what words you might choose to narrate, succinctly and vividly, a sequence that nearly defies description!)

I try to help describers find "walk" verbs which incorporate adverbial ideas denoting Phrasing, Effort life, Spatial Intent, Body Attitude and so on. Appended to this article is the sort of vocabulary list I'm developing for describers (Appendix A). This one lists "locomoting" words, organized from an LMA framework. (Note that to translate "Laban language" into plain English for the describers I've used "movement dynamics" instead of "Effort", "force" instead of "Weight Effort" and "focus" instead of "Space Effort".)

In addition to sharing my LMA perspective with professional describers, I've done some description writing myself. Separately from his role at NCI, Joel heads his own company, Audio Description Associates (ADA), which trains describers for live theatre and creates description for museum exhibits. One special project on which I collaborated with ADA produced a script used by describers at a performance of the Axis Dance Company—a company that has pioneered "physically integrated dance".

Axis Dance, committed to inclusion and accessibility, asked ADA to provide live description for a performance presented by the Flynn Theatre in Burlington, Vermont. I wrote a script based on videotapes of the choreography, and participated in training workshops for the live describers. The describers attended rehearsals, script in hand, to practice “speaking the motif” as the dancing occurred and then described the performance live for blind and low-vision audience members. For most of these patrons, this was the first time they had attended a live dance performance.

At the pre-performance workshop organized by Axis, we heard from one blind participant, “I never go to dance because all I get is the music, and if I don’t like the music, it’s really boring!” Watching the choreography on video as I developed the audio description script, I tried to keep his perspective in mind. What information would be most important to allow him to “view” the performance as fully as possible, to help him understand the choreography, not just picture isolated movements? Again, my LMA training provided ways of looking, and a framework for discerning “essence”. Since there’s not time while it’s happening on stage to describe everything about a dance piece, I needed to choose which elements comprised the structure and themes of the choreography, and what words would most succinctly convey those ideas. One piece seemed mostly “about” spatial patterns and sequences of group clustering and scattering; the dancers’ specific movements seemed less important, and their individual characteristics (gender, hair color, body shape, etc.) seemed not to matter at all. In another piece, where each dancer played a unique character, those particulars, along with Effort combinations and body attitude, were meaningful factors. Appendix B is a portion of the describers’ script for one of the Axis Dance pieces: “Dust”, choreographed by Victoria Marks. The script is designed to be spoken while the movement occurs; viewing a tape of the piece, you would notice that much has been left unsaid in order to focus on communicating mood, theme and choreographic structure, while leaving aural space for the impact of the musical score. I invite you to test the description by having it read aloud to you. To what extent does hearing the dance allow you to see?

These projects—both training audio describers and writing description—are beginning explorations in the application of LMA to AD. I am convinced that describers and movement analysts have a lot to share and a lot to learn together about observation, clarity and efficiency of description. I believe that an ongoing collaboration between AD and LMA will be enriching and enlightening for both fields. I hope more CMAs will become involved in this endeavor.

APPENDIX A

Vocabulary for Audio Describers: Locomoting

Writers of audio description search for both brevity and clarity of expression. Movement Analysts use the LMA framework and language to look for pattern, essence and meaning. Here is a sample word list for describers, organized from a movement analyst's overview.

VERBS INDICATING LOCOMOTION (TRAVELLING THROUGH SPACE)

Category #1: Some basic verbs that denote a specific Body Action

WALK, STEP, RUN, JUMP, HOP, SKIP, LEAP, GALLOP, TURN

These words tell what the mover is doing. Describers need to be succinct, but also specific. To convey as much information in as few words as possible, they often need to describe how the mover is accomplishing the action. What sort of pathway in space does the mover follow? How does the shape or "attitude" of their body convey character or context? What dynamic qualities of the movement flavor its meaning? The describer needs to choose concise wording that will capture the primary elements, communicating to the listener the most essential visual cues.

Below are some verbs meaning "locomote" which contain modifying information about the "how" of the movement.

Category #2: Movement Dynamics

(The main idea in the locomotion is seen through the mover's use of dynamic factors: flow, time, force and focus.)

The locomoting movement is mostly "about" Flow (releasing or containing):

FLOW, PROGRESS, STREAM, SURGE, YIELD, EASE
STIFFEN, RESIST, TIGHTEN

The locomoting movement is mostly about Time (quick or sustained):

RACE, FLY, DASH, TROT, DART, ACCELERATE, HUSTLE, RUSH, ZIP, SPEED,
HASTEN, SCURRY, WHIZ
STROLL, LINGER, LOPE, HESITATE, SAUNTER, DECELERATE, DALLY,
MOSEY, DAWDLE

The locomoting movement is mostly about Force (strong or light):

STOMP, CRASH, THUD, TRUDGE, PLOD, CLOMP, LUMBER
FLUTTER, TIPTOE, FLIT

The locomoting movement is mostly about Focus (direct or diffuse):

THREAD, HOME IN, TREAD, TRAIL, TRACK, FOLLOW
WANDER, WEAVE, EXPLORE, SURVEY

Many locomoting verbs contain ideas combining two or three of these factors within the category of movement dynamics. For example:

(Time and Force) BARRELL, STAMP, MARCH, FLUTTER, BOUNCE, PLOD

(Flow and Focus) ROAM, WITHDRAW

(Force and Focus) LUNGE, STABILIZE

(Time and Flow) MOBILIZE, CAVORT

(Time and Focus) PRANCE, WAVER

(Flow and Force) SURGE, MINCE, DRIFT

(Force, Time, Focus) FLOAT, POUNCE, GLIDE, FLING, GRIND, FLIT, PRESS

(Force, Time, Flow) FLAIL, CAREEN, BURST, STAMPEDE

(Time, Flow, Focus) TRANSPORT

(Flow, Focus, Force) – Spell Drive: can you think of any locomoting verbs?

Category #3: Space (Spatial Direction or Pathway)

(The “main idea” in the movement is where it goes and how it navigates through the environment.)

ENTER, APPROACH, ARRIVE, CIRCLE, NAVIGATE, CIRCUMNAVIGATE, SIDLE, STEP, WEND, MEANDER, STRAGGLE, ZIG-ZAG, ANGLE, WANDER, SPIRAL, ORBIT, FOLLOW, FORGE, SLIDE, TRAVERSE, EVADE, INTRUDE, PURSUE, CHASE, TURN

Category #4: Body Shape or Attitude

(The main idea is contained in the mover’s way of forming their body shape in relating to the environment as they locomote.)

ADVANCE, RETREAT, WRIGGLE, CRAWL, WRITHE, OOZE, HOBBLE, WIGGLE, WADDLE, PARADE, STRUGGLE, ENTWINE, TANGLE, SHAKE, SHIMMY

Combination Verbs

Of course, many locomoting verbs combine ideas from the above categories:

(Space and Dynamics) DIVE, HURTLE, LURCH, SCOOT, SASHAY, SWOOP, FLEE, BLUNDER, STALK, PLUNGE, SKIM, STRIDE

(Space and Body Shape) LEAN, LIST, SLITHER, SCUTTLE, SIDLE

(Space and Body Action) SLIDE, STUMBLE

(Body Shape and Dynamics) JERK, SLINK, STRUT, STUMBLE, SCOOT

(Body Action and Dynamics) TWIRL, WHIRL, TRIP, MARCH

(Space, Dynamics, Body Shape) SNEAK, CREEP

APPENDIX B

Audio Describers' Script for a Live Dance Performance (segment)

DUST

By Victoria Marks

GENERAL GUIDELINES FOR DESCRIBERS:

This dance is structured to employ many types of contrasts. Examples include....

Visual contrasts: light/dark, warm tones/cool tones, patterns/full light, one or two dancers/large group.

Sound contrasts: nature sounds/music, quietness (serene sounds)/active (agitated) sounds.

Choreographic idea contrasts: stillness/mobility, passive/active, initiator/follower, intensity (seriousness)/lighthearted busyness, isolation/interaction.

Note that the activeness/passivity, stillness/mobility of each dancer at any given choreographic moment is not based on who's in a wheelchair/"disabled" or not. Sometimes the choreographer purposely turns that around.

DESCRIPTION

1

A small pool of light reveals a woman lying still, face down. From left, a second woman drives her motorized wheelchair into the light.

2

She pauses next to the prone woman, then reaches down to lift the woman's shoulder and change her pose.

3

The woman in the wheelchair continues to pose the other, moving one body part at a time. The woman on the floor moves only as she is molded, holding each new shape.

[SLIGHT PAUSE]

The mov-er steers her wheelchair to gently nudge the mov-ee onto her back.

4

The passive dancer on the floor is softly pulled and pushed, her head lifted, her back lightly touched, to bring her to sitting. The wheelchair presses into her from behind; she slides to a crouch, then a squat. In stages, her partner stands her up. The standing woman now turns her head—on her own—toward the wheelchair dancer. Light fades to black.

5

Light comes up. The standing woman faces a new dancer. She who was passive is now the initiator. One press of her forefinger against the other's breastbone sets off a cascade of movements. The first backs away and watches as the new dancer flails and dangles, drops to her knees, her elbow, then splays onto her back. Lights fade out.

6

The circle of light comes up. A new dancer stands beside the splayed woman, slicing the air with sharp arcing arm movements. The splayed woman lifts her head, as the other gazes upward. Light fades to black.

[PAUSE, MUSIC CHANGES]

7

Full stage lights up. From left, a man and woman, in time to the music, prance and dip forward. They are met, from right, by a dancer motoring her wheelchair on, dragging another who hangs on to its back. Now dancers converge and scatter busily all over the stage—two drive wheelchairs, five are on foot. Greetings, hugs, taps, re-groupings. Dancers wave, bump, tease, chase, shove, lean, flop onto and roll or climb over each other, scurrying and whizzing playfully from place to place.

8

Now, as lights begin to dim, the dancers spread across the stage and slow to stillness, pausing in tableau. Lighting creates an uneven geometry of shadows slashing across the floor. In unison, the dancers begin to turn slowly in place. Now all are seen in right profile.

9

Now their backs all face us.

10

[CHIMES]

11

The dancers continue their slow-motion rotation.

12

Now all are in left profile

13

At left, suddenly a wheelchair dancer sweeps her arm up and circles her chair to the right. At this cue, a man at right spins, then reaches out to draw her to him. While some continue their slow, in-place rotation, others break rank and repeat some of the earlier greeting, reaching, running, and pushing. Each always returns to a still patch of light and rejoins the ongoing group rotation.

14

Small groups step forward, then back into place. Now all pause, in tableau again, their backs to us.

15

In unison, all look over their right shoulder then turn toward us.

16

They are still.

17

The two at right turn away.

18

The two at center turn away.

19

The remaining three turn away.

20

Steadily, evenly, all rotate to their left, to face the far left corner.

21-22

Abruptly breaking the spell, a woman dashes from right to left, slicing through the group. She flings herself to the ground, then scrambles up and races back as the others pull away from her and stride off left. She repeats the run and slide, left alone on stage. The lights have brightened and the floor pattern disappears. The lone dancer runs off as others return along her same diagonal path (from far left to close right). They are tugging, shoving, catching and lifting each other. Some push, roll and dart past others to advance along the diagonal and scatter offstage right.

23

Now all but two have exited. They pause, stare at each other, and one runs off right, leaving the other standing alone.

24

Body erect, she gradually turns her back to us...

25

...then pivots slowly on one foot then the other to complete her rotation.

26

Now she looks at us, then walks forward, gazing across the audience.

27

The light brightens on her as she bends forward, hands to her right knee, and unfastens her prosthetic lower leg. She sets it upright in front of her. It stands alone as she kneels behind.

28

Crouching, she slides left on her knees.

29

She glances at us, leans forward to peer at the leg, reaching out slowly with her index finger to poke the leg and tip it over. As she sits up, another dancer, in a separate pool of light to the left, reaches upward, arching her back, then crumples to the floor, face down.

SILENT WISDOM: TEACHING LMA FOR ACTORS

by

Gabriela Gonzalez

You may wonder why 'silent wisdom'...

Because the number of publications that articulate the work done over the years applying LMA to actor training is so low. I could mention *O corpo em movimento* by Ciane Fernandes (2002) from Brazil (CMA PhD), which compiles every aspect of LMA combining theory with activities and sensibilisation through images and poetry. There is also Tom Casciero's manual that he created as part of his PhD thesis in 1998. He is working on the publication of that work combined with new insights and developments, we look forward to it. Another essential book is Jean Newlove's *Laban for actors and dancers* (1993), with plenty of practical examples. Also, and going back to basics, is Laban himself, who, in *Mastery of movement* anticipated that "the old ways of effort awareness and effort training will certainly play a part in the investigation of the actor's movement." (Laban, Rudolf 1980, p17) I quote this asseveration because it is particularly relevant in relation to the findings of this study. Laban did not justify this assertion, but this study comes to prove that this affirmation is true for many practitioners working with actors today.

Each of these publications have proposed interesting and different approaches to the application of LMA in actor training; what is surprising is how few these are in numbers in comparison with the large number of people actually teaching LMA to actors. Based on this observation is that I was motivated to use this study to explore the actual work of the practitioners teaching LMA to student actors.

Before the analysis we need to consider that acting is a cultural activity that takes different forms and has different meanings according to its cultural framework. Therefore, whenever we refer to actor training we should define what kind of actor we refer to, what type of training we are talking about. Surely the actor Laban made reference to is not the same actor Jean Newlove writes for in her 1993's book, and this is probably true also of Ciane Fernandes' work, developed at the beginning of the twenty first century in Brazil.

The notion of actor that this study refers to is based on Western traditions of actor training, hugely developed during the twenty century. In the first attempt to discuss the nature of acting in early nineteenth-century France, Denis Diderot, French Philosopher, proposed a "dualistic model of the actor, the inner mind controlling the outer expres-

sion of feeling and thereby achieving 'penetration and no sensibility'. (Hodge, 2000, p.4) Constantin Stanislavski, Russian director and pedagogue, was the first one that actually articulated the process of acting. For Stanislavski the actor is the artist and material at the same time. His theories and techniques address both sides of actors' work. His "method" trains actors for working on themselves, exploring their own emotions, sensations, imagination, and energy, and on the other hand, he also developed techniques such as 'scoring of actions', 'physical actions' and 'active analysis' that actors can use in order to give shape to their work.

I mentioned before the importance of the twentieth century to the development of actor training, because previously to the twentieth century the actor was not considered as central to the process of creation as it is considered today. Directors such as Stanislavski and Meyerhold in Russia, Peter Brook in England and Europe, Grotowski in Poland and the rest of Europe and America, shifted the role of the actor to the centre of the process of creation. Under these new circumstances the actors' training gained a central role.

Because actors are subjects (that is the artist/creator) and objects of their art duality is essential to the acting practice, and therefore to the training of actors. Contemporary actors are object and subject of their artistic creation: they perform their own creations.

Those of us who work with movement are used to the problem of duality, the body-mind duality is an issue we have to deal with everyday. Acting pedagogues such as Stanislavski encountered this problem as well; he needed to train the expressivity of his actors for them to be spontaneous- expressing themselves without affectation- but at the same time that they had to be precise embodying different stylistic features and following the score of actions. It sounds contradictory to be spontaneous and precise at the same time but it is the essence of acting.

The movement education of actors has been a constant preoccupation of acting masters and directors of the last century. Many techniques such as Tai Chi Chuan or Alexander Technique or Feldenkrais's method have been used to train actors. LMA is one of the techniques used that grew more relevant as the twentieth century progressed and Laban's disciples reproduced and spread Laban's concepts.

Because of the lack of studies that analyse the practice of training actors by means of LMA there is not much information about possible modifications that LMA might have gone through to serve the particularities of actor training. Laban analysis is a general theory and system of movement analysis that can be applied to any situation, but we still do not know how this system works for training actors. How is Laban analysis modified in relation to actor training?

Because this study is based on a survey the sample is fundamental. The sample represents the work of individuals teaching movement to student actors in Higher Education settings. All of the surveyed practitioners have been trained either by the New York based Laban-Bartenieff Institute of movement studies – or by Certified Movement Analysts (CMAs).

The sample – that is the number of practitioners surveyed- does not have the fairness and randomness of large numbers; however this is mitigated with knowledge and expertise in the selection of the participants. This is what is called a ‘non-probability quota sampling’ in behavioural research. (Kerlinger, 1986, p119) The practitioners who finally collaborated with this project have many years of experience fully committed to the training of performing artists; in order to participate I asked for at least 3 years of experience in teaching Labananalysis in Higher Education settings. It has been said also that these practitioners work in different countries such as USA, Canada, Scotland, South Africa and Argentina. (The original intent to include participants from Brazil and Mexico was, for different reasons, eventually not possible.)

GENERAL CONSIDERATIONS ABOUT THE SURVEY

The survey is a general one that embraces every area of LMA: Body organisation, Effort, Shape and Space. And I also included some questions about the concepts of Posture/Gesture by Warren Lamb, and also enquired about the use of Labanotation in the courses.

I divided the survey into 4 questionnaires: One about the practitioners factual information (training, experience, general background, courses that teaches); another questionnaire about Effort only, another enquiring about the rest of the areas of LMA, and the fourth questionnaire, an open questionnaire with general considerations about the application of LMA to actor training. Most of the questions were closed questions however I also included open questions, in order to give the practitioners the opportunity to expand when necessary.

In order to organise the design of the questionnaires I tried to make explicit some hypotheses I had in my mind, and then articulate them in questions as measurable as possible. Kerlinger, specialist in behavioural research, affirms that “There is...no genuine progress in scientific insight through the Baconian method of accumulating empirical facts without hypotheses or anticipation of nature. Without some guiding idea we do not know what facts to gather...we cannot determine what is relevant and what is irrelevant.” (Kerlinger, 1986, p15)

Though I cannot discuss every hypothesis here I would like to mention the essential ideas for the reader to have a clearer picture of the study. The hypotheses were the following:

- 1) The practitioner's background, particularly her/his relation to the Theatre field, is a strong influence on the practitioner's selection of contents.
- 2) Though useful for "awareness" work, LMA is particularly useful as "tool" for the actor.
- 3) Effort theory is particularly important for actor today.
- 4) Laban's abstract approach to Space might be particularly difficult for actors to relate to.
- 5) Movement techniques such as improvisation might be good method through which to introduce LMA theory to actors. Also, the use of elements such as music or props might add a ludic quality to LMA analytical approach to movement.
- 6) Students might be tempted to ignore work that they cannot name.
- 7) LMA could give inexperienced actors a false impression of total control over human emotions.

FINDINGS

One of the hypotheses was that "For actors, Effort theory is particularly important". This is a broad and general hypothesis designed to explore the use of Effort theory, and its relevance for actor training. In order to check the validity of this affirmation the practitioners were given the opportunity to give a value (in numbers) to the relevance of each LMA area for their course. The areas included in this study are Effort, Shape, Choreutics and Posture/gesture. Table number 1 shows that the value given to Effort is noticeably higher than those given to the rest of the areas of LMA. Though among Shape, Choreutics, and P/G the numbers are very similar, the difference in value is of a maximum of 1 point, Effort shows a significant higher value. It is also particularly relevant that the values given to Shape, Choreutics, and P/G reach just the 50% of a possible 100%, while Effort reaches nearly 80%. The table below shows an average based on values given to each category in relation to the parameters "Awareness" and "Tool".

	LMA categories			
	<i>Effort</i>	<i>Shape</i>	<i>Choreutics</i>	<i>P/G</i>
<i>Average value</i>	7.9	5.4	5.7	4.7

Table 1: Importance of each LMA category (average).

It is also possible to analyse the original data in order to assess whether this average is representative of the values given to each category. Table 2 contains the original numbers given by the practitioners. Effort is the category with the higher number in both aspects: "tool" and "awareness". The categories included in this table all reached at least 50% of the 100% possible.

Category	Value in points from 1 to 10
<i>Effort Awareness</i>	7.9
<i>Effort Tool</i>	7.8
<i>Choreutics Tool</i>	5.9
<i>Shape Awareness & Tool</i>	5.4
<i>Posture/Gesture Tool</i>	5

Table 2: Preferred LMA categories according to value given in scale 1 to 10.

Consistent with the previous analysis it is observed that Effort is the only area of LMA that is taught by 100% of the surveyed practitioners. Some practitioners have expressed their frustration because sometimes, for different reasons, they have to leave out areas of the system. However, it is interesting to notice that Effort is never left out. Table 3 presents this information in percentages.

	LMA categories			
	<i>Effort</i>	<i>Shape</i>	<i>Choreutics</i>	<i>P/G</i>
<i>Percentages of surveyed practitioners that teach each category.</i>	100%	80%	75%	80%

Table 3: Preferences in percentages

The practitioners were presented with a specific questionnaire for Effort theory only. Out of this questionnaire some significant data can be highlighted. Regarding those concepts of Effort theory that the practitioners actually teach, the survey shows a preference for Effort Qualities and Action Drives, which are taught by 100% of the practitioners while States and Transformational Drives are left out by 30% of them.

Though Effort Flow is one of the Effort Qualities, it is somehow regarded as different. Celcil Dell observes that "changes in (...) flow seem to be the most frequent kind of

changes in movement of all the Effort elements.” (Dell, 1977, p15) When asked whether they used Effort Flow in a different way, 45% of the total number of surveyed practitioners answered positively and 45% negatively. Though taught in the same fashion than the rest of the Effort Qualities, one of the practitioners acknowledged that Effort Flow “seems to appear more often and is more readily (incorporated) in the students’ vocabulary” (Effort Questionnaire 6). Other practitioner teaches Effort Flow only after the students have explored the rest of the Effort Qualities (Effort Questionnaire 2).

Enquiring on the use of Effort theory in relation to actual theatre styles, it seems that Effort is effectively applied to different aesthetics. In the data collected it can be seen that Effort is applied to Theatre Styles such as Classic Tragedy, Shakespeare Tragedy, Expressionism, Absurd, Physical Theatre, and post-modern and ritualistic performances. “Effort, sometimes diluted and sometimes amplified, could support presentational and re-presentational modes of performance” is the comment on this topic one of the practitioners (Effort Questionnaires 7).

Hypothesis 4 proposes that the fact that Choreutics is fundamentally based on Geometrics might make it more difficult for actors to relate to it. Contrary to what this hypothesis suggests, the survey shows that for a 75 % of the practitioners Choreutics is an essential aspect of their courses. Though the figure is not as conclusive as it seems to be in the case of Effort, 75%, it is still a very high value.

Scales make for an important part of the Choreutics’s work. 100% of the practitioners that teach Choreutics make use of the Scales. The survey shows that all the practitioners that employ Scales use at least two different Scales in their work. The data suggests that the Diagonal Scale is the most popular, used by a 100% of the practitioners; and the Dimensional Scale is the second best, used by a 75% of these practitioners.

From the data collected it can be concluded that in general the Scales are used as a practical tool for the training of LMA concepts. The Diagonal Scale is mostly used in combination with Effort/Shape affinities. One practitioner articulated her approach in these words: “scales are used as structures or containers through which the actor experiences his body with Shape and Effort qualities” (LMA Questionnaire 4). A practitioner with a more specific approach uses Diagonal Scale to teach Action Drives, and also to explore character’s movement and to work on scenes with limited mobility (LMA questionnaire 2).

Regarding how the practitioners deal with the abstract nature of Choreutics theory, we can say that, on the whole, the practitioners stress the use of imagery that might give the actors inner motivations to move, and also stressing the Shape processes. The following examples might be illustrative of how they work. One option? is the kinetic exploration

of the Scales supported by tactile and visual stimuli (LMA Questionnaire 7). Another practitioner starts the exploration of Scales from the inner architecture of the body and Shaping. Her approach is from inside-out, stressing emotional images as motivations to move. This practitioner tries to avoid the pressure of "doing it right" that could be associated with fixed sequences of movements like the Scales (LMA Questionnaire 4). The same happens with another practitioner that encourages her students to create their own scales (LMA questionnaire 5).

For 80% of the practitioners the main aim of the use of the Scales is to bring LMA components together. One practitioner, for example, works with Scales as an introduction to Effort concepts. Scales are also used to work aspects of the students' body level activity such as connectivity and physical commitment.

Another function of the Scales is to provide a set of actions for warm-up, in fact all the practitioners that work with the Scales incorporate them in their warm-ups.

It was surprising to find that Choreutics is used for voice and speech training of the actors. Though this possibility was discussed only by one of the practitioners, it is an original perspective that is worth mentioning here, and exploring further in future and more detailed research.

Another hypothesis addressed the issue of the structuralist construction of Laban's theory that could lead to an excessive importance given to categorization. The survey suggests that 60 % of the practitioners are concern with the student's tendency to "over define" or disregard work that cannot be clearly named. The information regarding this issue was collected in an open questionnaire where the practitioners expressed their views freely.

First, we can identify a concern about this issue, one practitioner considers that this is a greater risk for beginners, and other plainly said "yes, I do not know how to avoid this risk" (General Questionnaire 5). Other thinks that in general "students disregard work that they find too complex and (...) oversimplify complex concepts in order to (...) manage their learning" (General Questionnaire 7). It seems then that this is an issue more relevant for those teaching at beginners level than a more experienced level.

Second we can discuss how do these practitioners deal with this issue when it emerges during their work. Their methodological approach seems to focus on finding a balance between theory and experience;

I just encourage them to neither lock their definitions down nor avoid defining. If they get stuck in an overly-restrictive definition I try to open up new options (if they are

“stuck” on a particular Effort I encourage them to consider Space, or body part initiation.)(General Questionnaire 5)

However, we know how difficult to find this kind of balance can be. In order to illuminate this issue a bit more I will list below the strategies used by the practitioners to achieve a balance between theory and practice.

a) avoid asking students to remember the LMA concepts, and focus more on application and less on LMA (General Questionnaire 8).

b) use Laban’s vocabulary as a point of departure allowing the students to find their own words (General Questionnaire 4).

c) “use vocabulary from other aspects of the students’ training to forge connections with the LMA work that they may understand better” (General Questionnaire 5).

d) stress the feeling of the concepts rather to give importance to the theorisation (General Questionnaire 6).

e) work from feeling and sensing to analysis (General Questionnaire 7).

CONCLUSIONS

This study is situated at crossroads of two areas of study: LMA and actor training. Regarding LMA this is a general study which’s key contribution seems to be the finding of a general pattern in the application of LMA to actor training. In this sense the survey did not unveil any important modification of the theory but rather methodological adaptations in the process of teaching the material.

The use a fixed structure- a set of movements- that is repeated endlessly – like the Scales- to train the actor in his ability to find inner motivations to move, is an approach known in the tradition of physical training initiated by Meyerhold with his Biomechanics, and followed by Grotowski and Barba, among others. In this case we find that Laban’s material is blended into other actor training traditions, serving the same aims, but adding the extra component of Space exploration.

Regarding the area of study that could be name “actor training” we find that Effort is particularly relevant for it provides an understanding of the expressive level of movement, given by the qualities of movement identified by Laban. In this sense this study shows that Effort is the aspect of LMA that is more relevant among actors. Laban himself in *Mastery of movement* anticipated that “the old ways of effort awareness and ef-

fort training will certainly play a part in the investigation of the actor's movement." (Laban, Rudolf 1980, p17)¹

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**COMPUTER INTERPRETATION OF LABANOTATION WITHIN
GRAPHICAL DANCE NOTATION SCORES
(ABSTRACT)**

by

Matthew Gough

This paper proposes a computer-based method for editing and animating Labanotation symbols within the context of graphical dance notation scores (see following page). Analogous to graphical music notation, graphical dance notation has no standardized syntax. This open lexis requires the interpretation and transformation of symbolic marks into human movement and gestures. If direct motive, or postural translations are required Labanotation, or score specific abstractions may be used within the graphical notation.

We are currently developing a system that will interpret and pre-visualize multi-modal graphical notation with an 'improvizing' avatar. Each 'performance' will be a unique interpretation guided by the marks and notational abstractions found within the score. This tool is being designed as an integrated development environment (IDE) for choreographic practice.

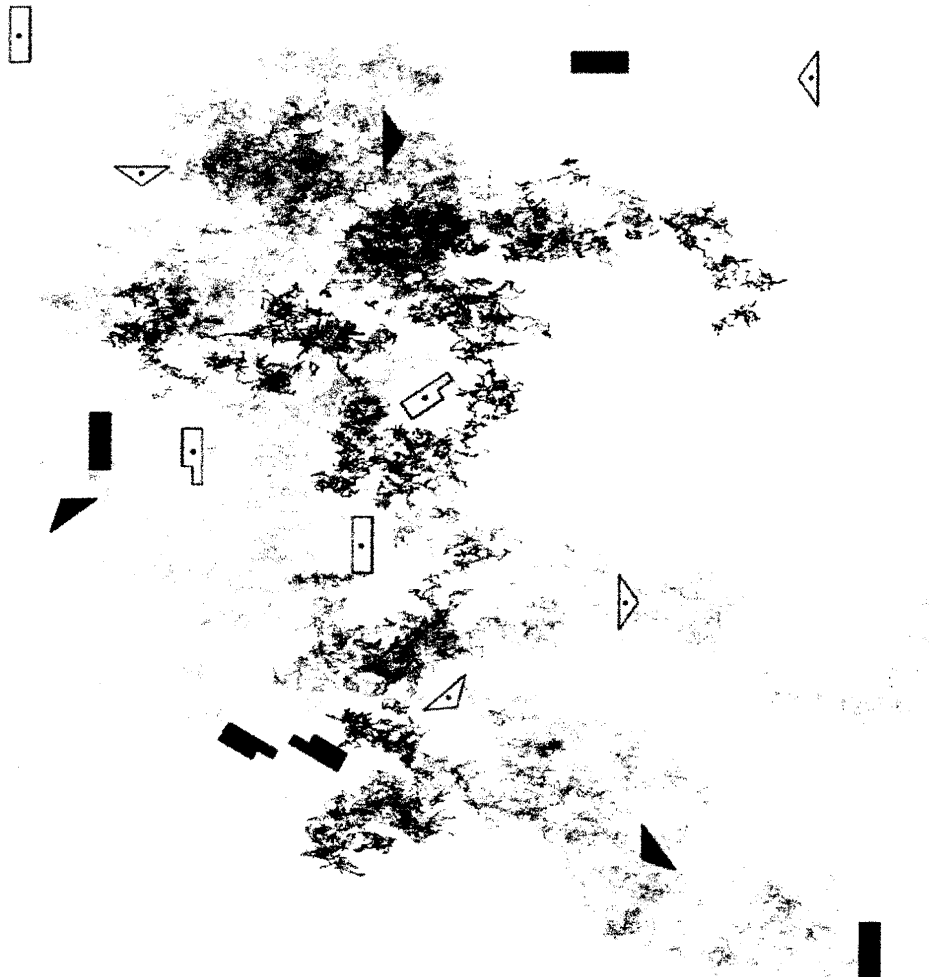
The graphical scores are produced in a 'sketching' interface (as opposed to 'drag and drop') through an extension of Scalable Vector Graphics (SVG). This 'pen and pad' design uses symbol recognition to discern abstract mark making from symbolic notation. Labanotation symbols for the nine basic directions at low, middle and high levels are supported within the recognition and interpretation process. The relative and absolute portions of Labanotation symbols on the score are used to calculate duration, floor path and orientation. This method could be extended to handle multiple symbols on a stave, and the modification of the stave to describe the floor path. However, the modification of a Labanotation stave into track notation requires legibility, whilst the avatar requires very detailed notation to generate specific animation.

Whilst legibility is not entirely problematic for an interpretive score, detailed notation is too time consuming for the rapid choreographic development this system is designed for. A more practical solution would be to adapt the symbol recognition method to generate Labanotation 'interlingua'. The 'interlingua' could then be translated with fewer resources than our transformative process. This adaptation could also simplify the creation of Labanotation scores in both software environments and the scanning of paper scores.

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Example of multi modal score (Labanotation within a Graphical dance notation score)



**OBSERVING AND EXPERIENCING STILLNESS IN DANCE
CHOREOGRAPHY, COMBINED PAPER/WORKSHOP
(ABSTRACT)**

by

Oona Haaranen

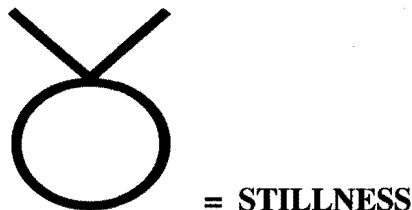
This paper/workshop utilizes Labanotated dance scores and motif writing as a way to observe and analyze stillness and to explain the varied uses of stillness as they appear and disappear in two twentieth century choreographer's works: George Balanchine's *Tarantella's solo* and Anna Sokolow's Rooms, *Escape solo*.

Sokolow's use of stillness is in sharp contrast to Balanchine's. *Escape* spends 8.16 percent in *total stillness*, while *Tarantella's* use of *total stillness* is 2.09 percent. *Tarantella* utilizes partial stillness for 41.66 percent of its length and *Escape* uses partial stillness for 63.13 percent. The only similarities in both works are that the amount of *total stillness* is greater during *partial stillness* and *total stillness* is smaller when it abruptly takes place inside a traveling sequence. In Sokolow's *Escape*, solo, stillness is primarily used as subtext with internal focus while in Balanchine's *Tarantella* solo, stillness is postural in nature and is mainly used as punctuation.

If you are interested in my Stillness research, you can read my complete paper on the proceedings of Motif Symposium II at Southern Illinois University Edwardsville, Illinois 2004, "Observing Stillness in Dance Performance."

Workshop participants will explore stillness through creative activity leading to an increase in awareness of the possibilities of stillness in choreographic work.

Participants will create a short stillness study from motif writing, which will be used as a tool to focus on stillness/movement ideas.



I have come to the conclusion that there are three types of stillness in dance choreography: total stillness, stillness in body and stillness in space. I base this theory on my examination of the definitions of stillness in music, literature, martial arts, pantomime, psychology and dance and on my experience as choreographer and a reconstruction director researching and analyzing the Labanotation dance scores of Balanchine's *Tarantella* and Sokolow's *Escape* solos.

Below are the concepts of stillness that will be explored and further defined through examples and through a creative stillness study.

1. TOTAL STILLNESS: complete absence of movement
2. PARTIAL STILLNESS: a) Partial stillness in space
b) Partial stillness in the body

First let me clarify the concepts and definitions of stillness that I will be using during the workshop/paper.

1. TOTAL STILLNESS

- Complete absence of Movement
- Pause, a very short momentary stillness, a component of a total stillness during which a dancer abruptly changes direction or transits to another movement phrase. Pause can occur during traveling or an axial phrase.

2. PARTIAL STILLNESS

2.a) Partial stillness in space

- Absence of traveling through space (stillness in the floor plan) Dancer does axial movement in the personal kinesphere, while rest of the stage area is still/passive.

2.b) Partial stillness in the body

- Dancer travels/locomotes through space, while her/his body part/s hold a still shape.
- Space/stage area is active, because of the traveling indicated by the floor plans.

The following handouts were distributed:

- 1) Example of short momentary stillness pause from Balanchine's Tarantella woman's solo.
- 2) Examples of total stillness and stillness in space in Sokolow's Rooms woman's Escape solo, followed by motif explanation page.
- 3) Stillness study handout.

**“THE THEORIZED BODY” AND “THE EXPERIENCED BODY”
IN DANCE RESEARCH:
EXPLORATIONS THROUGH THE LENS OF PATTERNS OF TOTAL BODY
CONNECTIVITY
(ABSTRACT)**

by

Mary Hayne

This paper explores the relationships between “the theorized body” and “the experienced body” in dance research. By using the Patterns of Total Body Connectivity developed by Irmgard Bartenieff and Peggy Hackney as an architectural structure for exploring the issues between the ‘two bodies’, this paper produces multiple angles and perspectives for thinking about the many conceptions of “theorized and experienced bodies”. In addition to addressing their various relationships, it also explores the multiple research agendas that are supported by ‘the world of each Body Pattern’, including Postcolonial Studies, Cultural Studies, Cultural History, and Dance Philosophy. Discussion of Laban notation systems and the issues involved in capturing various research concerns in symbology is also included. In conclusion, this paper calls for extending beyond the often common black/white thinking that comes with Body-Half Connectivity in respect to “theorized and experienced bodies”, while simultaneously honoring Body-Half thinking as a necessary part of integrated and sophisticated academic work.

**SURVIVING ASSEMBLY LINE WORK USING LABAN BARTENIEFF MOVEMENT
ANALYSIS—WORKSHOP
(ABSTRACT)**

by

TERESA HEILAND

I returned from studying dance abroad for a year and I desperately needed to make money. I quickly took a job unfamiliar to me: working on an assembly line doing repetitive tasks for 8 to 10 hours a day, standing in one spot the entire time. This was grueling for me, and knowing so much about my dancer's body and its needs, I was physically and emotionally traumatized. I had interviewed for 15 other jobs, but couldn't get hired because I was "over-educated." I had to make the most of my most ill-fitting work situation, and in so doing applied as many of Laban's and Bartenieff's lessons as I could while standing at an assembly line. Laban taught us to move more fully rather than to economize in order to withstand the tedium and wear and tear of manual labor, and to outlast the time clock. I survived each day using Irmgard Bartenieff's lessons by vocalizing, rocking, shifting, gradating my joints, moving with Baroque-like arm flourishes and Javanese dance movements, and I shared my body-knowledge with my coworkers. Eventually, I also tried to inspire the management with my ideas of ergonomics, table height, and organizing people into teams to switch from standing to sitting and back again, but they wanted nothing to do with my enlightened thoughts and knowledge of Laban's work in factories. I wanted to have Rudolf Laban and Warren Lamb beside me to support me in my presentation to the bosses. There I stood, alone with my knowledge, but with no tried-and-true, convincing or financially feasible, quick approaches towards helping my fellow factory workers at home and around the world.

Today, I'd like to share with you how I applied my Laban Bartenieff skills in a factory world, to give you a mock light-industrial factory experience, and to share some of my ways of surviving the grueling tasks of speedy, monotonous, repetitive movements while standing in one spot. You will join me in mock-assembly line work in its usual methods, and then I will introduce you to the ways I adapted my own work and instructed other to preserve their bodies using Laban Bartenieff movement analysis. You will be encouraged to join in to discuss ways in which we might put our body knowledge to action to support our fellow light-industrial workers around the world. What sort of approaches might body-educated individuals take to support people in factories.

Repetitive-task-oriented production facilities tout their successes on the premise that highest production in the shortest amount of time sells the most and makes the most money. Laban believed this end all be all approach to economy to be the downfall of humans because we eventually destroy the workers who do the handiwork. How far have we come? How far can we go? How do we convince the management that their workers are important and that workers' compensation is not fixing this problem. Research in ergonomics has helped us create tools that fit the body, but the unfortunate turn about is that now the little units of space that industrial workers toil in are being designed so carefully that people aren't even asked to walk around or to bend, thus making the human into an even more mechanized state of being. How can we convince managers in industries that going slower with larger movements and more relax time equals higher production? Research shows that it does. Can dancers educate business managers? Is there a place for Laban's factory research to come back into the factories now?

**LABAN-BARTENIEFF MOVEMENT ANALYSIS (LMA) AS A TOOL FOR
TEACHING DANCE, PERFORMANCE SKILLS, AND WELLNESS TO
ADOLESCENT GIRLS
(ABSTRACT)**

by

Deborah Hull

For the past seven years I have taught dance to girls ages 12-14 in the 7th and 8th grades at the Hamlin School, an independent school for girls in San Francisco, CA, in the United States. I incorporate LMA into all aspects of my work with my students, from dance classes and rehearsals, to my counseling work with students during our advisory sessions. In my presentation I explore the following questions:

- How does LMA serve my work as a teacher of adolescent girls in a highly academic independent school?
- How does LMA help to strengthen my pedagogy and my students' performance and life skills?
- How does LMA inform and illuminate my interactions with students outside of the dance class and rehearsal settings?

I presently teach three dance classes at Hamlin. The first introduces 7th grade students to dance via improvisation and consideration of the roles that African and European music and dance played in the development of religious expression and vernacular dance forms in the Americas during the colonial era. The second offers 7th and 8th grade students a daily movement and choreography laboratory through which they create an original movement piece that we present publicly at the end of the term. The third class is a course in musical theater production that I co-teach with my drama and music colleagues. In that class I direct a 20 member dance ensemble comprised of 7th and 8th grade girls, and with their help I choreograph the musical, the major middle school (grades 5-8) production that takes place every spring. I also advise 8th grade girls preparing for competitive secondary school admissions.

The school has been in existence for 140 years, a long time by California standards. The culture of Hamlin models itself on that of the college preparatory schools of the American Northeast: historically it has valued cognitive function over bodily expression, and the current curriculum emphasizes cultivation of students' analytical and discursive skills. My particular challenge has been to offer students the opportunity to enter into different modes of sensing, feeling, and communicating that provide

contrast to and recuperation from the Effort ($\neq$) constellations that dominate their days. For example, many of my students spend the majority of their days in Remote State ($\neq$) and Mobile State ($\neq$), States which are missing the active role of Weight ($\neq$) and Weight Sensing ($\neq$). Exploration of Weight ($\neq$) and Weight Sensing ($\neq$) thus becomes integral to our consideration of a range of subject matter, from dance to health, wellness, and the gifts of diversity. Over the past seven years I have developed curriculum around the movement aptitudes and deficits of the population I serve.

In my presentation I start by describing the elements of my curriculum and the needs of my adolescent students. I then provide LMA analysis of my work at Hamlin; a Power Point presentation supports my analysis as I answer the questions posed above.

INBETWEEN THE SCORE AND THE DANCE: COGNITIVE PROCESSES IN READING LABANOTATION

by

Corinne Jola^{1,2} & Patrick Haggard²

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Introduction

A Labanotation (LN) reader infers movement from a score. Leg and arm gestures are extracted by combining the direction symbols with their location on the staff. The subsequent gestures of particular limbs define the movement. This information has to be transformed to the reader's own body and egocentric perspective. This is merely a vignette of what happens when a score is transformed to movement via the reader's or the dancer's body. Clearly, several other features that have to be considered in defining the entire process of encoding LN. However, the main issue here is that reconstructing movement by reading a notation score is a cognitive process.

Cognition

Cognition refers to the processes of thought. After a long period of investigating human perception, scientists became more and more interested in the brain processes associated with human movement. The focus nowadays is strongly set on action observation and motor control. A moving body needs muscles that can contract and nerves that send the commands to the muscles. However, voluntary movement also requires the brain to prepare and send motor commands to the muscles. For example, when a dancer is mentally rehearsing a movement pattern or when a dancer is watching other dancers moving, certain brain areas named motor and premotor cortex are activated. Interestingly, there seem to be a common brain area responsive for the observation and the execution of a movement. Rizzolatti and Fadiga (1998) found evidence that observing a movement and executing the same movement are firmly connected in a particular brain area. This area (F5) of the premotor cortex is activated either when a monkey observes a goal-directed movement executed by somebody else or when he himself executes the same action. The authors hypothesize that the activation of a corresponding 'mirror system' in humans represents actions that we see other people making.

Often, LN readers report that they generate a mental representation of the movements when reconstructing the movement from the notation. Therefore, it can be assumed that reading a dance notation eludes movement related brain areas even without having any real external movement. However, is internally processing a LN symbol cognitively

identical to observing the corresponding movement of another's body? This paper endeavours to explore how this question should be answered.

Labanotation

Investigating cognitive processes between the notation and the dance might have some advantages for the LN community. To know the reading and writing processes in more detail means to be able to infer and make predictions about what happens between the notation and the dance. This knowledge can help to give some directions in the evolution of the notation score and the use of it. However, some particular features of the LN are also of interest for cognitive neuroscientists. First, the LN is perspective dependent, written and read from a first person perspective. Second, the segmentation of the body in LN is not congruent with the segmentation of the physical body. This means, there is no match in the outline of the human body and the graphic symbols on the staff. The way in which the body is represented on the staff is not isomorphic. Third, the movement is given by incrementally indicated positions. This paper focuses on the perspective and the body congruency.

For example, one might ask whether skilled readers *automatically* transform notation into representations of body postures. If there is behavioral evidence that encoding LN to movement is an automatic process, motor observation related brain areas are likely to be activated. Another important issue in the reading process is the *perspective transformation*. The notation symbols can be translated from the staff to the reader's own body (egocentric perspective) or the dancers' bodies (exocentric perspective). When the LN reader aligns the symbols with a representation of its own body, we expect no perspective transformation. The LN represents the body from the back which can be easily matched with the subjects own egocentric perspective. However, imagine the LN reader holding the score in his hands while facing dancers who should learn the movements. In this situation, a perspective transformation from the score - or the readers' egocentric perspective - to the dancers' orientation in the exocentric space is needed. We assume that this egocentric transformation functions like a mental rotation in depth, with a vertical axis through the body midline in upright positions. Recent studies found that bodies are processed differently if they are presented from an egocentric perspective or an exocentric perspective (Jola & Mast, 2005). Therein, the way dance notation specifies body in space can give insight into cognitive processes while encoding the symbols.

Dance and Cognition

Dance movements are whole body complex three-dimensional movements in space. It has been tagged out in recent experimental studies on motor control and body image that dance represents a decent stimuli (Brown, Martinez, & Parsons, 2005, Calvo-Merino, Glaser, Grezes, Passingham, & Haggard, 2005, Jola & Mast, 2005). Dance movements

stands out from other movements as they are object-unrelated with specific syntax (e.g., arm positions in classical ballet). However, to use applied fields like dance in experimental-based research the research of interest has to be narrowed down immensely. For example, in most of the methods where the brain activity is measured, the subjects cannot make whole body movements (fMRI, EEG, TMS). Therefore, studying the cognitive processes involved in reading the LN widely broadens the field. The notation score can be used as a control in experimental settings when the subjects shall not move.

For the moment, we have focussed on using LN to study cognitive representation of the body. The main issue of this paper is to make use of the LN and its particular characteristics to study features of the body representation. It is possible, that LN readers benefit from a wider understanding of the cognitive processes that are involved in reconstructing movements and postures. Our work uses LN to study cognition, and does not prescribe how LN should be used. The dance notation is used to gather relevant information about how the human brain deals with its own body in three-dimensional space.

Posture-matching Experiment

Posture is a term used corresponding to the term position in dance. The matching of two body postures has been used in studies on body representation (e.g., Ramsay & Riddoch, 2001). Before studying movement representation with the use of the LN, it is necessary to investigate basic processes in encoding the symbols. We therefore performed a posture-matching experiment to understand the brain processes involved in reconstructing movements from a notation score.

When a movement pattern is reconstructed from the score, the reader encodes the symbols to a body posture with a particular spatial orientation. How long does the composition from the symbols to a body posture take? How do we deal with the orientation difference in space from bodies and the LN? Both questions can be answered by a simple computer experiment based on findings in earlier investigations on bodies and objects.

From a study conducted by Shepard and Metzler in the 1970s we know that human can mentally transform objects (Shepard & Metzler, 1971). Subjects were presented abstract cubes in different angular disparity on a computer screen. The task was to judge whether the cubes were identical or not. The increase in the subjects' response time with increasing angular disparity between two identical cubes has been taken as evidence for a mental transformation, i.e., a mental rotation of the objects. This is known as the classical mental object rotation task. No such linear increase in response time was found in following studies where the inanimate objects were replaced by pictures of human bodies (e.g., Zacks, Ollinger, Sheridan, & Tversky, 2002). With the evidence from further studies, the authors assume that the bodies were processed by particular brain areas

responsible for the perception of bodies (Downing, Jiang, Shuman, & Kanwisher, 2001; Grossman et al., 2000). In contrast, Mast & Jola found evidence for mental body rotation (Jola & Mast, 2005). Subjects had to detect which arm of a body drawing is outstretched. The body was presented from different perspectives (front vs. back) and in different orientations ($0^\circ/45^\circ/90^\circ/135^\circ/180^\circ$). When the stimuli were presented in the first person perspective, i.e., from the back, subjects showed a clear increase in response time with increasing angular disparity. However, stimuli presented from the front showed no clear increase as bodies inverted by 180° were surprisingly quick to perceive. Most subjects verbally described this stimulus by referring to a feeling of “slipping back”. This finding suggests that the subjects’ egocentric perspective does play a role in the perception of externally represented bodies.

A posture-matching experiment with the LN will give further insight on the role of the outline of the externally represented posture. In this experiment, subjects have to match two sequentially presented postures. The postures are presented from the front and back perspective. The prime posture (i.e., first presentation) will always be shown by a picture of a dancer. The target posture (i.e., second presentation) will be presented either as a picture of a dancer or as a LN drawing. The general aim of the pilot study presented here is to test if the chosen postures can be matched with a LN. If the LN can be read and correctly matched with the postures in the pictures, we can infer the LN reading time. The LN reading time is given by the difference in response time from trials with the LN in the target from trials with pictures only. Furthermore, we will see differences between picture-LN and picture-picture matches in perspective transformation. The data presented here are from a pilot study. For further results see the original literature Jola & Haggard (in prep.).

Experimental design

Subjects

Two female subjects volunteered to participate in the pilot experiment. Both subjects were students from the professional diploma course in dance studies at the Laban Centre London and had just currently started LN study (approx. 20 hours lectures).

Stimuli

In this pilot experiment we used 4 classical ballet and 4 novel ‘contemporary-like’ postures (Table 1). The performer was naïve in respect to the hypothesis of the study. The pictures were taken with a digital camera at the Laban Centre. The background of the pictures was homogenate. The LN drawings were written with the computer aided software CALABAN LT (<http://aweb.bham.ac.uk/calaban/>). No direction signs were used in the LN as they always indicated postures from the back only. This was explained clearly to the subjects. The notations were verified and rectified for the experiment proper by Jean Jarrell, a Lecturer at the Laban Centre (City University, London).

For each posture 4 modifications were chosen accordingly to balance the criteria of the body parts employed, the body directions in space, the gestures side and alignments (Table 2). In one of the modifications the outline of the modification was virtually matching with the outline of the original posture. In another modification the original picture was mirrored (i.e., lateral change). Furthermore, the original posture was modified with a small change and finally also with a clear change. The small change was defined by a direction and level change of one body limb only. The clear change consisted of a novel arrangement of the LN symbols used in the original posture. This modification resulted in a clearly different posture by upholding the level of information. However, a few symbols had to be changed to remain a biologically possible posture.

Task

The subjects were instructed to match pairs of body postures presented sequentially on a laptop screen. The subjects had to respond by pressing one of two indicated keys with the index finger of the right or the left hand. The response keys for match and mismatch were swapped for every second subject. The task consisted of two matching types, i.e., picture-picture and picture-LN matches, each presented in 50% of the trials. In 50% of the trials, the two postures were oriented in the same direction (e.g., back-back). In the remaining trials, the two pictures were not matching in their perspective (e.g., front-back). As the LN has an inherent perspective from the back, only the back-back and front-back relation were possible. In the picture-picture condition, two more pairs for the factor perspective were randomly assigned (front-front and back-front). We used the additional perspective changes in the picture-picture matching type to prevent subjects from using a preparatory strategy. Thus, no inference about the direction or presentation from the target posture was possible.

In total, the experiment consisted of 256 trials with 8 *body postures*, 2 different *matching types* (picture-picture vs. picture-LN), 2 different *perspective* relations between prime and target (no perspective change vs. perspective change), 2 *congruency types* (same vs. different) and 4 *types of modification* (same outline, lateral change, small change, clear change). The order of the trials was randomized. The prime and the target posture conditions have been swapped randomly (e.g., the original posture could be at the prime or at the target posture). Every 50 trials subjects had the opportunity to take a short break. The subjects were tested individually in a quiet room. The instruction to the task was standardized and subjects could read them on their own. A brief look at the LN drawings on a paper sheet was offered prior to testing. This assured that the subjects could recognize all symbols occurring in the experiment. Before the pilot experiment started, subjects underwent a training session with five test trials in order to get familiarized with the speed of the task and the type of the stimuli. None of the postures within the test trials were used in the pilot experiment. The first picture was presented for 1500ms. After an inter-stimulus interval of 500ms with a fixation cross, the second stimulus appeared. The

target was presented on the screen for a maximum of 8000ms during which the subjects could give their response.

Hypothesis

We hypothesize that the *reading time* of the LN stimuli is implied in the additional *response time* for picture-LN trials compared to picture-picture trials. Our aim is to show evidence that the LN is encoded into a body representation. The features of the body representation might be similar when generated from pictures. Mental body representations are perspective dependent which can be shown by matching two postures presented from different perspectives. The response time increases when the postures do not match in their perspective. This additional response time represents the mental transformation (see introduction section). When a mental body representation eluded by the LN does share properties of the mental body representation known from recent studies with pictures, we should find a *perspective transformation effect* in both matching types. In this case, additional response time will be shown in both picture types in trials with a perspective change between the two postures.

Helpful information for the experiment proper will be gathered from response accuracy. We test whether the matching types are dependent on the type of *modification* and on the different *body postures* used in this pilot study. For example, when the postures are rated by pictorial given characteristics, postures with the same outline should be less detectable than the other modifications. Finally, the accuracy in the conditions should not differ significantly between the different *body postures*. However, the postures should cover a broad range of different spatial aspects.

Results

We tested the effects of *perspective change* (no perspective change vs. perspective change) and of posture *modification* (same posture, same outline, lateral change, small change and clear change) on *picture form* (picture-picture vs. picture-LN matching). Perspective effects were expected to be shown in response times (RTs in seconds). Effects of posture modifications were tested on the accuracy (in percentage). We computed the analysis with repeated measurement ANOVAS and *t*-tests.

The different body postures were included as a random factor. In a separate analysis we found no significant effect of the different body postures. Any factor that showed significance therefore indicated a general effect that hold over the different body postures. Unfortunately, postures 5, 7 and 8 had to be excluded from the pilot analysis due to programming error and notation inconsistencies. Table 1 shows the mean accuracy and mean RT for the two matching types of both subjects in the remaining six postures. The overall mean accuracy for both subjects was 89% with a standard deviation (SD) of 0.10. Picture-picture matches were identified correctly in 94% (SD = 0.04). Picture-LN

matches were correct in 83% (SD = 0.26). The mean RT for both subjects was 1.59 (SD = 0.16) for picture-picture and 3.81 (SD = 1.20) for picture-LN matches.

LN Reading time and Effect of perspective change

Only response times from correct responses were taken. The repeated measures ANOVA with the factors *perspective change* and *picture form* showed significant main effects for both factors and a significant interaction effect, $F(1, 9) = 8.89, p < 0.05$ (perspective change), $F(1, 9) = 152.49, p < 0.001$ (picture form), $F(1, 9) = 24.20, p < 0.001$ (perspective change*picture form). RTs were significantly longer for postures that were not shown from the same perspective, $M = 2.56, SD = 1.35$ (same perspective) vs. $M = 2.85, SD = 1.07$ (perspective change). The additional RT for perspective change was significant when the subjects had to match the posture of two pictures, $t(9) = -.30, p < 0.001$ (paired samples t-test), $M = 1.29, SD = 0.17$ (same perspective) vs. $M = 1.91, SD = 0.30$ (perspective change). There was no significant increase in RT for non-perspective corresponding posture presentations when one of the postures was read from a LN drawing, $M = 3.83, SD = 0.48$ (same perspective) vs. $M = 3.79, SD = 0.60$ (perspective change). The mean additional RT for the trials with the LN was 2.20 (SD = 0.13). In both perspective conditions subjects had significant longer RTs in trials with the LN, $t(9) = 14.46, p < 0.001$ (no perspective change), $t(9) = 9.14, p < 0.001$ (perspective change).

The repeated measures ANOVA with response accuracy as dependent variable and the independent factors *perspective change* and *picture form* showed a significant main effect of *picture form*, $F(1, 9) = 11.77, p < 0.05$. The accuracy for picture-picture matches was higher than for picture-LN matches. The effect of perspective change was not due to accuracy trade-off.

Effect of gesture and direction modifications on posture detection

A repeated measures analysis for the factors *modification* and *picture form* shows significant main effects for both factors and a significant interaction effect, $F(1, 9) = 10.1, p < 0.05$ (picture form), $F(4, 36) = 4.54, p < 0.005$ (modification), $F(4, 36) = 4.58, p < 0.005$ (modification*picture form). The mean accuracy was higher when both postures were presented as pictures. However, paired samples *t*-test showed that only postures which had a common outline were significantly better detected in picture-picture than picture-LN matches, $t(9) = 2.86, p < 0.05, M = 90.0, SD = 21.08$ (picture-picture), $M = 45.0, SD = 43.78$ (picture-LN). Postures without any modifications (i.e., corresponding postures) showed a trend for better match from pictures than from LN, $t(9) = 1.92, p = 0.09, M = 97.6, SD = 5.06$ (picture-picture), $M = 87.7, SD = 15.60$ (picture-LN). The higher accuracy of LN drawings to pictures for mirrored gestures did not reveal significance, $t(9) = 1.50, p = 0.17, M = 95.0, SD = 15.81$ (picture-LN), $M = 85.0, SD = 24.15$ (picture-picture). Mean accuracy in picture-picture matches did not vary dependent on the type of modification, $F(4, 36) = 1.36, p = 0.27$ (modification). When one of the

postures was presented as a LN drawing, the modification type did not have a significant effect on the postures detection, $F(4, 36) = 6.24$, $p < 0.001$ (modification). Post-hoc t -tests showed that the low accuracy value in the same outline modification was responsible for this effect. Both subjects did not detect the mismatch when the postures had the same outline in body postures 4 (both subjects), posture 1 (subject 1), and posture 3 (subject 2).

Body Posture						
Accuracy (%)	Picture - Picture	93.8	93.8	96.9	93.8	90.6
	Picture - LN	84.4	90.6	84.4	75.0	81.3
Response Time (s)	Picture - Picture	1.72	1.58	1.64	1.40	1.60
	Picture - LN	3.68	3.58	3.47	3.86	4.45

Table 1. Mean accuracy in percentage and response times in seconds for the two picture matching types, picture-picture and picture-Labanotation. On the left side are the four ballet positions and on the right side the two contemporary postures. Two of the contemporary postures had to be excluded and are not presented here.

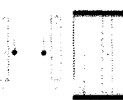
Posture Example						
						
Modification		Same posture	Same outline	Lateral change	Small change	Clear change
Accuracy (%)	Picture-Picture	97.9	87.5	79.2	87.5	100
	Picture-LN	78.1	45.8	95.8	79.2	95.8
Response Time (s)	Picture-Picture	1.67	1.50	1.81	1.51	1.24
	Picture - LN	4.03	2.85	3.60	3.79	3.73

Table 2. Example of an original posture on the left and its modifications used in the pilot experiment. Mean accuracy is given in percentage and response times in seconds for both matching types, i.e., picture-picture and picture-Labanotation ($N = 2$).

Discussion

Labanotation reading time and perspective transformation

The time needed to match a picture of a body posture with a LN drawing was slightly more than twice as long as the time needed to match it with another picture. This difference in time reflects the *LN reading time*. That is, subjects transformed the symbols of the LN into a mental body representation which took approx. 2s longer than from a picture. However, and crucially for present purposes, there was no additional mental *transformation time* for the LN. For picture-picture matches we found significant longer RTs when the two postures were presented from a different perspective than when the perspective was identical. This result confirms previous findings on egocentric body transformation and mental object rotation (see introduction). The additional time needed is considered as the mental transformation time to adjust the objects or to transform the egocentric perspective. In our experiment, we found a “quick flip” of perspective for the LN condition. Response times did not differ between non-perspective and perspective matching trials when one of the postures was encoded from a LN drawing. However, what does the main result of this study, namely the lack of additional mental transformation time in the LN means?

One possible interpretation for the quick perspective flip is that a mental body representation generated from the LN is perspective independent. In recent literature on mental rotation Murray et al. found a quick flip when one of the stimuli was inverted by 180 degree (Murray, 1997). Murray used familiar objects in her experiment. In a recent study on mental object and body rotation a similar flip was found for inverted bodies (Jola & Mast, 2005). Interestingly, the response pattern seems to be consistent even when the subjects' postures were modified. Shorter RTs were found for inverted bodies from the front view compared to the usually easier back view for bodies when subjects were lying on their back (Mast, Zaehle, Long, Jola, & Lobmaier, 2006). In respect to those studies it is considerable that the characteristics of the mental body representation evoked by the LN reflect a kind of familiarity to the subject that the pictures do not.

However, one argument against the “quick flip theory” is that the mental transformation time is hidden in the additional reading time. This means, cognitive processes may overlap each other. In this experiment, it is doubtable that the cognitive load decreased with increasing difficulty. We found that the encoding of an external stimulus into a mental representation from a LN drawing was cognitively more demanding than from a picture. This was shown by the LN reading time. There is no evidence why reading and the transformation could have shared the same time window that the reading process required for itself. Therefore, we assume that some sort of facilitation does take place, either at during the encoding of the symbols or at the stage of the perspective transformation.

Representation transformation

In the picture-LN matching type condition, the subjects had difficulty seeing the mismatch when the two postures had a common outline. For mismatching postures with similar outlines, the accuracy was significantly lower in the picture-LN than in the picture-picture condition. None of the other modifications showed a significant effect on the accuracy between the two matching types and none of the modifications showed a significant effect on the accuracy within the matching type. We did not expect to find an effect of this modification type only. Some of the body postures could not be identified by the subjects as different at all. However, one posture differed in the level of the supporting leg and the bending of the upper body part, two postures shared the same outline but the side of the supporting leg and the direction of the leg gesture were changed, and another posture was modified by a different direction of the arm gesture while keeping the outline. Only the latter body posture was expected to be difficult to detect. The direction of the arm gesture was not very clear on the picture and could therefore be misinterpreted as a performance error. However, the other postures were clearly mismatching on the picture as well as on the LN drawings. The low accuracy value showed that the symbols from the LN drawing were transformed into a mental body representation which evoked a body image based on visual features at an early stage.

We found that the LN took more time to encode than a picture. However, the LN enables a quick flip in perspective which is not given by mental body representation generated from pictures. This quick flip appears to be a consequence of the egocentric perspective built in to LN. Therefore, the cognitive processes from reading the LN to a mental body representation cannot be simply explained by an additional reading time. Furthermore, we found that different postures which share the same outline were hardly detectable from a LN drawing. This indicates that the encoding of the LN to a mental body representation is closely connected to visual features.

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TEACHING AND ADAPTING FOLK DANCE FOR SENIORS WITH VARIOUS CHRONIC CONDITIONS

by

Barbara Kennedy

Laban Movement Analysis (LMA) can be very effective in studying folk dance. Not only is it useful in the analysis, teaching and performance of the original dance, but relevant in making modifications for selected populations. It is the intent of this paper and presentation to demonstrate the adaptation of various folk dances for general and specific chronic conditions experienced by the aging population. The dances that will be examined represent the culture and styles of the following countries, namely – Italy, the United States (specifically Hawaii), Scotland, Germany, Ireland and Spain. The chronic conditions that will be dealt with include – cardiovascular disorders, metabolic disorders, respiratory problems, neurological disorders, sensory problems and musculoskeletal conditions.

The content of the paper and the presentation of the accompanying video-clips, represent the culmination of the past six years of administering a folk and social dance course at Brock University in Ontario, Canada. The subjects of the videotape are third and fourth year students from the faculties of physical education and kinesiology, theatre arts, disability studies, education, as well as from various other departments who simply love to dance. The dancers' background in dance range from many years of study in various forms to absolutely no previous experience. The dances captured on the tape should be viewed as informal presentations in the dance studio rather than polished performances. The selection of the specific dances has been based upon the need to highlight each of the chronic conditions with the adaptations and to give a cross-cultural representation. It must be noted that the modifications to the dances suggested for each of the chronic conditions reflect a general guideline and would be adapted accordingly, based on the severity of the problems associated with the actual seniors involved. The viewing of the examples on the videotape are not necessary for the clarification of the ideas presented in the paper, however their inclusion at the conference presentation visually highlights the modifications made to each folk dance through the use of Laban's movement principles.

Cardiovascular disorders can present serious dangers to dance teachers. (Lopez, 1983) Heart disease and hypertension/blood pressure abnormalities are associated with this classification. The first folk dance to be used as an example is the 'Neapolitan Tarantella' representing Italy. The traditional version is a vigorous dance that utilizes an object, namely a tambourine. In the original version, even though all four quadrants are evident, Laban's area of *body awareness* would be the most prevalent. *Body parts* – with the dominant hand controlling the tambourine and utilizing it as an extension of the arm – *lead* the dance actions and directions quite frequently. *Transference of weight, elevation, balance, body parts meeting and parting* and significant *turns* and *locomotion* are visibly evident in the videotape example of students performing the original folk dance.

Using LMA, adaptations for cardiac problems would significantly address the *effort* qualities of movement of the original dance. By changing the music to a slower 'Neopolitan Tarantella', the speed and intensity of the movements would be altered to alleviate placing undue stress on the functioning of the heart of the participant. The actual striking of the tambourine would utilize a *finer touch* with respect to the *weight* quality. Addressing the area of *body awareness*, specifically *body parts*, the major change would be on the emphasis of keeping the level of the arms below the heart in order to avoid placing undue stress on its functioning. In addition, *body actions* and *weight-bearing* should also be altered and the numerous hops and leaps can be changed to simple rises, therefore alleviating sudden changes in blood pressure. (Clarke, 1992) The second video-clip demonstrates these changes.

This same dance can be modified by emphasizing different Laban quadrants for other chronic conditions. Seniors who suffer from *metabolic disorders* generally also exhibit weight problems such as obesity. Increases in caloric expenditure would be beneficial, particularly in treating diabetes and this can be achieved in increasing the duration of the dance through repetition. (Deborah, 1985) The original tarantella could be used as a starting point, however to avoid the monotony associated with constant repetition needed to increase the duration, the participants can be creatively challenged by changing the music and the prop. The utilization of music with a fast 'techno' or 'hip-hop' beat and the introduction of a 'funky light stick' instead of the tambourine, would affect the *effort* and *space* qualities of the dance. The constantly changing floor patterns of the dance are evident in the video showing the adapted dance.

Seniors with *respiratory problems* can participate in folk dances of very low intensity. Participants suffering from emphysema, asthma and bronchitis can perform dances with a short duration of less than two minutes and with rest periods between dances. (Clarke, 1992) The 'Hawaiian Heeia', a dance/drama that depicts a canoe trip for the purpose of fish spearing, can be modified for these limitations. The *spatial* nature of the dance can be altered by having the participants perform the dance sitting cross-legged in a circle facing each other. With respect to LMA, the original dance has been modified to omit the use of intensive *floor patterns* and *levels*. Under *body awareness*, the *gestures* however remain the same to tell the story. The following three video-clips demonstrate the original version; an extremely modified version; and one that gradually adds lower intensity movement solely in a circular pattern and without the use of the dancing/spearing stick. To keep participants creatively involved, seniors can be asked to improvise and add to the given story as the dance evolves.

Research involving *neurological disorders*, which include Parkinson's Disease and Alzheimer's (dementia), has been conducted linking the utilization of dance and music, particularly with nostalgic qualities to facilitate movement. To address this condition, the main modifications made to the 'Scottish Highland Fling', were in the areas of *body awareness*, *space awareness* and *effort* quality. The music was not changed, as the repetitive beat and sound of the bagpipes gave the participants a constant reference point. The *body actions* of the dance only involved the use of the legs and feet and were simplified and constantly repeated. This movement facilitated stretching and

strengthening the muscles, important for Parkinson's patients. (Duvall, 2003) Intricate *balances, leaps and turns* were removed from the dance, and the dancers used a ballet barre to hold on to for stability. *Spatially*, the dance was conducted on one spot and with regard to *time and weight*, the dance was slowed down and performed with a *finer touch*.

Sensory problems such as *visual disorders and auditory disorders* can affect the elderly in varying degrees. The German dance, 'D'Hammerschmiedgsell'n', a circle dance in which two partners work across from each other, can be used in its original format to meet the needs of seniors with these problems. Analysis through LMA reveals strong use of the *effort quality of weight* evident in the direct and definitive clapping between partners. The clapping and the powerful beat of the music elicit precise musical cues of when and how to react to one's partner. *Spatially*, the closeness between the partners facing each other and the participants in the small circle also makes it easier for those suffering from visual disorders to see their partner. The circular floor pattern with the dancers holding hands can prove reassuring for success and they can also rely on the verbal cues of the music. The following two video-clips demonstrate the dance in its original format, followed by an adaptation to a change of music, namely of a 'hip-hop' nature. This alteration only addresses a change in the *effort* quality of the piece of *weight/time/rhythm* and is useful in avoiding the monotony sometimes felt by seniors if the dance is too simplistic and overly repetitive. It further sparks creativity and allows for important social interaction between participants.

Musculoskeletal conditions include several problems such as osteoporosis, osteoarthritis, low back pain and leg pain. (Harris et al, 1995) The Irish dance, 'Rakes of Mallow' is a good example of a folk dance beneficial for osteoporosis. The dance emphasizes the use of *body awareness*, particularly *weight-bearing*, with the constantly repeated 'leap ball-change' step stimulating the production of bone important for increasing bone density. In more severe cases, this can further be modified by changing the 'leap' to a 'step'. The danger of falling – which is extremely important for those suffering from this condition – can be minimized by omitting backward movements and spinning, which can produce disorientation. With respect to *space awareness*, the intricate floor pattern of the dance can be kept intact, as long as the movement progresses in a controllable, forward direction. In the next video segment, the dance is presented close to its original format with participants slightly changing some of the direction of the steps to meet their own particular level of disability. In addition, a participant symbolizing severely impaired mobility in a wheelchair, has been integrated into the dance, demonstrating that the floor pattern need not be altered.

The final video-clip once again addresses *musculoskeletal conditions*, however it is included and highlighted since it involves an adaptation for an actual hip replacement case. The particular subject, a student's grandfather, had been given exercise guidelines to follow directly following his surgery. These guidelines were used and adapted to the music and dance from Spain, namely the 'Flamenco'. The modifications for hip replacement altered the original dance greatly. Emphasis was placed mainly on the area of *body awareness* with isolated *body actions*, mainly the hands and arms. This was used to help stretch, strengthen and sustain muscle function. Difficult foot work and

patterns were totally omitted along with complex *body shapes* and *positioning*. With respect to *space awareness*, basic *levels* were explored through gently raising the body from the seated position to standing during the dance to help strengthen the muscles. *Effort* qualities, specifically *weight*, remained considerably the same with an emphasis on *firm*, direct clapping movements. Although the music was altered from the original version to one with Spanish flavour, the *tempo* remained similar and the beat was less complicated to follow for an elderly individual.

It has been demonstrated on how the emphasis on different Laban concepts change with each chronic condition experienced by the senior and also on the severity of each case. For clarity, this paper isolated each disorder rather than combining several of the conditions that would be more of a reality. It should also be noted that before any of these dances are studied or performed or modified, a doctor's permission and exercise guidelines should be investigated. Also during the course of each session, each participant's heart rate should be monitored and they should be advised to stop with any onset of pain and medications should always be available. Moreover, longer warm-ups and cool-downs are an integral part of each dance session and the most important part of folk dance is for seniors to have fun! (Corbin,1983)

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THE ESSENCE OF THAI MALE CLASSICAL DANCE.

by

Chommanad Kijkhun

Variations of the male character pose

In analyzing the poses, the reference used is the Indian dance form called Naritta and the theory is from Bharot Natyasart. There is no emotion or meaning in this form, just pure gesture. Combining different gestures creates a series. There are 88 poses derived from the two songs and seven sequences. They combine three hand positions, the arm positions, the three levels and the directions. For example, when the arm is in the *Wong Bon* position, with the *Meu Bae* hand, the arm is bent inwards to the body to the 2.5 direction, you can derive eight separate poses. If both hands and arms are symmetrical then there are 47 poses.

First variation "mue bae"

Arms twisted inwards

Direction 0	bent arms mid and low position
Direction 1	stretched arms and bent arms mid position
Direction 2	bent arms high and low position
Direction 2.5	stretched arms mid and low position
	Bent arms high and mid position
Direction 3	stretched arms mid position

Arms twisted outwards

Direction 0	bent arms mid and low position
Direction 1	stretched arms mid position
	bent arms mid and low positions
Direction 2	bent arms mid and low positions
Direction 2.5	bent arms low position
	bent arms high, mid and low position
Direction 3	stretched arms mid position

Direction and level of *mue bae*, the first variation and *mue jip*, without twisting arms and *mue bae*, the second variation.

Directi	Mue nae, without twisting arm						mue jip, without twisting arm						mue bae, the second variation					
	high	mid	low	high	mid	low	high	mid	low	high	mid	low	high	mid	low	high	mid	low
0											✓	✓						
1						✓												✓
2																		
2.5																		
3										✓								
5.5																		
centre																✓		✓

For turns, the whole body must turn together. Movement is only from side-to-side or forward-backward, never diagonally. The weight always shifts forward before turning. Never turn without bending your knees.

For the *yued yup* movement and the *hom khaw* movements the leg has to be in tension and the rhythm can be compared to *staccato* which requires a pause before completing the movement.

The Grammar of male character

The Laban Notation was applied to the *pleang char* and *pleang reo* dances after the linguistic and movement analysis had been recorded.

Firstly, the pose can be applied to the Thai linguistic system with 21 consonants, 21 vowels and five tones. So by borrowing the words from the Thai sound system, I derived that 47 consonants, 6 vowels and 21 tones can be assigned to the characteristics of the male character dance poses.

I use the "consonant" as the smallest possible unit – a combination of hand together with arm. Combining two "consonants" together gives a *mae tha*, the main dance pose. The *mae tha* comprises the *tha ton*, the beginning pose and the *tha tam*, the following pose. The "vowels" are the continuous movement that links two "consonants" together, *tha tor* or the combining pose. The "vowel" movements include straightening the entire body vertically, bending, bowing, gliding and turning.

The tones are used to polish the movement and concerns the leg positions and the angle of the head. These factors are isolated from the head and arms and are used to make the poses at all levels more elegant, balanced and smoother. Therefore I identify these 21 tones:

1. Walking Step – kao tao
2. Knee bent, foot behind – kradoke tao
3. Knee bent, ball of foot lightly touches ground (behind) – kratong tao
4. Kneeling position with heel raise – wang son tao
5. Rapid running on the spot (very small movement) – soy tao
6. Open step with pause foot touching floor pausing with heel raise – charod tao
7. Open step with pause a side way glide/foot glide side way with heel raise – chai tao
8. Stamp (heel-toe) with foot pointing outwards – tob tao
9. Touching (heel-toe) on the spot pause between – tae tao
10. Twist sideways (heel-toe, heel-toe) – tud tao
11. Weight moving front foot to back – ton tao
12. See 6 but with a tap of the ball of the foot instead of pause – pra tao
13. Open feet, heels together, toes raised – pra som tao
14. Foot raised with knee bent – yok tao
15. Raising and lowering a body with knees bent – yead yub
16. Lowering with knees bent and raising on toes lowering and raising with knee bent – yub yead
17. Various foot positions with knees bent – yor
18. Lowering shoulder, tilt head in counter direction – luk khor
19. Heel-toe movement knees bent – sood tao
20. Standing with one heel touching instep, toes raised – leam tao
21. Tilt head – eang srisa

A 'word' can be created by a combination of consonants, vowels and tones, as shown in diagram.

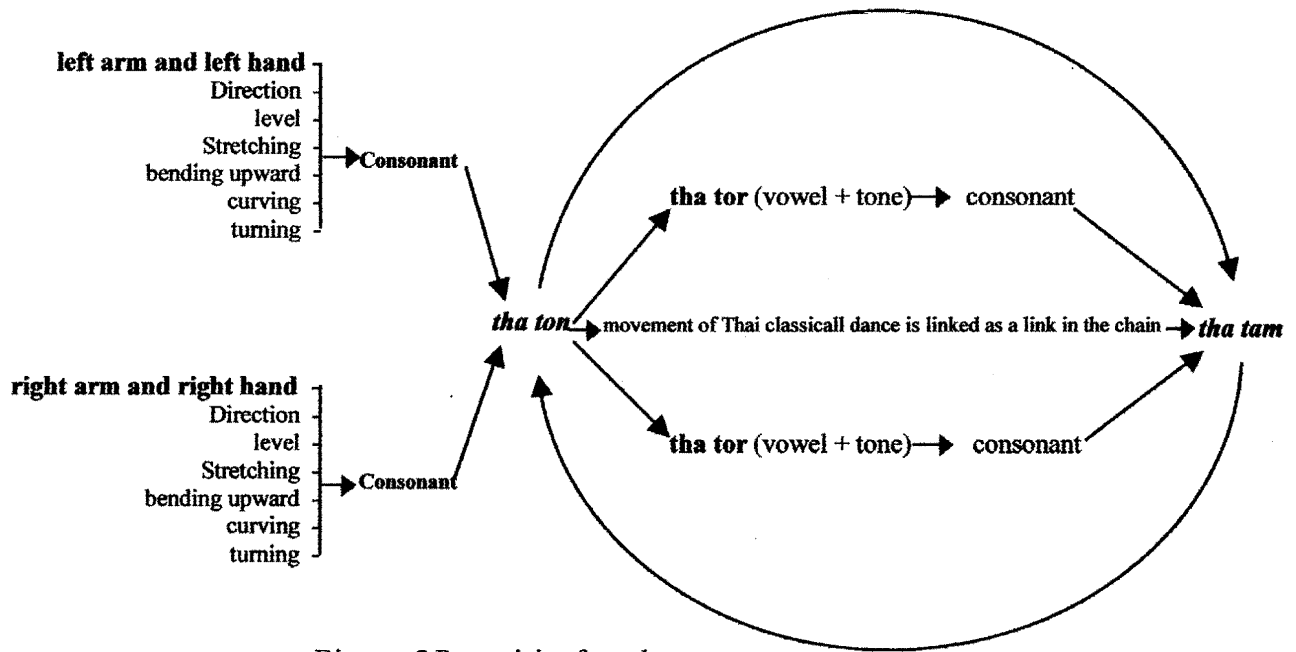


Diagram 2 Pose mixing formula

For example, the position of left arm and left hand, right arm and right hand, which are composed of direction, level, stretching, bending upward, curving and turning, are consonants. When both arms and hands are in the prescribed position they become what is called “*tha ton*”. The *tha ton* will be linked by the *tha tor*, a movement which is composed of vowel and tone to become another consonant, called “*tha tam*”. The “*tha tam*” will take us to the next *tha ton*. The final consonant that appears at the end of a musical phrase and it is always the first consonant at the beginning of the new phrase – as a link in the chain.

As a result of the research, it is clear that the characteristics of the *male character* can be applied to all other aspects found in Royal Court Dance. Furthermore, analysis of the direction, levels, variations, poses and grammar can be used when exploring the dance of other Asian dance cultures – and therefore, possibly the roots of Thai dance.

Finally, by observing one dancer, this system serves to provide a means to describe the whole.

Choreological Study of Old Japanese Ritual Dance
"Miyabito" a study of the Miko-Mai in the KOTOHIRA-Shrine from
the point of view of dance structure

by

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Study Cooperation:

Reiko MORITA (Kawamura Gakuen Women's Univ.)

Eri ITOU (musical transcription)

Hajime KATOU (video)

Sacred Time; Sacred Space; Sacred Act

The "Yaotome-mai" (maidens' dance), which is a kind of Miko-mai (shrine maidens' dance) and is offered to the god of Kotohira, is performed in the Haiden (a hall of worship) which is the most sacred place in the shrine. Religious rituals cause a flow of sacred time in the Haiden, thus creating a sacred space. Offerings to the god of Kotohira are made. Then, the god is invited from the Honden (main shrine). A ritual Shinto prayer is recited. Then, music and singing begin, and then dancing is performed. The Yaotome-mai is a form of "Kami-asobi" (a way of pleasing the god), which includes some "Kagura" dances. The "Yaotome-mai" consists of the following dances and pieces.



KOTOHIRA Shrine

[YAOTOME-MAI]

There are 22 Yaotome-mai in this shrine. Moro-mai is performed by 6 ~12 girls, and Shirabyoushi-mai is performed by one girl. Susumi-uta is a song for enter Haiden, and Tachi-uta is a song for leave Haiden. Dan is a name of tune for the strings of Koto.

Moro-mai

Susumi-uta	Otomera-ni
Tachi-uta	Subegami
Iwa-uta	Senzai
Suzu-mai	Kono-yaotome
Shodan	Wakamiya (Oogami)
	Hatu-no-uta (Kimigayo)
	Irokaenu
Chuudan	Medurashina (Mezurashiki)
	Hatu-no-uta (Chiyo)
	Miyabito (Sureru Koromo)
Godan	San-no-uta (Kami-no-masu)
	Yon-no-uta (Maturaruru)
	Hatu-no-uta (Yoroduyo)
	Sue-no-uta (Uetemiru)

Hitori-mai (Shira byoushi mai)

Shodan	Naka-no-uta or Miakasayama (Ohisofumatu)
	Kasugayama (Iwane-no-matsu)
Chudan	Tsuru-no-ko
	Iwai-no-tameshi
Godan	Naka-no-uta (Wagayado)
	Shinmei

Miyabunokyoku

Miyabunouta Hitofuta (Kazoe-uta)

listed above Transmitted from KASUGA-shrine in Meiji era

.....

Kotohira-mai (was made only for Kotohira shirine)

Urayasu-no-mai (was made to pray peace in Showa era)

"Miya-bito" (persons serving at court) dance



"Iwai no Tameshi" (Auspicious Occasion) dance

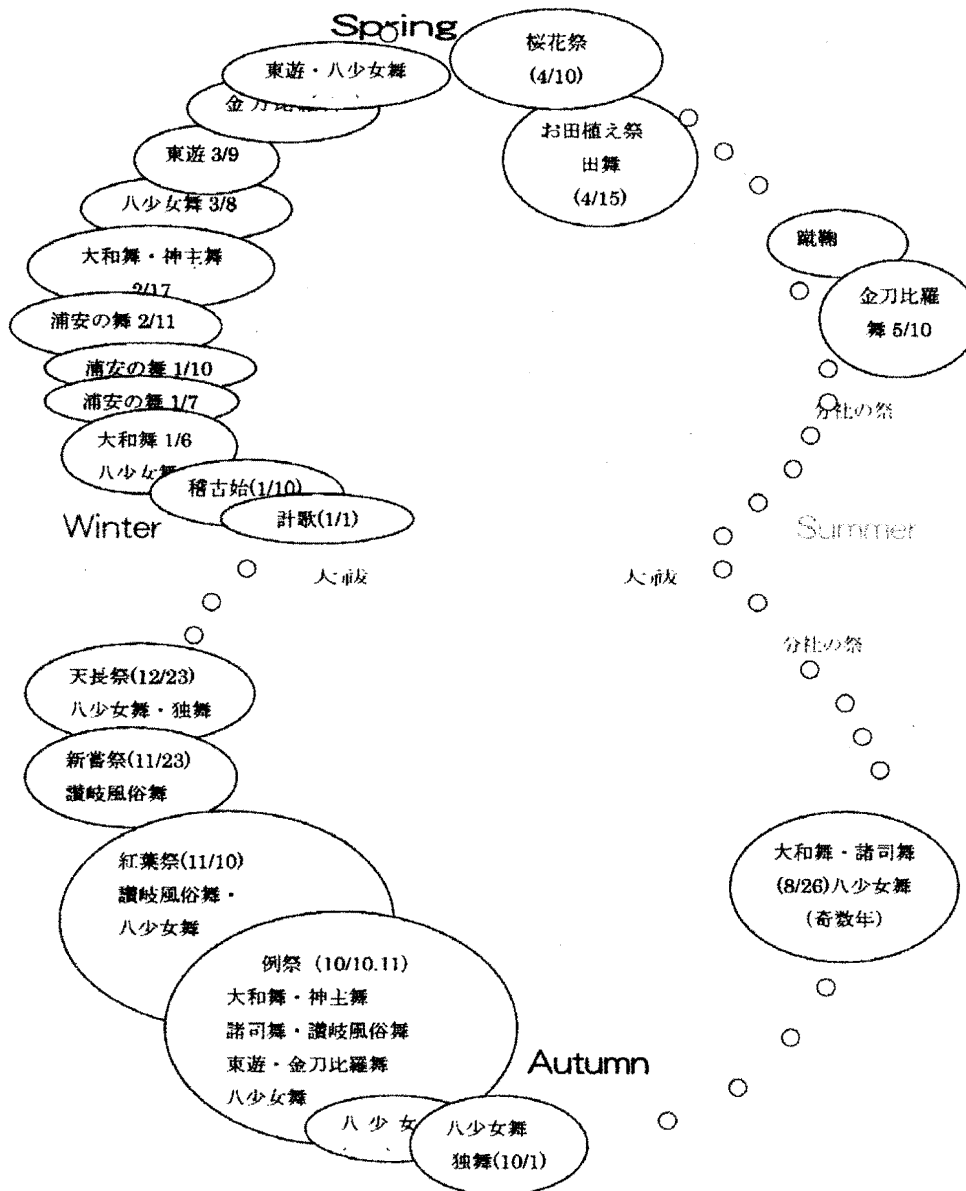


these two dances are belonging with "Yaotome-mai"
and were performed in "Tencho-sai" (Emperor's birthday
festival) in 1998.

List of Festivals held in the Kotohira shrine through the year

Festivals and dancing following the seasonal flow of the natural world

There are twice purify in the half of the year, an the end of June and December.



Music

Miya-bito: the musical structure

The melody of Miyabito is classified as the "Miyako-bushi" musical scale, which is one of the traditional Japanese musical mode or scale. The "kyu-on", or the essential note of the scale is set at the pitch of "Ichikotsu" (corresponding to "D"). The beat is relatively clear but it seems to be difficult to read or determine the tonality (modulation or the like) and the structure. Furthermore, the length of the phrases is irregular—they vary from three bars to seven or nine bars. Hence, the approach has been made to divide the "Miya-bito" into some segments with attention paid to the cadence of each phrase and following its flow.

Unexpectedly, such attempt allows for very clear punctuation of the musical piece (see the diagram on the left page).

The entire musical piece is constituted of just two phrasal patterns made up of from three to nine bars: the pattern moving toward the "chi-on" (set at the pitch of "Ou-shiki", corresponding to "A", in this "Miya-bito") or moving toward the "kyu-on". But exceptionally, the phrase from the 96th bar to the 98th bar is moving toward the "kaku-on" (the forth upper tone from the kyu-on).

The continuous movement around the same pitch in a very slow, leisurely manner is monotonous but graceful. It can be said that the "Miya-bito"'s music is suitable for the "Miko-mai dance" offered by the young girl "Miko", who wear a dignified classical ceremonial dress and dance in a strictly limited space.

A feature peculiar to "Miya-bito" is to have a "Yuru" melody pattern in which the ornamental movement of the two tones ("Yuru" is performed twice in "Miya-bito") as in often listened cases of the musical pieces in "Kyuchuu-mikagura" or "Saibara"

which are performed and sung as court music. Further, the style which begins with a short solo voice and ends in chorus is the almost same fashion as that in "Kyuchuu-mikagura" or "Saibara". However, unlike any pieces of "Kyuchuu-mikagura" or "Saibara", the tempo in "Miya-bito" becomes slower toward the end and finishes rather slower than at the beginning. This time, only two musical pieces have been transcribed from the actual sound for analysis, but the pattern observed in "Miya-bito" may be common to all "Kotohira mai" music.

The melody creates new developments by subtly varying similar patterns. While retaining the pattern of moving toward the same sound in each phrase over many bars, the melody develops by subtly paraphrasing the pattern. This gradual development may reflect the content of the words of the song as a sense of impatient and painful. The pitch and the key do not jump and or move drastically, thus making "Miya-bito" modest and courtly.

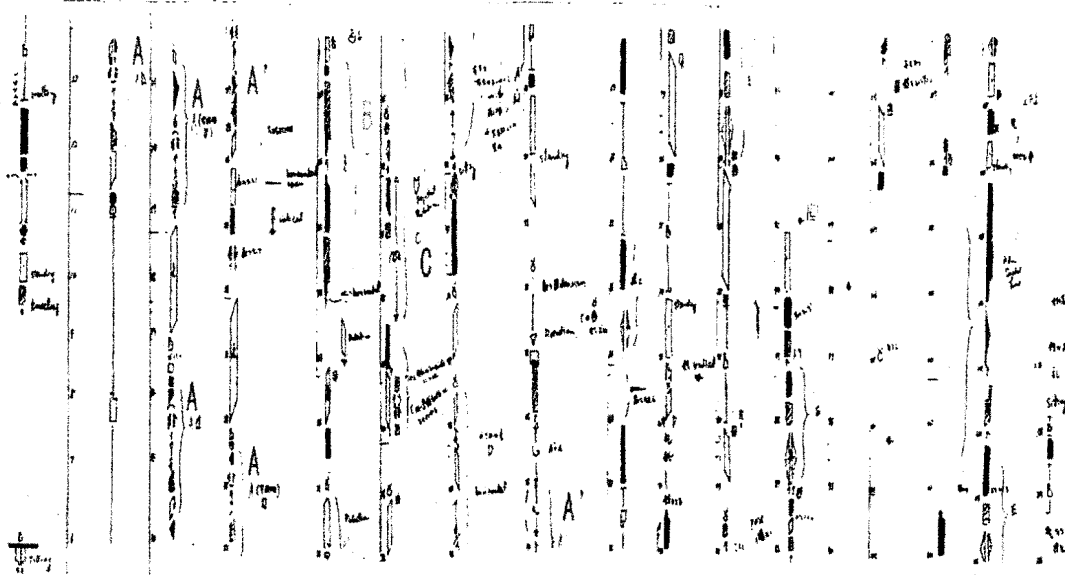
The solo part in the beginning ends on the "chi-on", and soon the piece moves to the chorus part. After that, long phrases moving toward the "chi-on" are continued (see exhibit). The first move of the melody toward the "kyu-on" appears in the 40th bar. Thereafter, the "kyu-on" cadence is continued awhile (until the 83rd bar).

After that, one short phrase ends on the "chi-on", and then the six-bar phrase ends on the "kyu-on". This sudden change of the cadence forms the passage to the next phrase ending on the "kaku-on". This produces a tensive feeling towards the finale of the piece.

In the final phrases ending on the "kyu-on", after each ritardando the tempo picks up again, and then, gradually eases off. This is repeated until the piece reaches the very final cadence.

Dance of "Miyabito"

I wrote the simple score of Miyabito to grasp the structure of this dance by using Your move. But it is a simple way just to show the outline.



the whole flow and the repetition of Dance Movements

It consists of three parts.

- 1, no instrument just Hands
 - 2, dancing with a Japanese fan in the right hand
 - 3, dancing with a Japanese bell in the right hand
- picking out the characteristic movement from this score
focusing on repetition of series of symbols.

Part1; "Kamae (taking up the opening position)

-A-A-A-A-connecting action

Part 2 (Fan Dance)

bowing-A-B- (pre-C+C) -D- (α) -withdrawing

Part 3 (Bell Dance)

"Kamae"-bowing-E-E-moving around the space-changing
directions and shaking the bell five times-E-C
type-taking up a position with the bell-ending
action-bowing

The basic action of "kamae" and going forward is performed three times as if in preparation for starting each part.

When similar actions are observed with reference to the diagram in the "Your Move" Notation System, it is seen that there are some repeated actions.

Further, the slow actions such as walking, turning, sinking create beautiful directional changes and postures in the "mai-Dance". However, the distinctive actions A, B, C, D and E are picked out as samples in this study.

The structure of "Miyabito"

By put them together we can see the relation ship of three elements

Bar	Song	Music	Dance	Movement
1			sitting	
2	MIYaBiToNo	a-1	KAMAE	
3				
4	MIYaBiToNo	a-2	go forward	
5				
6	SuReRuKoRoMoNi	a-3		
7				
8	SuReRuKoRoMoNi	a-4	Dance	
9				
10	SuReRuKoRoMoNi	a-5		
11				
12	SuReRuKoRoMoNi	a-6		
13				
14	SuReRuKoRoMoNi	a-7		
15				
16	SuReRuKoRoMoNi	a-8		
17				
18	YuFuTaSuKi	b-1		
19	KaKeTeKoKoRoWoy		Fan Dance	
20				
21				
22	KoKoRoWoya	b-3		
23				
24	TaReNiYoSuRaMu	b-4		
25				
26	TaReNiYoSuRaMu	b-5	KAMAE	
27			go forward	
28	YoSuRaMu	b-6		bow
29	KaKeTeKoKoRoWoy			go forward
30				Direction Change
31		b-7		Direction Change
32				go forward
33				Direction Change
34	KoKoRoWoya	a-9		E
35				Direction Change
36				E
37				
38	KaKeTeKoKoRoWoy	b-8		
39				
40		a-1	Ball Dance	go around
41				
42	KoKoRoWoya	b-9		
43				
44	TaReNiYoSuRaMu	b-10		Direction Change
45				
46	YoSuRaMu	b-11		5 ringing
47				
48		b-11		E
49				
50	TaReNiYoSuRaMu	b-12	KAMAE	bow
51			put down ball	bow

Features of "mai" in the dance flow

Although the words of the "waka" (a 31-syllable Japanese poem), namely, the words of the song of the "Miya-bito", are repeated, all the words appear in approximate accordance with the musical phrases until the 84th bar is performed. The 84th bar corresponds to the end of the "ougi-mai" (a dance using a fan). In other words, the whole "waka" is recited until the 84th bar.

The actions of "Kamae (taking up a position)" and "chokushin (moving straight forward)" are performed after the "Ougi-mai". "Suzu-mai" (a dance using a bell) is performed while the second half of the "waka", such as parts E, e2, D and d2, is repeated. A distinctive feature of the "suzu-mai" is that the "Miko" move around the inner sides of the "Haiden" for the whole duration of the 90th to 104th bars. In this "suzu-mai", the musical phrase C-1 is played only once. In the 111th to 115th bars, the bell is shaken and rung five times, pointed to the four corners and to the front. This scene shows that the dancers turn to four different directions. This turning, as well as the movement around the sides of "Haiden", gives the purifying impression of going the round of the space in a horizontal plane.

However, the words B the first half of the "waka" are repeated four times in the 12th to 39th bars in the early stages. In the first two times, Action pattern B in which the dancer extends one arm diagonally and swings the other arm over her head to join it is repeated four times with the arms extended in an X-shaped pattern. This action appears to purify the place at the beginning of the "mai". Further, along with the words C ("yufu-tasuki") appearing only once in the 40th to 42nd bars, Action pattern C appearing in the "Ougi-mai" boldly includes one movement of the arms as if rowing (sagittal). This is impressive.

In toto, the vertical axis is dynamically used. The "Ougi-mai" showing the sagittal movement for variety in the first half, and the "suzu-mai" showing the horizontal slow

turnings and the horizontal positional movements in the second half correspond to the first half and the second half of the "waka" with regard to the length of time, but to my mind have no special connection with the meaning of the words of the "waka". However, it seems that "koromo" of "sureru koromo" in the first half and "kokoro" of "kakete kokoro" in the second half assonate with each other.

When

About what the action means when it is performed.

Then, I concluded that
the "when" is musical time,
time in the natural world, and also
human mental time.

Is this "when" some time in the year?

Is this "when" some time in the month?

Is this "when" some time in the day?

The "Miko" offers the dance to the god at the time of her life when she is a girl.

The festivals are handed down from person to person, and repeated through the changes of the times.

At the time of the festival,
the mental time of the person playing the music and
the mental time of the person performing the dance
seem to be integrated into a greater and more sacred time and space.

Thanks are owed Chiyoko HASEGAWA (chief of maidens of KOTOHIRA-shrine) and all staffs of KOTOHIRA-shrine for their help, and Chikako ETO and E. Willkinson for their help of English.

RECORDING *TRIO A* IN LABANOTATION

by

Joukje Kolff and Melanie Clarke

Yvonne Rainer taught her seminal work *Trio A*, from 1966, during a week-long workshop organised by London International Summer School at Greenwich Dance Agency in 2003. During this workshop we recorded the piece in Labanotation.

In this session we will address some of the issues we have encountered during the notation process of this dance. We will also give you pages from the score to read, which relate to some of the issues discussed. And we will demonstrate the DVD created from the video footage taken during the workshop in 2003.

***Trio A*: history**

Trio A was originally performed as *The Mind is a Muscle, Part 1* in 1966 by Yvonne Rainer, David Gordon and Steve Paxton. The piece of around 5 minutes can and has been performed in a variety of places and contexts and by any number of dancers.

Yvonne Rainer, as the other members of the Judson Church in the 1960s, rebelled against some of the characteristics of the established modern dance and ballet. With *Trio A* Rainer's objective was to eliminate such aspects as phrasing, development and climax, character, performance, virtuosity, the fully extended body and variation in dynamics. She also didn't use a glamorous costume, décor and music. Instead she substituted every-day, "found" movement, equality of parts (as opposed to development and climax), task-like activity, neutral performance, real body weight and time.ⁱ

Current resources for reconstructing *Trio A*

In this year's spring issue of the Dance theatre Journal Rainer writes: "For the first decade of *Trio A*'s existence I was teaching it to anyone who wanted to learn it — skilled, unskilled, trained, untrained, professional, amateur — and gave tacit permission to anyone who wanted to teach it to do so. I envisioned myself as a postmodern dance evangelist bringing movement to the masses, Well, I finally met a *Trio A* I didn't like. It was fourth or fifth generation, and I couldn't believe my eyes. It was all but unrecognizable."ⁱⁱ

Besides Rainer herself, there are three people authorized to teach *Trio A*: Pat Catterson, Linda K. Johnson, and Shelley Senter. Another potential resource for learning the dance is

a videotape from 2002 in which Rainer fine-tunes *Trio A* on Senter and Johnson. And there is a film from 1978 by Sally Banes in which Rainer performs *Trio A*.

The 'certified' teachers will continue to pass on the work. Rainer wrote: "As for after my demise, so far Pat Catterson is the best versed in the intricacies of the dance, but she's getting on in years also."ⁱⁱⁱ What happens after these teachers also go?

The 1978 film contains mistakes, so it cannot be used as the main resource for reconstruction. The "cleaning tapes" offer more pedagogical information than the 1978 film. But, says Rainer, "... it would still be a tricky business to try learning *Trio A* only from the tapes without additional input from an official instructor. Video distorts the spatial orientations, the geometric configurations of the floor patterns, for one thing."^{iv} On top of that, the tape is not easily available: currently only Rainer and Johnson own copies.^v

Rainer has become more and more concerned about the conservation of *Trio A* in the future: "In the spirit of the 60s a part of me would like to say, "Let it go." Why try to cast it in stone? Why am I now so finicky and fastidious, so critical of my own performance, so autocratic about the details — the hands go this way, not that way, the gaze here, not there, the feet at this angle, not that? In the last decade I have become far more rigorous — some might call it obsessive — not only with respect to the qualifications of those whom I allow to teach the dance, but in my own transmission of its peculiarities. In the presence of the Laban notators in the summer of 2003, it became increasingly clear to me that here was an opportunity to set the record as straight as possible and forget, at least for the moment, my scruples and caveats about fetishization and immortality."^{vi}

History of the project

When Rainer came to London to teach *Trio A*, the first author (Joukje Kolff) thought it was too good an opportunity to miss, to safeguard it for the future. When Rainer was approached, she was interested in the notation project, but at the same time sceptical. In the same Dance Theatre Journal article mentioned earlier, she writes: "If the thought of having *Trio A* Laban notated had ever crossed my mind, it was only with the conviction that such a venture would be quite impossible. The subtleties and dynamics of this dance, performed without the structuring support of a musical score, seemed outside the domain of any graphic notation system. But when the opportunity arose in conjunction with teaching *Trio A* at the Greenwich Dance Agency in the summer of 2003, I did not object, in fact, was curious."^{vii} Rainer has been supportive throughout the project and is now most curious to see how reconstructions from the score will turn out.

We notated the whole dance during the workshop and recorded practically all of the workshop on video. This initial phase of the project was supported in part by the Language

of Dance Centre, London. The first author then edited the video footage and created an initial DVD. We fine-tuned and corrected the score, asking Rainer for clarification by email and checking the DVD.

Funding from the Dance Preservation Fund at Ohio State University then made it possible for the score to be finished. After Mira Kim in New York typed the score, 2 checkers checked the score. Shelly Saint-Smith did a technical check. Vicki Watts then learnt the dance and performed it for us. Her 'physical reading' of the dance brought up many points and resulted in an enormous improvement of the score.

Characteristics of the dance

We gave out two pages from *Trio A* for the conference participants to read. These were pp.1-2 and p.25 (illustrations shown). In order for the participants to read these pages, we thought it was important to mention the following characteristics of the dance.

Trainers

The piece should be performed wearing trainers. The foot is not necessarily flexed nor pointed, unless indicated in the score.

No repetitions

The dance contains no repetitions. It is made up of discrete parts, none of them a variation of the other. Their order, though set, does not seem to be important.

Phrasing

Rainer mentions that in much of the western dancing we are familiar with there is a maximal output of energy at the beginning of the phrase, followed by an abatement and recovery at the end.^{viii} Although one can distinguish discrete parts within *Trio A*, they are not characterised by this particular distribution of energy. Instead the various parts flow into each other without a significant pause and without emphasis, attack, or other changes in dynamics. What does happen now and then is a registering of the position, a momentary stop.

Performance style

The dance is to be performed in a neutral way, and not in the traditional sense of performing with charisma, radiance and drama. The performer is projecting inward rather than outward and ignores the audience. This is especially made explicit through the gaze, which is never directed at the audience.

The movements are to be accomplished rather than to be displayed.^{ix} They are task-like, matter-of-fact and unpretentious. Some movements can be adjusted to the flexibility of the dancer, e.g. the height of a leg in a *ronde-jambe* or *arabesque*.

The energy exerted is the real energy it takes to perform the movement. One does not need to seem light or make the movements seem easy nor difficult or virtuosic. The spectator sees the actual weight and unenhanced physicality of the body.

Tempo

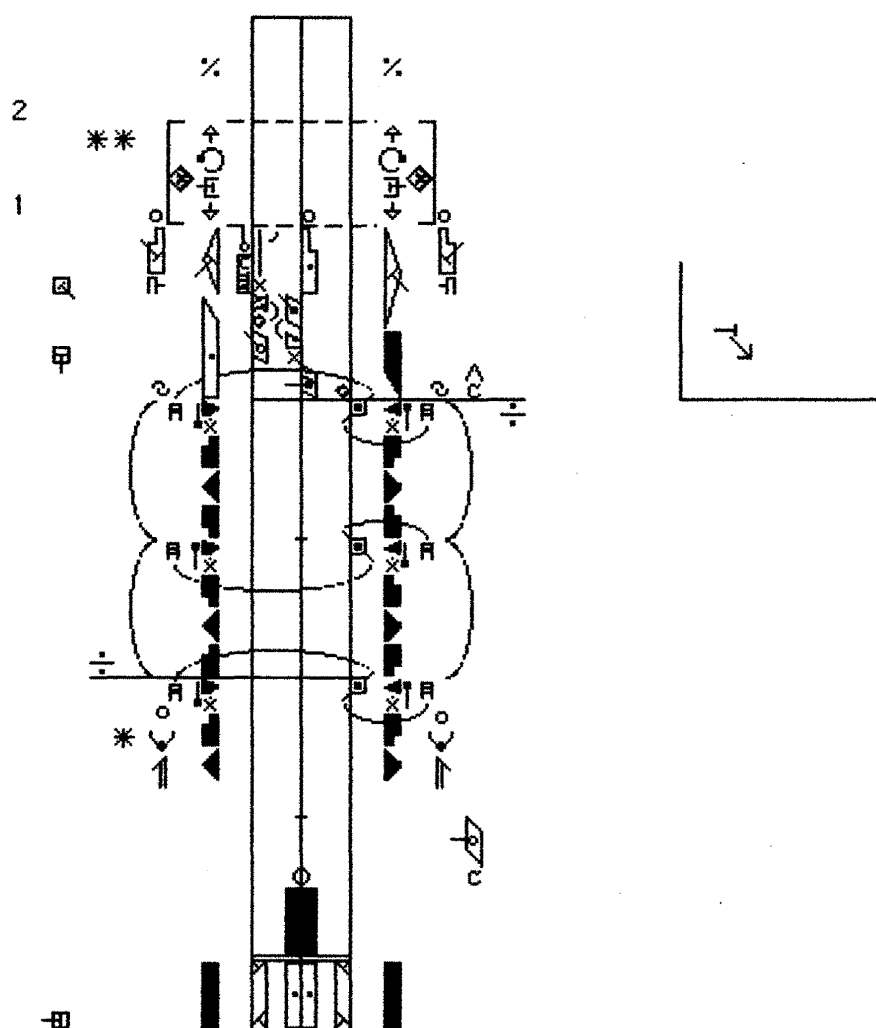
Although some movement units should be performed in a regular counting rhythm, one takes the time it takes the body to go through the movements: an actual time takes place. Thus, the dancers are never purposefully synchronised, each moving at his/her own tempo.

Use of space

The dance can take place anywhere on stage / performing area, although it is mostly performed in the middle. The performer can take a lot or only a little space.

Detail

In spite of the every-day dynamic and the lack of virtuosity, the choreography is detailed and precise and you may find that it isn't easy.

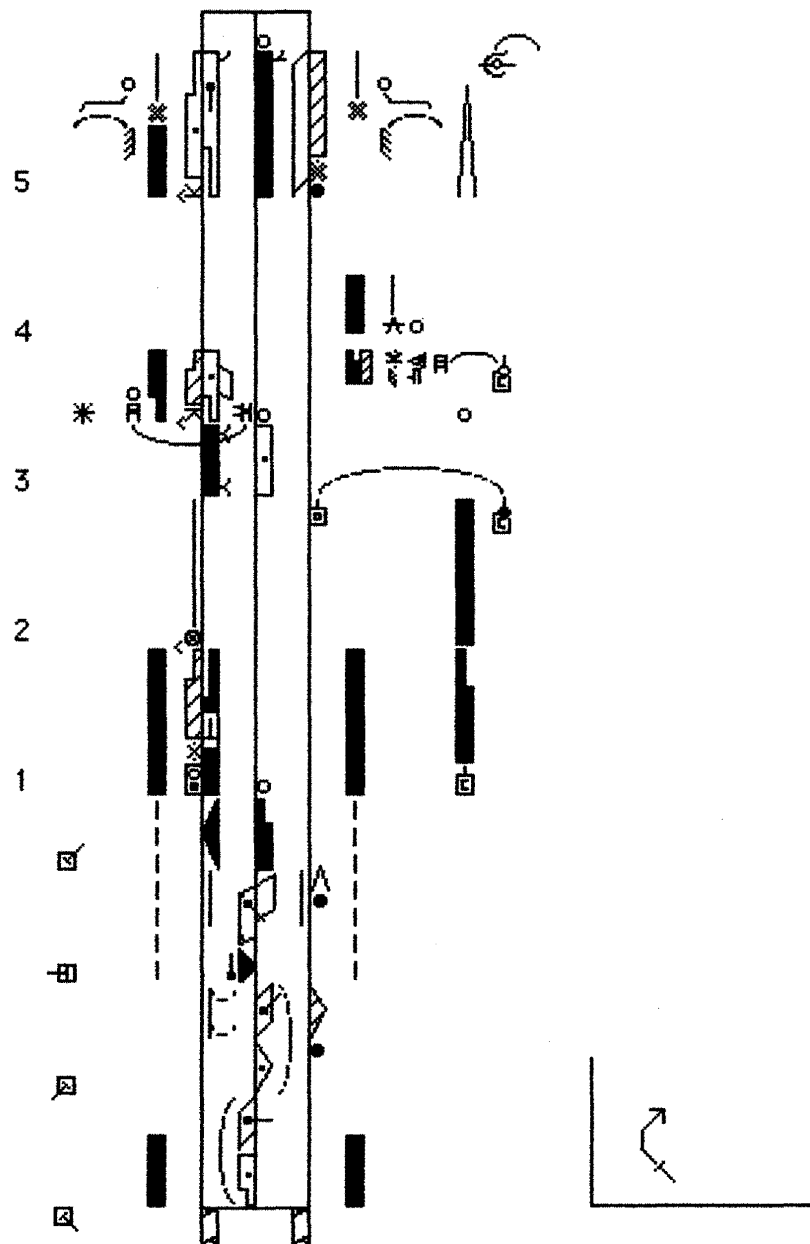


* weighty/heavy sign, as explained in Ann Hutchinson's 1970 Labanotation textbook. In Dr. Hutchinson Guest's 2005 Labanotation textbook, the sign appears with the centre of gravity part of the sign (the black ball) sitting on the centre part of the inside edge of the upward curve.

**

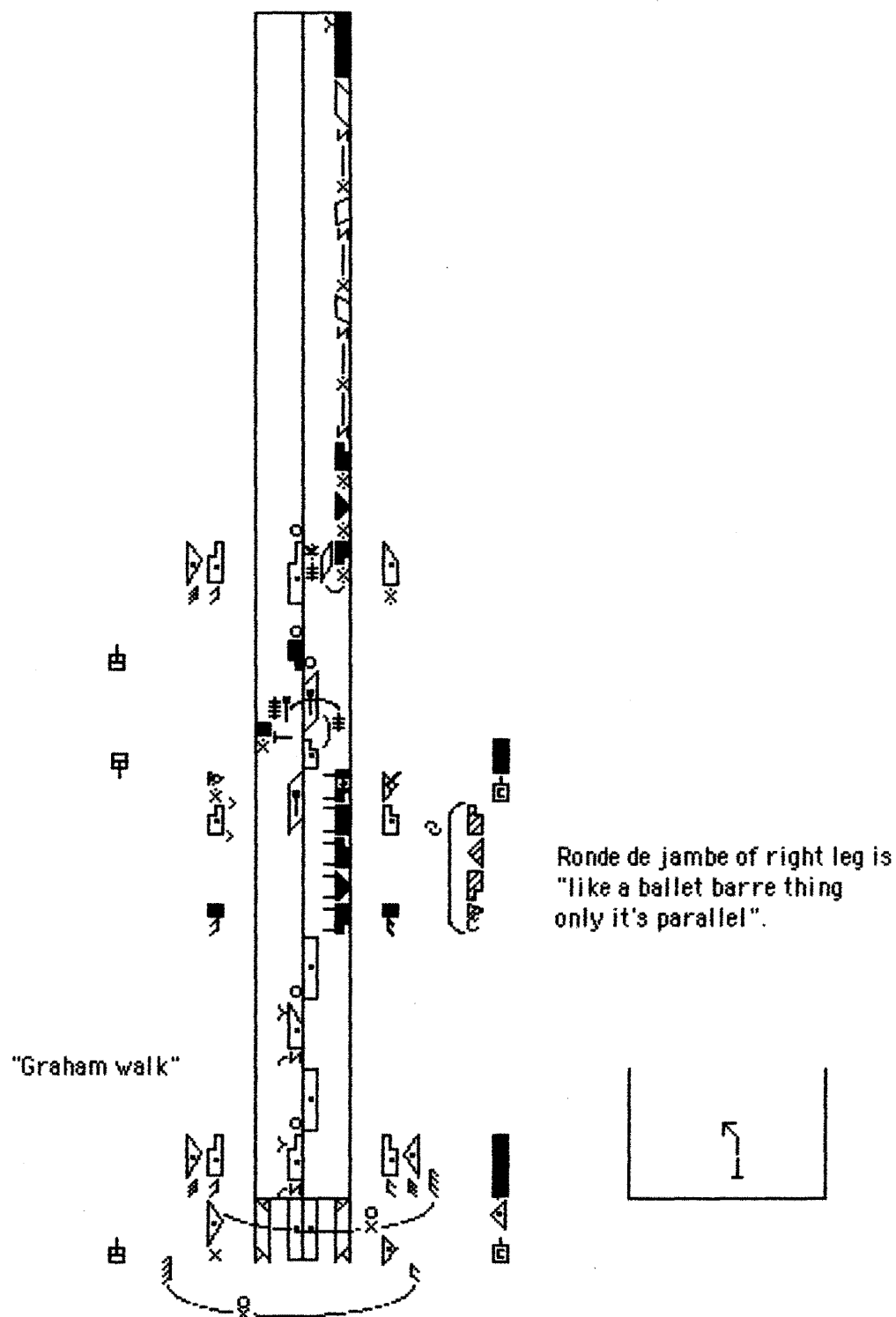
$$\left[\begin{array}{c} \diamond \\ \uparrow \\ \circ \\ \downarrow \\ \diamond \end{array} \right] \begin{array}{|c|c|} \hline \\ \hline \end{array} \left[\begin{array}{c} \diamond \\ \uparrow \\ \circ \\ \downarrow \\ \diamond \end{array} \right] = \left(\begin{array}{c} \downarrow \\ \downarrow \\ \downarrow \\ \downarrow \end{array} \right) \begin{array}{|c|c|} \hline \\ \hline \end{array} \left(\begin{array}{c} \downarrow \\ \downarrow \\ \downarrow \\ \downarrow \end{array} \right)$$

III.1 Trio A p.1



※ Left leg can go higher if body is capable, but keep torso as indicated.
 An argument against ballet, this arabesque is modified through dropping chin to chest and the arm/hand gestures.

III.2 *Trio A p.2*



III.3 *Trio A* p.25 (starting position, added here, is not necessary in the score)

The pages shown above contain sequences in which Rainer rebelled against established traditions. There is an arabesque with head down on page 2. The heels rather than the toes touch the floor first during the Graham walk on page 25. This page also contains a *rond-jambe*: like a ballet barre exercise, but then in parallel.

Notation issues in *Trio A*

Timing

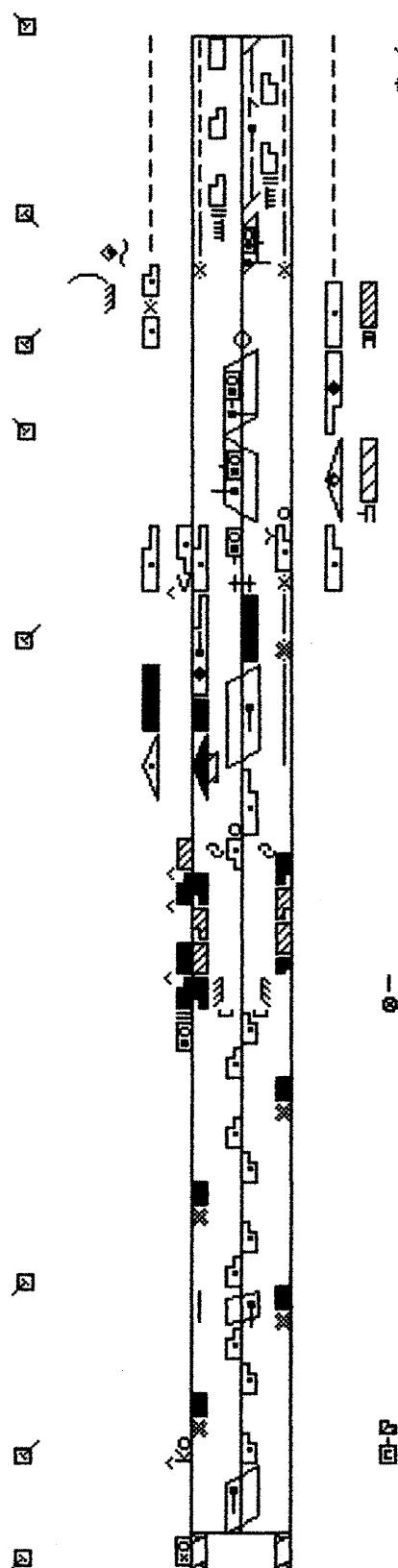
In *Trio A* there is no music and no set rhythm for the dancers to hold on to. We discovered, however, that there is some kind of unit of timing. At several points in the dance there is a sequence of positions (held only momentarily, a registering of the position, rather than a stop!). Rainer counted 1, 2, 3, 4, 5: each movement from one position to the next should take the same length of time, as on page 2 in the score, ill.2 above. So, at least in these parts of the dance we have made sure each counted movement is of equal length and we have put the numbers to the left of the Labanotation staff.

In general, it seemed that we could indicate the duration of a sequence in relation to others. However, one cannot learn *Trio A* from the Labanotation without reading about the performance style of the dance. Knowing about the lack of a set time structure and the ongoing flow, knowing that one can take the time it takes the body to go through the movements, the reader should take the score as a guideline as far as timing is concerned, not a dictation of exact duration.

Floorplans

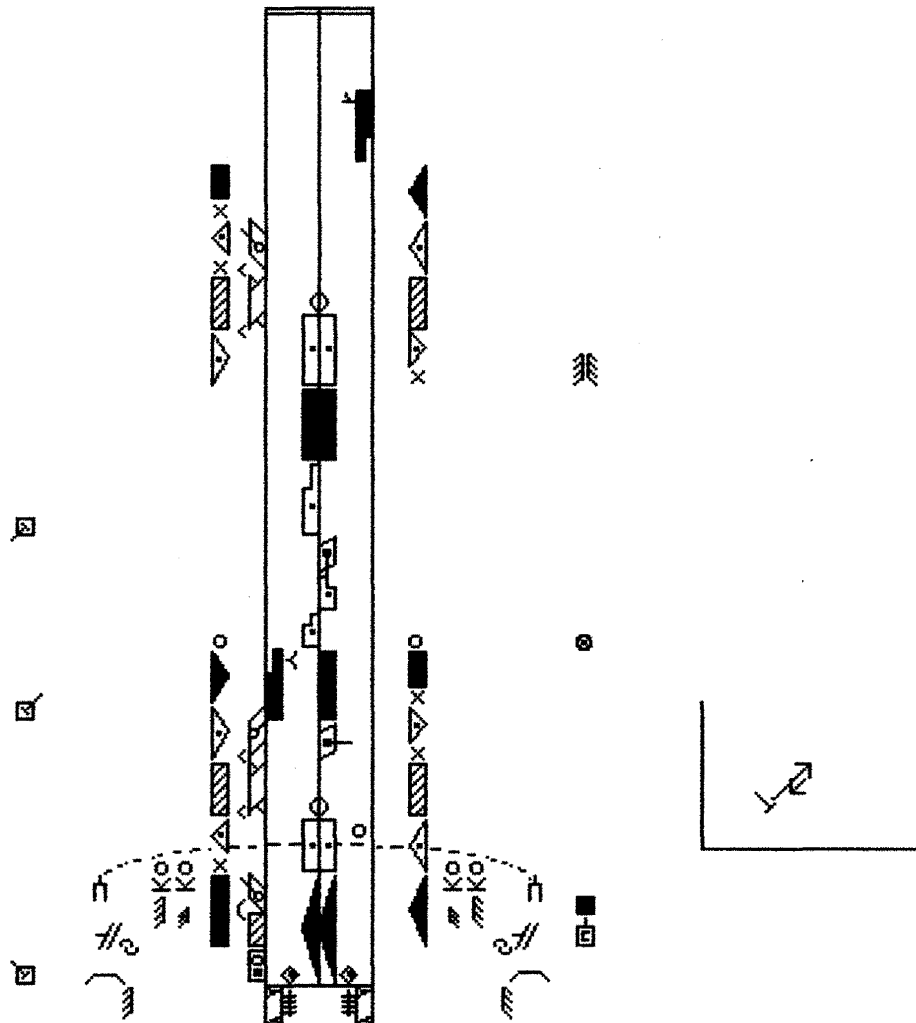
Initially we did not use consecutive floorplans. We did add a floorplan where we thought it was useful to easily see the direction of travel and possibly to give some idea of distance. But we often hesitated to add one because we did not want the reader to be precise about exact distance or exact position in space. Although direction of travel is important, distance is not. We also thought that the facing pins, direction symbols in the support column and path signs in the score were sufficient.

Vicki Watts, however, thought we should add more floorplans to make it easier to read. We decided to follow her advice and added, for example, the floorplans on pages 30 and 31, as can be seen in ill.4-5 above. At the same time, to avoid exact readings of distance and position in space, we added a paragraph to the introduction of the score about the freedom of distance travelled.



Your feet end up perpendicular to the diagonal mentioned on page 29.





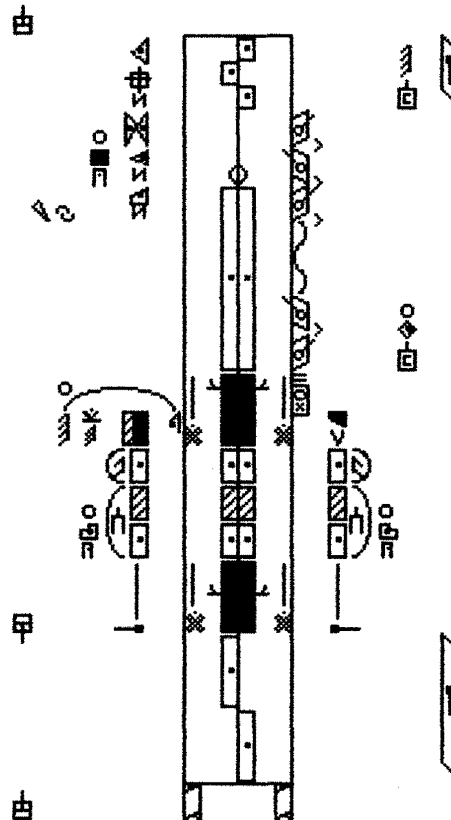
III.5 *Trio A* p.31

Which aspects of the dance are most important?

Some dancers in the workshop, where we notated the dance, took the whole of the enormous space at Greenwich Dance Agency and that was fine with Rainer. In the 1979 film, where Rainer performs the dance not much distance seems to be travelled. Although we can see the detail in the performance and teaching of Rainer, being present at the workshop revealed to us which aspects of the dance are most important. These points are the facing of the body, the direction of the gaze and the matter-of-fact performance style. On the other hand, space travelled and exact duration are not important in *Trio A*.

Also, during a turn in several steps it often did not matter how much to turn with each step. So, one can write: *turn, step, turn, step, turn, step*, indicating exactly how much to turn

before each step. But one can also write: *step, step, step with a general turn sign 'covering' those 3 steps*, so that the choice of how much to turn with each step is left open to the reader, as on page 17, see ill.6. As it was not usually important how much to turn with each step, a general turn sign has been used in those cases.



III.6 *Trio A* p.17

Our collaboration

The latter is a case, which we had notated differently. We notated some part of the dance together, some of it individually with the other checking and for some of the dance we each had our own notations. We then had to discuss the differences and choose the version we thought was most appropriate.

The DVD

'me' and 'I' in this section relate to the first author.

When the London International Summer School gave permission to me to notate *Trio A* and to record the workshop on video, they did ask me for a copy of the videotape. There were

20 hours of videotape, so I edited it down and put it on a DVD for their archive and as a reference for us notators. The intention was not to distribute this DVD with the score. If that were the case I would have wanted a more suitable microphone and a camera operator, not just in the afternoons, but also in the mornings. Instead, in the mornings a camera on a tripod recorded the teaching. It was only because of the funding from the Dance Preservation Fund that I created a new DVD to be available for score users. I re-edited the video and indicated chapter points to correlate with the pages in the score, something I hadn't done in the initial DVD. In spite of some dark images and less than ideal sound quality, I hope it will be a useful resource, especially for those analysing the score for reconstruction or research. I am looking forward to hearing about users' experiences.

Shown here is the main menu of the DVD. It consists of three sections. One section gives an overview of the workshop. In another section Rainer introduces the sequences to students. The third section tells us a bit about the history of the project and about the use of the DVD. It also contains the credits for the project.

In the 'introducing the movement' section, where Rainer teaches the movement to the students, all movements of *Trio A* are shown, but a run-through of the whole dance is not included. The whole sequence lasts about 1 hour and 10 minutes. A submenu allows the user to jump immediately to or near to the point in the dance or score they want to watch. Page numbers at the bottom of the screen then indicate the correlating page in the score. One can go to the next chapter by pressing the 'next chapter' button, go back to the menu of page numbers by pressing the 'menu' button or back to the main menu by pressing the 'title' button.^x

Of course, Rainer demonstrated and showed more than what can be shown on the DVD. Occasionally, Rainer might have corrected her previous teaching and, if there are any discrepancies between the score and the video, the Labanotation score is to be taken as the correct version.

The creation of this DVD and the use of it thereafter helped us in fine-tuning the notation. Going through the video while editing it, made me re-think a lot of points in our notation and being able to check certain points in the score, once the DVD was done, was enormously helpful. We imagine that this section can also be useful as a reference for those reading the notation score or for researchers. The notators recommend that reconstructors read and dance the score first before referring to this DVD.

The 'workshop overview' section contains a 20 minute sequence of bits of video from the week, showing Rainer's teaching, Rainer telling the students about the background of *Trio A* and some of her other work, students practicing, us notating.

Availability

The score and DVD will be available for hire from the Dance Notation Bureau in New York. For educational purposes it can simply be rented out. If it is going to be used for an official performance, one will need to seek permission from Rainer and pay a royalty fee.

ⁱ Based on "A Quasi Survey of some 'Minimalist' Tendencies in the Qualitatively Minimal Dance Activity Midst the Plethora, or an Analysis of *Trio A*" by Yvonne Rainer, 1966.

ⁱⁱ Rainer, Yvonne. "*Trio A*: Genealogy, Documentation, Notation" *Dance Theatre Journal*, Vol.20, No.4, 2005.

ⁱⁱⁱ Email from Rainer to me, dated 12/8/04.

^{iv} Email from Rainer to me, dated 9/10/04.

^v Another problem with (analogue and digital) videotapes is that they may not survive subsequent changes and updates in video technology.

^{vi} Rainer, 2005 (see note ii).

^{vii} Rainer, 2005 (see note ii).

^{viii} Rainer, 1966 (see note i).

^{ix} Robin Silver Hecht, "Reflections on the Career of Yvonne Rainer and the Values of Minimal Dance" *Dance Scope*, Vol.8, No.1, 1973-4, pp 13-14.

^x Button labels will differ on various DVD payers.

APPLYING LABANOTATION ON GREEK FOLK DANCE: THE CASE OF THE DANCES OF THE GREEK IONIAN ISLAND OF LEFKADA

by

Maria I. Koutsouba

Introduction

From my very first contact with the island of Lefkada, an island in the Ionian Sea, located around the middle of the western coast of mainland Greece, as I carried out fieldwork for the needs of my Ph.D. (Koutsouba 1997), I came across a contradiction taking place in its dance affairs. The contradiction took place between presentational (Nahachewsky 1994:1) performances, that being the performance of rural dances from Lefkada on stage, and participatory ((Nahachewsky, 1994:1) ones, namely the performance of rural dances whenever the islanders were among themselves. In particular, the common practice of the dance groups from the island, a practice adopted by dance groups all over Greece, was to select and combine in various ways from a repertoire of a certain number of dances, namely *milia*, *lemonia*, *barbouni*, *karavakia*, *ballos*, *th(e)iakos* and *patinada*, and to demonstrate them as being representative of the “Lefkadian” dance tradition during performances in folk festivals, in cultural events taking place at village squares, at national celebrations and in tourist spectacles. Whether the audience was made up of locals, Greeks, or tourists did not affect the synthesis and performance of these dances on stage.

Yet, three more dances, namely *tsamikos*, *syrτος argos* and *syrτος grigoros*, classified as “foreign” dances by the Lefkadians themselves, constituted their favourite dances and were continually performed whenever the islanders were among themselves, such as at village fairs, formal evening dances (*horoesperides*) or family celebrations, be that engagements, weddings or name-days. One more dance, *Yiannis o Meratianos*, *Marathianos* or *Peratianos* was performed in both cases but during different time periods. These two repertoires performed seemed to have nothing in common. This situation raised a number of questions. What sort of dances should be characterised as “Lefkadian”: those performed on stage, those performed by Lefkadians among themselves, or both? Were there any characteristics in the form of the dances that impose such a differentiation in their use? To answer this sort of questions an ethnochoreological approach was adopted. That is, issues of cultural identity, one of the main themes of present day discussions in social sciences, were decided to be defined through dance discourse. This approach presupposed that a number of steps should be made from a dance point of view: the dances, both presentational and participatory should be notated, then their form (structure and style) should be classified through a typology based on the notation, while finally a comparison of their form should be carried out to reveal if the use of the dances related to the construction of the island’s cultural identity was actually depending on the dance forms among others. Thus, the paper aims at demonstrating the way this process came into being and the way dance notation played the key role in this process.

Dance Notation, Typology and Comparison

Though in Greece the use of Laban's systems is still in its infancy and there is neither a satisfactory body of Labanotation scores of Greek folk dances nor a national notation center so as to discuss technical issues of the dance notation system itself (Koutsouba 2005), the first attempts to apply Labanotation to Greek folk dances have been made till the date of my research both by foreigners and indigenous dance researchers (Loutzaki 1979-80, 1984; Torp 1990). Based on these attempts, and the application and acknowledgement of Labanotation and Effort systems worldwide, it was decided to be used for the notation of the dances' structure and style correspondingly. As I was not sure about the capability of applying Labanotation on the dances of Lefkada, and as I had just started to learn Labanotation, at the Labanotation Institute in Guildford, my teacher there reassured that the system could be used in the case of my dance material. Thus, Jean Johnson-Jones made all the necessary adjustments and checked the Labanotation scores, while a colleague from Greece, Katia Savrami, helped me with the Effort system. In both cases, the material was characterised as "interesting" and "different" from those that Laban's systems had been applied till then.

However, apart from the notation itself, its correlation with dance typology was of particular importance. Typology 'aims at the uncovering of the substantial and particular features of the nature and form of the dances' (Tyrovolas 2001:33) and is necessary for comparative work as it is 'only the graphic display-the abstraction-[that] gives us the possibility of scientific comparison (IFMC Study Group 1974:118). Though a widely used term in the analytical dance practice towards this direction is that of 'formula', its replacement by the term 'type', 'the combination of separate kinetic motifs in order to form larger units, namely dance phrase' (Tyrovolas 2001:67) is allowed since the two terms can be considered as synonymous (Tyrovolas 2001:69). Yet, the selection of the latter allows the use of two useful neologisms in the study of dance, namely the abstract terms of 'kinetic type', i.e. 'the type of structure' and the 'morphic type', i.e. 'the characteristic features and properties of form' (Tyrovolas 2001:21).

Thus, for the purpose of my study, a way ought to be found so as to connect Labanotation with dance typology. In other words a way ought to be found so as to correspond Labanotation symbols with those of dance typology. To this end, symbols of dance typology (IFMC 1974; Tyrovolas 1994, 2001) were modified so as to correspond to Labanotation symbols. As in the majority of Greek folk dances the body is erect and functions as one unit and the handholds are of certain kinds and usually unchangeable during a dance, while the emphasis lies in the footwork, it was at the movements of the legs where the correlation was focused. Thus, the Greek letters 'δ' and 'α' were used for the movements of the legs as following:

A way has then to be found to distinguish supports for gestures, important distinctions in both dance notation and typology. The letter 'ο' was thus added to 'δ' and 'α' for supports thus helping in the visualization of supports in dance typology. Finally, the numbers 1-9 were used indicating the directional symbols according to the Labanotation system as following:

i) Symbols for the movements of the legs:

a) Symbols for the legs:

- **δ** (the first letter of the Greek word *δεξι* which means right) = right foot, either **support**, that is the movement that carries weight or **gesture**, that is the movement in space that does not convey weight (Hutchinson 1977:22).
- **α** (the first letter of the Greek word *αριστερό* which means left) = left foot, support or gesture

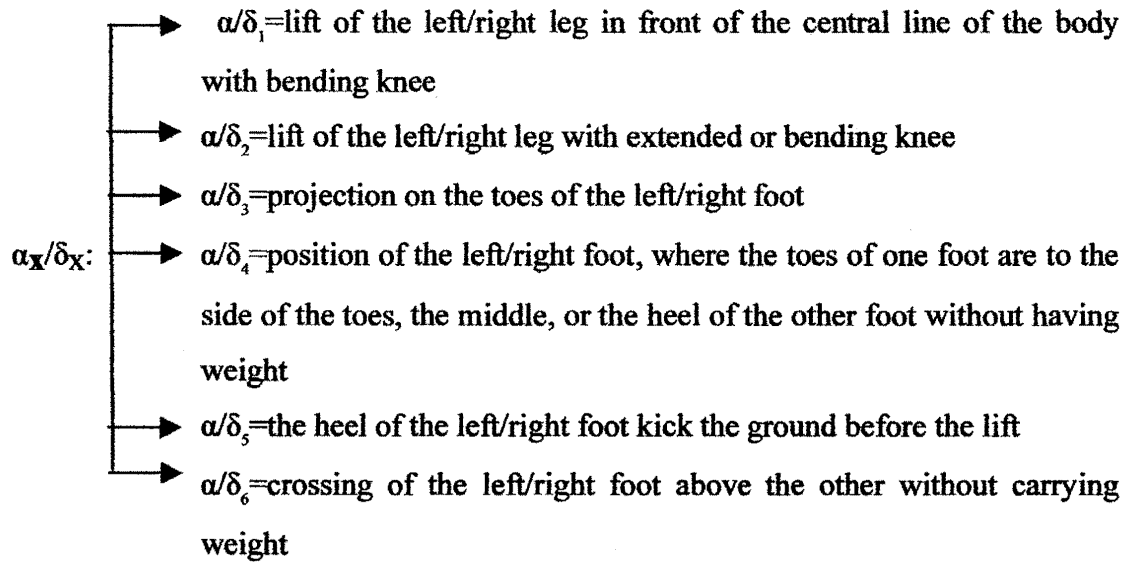
b) Symbols for leg supports:

- **αο/δο** = the left /right foot /support carries weight; the numbers 1-9 were used to indicate the directional symbols according to the Labanotation system:

c) Symbols for leg gestures:

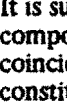
- **α_x/δ_x**=the left /right leg is weight-free; the numbers indicate the various destinations according to the Labanotation system:

αο/δο	→	αο/δο ₁ =in place	□
	→	αο/δο ₂ =forward	⌞
	→	αο/δο ₃ =backward	⌞
	→	αο/δο ₄ =right	▷
	→	αο/δο ₅ =left	◁
	→	αο/δο ₆ =diagonal forward right	⌞
	→	αο/δο ₇ =diagonal forward left	⌞
	→	αο/δο ₈ =diagonal backward right	⌞
	→	αο/δο ₉ =diagonal backward left	⌞



With this way the correlation of dance notation with dance typology was made possible as it is shown in Table 1(next page):

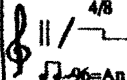
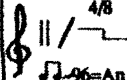
Table 1: Labanotation and Dance Typology

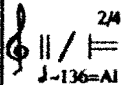
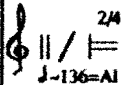
Structural Units (Levels) of Dance		Examples (footwork only)	
		Labanotation Typology	(Description)
Small Structural Units or Microscopic Level	(kinetic) element (e)		$e = \delta o' 4$ step to the right side with the right foot
	Cell (c)		$c = \delta o' 4(\delta o_4)$ step to the right side with the right foot with pulse/bounce
	Kinetic Motif (KM)		$KM = \{\delta o' 4 + \alpha o_8\}$ step diagonally backward right with the right foot with pulse/bounce step to the right side with the right foot with pulse/bounce
Large Structural Units or Macroscopic Level	(Dance) Phrase (P)		$P = KM1\{\delta o' 4 + \alpha o_8\} +$ $KM2\{\delta o' 4 + \alpha o_6\} +$ $KM3\{\delta o' 4 + \langle \delta o_4 \rangle \alpha o_8\} +$ $KM4\{\alpha o' 5 + \langle \alpha o_5 \rangle \delta_2\} $ gesture with the left leg gesture with the left leg step to the left side with the left foot with pulse/bounce
	Section (S)		gesture with the left leg
	Part (P) Dance Compo- sition (D)		step to the right side with the right foot with pulse/bounce step diagonally forward right with the right foot with pulse/bounce step to the right side with the right foot with pulse/bounce step diagonally backward right with the right foot with pulse/bounce step to the right side with the right foot with pulse/bounce
		It is supposed that this dance composition has one part that coincides with the section constituting of one dance phrase.	

Then this model was applied for each of the dances under research. An example of applying this model to the dance material of the island of Lefkada is given through the notation and typology of one of the dances, namely *Th(e)iakos* dance (Example 1):

Example 1a(b): Notation continued

Example 1b: Typology

WD6	Th(e)lakos Dance								ABH/Hum/Al
P	A/HmCF								
F	FA.4								
KM	W1		W2		W3		W4		
c	$\delta\alpha_2$	$\alpha\alpha_3/\delta\alpha_8$	$\alpha\alpha_2$	$\delta\alpha_2/\alpha\alpha_2$	$\delta\alpha_4$	$\alpha\alpha_8/\delta\alpha_2$	$\alpha\alpha_9$	$\delta\alpha_3/\alpha\alpha_1$	
e	$\delta\alpha_2(\delta\alpha_2)$	$\alpha\alpha_3/\delta\alpha_8$	$\alpha\alpha_2(\alpha\alpha_2)$	$\delta\alpha_2/\alpha\alpha_2$	$\delta\alpha_4(\delta\alpha_4)$	$\alpha\alpha_8(\alpha\alpha_8)/\delta\alpha_2(\delta\alpha_2)$	$\alpha\alpha_9(\alpha\alpha_9)$	$\delta\alpha_3(\delta\alpha_3)/\alpha\alpha_2(\alpha\alpha_2)$	
	2/8	1/8+1/8=2/8	2/8	1/8+1/8=2/8	2/8	1/8+1/8=2/8	2/8	1/8+1/8=2/8	
	$\neq / \text{lr} / \text{lc}$		$\neq / \text{lr} / \text{lc}$		$\neq / \text{lr} / \text{lc}$		$\neq / \text{lr} / \text{lc}$		

P	B/HmCF			
F	FB.6			
KM	U1		U2	
c	$\delta\alpha_4$	$\alpha\alpha_1/\delta\alpha_1$	$\alpha\alpha_4$	$\delta\alpha_1/\alpha\alpha_1$
e	$\delta\alpha_4(\delta\alpha_4)$	$\alpha\alpha_1/\delta\alpha_1$	$\alpha\alpha_4(\alpha\alpha_4)$	$\delta\alpha_1/\alpha\alpha_1$
	1/4	1/8+1/8=1/4	1/4	1/8+1/8=1/4
	$\equiv / \text{lr} / \text{lc}$		$\equiv / \text{lr} / \text{lc}$	

$$WD6 = [PA/An+PB/Al].x = [4.(S)FA/An+8.(S)FB/Al].x$$

$$WD6 = [FAI\widehat{W1}\{\delta\alpha_2^{2u} + (\alpha\alpha_3/\delta\alpha_8)^{2u}\} + \widehat{W2}\{\alpha\alpha_2^{2u} + (\delta\alpha_2/\alpha\alpha_2)^{2u}\} + \widehat{W3}\{\delta\alpha_4^{2u} + (\alpha\alpha_8/\delta\alpha_2)^{2u}\} + \widehat{W4}\{\alpha\alpha_9^{2u} + (\delta\alpha_3/\alpha\alpha_1)^{2u}\}] +$$

$$4/8B-9u/An+2/4J-13u/Al$$

$$MW \curvearrowright FBR\widehat{U1}\{\delta\alpha_4^{2u} + (\alpha\alpha_1/\delta\alpha_1)^{2u}\} + \widehat{U2}\{\alpha\alpha_4^{2u} + (\delta\alpha_1/\alpha\alpha_1)^{2u}\}]$$

The same procedure, i.e. dance notation, typology and morphic type, applied to each one of the examined dances. This gave the possibility for the comparison of their form as the morphic types of all the dances were put one below the other as it is presented in Table 2:

Table 2: Condensed comparative table of the dances of Lefkada

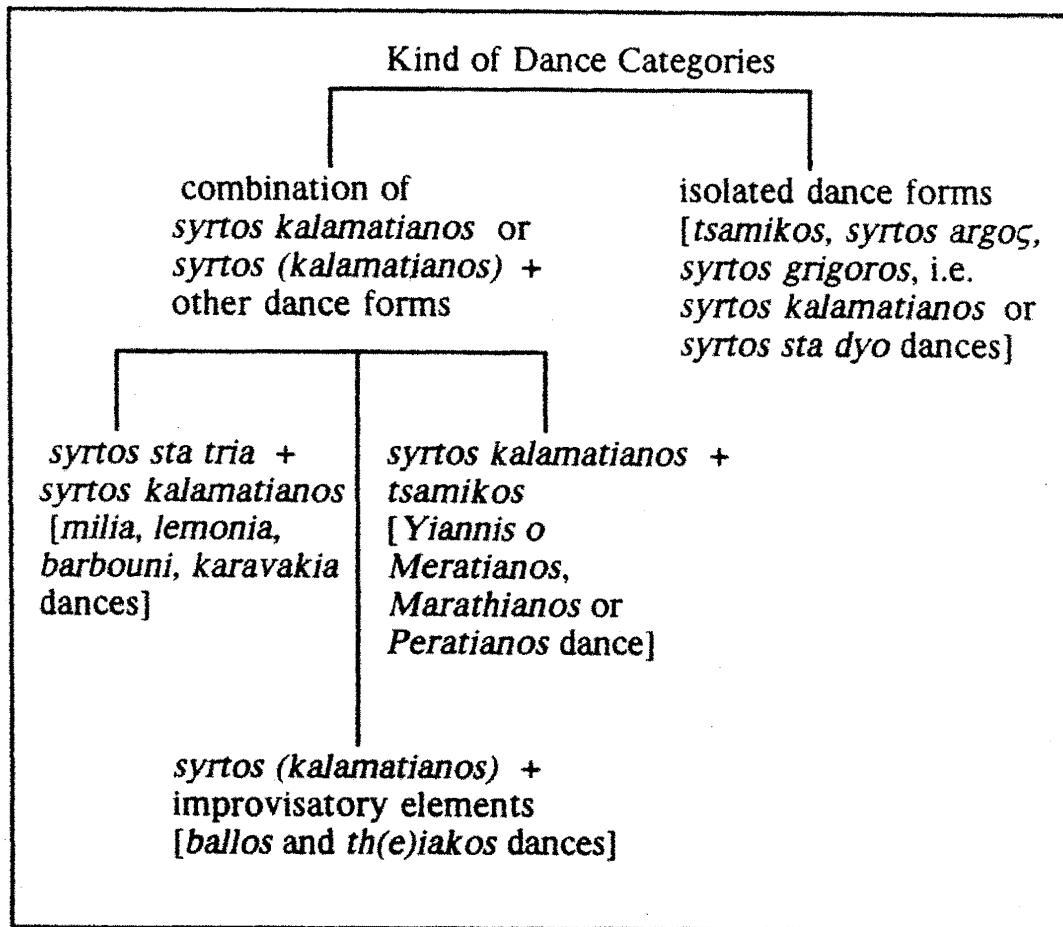
[illegible]

Table 2: Condensed comparative table of the dances of Lefkada (continued)

$$\begin{aligned}
& \widetilde{T}1[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{T}8[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{F}B1[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{T}1[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{T}3[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{T}4[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] \\
& \widetilde{F}B\widetilde{X}1[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{X}1[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{X}2[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{X}3[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{X}4[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] \\
& \widetilde{F}B\widetilde{X}1[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{X}2[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{X}3[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{X}4[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] \\
& \widetilde{F}B1[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{T}2[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{T}3[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{T}4[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] \\
& \widetilde{F}B\widetilde{U}1[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{U}1[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{U}2[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] \\
& \widetilde{F}B\widetilde{U}1[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] + \widetilde{U}2[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4}] \\
& \widetilde{F}B\widetilde{W}1[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4} + \delta_0^{1/4}] + \widetilde{W}2[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4} + \delta_0^{1/4}] + \widetilde{W}3[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4} + \delta_0^{1/4}] + \widetilde{W}4[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4} + \delta_0^{1/4}] + \widetilde{W}5[(\delta_0')^{1/4} + (\delta_0 + \delta_3)^{1/4} + \delta_0^{1/4}]
\end{aligned}$$

The comparison of their forms, made possible the dances of Lefkada to be categorized. The categorization ended up in two main categories as these are presented in the following table (Table 3). Through this categorization it was proved that the dances included in the one category were the presentational ones, while those of the other the participatory ones.

Table 3: Categorisation of the Dances of Lefkada



In particular, the analysis of the form in both parameters, structure and style, showed that while the former presents significant differences, the latter presents a uniformity. With regards to the structure-form dimension, the analysis showed that the majority of the presentational dances are two-segment dance forms having the type of *syrtos kalamatianos* or *syrtos (kalamatianos)* as one of the two segments. The participatory dances are one segment dance forms. In addition, the uniformity in the style of all the dances regardless of the context of their performance is not surprising as it is closely related with the use of the body. Indeed, whatever dance is performed, the 'dancing body... is shaped, constrained and invented by society' (Grau 1998:72) that makes it move and perform within the rules of this society.

The categorization provided the means for the explanation of the different use of the dances on the island of Lefkada and then of an interpretation of its cultural identity through the dance discourse. Thus, the two-segment dances form a particular local dance idiom whose specific structure and style allows their performance on stage as representative of the Lefkadian dance heritage being identity dance markers of the island and expressing a specific Lefkadian cultural identity. The one segment dance forms performed as such in many Greek areas could not contribute to this end, thus their performance was restricted only to the participatory events

Conclusions

In this paper an attempt was made to correlate dance notation with dance typology and classification in order to answer issues of cultural identity through its dance dimension. It has been proven that by corresponding Labanotation symbols to symbols of dance typology this attempt can be successful. In addition this has been achieved by applying dance notation to a new kind of material that is Greek folk dance and particularly dances from the Ionian island of Lefkada. This attempt has also supported the belief that in many areas of dance study the notation of the dances can function as the key element providing the fundamentals of the study.

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AN OVERVIEW OF A CREATIVE DANCE COURSE THROUGH A MULTIMEDIA CD-ROM

by

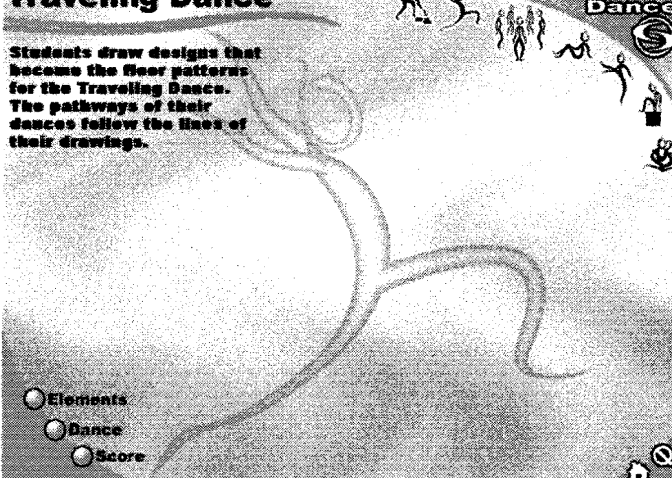
Billie Lepczyk, Ed.D

This session provides a demonstration of a CD that was developed as an instructional tool for a university wide course in Creative Dance. The students who enroll in this course are from diverse majors and have various degrees of dance experience ranging from novice dancer to advanced levels. Students work in small groups on the course assignments and new groups are formed for each assignment. Each assignment culminates in a dance, and each dance has a dance score. The dance score, consisting of floorplans, notation, essays, and art work, serves as a means to increase understanding and learning in the ephemeral art of dance. The curriculum is developed to introduce dance elements, dance-making, and dance documentation simultaneously.

The CD contains seven chapters representing the seven main assignments of the creative dance course. Icons in the upper right hand corner of the home page represent the dance assignments. Click on an icon and a screen appears with an introductory paragraph that briefly describes the assignment and provides three links entitled elements, dance, and score (figure 1: Assignment). A click on <elements> brings one to a page with a list of salient movement elements experienced in this assignment. Elements on the list are illustrated through clips (figure 2: Elements). A click on <dance> brings one to a clip of a dance example choreographed by students that fulfills the assignment requirements. A click on <score> brings one to the floorplans for the dance example. Floorplans are shown from the audience perspective simultaneously with the dance clip in motion (figure 3: Score). The floorplans are also shown from the dancers perspective without the video clip. The progression of the curriculum is reviewed through the focus of the dance assignments, the resulting dances, and the varying components of their scores.

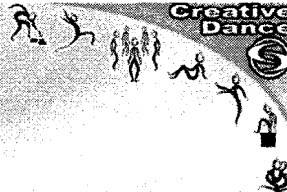
Traveling Dance

Students draw designs that become the floor patterns for the Traveling Dance. The pathways of their dances follow the lines of their drawings.



Elements
Dance
Score

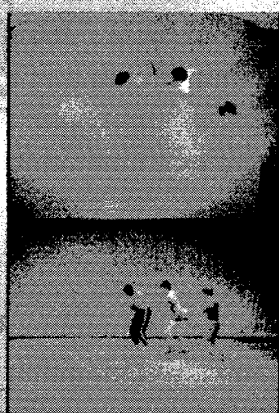
Creative Dance




Traveling Dance

Elements

- Locomotive Movement
- Pathways
 - Zigzag and Straight Path
 - Locomotive Movement in Path Variations
- Directions
- Turns



Elements
Dance
Score

Creative Dance



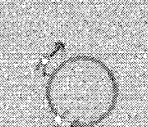

Traveling Dance

Floorplans

- Audience Perspective
 - Measures 1-2
 - Measures 3-6
 - Measures 7-9
 - Measures 10-12
- Dancers Perspective
 - Measures 1-2
 - Measures 3-6
 - Measures 7-9
 - Measures 10-12
- Path Overview
 - Leah
 - Laura



Traveling Dance

 Audience Perspective	Choreographers • Leah • Laura Measures 3-6 Music: African Warrior
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Elements
Dance
Score

Creative Dance




**RUDOLF LABAN'S NOTATION WORKBOOK
A SURVEY OF DANCE SCRIPT METHODS FROM *CHOREOGRAPHIE* (1926)**

by

Jeffrey Scott Longstaff

ABSTRACT

Rudolf Laban's (1926) *Choreographie* can be described as an experimental laboratory workbook exploring over fifteen types of "dance script" including body cross, dimension & diagonal signs, uni- bi- & tri-partite letter abbreviations, inclination numbers, directional vector signs, diagonal script, foot and arm pins for the five positions, path signs, gravity or weight transfer dots, bar and repeat signs, free signs, secondary-stream-signs, and intensity-signs. Script signs are reviewed according to graphic features and as they reveal conceptions or theories about body motion and space being explored during the early development of Labanotation and Laban analysis.

BRIEF CHRONOLOGY

Much of *Choreographie* can be seen relative to debates and decisions leading towards Laban's publication of the first 'finished' Kinetography method in 1928. Chronological lists of his activities, choreographic works and writings at that time, as well as added issues from his personal life, give a sense of the intensity of energy and abundance of influences. Only a few major events are mentioned here surrounding publications of *Choreographie* and Kinetography (see: Green, 1986, pp. 94-105; Hodgson & Preston-Dunlop, 1990; Knust 1979, p. 367; Laban, 1956, pp. 7-8; Preston-Dunlop, 1998).

1900. Laban's early observations and writing movement:

His first experiments were in Paris, soon after 1900, where as a young art student, following the advice of Noverre, he watched people's behaviour in the streets and meeting places of the city, noting down what he saw in a crude symbol system. (Preston-Dunlop & Lauhausen, 1990, p. 24)

1910. Laban researches historical dance and music scripts : "In Munich, ten years later, he studied documents on dance notation in the city library and at St Gallen early music manuscripts." (Preston-Dunlop & Lauhausen, 1990, p. 24).

1913-1919. Summer schools held in Ascona, Switzerland where the basic movement training in 1913 was already based on the *Schwungskalen* (swing scales; A- B-scales) and early "reports of the Laban School in Munich and Zurich, in 1916, refer to a dance notation from which students performed" and also recorded abstract dances (Preston-Dunlop, 1998, pp. 31, 44; Preston-Dunlop & Lauhausen, 1990, p. 24). Formulating the scripts for the notation system became a major concern and focus during this time (Green, 1986, p. 103; Laban, 1956, p. 7), though the development of graphic signs was also mingled with Laban's own particular method of movement analysis: "At this time his search was still focused on finding a spatial harmonic system for dance which would form the basis for the written dance" (Preston-Dunlop & Lauhausen, 1990, p. 24).

1920. Publishes his first book *Die Welt des Tänzers*, written during the time in Ascona and "which contained the fruit of his experiments there... What he meant by dancing was quite transcendental,... rebel against the domination of abstract ideas and fill the world with the dance of the body-soul-spirit" (Green, 1986, p. 107).

Even though it had also been produced in Ascona and intended as an accompanying text on matters of dance writing and analysis, *Choreographie* was not yet published:

Choreographie, written by 1919 but not published until 1926, needs some explanation. Far from being a textbook on notation, as it was first intended to be, as the companion text to *Die Welt des Tänzers*, it was both far more and far less - less, because the problems of the notation were still not solved and because various schemes for analysing and writing movement were contained in it, none of which constituted a usable system; more, because it contained choreological concepts, showing how he came into his decisions on movement analysis, and more significantly, on the theory of dance form, a first attempt at a morphology of dance art. (Preston-Dunlop, 1998, p. 110)

1920-1926. Opening of Laban-schools & Institutes (Hamburg, Würzburg), publication of numerous articles and performances of *Tanzbühne Laban* given throughout Europe.

1926. Several publications:

Gymnastik und Tanz on the topic of dance education.

Des Kindes Gymnastik und Tanz, a corresponding text for children's dance.

Choreographie, erstes heft, intended as the "first volume" on dance analysis and corresponding methods for a written graphic "dance-script"; this text later recounted by Laban (1956, note †, p. 7) as "the struggle for the new directional signs".

However, even by 1926 the dance script was not ready and rather than a unified system, the text spans across various possibilities, mixing or modifying the scripts to assess their utility. Two major issues were at stake; first was the problem writing motion:

Over the next ten years [since 1916], the problem he tried to solve was how to write motion, not only positions passed through, a task which proved to be extraordinarily difficult. All his various solutions up until 1927 - and there are many recorded in *Choreographie* (1926) - retain this hope. (Preston-Dunlop & Lauhausen, 1990, p. 25)

Further, as in the book's title, 'graphy' at that time was not only writing or notating, but included studies of function and harmony which were embedded in the written scripts:

At that time in Germany the word 'choreography' did not have the meaning that it has today, nor did it mean simply the mechanical action of writing in a notation system. It comprised both those and even more - that is, the integration of the principles of movement, knowledge of possibilities and depth of detail which the understanding of a notation stimulates. (Preston-Dunlop & Lauhausen, 1990, p. 25)

1927. First Dancers' Congress in Magdeburg (June) with performances and displays in the accompanying exhibition where "Laban exploded with spatial analysis, spatial scales, space as cosmos, spatial requirements of a dance notation, the experience of man in space", and all revealed in dance script, drawings and models such as body figurines representing choreutic scales (Preston-Dunlop, 1998, p. 129; plate 38).

Laban Summer School at Bad Mergentheim (July-August); discussion was generated from the dancers' congress regarding necessities of a dance script and possible solutions for various writing issues. Several key decisions were made about crucial issues in the dance script which still form the basis of Kinetography Laban / Labanotation:

One solution was to "duplicate Feuillet's right-left division ... to record the movements of trunk and arms in separate columns"; until then arms and legs were indicated in the "body cross" but this tended to be read as a series of positions; and it was also agreed to make signs different lengths for indicating movement duration (Laban, 1956, pp. 7-8). Both solutions encouraged a continuity in the flow of motion and are at the foundation of Labanotation, being stated in the 2nd, 3rd, and 4th principles (Knust, 1979, p. 2).

Another issue relevant to *Choreographie* was a “question [which] occurred again and again -- should the [script] signs ... show the movement in the *direction* [of motion] or the *final goal*, the position achieved” (Snell-Friedburg, 1979, p. 12 [italics hers]). This “heady discussion focused on whether it was practical to write all movements as progressions in space” or to represent arm and leg motion as a series of positions “by stating the places passed through”; the agreed solution in 1927 was that “gestures were best expressed as positions passed through, while ‘steps’ were best expressed as motion” (Preston-Dunlop, 1998, p. 132) and this has continued into Labanotation:

... gestures and supports of the body differ basically from one another. Two entirely separate concepts are involved. Gestures are usually described in terms of movement toward a specific point, that is, a destination; steps are described as motion away from a previous point of support. (Hutchinson, 1970, p. 27)

For Laban this solution led to a mixture of emotions where “jubilation followed painful compromise”; “jubilation” since a decision was finally reached and the notation system ready for general use, yet a “painful compromise” since “Laban wanted at all costs to defend that he was writing motion, not positions” (Preston-Dunlop, 1998, pp. 131-132). The pain of this compromise for Laban suggests more than a theoretical preference, perhaps something deeper and more personal linked to his universal view of movement and energy. When considering Laban’s dance philosophy of a “festival, a high mass of life”, it is easy to see how the development of notation “took him away from the idea of a spontaneous celebration and an expression of the unconscious toward the idea of exactitude, fixity, and system” (Green, 1986, p. 103). The decision against motion writing and towards writing positions may have been part of this same transition away from the inexpressible and intangible towards static quantities of analysis.

1928 onwards. After these solutions to fundamental issues in the dance script the new finished system was presented at the 2nd Dancers Congress in Essen, and many other publications of dance script manuals, journals, fully scripted dances, and the also establishment of societies and institutes for promoting dance script soon followed.

Beginnings of distinction between Labanotation and Laban analysis

Decisions made in 1927 reveal the beginnings of a distinction between Labanotation / kinetography and Laban analysis. The notation became focused as a purely objective description of body movement, not tied to any particular style or theories of movement, while the theories of body function and concepts of movement ‘harmony’ continued to develop as a parallel area of study, such as in early German articles by Klingenbeck (1930) and Gertrud Snell (1929abc) (see Preston-Dunlop & Lauhausen, 1990, p. 28).

This distinction echoes today in separate organisations devoted to Labanotation versus Laban analysis, while also maintaining links from shared origins and shared graphic signs. In *Choreographie* can be seen a stage when Laban’s theories of ‘harmony’ were still embedded in the notation system. Examining these early dance script methods can give an insight into origins and meaning of signs and also movement analysis concepts explored during the early development of Labanotation and Laban analysis.

Script methods used in *Choreographie* can be considered in five topics;

- Body cross,
- Direction of positions,
- Direction of motions,
- Pathways, &
- Dynamics.

BODY CROSS

During 1924-1926 directional indications were written inside the "body cross" (Snell-Freidburg, 1979, p. 12). The body-part to perform an action was indicated by dividing the body into four quarters with a cross (Fig. 1) and then writing signs, letters or numbers in that quadrant. Many are shown in the Appendix (Laban, 1926, pp. 92-99) for example, shapes of paths, directions, and level of the centre of gravity (Fig. 2).

left upper body-quarter	right upper body-quarter
left lower body-quarter	right lower body-quarter
Figure 1. The body cross (Laban, 1926, p. 15).	

a. shapes of movements (<i>droit, ouvert</i>) by each of the body-quarters.	b. leg gesture, from direction #6 to #7.	c. transfer of weight (standing leg not written), from right-leg direction #2 to left-leg direction #L9).	d. Standing leg bent (• = low centre of gravity).
Figure 2. Examples of writing with the body cross (Laban, 1926, pp. 92-95).			

Use of the body cross is often described and pictured regarding how it was discontinued after 1927 in favour of indicating body parts within columns along a staff (Laban, 1956, p. 8; Maletic, 1987a, p. 120; Preston-Dunlop, 1954, p. 43, 1998b, pp. 131-132; Preston-Dunlop & Lauhausen, 1990, p. 25) (Fig. 3).

UPPER LOWER Left Right Body Cross		ARM gesture	LEG gesture SUPPORT SUPPORT LEG gesture Left Right Body parts in staff				ARM gesture
UPPER LOWER	UPPER LOWER						

Figure 3. Body cross and Labanotation staff.

The body cross appears to not have played any further role in Labanotation, however, Laban (1956, p. 8) does comment that "It is perhaps interesting to mention that this cross sign became later the basic symbol of my effort notation" (Fig. 4).

Figure 4. Body cross and "effort" symbol.	

Representing the body as a cross oriented in a frontal plane endures as an anthropomorphic sign giving "an obvious graphic expression of the vertical character of the human being" (Preston-Dunlop, 1954, p. 43). Interestingly, the "8" signs used to indicate "the body as a whole" (ICKL technical sessions, 2004), and body organisations (Hackney, 1998) also represent the 4-quarter structure of the body in the frontal plane and might be seen as a kind of curved, fluid variety of the body cross (Fig. 5). In addition to writing body parts, more typical for Labanotation, these give methods for writing function and connectivity, more typical for Laban analysis

Body cross	Whole-body	Head-tail	Upper-lower	Homolateral	Contralateral
Figure 5. Body cross and signs for whole-body (ICKL, 2004) and body organisation (Hackney, 1998).					

DIRECTION OF POSITION

In *Choreographie* ideas of direction are explored both as positions (orientation of body parts) and as motions (orientation of the line of motion between two positions) (Fig. 6).

This distinction is particularly relevant in light of the decision for Labanotation to notate gestural movement as a series of body positions. Perhaps contributed to by this, the position-directions may seem more familiar.

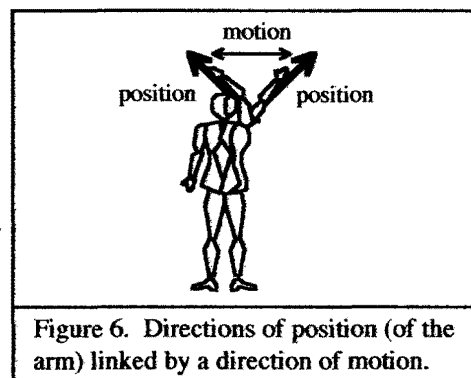


Figure 6. Directions of position (of the arm) linked by a direction of motion.

Dimensions; Diagonals. One-dimensional directions are abbreviated with single letters around a human figure in an octahedron and are also given graphic signs. Likewise, three-dimensional diagonals are abbreviated with triple letters (tripartite) around a human figure in a cube and given a similar set of graphic signs (Fig. 7). These reveal the basic Cartesian system based on equidistant orientations of 90° and 45° and centred around the body, typical in later works on choreutics (Laban, 1966, p. 16) and also used in dance orientation systems such as a “space module” and “theory of design” in Ballet (Kirstein & Stuart, 1952).

Signs of the “trial script” have obvious similarities with Labanotation direction signs. Their shapes give a similar pictographic image, seemingly pointing towards a direction as if viewing space from above. In contrast to present-day Labanotation, the early “trial-script” signs for dimensions and diagonals contain no sign for ‘center’. Instead, the dark dot is used for indicating downwards or deep, rather than middle level as in Labanotation. In later writings Laban (1948, p. 93) stated explicitly “centre *c* is a directional aim like any other point” but in *Choreographie* the center is never included as a direction or a script sign.

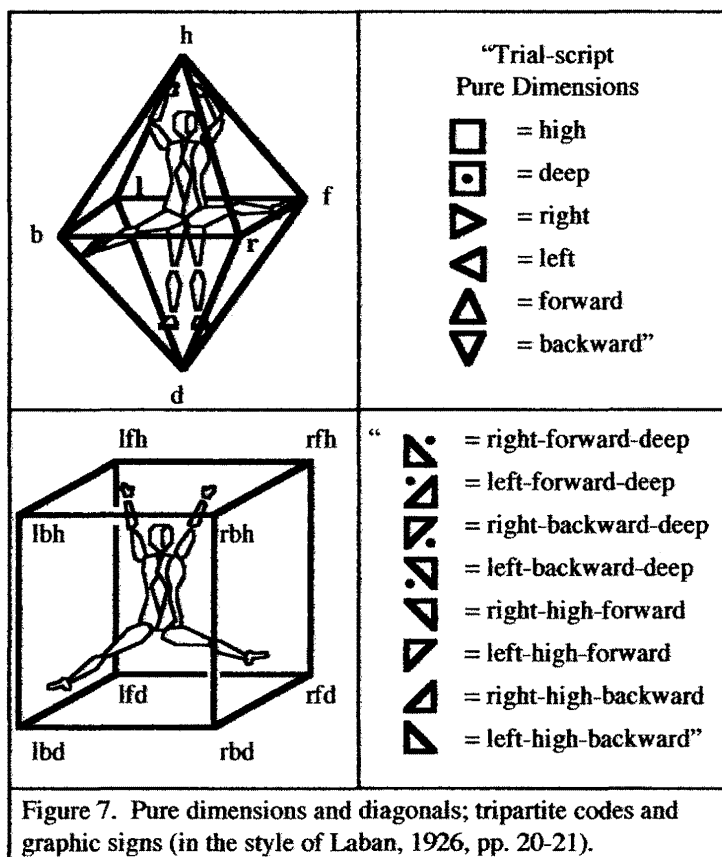
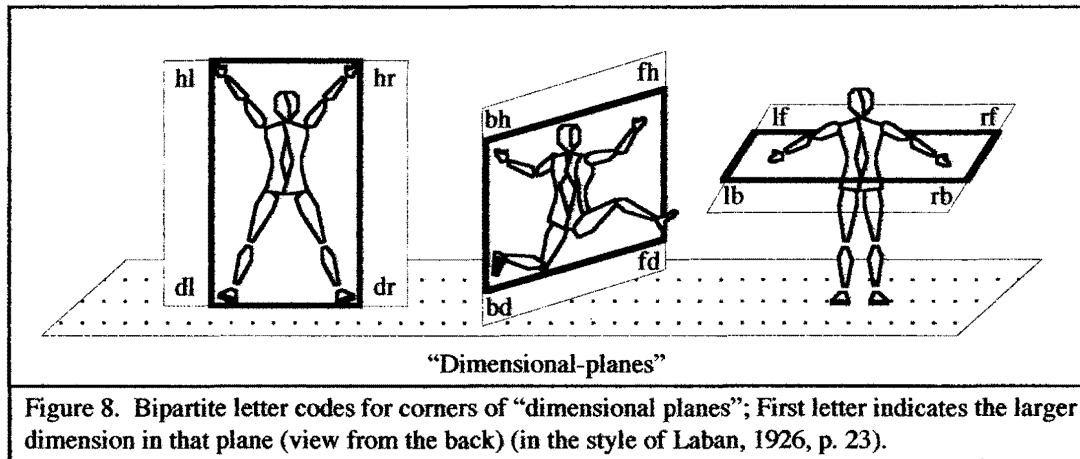


Figure 7. Pure dimensions and diagonals; tripartite codes and graphic signs (in the style of Laban, 1926, pp. 20-21).

Two-dimensional directions; Dimensional-planes. Corners of the three cardinal planes are used to show two-dimensional directions with two-letter (bipartite) codes (Fig. 8), in later works these are described as “planar diagonals” (Bodmer, 1979b, p. 14) or more commonly “diameters” (Laban, 1966, pp. 15-16). While dimensions and diagonals are both given graphic signs, the two-dimensional directions (planar diagonals) do not receive any signs but are only represented with their bipartite letter codes.

While dimensionals and diagonals correspond to 90° and 45° orientations, typical of Cartesian coordinate systems common in models of body space, a unique conception in Laban's system is that the three cardinal planes are not seen to be equidistant in all directions, but are conceived to be larger along one dimension than the other, and hence considered to be "dimensional-planes" (Laban, 1926, p. 23).



A demonstration is given, describing how planes of the body create unequal proportions between the two dimensions in each plane:

The three dimensions have a double consequence in each case: High-deep, right-left, and back-fore, reveal themselves in the following way in our movement:

Considered spatially: High and deep each divide through our body symmetry into two high directions and two deep directions, so that at high-right (hr) and high-left (hl) we find a point, which we perceive as the direction high. Likewise, deep-right (dr) and deep-left (dl). The direction fore-back is split into a higher and a deeper forward and backward line by the division of the upper- and lower body (movement possibilities in the spinal column), so that we find the four points fore-high (fh), fore-deep (fd), back-high (bh) and back-deep (bd). The third, the right-left dimension, is deflected forwards and backwards by the most natural movement-burgeoning of our arms and legs, into the points right-fore (rf), right-back (rb), left-fore (lf) and left-back (lb). We thus have a high-deep-plane, a fore-back-plane, and a right-left-plane...

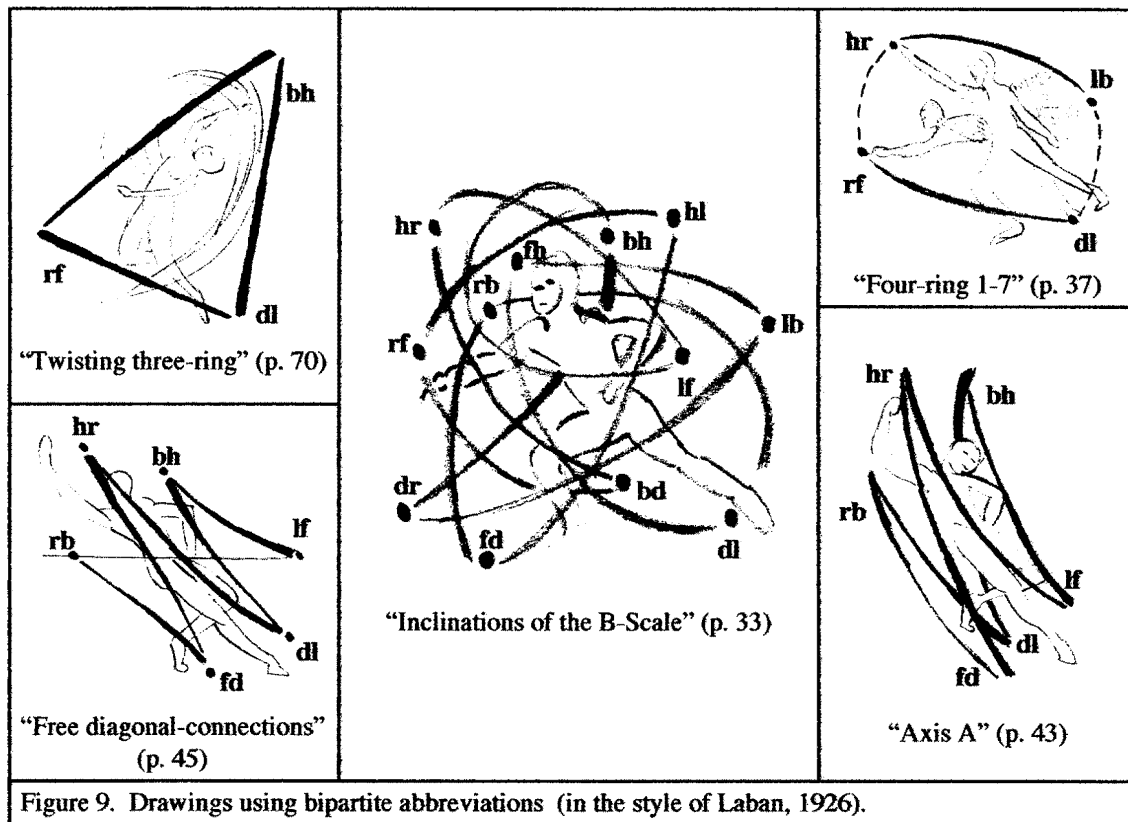
Bodily example of a spatial exercise. Twelve points:

The direction of the closed legs towards "down". If we emphasise the two-sidedness, by spreading the legs, then we obtain two significantly diverging directions which lead downwards; one right-hand (dr), one left-hand (dl). The same is the case if we lift both hands to "up". Shoulder blades and the head are natural obstructions to drawing an absolute vertical. Rather, the arms, if they are really stretched, cannot come beyond two clearly different right- and left-high-directions (hr and hl).

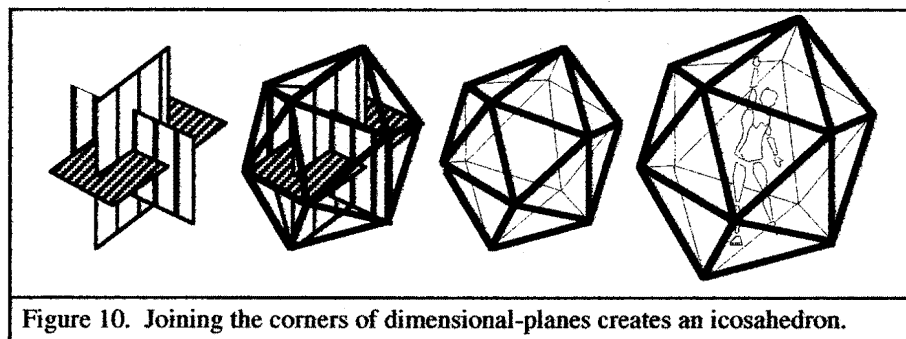
Extend the arms forwards to the left and right (at waist level): rf and lf. The same backwards: rb and lb.

Lift a leg forwards (to knee height): fd. Simultaneously direct both arms forwards (at face level): fh. Similarly backward: bd and bh. (Laban, 1926, pp. 21-23; similar descriptions by Ullmann, 1955, pp. 29-31, 1966, pp. 139-141, 1971, pp. 18-21)

The bipartite letter codes are used in five drawings in *Choreographie* and in every case these indicate directional orientations in the proportion of the dimensional-planes. This is affirmed since they always appear in a consistent order with the larger dimension in that plane listed first (eg. always "fd" and never "df") (Fig. 9).

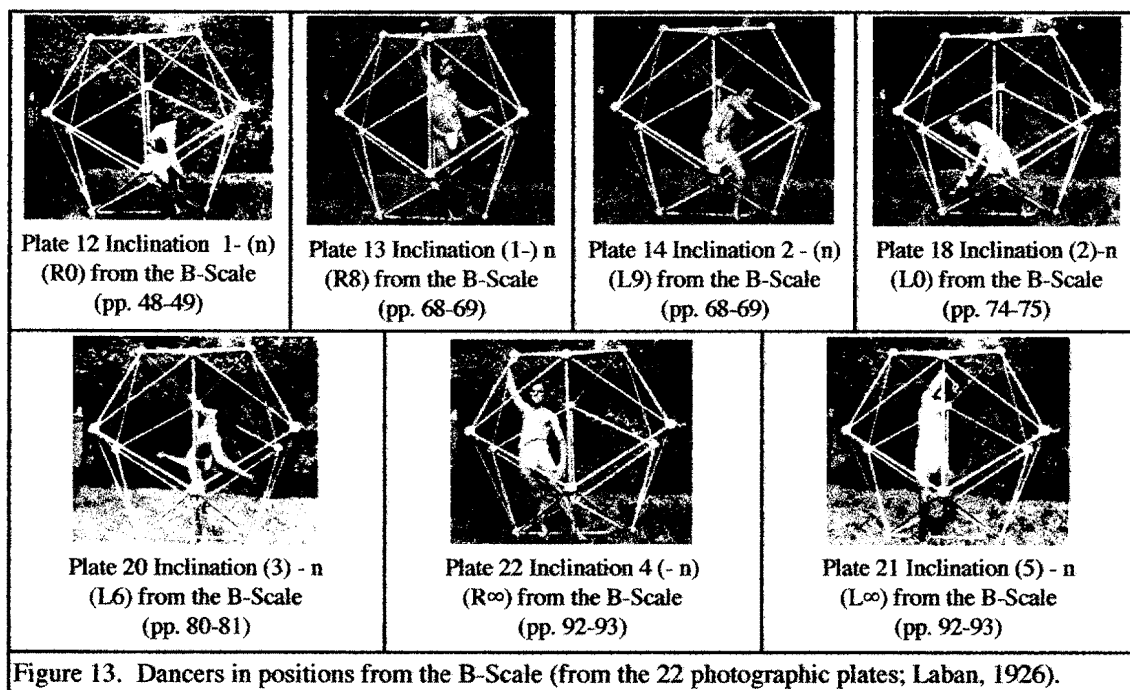
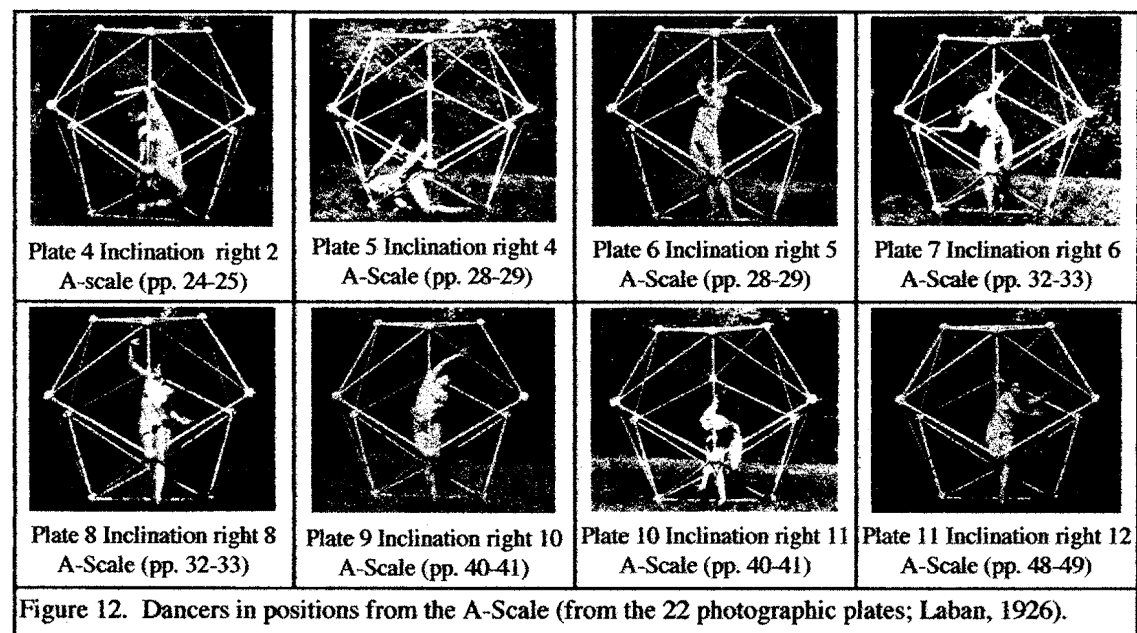
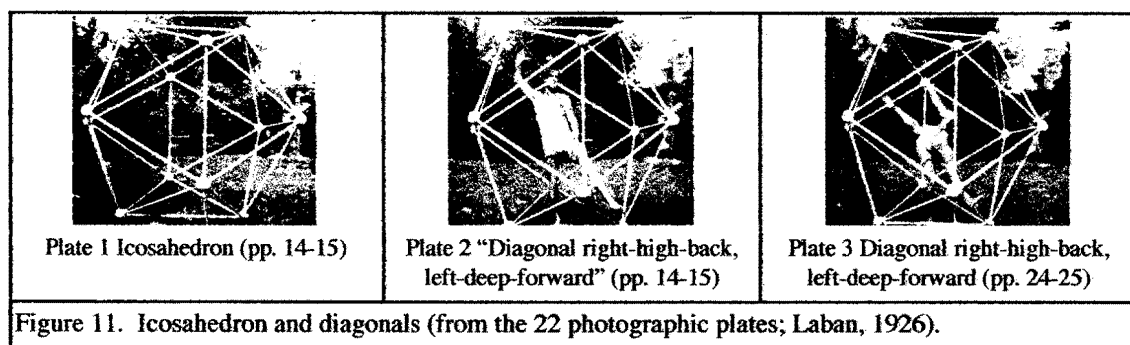


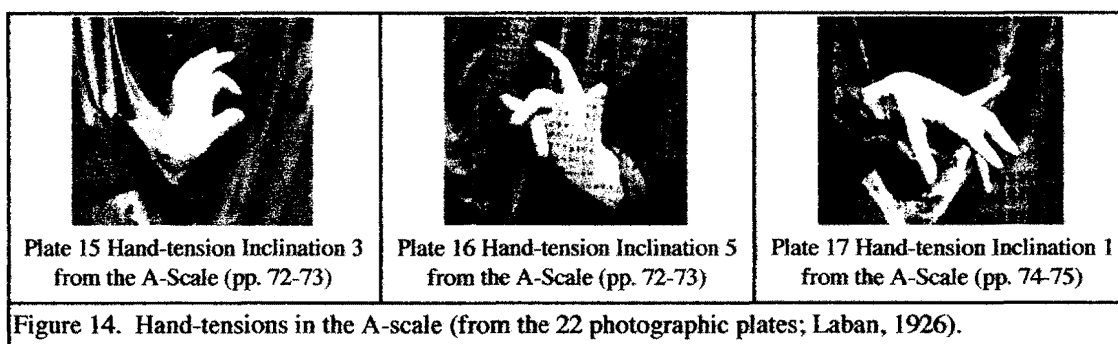
Icosahedron. Using dimensional-planes implies an icosahedron since linking corners of the planes reveals an icosahedron around the outside edges (Fig. 10).



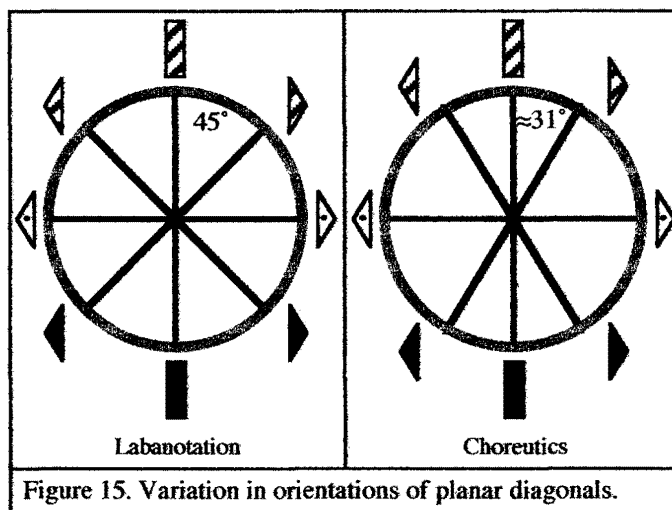
While the icosahedron is well known in later works (Bartenieff & Lewis, 1980, p. 33; Laban, 1966, p. 105; Preston-Dunlop, 1984), in *Choreographie* it is not discussed and its identity with dimensional-planes never stated. The word “icosahedron” does appear once, in the first of twenty-two plates spread throughout the book (Figs. 11, 12, 13, 14). Later, Laban recounted discovering the icosahedron “very early”, perhaps just during this time of writing *Choreographie*, as it appears in photos but not in the text:

... crystalline structure of man's movement possibilities. I found this out very early ... that people, in spite of their differences of race and civilisation, had something in common in their movement patterns. This was most obvious in the expressions of emotional excitement. I observed that in these patterns certain points in space around the body were specially stressed. In joining these points, I arrived at a regular crystal form ... an icosahedron ... Man is inclined to follow the connecting lines of the twelve corner points of an icosahedron with his movements in travelling as it were along an invisible network of paths. (Laban, 1951, pp. 10-11)

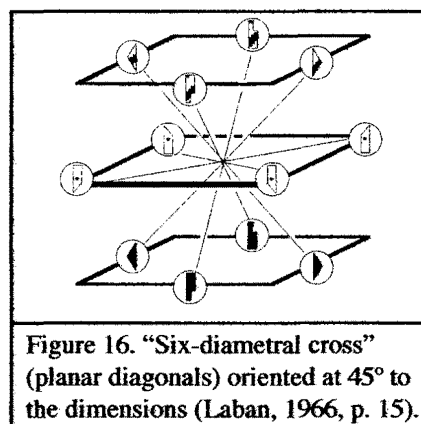




Planar diagonals in Labanotation and choreutics. One aspect of Laban's movement theory which did not continue into Labanotation is the use of the icosahedron and dimensional-planes. This has led to a divergence with choreutics which uses many of the same direction signs as in Labanotation, yet some of these signs are defined differently, specifically orientations of two-dimensional directions, also called diameters or planar diagonals. For example, a planar diagonal 'side-high' in Labanotation is performed in the orientation of 45° , but choreutics takes this same planar diagonal as oriented more steeply, inclined approximately 31° to the vertical (Fig. 15).



Despite this difference, later in *Choreutics*, Laban (1966, pp. 13-100) describes the majority of spatial principals using a framework of three square-shaped horizontal planes (Fig. 16) which orient planar diagonals at 45° as in Labanotation rather than as usual in choreutics. Only later in the text does he introduce the change of orientation for planar diagonals, beginning by almost apologising for the sole use of square planes to that point, writing "The conception of the cube as a basis is not a compromise", followed by the assurance "for general observation and notation of trace-forms, this variation is not vitally important" but is included as a "refined observation". He goes on with another level of analysis considering how "In practice, harmonious movement of living beings is of a fluid and curving nature", hence planes extended along one dimension and planar diagonals tilted, this irregular orientation considered to be "modified diameters" (pp. 101-102).



Initially written in 1939 to a new English audience, Laban may have chosen the most regular perspective of three square horizontal planes (levels), corresponding to planar diagonals at 45° . This is in contrast to Part II of *Choreutics* written by Ullmann (1966) and to Laban in *Choreographie* (1926), where dimensional-planes with their irregularly oriented planar diagonals are presented at the outset.

This issue of dimensional-planes highlights that while in some cases “this variation is not vitally important” (Laban, 1966, p. 101), it is interesting that they are, nevertheless crucial for Laban’s theory of space harmony, for example their elongation along one of the dimensions is essential in creating “compensation of extremes” giving the logical basis for a “natural order of succession” (Ullmann, 1966, pp. 149, 152) and thus a theoretical model for defining particular series of directions as movement ‘scales’.

Location of center. The differences of planar diagonals is combined with a variation in the usual location of center or ‘origin’ from which directions are judged (Fig. 17). In Labanotation directions are normally judged from the “base”, at the proximal end of the moving body parts, defining a “local system of reference” centred in each articulating joint and providing a detailed analytical scheme where orientation of each body segment can be specified individually (Hutchinson, 1970, pp. 226-229). While in contrast, the tradition of choreutics usually envisages a life-size kinesphere surrounding the dancer, with directions judged from the ‘center’ near the center of the body and creating a more global system where the orientation of the entire body is considered as a whole (Bartenieff & Lewis, 1980, pp. 25-28; Laban, 1948, p. 93, 1966, pp. 11-17; Preston-Dunlop, 1978, p. 70).

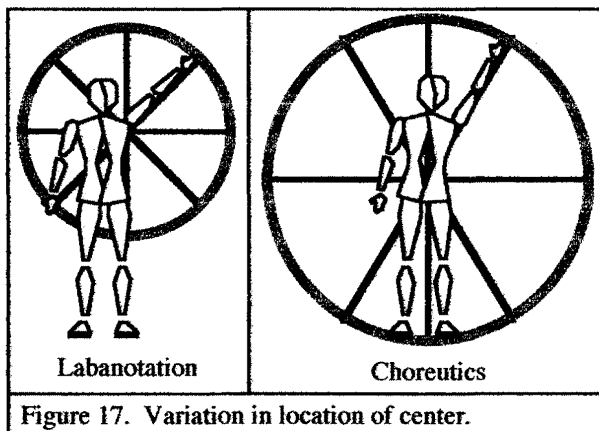


Figure 17. Variation in location of center.

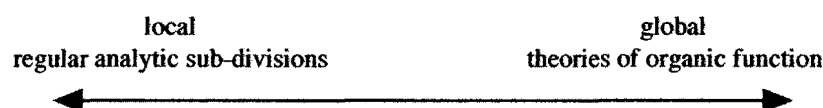
This difference might indicate the local analysis in Labanotation next to a more global synthesis or ‘harmony’ in Laban analysis where the body-center as center of movement is a basic principal. In *Choreographie* this is given as a “law” of “flowing-from-center” (*Aus-der-mitte-fliessens*) where movement initiated from the center of the body outward “ensures a light volatility”, though if not, likely “requires for its performance a greater rigidity... a great boundness” (Laban, 1926, p. 18). Similarly, Bodmer gives importance to an “awareness of the movement centre ... from which the movement is initiated and from which it grows and radiates” (1979a, p. 10), or “the focal point around which movement harmonics are grouped” (1979b, p. 4) which have obvious similarities with body concepts of core-distal connectivity in Bartenieff Fundamentals (Hackney, 1998).

Adaptability. Different locations for ‘center’ together with variable orientations of planar diagonals contribute to a divergence between the ‘notation’ and the ‘analysis’ to the point sometimes where two separate orientation systems are defined, such as “Labanotation directions” versus “true crystal directions” (Bodmer, 1979b, p. 21). However, despite differences both systems also include possibilities to incorporate the usual method of the other.

In Labanotation a “key” can be included indicating if two-dimensional direction signs refer to the icosahedron (Maletic [with Knust], 1950). In other cases variations of two-dimensional directions can be specified with “halfway points” and “third way points” (Hutchinson, 1970, pp. 437-439). Further, Labanotation provides that direction signs can be modified with “inclusions” (Hutchinson, 1970, pp. 253-259) bringing greater parts of the body into motion, and effectively moving the base of motion closer to the centre of the body, as more usual in choreutics.

Choreutics has also always included the possibility of placing the origin or 'centre' anywhere in the body. This is explicit in *Choreographie* where the chapter "Specialised Movements of the Limb Ends" (Laban, 1926, pp. 72-73) describes how the origin for directions can be placed in the torso or the hand or anywhere, creating smaller localised direction systems. These local kinespheres are demonstrated in photos of the hand performing movements from the A-scale (see Fig. 14) and are also described frequently by Bodmer (1974, p. 28, 1979a, 1979b, pp. 3-7, 1983, p. 11).

Because of their overlap and interaction these variations in spatial methods usually used by Labanotation and Laban analysis (choreutics) might be seen, not as different types, but as tendencies along a continuum, spanning between local, elemental analytic approaches to more global whole-body synthesis approaches.



Summary; Direction of position. Indications of directional positions are given for one-, two-, and three-dimensional orientations (Fig. 18). Two interesting features can be noted. First, graphic signs are given for one-dimensional and three-dimensional directions, yet there is a curious absence of corresponding signs for two-dimensional directions. Secondly, there is another obvious absence of any sign for 'center'. Both of these features raise a question of whether these graphic signs are intended to represent orientations of body positions, or if they should be placed together with the similarly appearing motion signs (see below). This adds to a sense in *Choreographie* of ongoing experimentation of both motion and position writing, with solutions yet to be decided.

□ h ◼ d ▷ r ◁ l ▽ b △ f one-dimensional	hr fh rf hl fd rb dr bh lf dl bd lb two-dimensional	lfh ◻ rfh lfd ◻ rfd lbd ◻ rbd lbh ◻ rbh three-dimensional
---	---	---

Figure 18. Summary of indications for directions of positions, in *Choreographie*.

DIRECTION OF MOTION

A large part of *Choreographie* explores Laban's attempts at a script for writing motions:

Over... ten years [1917-1927], the problem he tried to solve was how to write motion, not only positions passed through, a task which proved to be extraordinarily difficult. All his various solutions up until 1927 - and there are many recorded in *Choreographie* (1926) - retain this hope. (Preston-Dunlop & Lauhausen, 1990, p. 25)

While the decisions in 1927 adopted the method for writing limb motions such that "movement is the transition from one point to the next" (Hutchinson, 1970, pp. 15, 29), years later in *Choreutics* (1966) Laban returned to the topic of motion script (without reference to positions) stating that "a notation capable of doing this is an old dream in this field of research" (p.125). In *Choreographie*, several motion scripts are used: deflecting diagonal abbreviations, inclination numbers, vector signs and diagonal script.

Deflecting diagonals; Inclinations. Surveying the various motion scripts it should be first noticed that while formats for writing are different, the same scheme for motion analysis is used in all cases. The infinite number of possible directions of motion are classified according to two fundamental contrasting tendencies of stability and mobility. Occasionally "liability" is used and they are commonly considered to be synonymous (Maletic, 1987, p. 52). According to the scheme, three-dimensional diagonals are taken to be prototypes of mobility, while dimensionals are taken as prototypes of stability, and actual body movement occurs as an interaction or "deflection" between these two contrasts. This deflection of 8 diagonals with 3 dimensions produces 24 deflecting directions or "inclinations" (*Neigung*) (Fig. 19). This system of deflecting directions lies behind all of the scripts for motion writing and is described in many places:

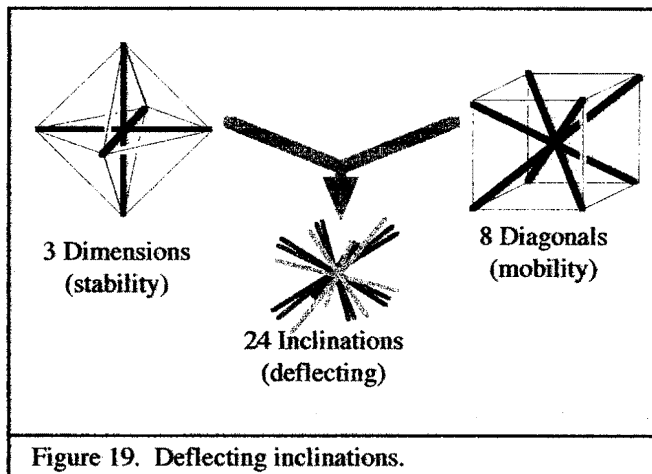


Figure 19. Deflecting inclinations.

With the name "pure diagonals" we indicate the spatial-directions in which the three dimensions are equally strongly stressed; they are the most liable of all inclinations while the dimensions are the most stable ... A diagonal-movement is more active, more positive, more mobile. A dimensional-movement tends towards peace. (Laban, 1926, pp. 14)

The two contrasting fundamentals on which all choreutic harmony is based are the dimensional tension and the diagonal tension. (Laban, 1966, p. 44)

... dimensions, seem to have in themselves certain equilibrating qualities ... a feeling of stability. This means that dimensions are primarily used in stabilising movement, in leading it to relative rest, to poses or pauses. ... Movements following space diagonals give ... a feeling of growing disequilibrium, or of losing balance. ... Real mobility is, therefore, almost always produced by the diagonal qualities ... Since every movement is a composite of stabilising and mobilising tendencies, and since neither pure stability nor pure mobility exist, it will be the deflected or mixed inclinations which are the more apt to reflect trace-forms of living matter. (Laban, 1966, p. 90)

... the deflected directions are those directions which, in contrast to the stable dimensions and to the labile diagonals, are used by the body most naturally and therefore the most frequently. In these deflected directions stability and liability complement each other in such a way that continuation of movement is possible through the diagonal element whilst the dimensional element retains its stabilising influence. The deflected directions in the icosahedron ... are easily felt because they correspond to the directions natural to the moving body. (Ullmann, 1966, p. 145)

... inclinations of the pathways of our gestures which have combined directional values [deflections] are very frequent. In fact they are the rule rather than the exception. (Ullmann, 1971, p. 17)

Because the body limits the fulfilment of perfect three-dimensional shapes that pure diagonals would offer, most three-dimensional shapes are created through modified diagonals ... These are available to the body. (Bartenieff and Lewis, 1980, p. 33)

Dimensional-diagonal deflections are described in many ways, for example a tendency to "oscillate" (Maletic, 1987, p. 177) or as a "harmonic mean" (Bodmer, 1979, p. 18), "variations" (Dell, 1972, p. 10), "deviation", being "influenced by", or "deriving", "replacing", "transformation" (Ullmann, 1966, pp. 145-148, 1971, pp. 17-22), and how it is "modified" (Bartenieff & Lewis, 1980, p. 43). Dimensional-diagonal deflections provide the basis for classifying movement orientations used in the script signs.

Tripartite letter codes. Each of the 24 inclinations is given a name and corresponding abbreviation (tripartite code) derived from the names of the dimensions in a particular order to indicate the largest, middle, or smallest component in that inclination (Table 1), and each inclination named according to the largest dimension, flat, steep, or suspended:

With these tripartite names the following should be noted: The specific-sequence of the dimensional-names ... is of importance inasmuch as the dimension named first is extremely outspoken the second somewhat less and the third scarcely. Thus if we say of an inclination that it lies in the situation side-high-forwards, it lies inclined very extremely sideways, somewhat high, and very little forwards. (Laban, 1926, pp. 25-26)

The diagonals will deflect: high-deep = steep,
right-left = flat,
back-fore = suspended. (Laban, 1926, p. 21)

“high-fore-right, high-fore-left, high-back-right, high-back-left, deep-fore-right, deep-fore-left, deep-back-right, deep-back-left,	fore-right-high, fore-left-high, back-right-high, back-left-high, fore-right-deep, fore-left-deep, back-right-deep, back-left-deep,	right-high-fore, left-high-fore, right-high-back, left-high-back, right-deep-fore, left-deep-fore, right-deep-back, left-deep-back.”
‘steep’ vertical deflections	‘suspended’ sagittal deflections	‘flat’ lateral deflections
Deflecting Diagonals (Inclinations)		
Table 1. Twenty-four inclinations: First dimension listed indicates the principal deflection of that diagonal (8 diagonals x 3 dimensions = 24 deflections) (Laban, 1926, p. 13).		

Names for the inclinations are shortened, maintaining the specific order in which the dimensions are listed to indicate their relative size in that inclination (Table 2).

Preliminary definition of abbreviations: hrf = high-right-fore fhr = fore-high-right rhf = right-high-fore hlf = high-left-fore fhl = fore-high-left lhf = left-high-fore hrb = high-right-back bhr = back-high-right etc.
Table 2. Tripartite codes indicating primary, secondary, and tertiary dimensional component in the inclination (Laban, 1926, p. 15).

This pattern of different sizes for each of the dimensional components in an inclination is continued as a central principal in choreutics, described as the “uneven stress on three spatial tensions” (Dell, 1972, p. 10), “three unequal spatial pulls” or “primary, secondary, [and] tertiary spatial tendencies” (Bartenieff & Lewis, 1980, pp. 38, 92-93).

There is a degree of ambivalence in *Choreographie* regarding whether indications refer to motions or to positions. In some places, the letters seem to explicitly represent positions (Fig. 20), however the order of letters in these cases does not follow the consistent order used for inclinations (motions). In the majority of cases these tripartite codes refer to motion as is demonstrated in the lists of A-scales & B-scales where every tripartite code consistently follows the pattern for inclinations (Table 3).

lbh rhf lbd rdb lbd rfh
(A) (B)
“Movement from a position (A) into the second (B).”
Figure 20. Tripartite codes for diagonal “positions” (<i>Stellung</i>) in body cross (Laban, 1926, p. 15) do not follow the order of letters used for inclinations.

"[A-scale right-leading runs from:]						
point	lb	to	hr	inclination	R1 [L10]	(rhf)
"	hr	"	bd	"	R2	(dbl)
"	bd	"	lf	"	R3	(flh)
"	lf	"	dr	"	R4 [L7]	(rdb)
"	dr	"	bh	"	R5	(hbl)
"	bh	"	rf	"	R6	(frd)
"	rf	"	dl	"	R7 [L4]	(lbd)
"	dl	"	fh	"	R8	(hfr)
"	fh	"	rb	"	R9	(brd)
"	rb	"	hl	"	R10 [L1]	(lhf)
"	hl	"	fd	"	R11	(dfr)
"	fd	"	lb	"	R12	(blh)"
"[A-scale left-leading runs from:]						
point	rb	to	hl	inclination	L1 [R10]	(lhf)
"	hl	"	bd	"	L2	(dbr)
"	bd	"	rf	"	L3	(frh)
"	rf	"	dl	"	L4 [R7]	(lbd)
"	dl	"	bh	"	L5	(hbr)
"	bh	"	lf	"	L6	(fld)
"	lf	"	dr	"	L7 [R4]	(rdb)
"	dr	"	fh	"	L8	(hfl)
"	fh	"	lb	"	L9	(bld)
"	lb	"	hr	"	L10 [R1]	(rhf)
"	hr	"	fd	"	L11	(dfl)
"	fd	"	rb	"	L12	(brh)"
"[B-scale right-leading runs from:]						
point	rb	to	dl	inclination	R0	(ldf)
"	dl	"	fh	"	R8	(hfr)
"	fh	"	lb	"	L9	(bld)
"	lb	"	dr	"	L0	(rdf)
"	dr	"	bh	"	R5	(hbl)
"	bh	"	lf	"	L6	(fld)
"	lf	"	hr	"	R ∞	(rhb)
"	hr	"	bd	"	R2	(dbl)
"	bd	"	rf	"	L3	(frh)
"	rf	"	hl	"	L ∞	(lhb)
"	hl	"	fd	"	R11	(drf)
"	fd	"	rb	"	L12	(brh)"
"[B-scale left-leading [runs] from:]						
point	lb	to	dr	inclination	L0	(rdf)
"	dr	"	fh	"	L8	(hfr)
"	fh	"	rb	"	R9	(brd)
"	rb	"	dl	"	R0	(ldf)
"	dl	"	bh	"	L5	(hbr)
"	bh	"	rf	"	R6	(frd)
"	rf	"	hl	"	L ∞	(lhb)
"	hl	"	bd	"	L2	(dbr)
"	bd	"	lf	"	R3	(flh)
"	lf	"	hr	"	R ∞	(rhb)
"	hr	"	fd	"	L11	(dfl)
"	fd	"	lb	"	R12	(blh)"
Table 3. Right and left A- and B-scales, represented with: bipartite abbreviations for positions; inclination numbers; and tripartite codes for inclinations (Laban, 1926, pp. 29-32).						

The tables of the A- and B-scales give three different representations. The directions of each position are listed in bipartite codes as "points". Inclinations (motions) are

numbered in consecutive order according to the A-scale. Finally, each inclination is represented with a tripartite code, specifying the relative size of each dimensional component in that inclination.

Inclination numbers. A set of numbers is designated based on the order of movements in the right & left A-scale (Laban, 1926, pp. 32-34). However since each inclination appears twice in the scales, this leads to an awkward system where a few movements in the A-scale have two different numbers, and numbers in the B-scale are non-sensical, especially with four new numbers (R0, L0, R ∞ , L ∞) are arbitrarily added (Table 4).

Right A-scale	Left A-scale	Right B-scale	Left B-scale
R1 [L10]	L1 [R10]	R0	L0
R2	L2	R8	L8
R3	L3	L9	R9
R4 [L7]	L4 [R7]	L0	R0
R5	L5	R5	L5
R6	L6	L6	R6
R7 [L4]	L7 [R4]	R ∞	L ∞
R8	L8	R2	L2
R9	L9	L3	R3
R10 [L1]	L10 [R1]	L ∞	R ∞
R11	L11	R11	L11
R12	L12	L12	R12

Table 4. Order of inclination numbers in the A- and B-scales (Laban, 1926, pp. 29-32) with duplicate numbers in right & left A-scales.

Inclination numbers are used extensively in *Choreographie*, especially to represent the various movement scales and rings such as; A- & B-scales (pp. 29-32, 36), "axis scales" (p. 44), "four-rings" (pp. 37-39), 3 part series of four-rings or "ring sequences" (p. 39), "definition of the symbols" (pp. 44-45), "equator-scales" (p. 46), "volutes" (p. 49), "mixed-scale" (p. 66), and "three-rings" (pp. 40, 71). However, likely because of their awkward order in the B-scales, they rarely appear in other works. One exception is the second part of *Choreutics* where Ullmann (1966, pp. 152-205) defines the inclination numbers again and uses them for an abundance of sequences including large transverse inclinations in the A- & B-scales as well as small inclinations on the periphery.

While they are not practical for obvious reasons, inclination numbers do help confirm translations of early script examples. In addition, the numbers may give an indication about Laban's comparison of choreutic movement scales to scales and intervals in music which are also given numerical designations such as "thirds", "fifths" etc.

An analogy with harmonic relations in music can be traced here and it seems that between the harmonic life of music and that of dance there is not only a superficial resemblance but a structural congruity. (Laban, 1966, pp. 116-117 et seq.)

As with the tripartite letter codes, there is some ambivalence as to whether inclination numbers refer to motions (inclinations) or positions (points). Clearly as listed by Laban in the A- and B-scales (Table 3) inclination numbers are identical to the tripartite letter codes for deflecting diagonals (motions). This is also made explicit in the "guidelines for writing" at the end of *Choreographie* (Table 5) and as defined in extensive written scripts of movement sequences by Ullmann (1966).

"R8 = high-forward-right
L3 = forward-right-high
R1 = right-high-forward"

Table 5. Inclination numbers equivalent to deflecting diagonals (Laban, 1926, pp. 100-101).

In contrast, drawings of the A-scale in *Choreographie* show all the inclination numbers written next to points, giving the impression that the points are being numbered rather than the motions (Laban, 1926, pp. 30-31) (Fig. 21).

Similar drawings of the A-scale, which are obviously adapted from those in *Choreographie*, have appeared in other places. Ullmann (1966, p. 153) places the inclination numbers midway along each line, clarifying their indication as lines of motion (Fig. 22). On the other hand Bartenieff & Lewis (1980, p. 39) present drawings with points numbered and specifically made equivalent with two-dimensional directions (HR, HL etc.) (Fig. 23). Other numberings of points are used such as the order of the "primary scale" and applied to create new movement scales by selecting numbers (positions) at regular intervals (Bartenieff & Lewis, 1980, p. 99).

There is ambivalence in how the numbers are used in the drawings, yet spatial analyses of inclination numbers used in *Choreographie* are consistent with their representation as lines of motion. For example, the numbers are used in analyses of "parallel" motions in choreutic rings such as the A-scale (Table 5) and since a point in itself cannot be parallel, the numbers must refer to lines.

Similar to this, in analyses of shorter "peripheral inclinations" the same inclination numbers are adopted and written in small size font, as are used for larger inclinations with which they are exactly parallel but might be in any place or size. Each inclination number refers to an orientation of a line; while '5' is parallel to '5', they will have different sizes and be in different locations (Fig. 24). For example these inclinations occur in "four-rings" which are organised in groups described as having "kinship" (*Verwandschaft*) based on the parallelisms between their peripheral and transverse inclinations. Each "kindred" group of four-rings includes six different inclinations, each of these occurring twice, once as peripheral and once as transverse (Table 6).

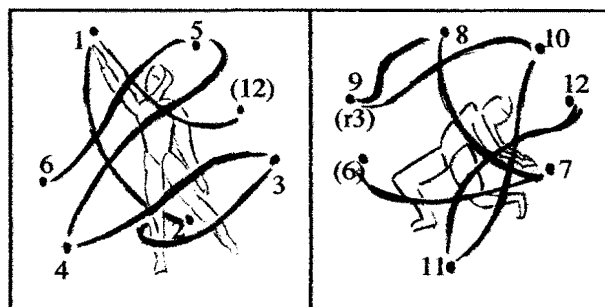


Figure 21. Numbers apparently given to points of the A-scale (in the style of Laban, 1926, pp. 30-31).

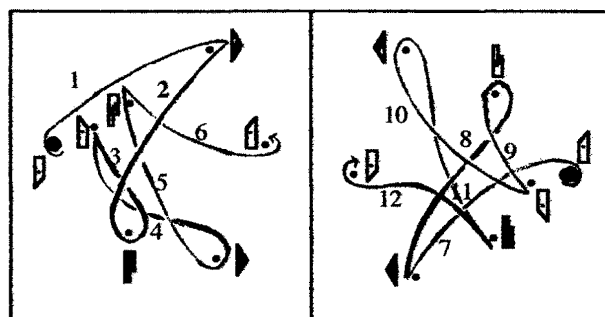


Figure 22. Numbers given to lines (motions) of the A-scale (in the style of Ullmann, 1966, p. 153).

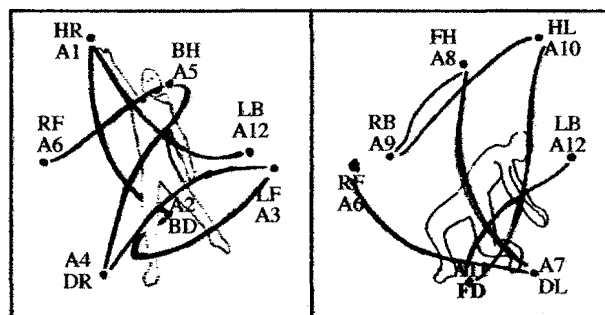
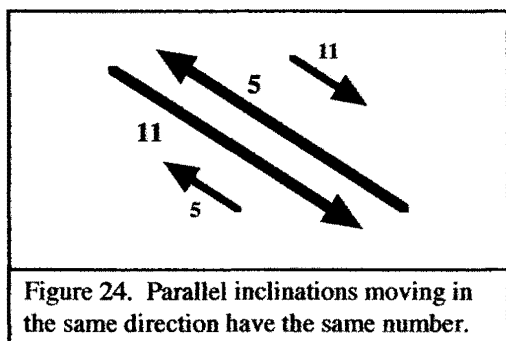


Figure 23. Numbers given to points of the A-scale (in the style of Bartenieff & Lewis, 1980, p. 39).

"1	is parallel to	7
2	"	8
3	"	9
4	"	10
5	"	11
6	"	12
and 0	"	∞

Table 5. Numbers of parallel inclinations in the A-scale (Laban, 1926, p. 36).



Parallelism amongst inclinations with their corresponding use of the same set of inclination numbers, again reveals an emphasis in *Choreographie* to represent lines of motion through the space, rather than series of body positions towards points.

"we have a kinship between these... four-part rings:

1	11	7	5
11	9	5	3
9	7	3	1

The other four-rings kindred with one another are:

2	L6	8	L12
L6	L0	L12	L∞
L0	8	L∞	2

L1	L11	L7	L5
L11	L9	L5	L3
L9	L7	L3	L1

L2	R6	L8	R12
R6	R0	R12	R∞
R0	L8	R∞	L2

Table 6. Kindred 4-rings based on parallelisms among inclinations; numbers in small font indicate peripheral inclinations (Laban, 1926, pp. 37-39).

Vector signs; Free space lines. The most extensively used graphic sign system in *Choreographie* is not given any name in the text, but the signs have been translated as indicating directional-motions and so might be considered 'vectors' (Longstaff, 2001). Similarly, they are likened to "free space lines" described later in *Choreutics*:

... a notation is needed that makes it possible to record any desired inclination which may occur at any place, either inside or outside the kinesphere, without being bound to the points of the scaffolding... [For] notating free space lines... the vertical remains the only reference and inclinations are related to themselves. (Laban, 1966, p. 125)

The signs are defined in *Choreographie* to be equivalent with inclination numbers, as demonstrated in the Axis-scales (Fig. 25). In the same way, the vector signs are used as transverse inclinations in the sequences titled "augmented three-rings or double-volutes with one action-swing-direction" (Fig. 26) and "volutes with volute-links" (Fig. 27). These scripts begin to reveal how vector signs use the same concept of flat, steep, or suspended inclinations (deflecting diagonals).

"If one connects the steep, flat and suspended inclinations which lie in one diagonal, then one obtains scales which we term axis-scales:						
Axis A--R	L11	L12	R0	L5	L6	R∞
Axis A--L	R11	R12	L0	R5	R6	L∞
Axis B--R	L2	R3	R4	L8	R9	R10
Axis B--L	R2	L3	L4	R8	L9	L10

Figure 25. Well-known "Axis scales" demonstrate equivalence of inclination numbers and vector signs (Laban, 1926, p. 43-44).

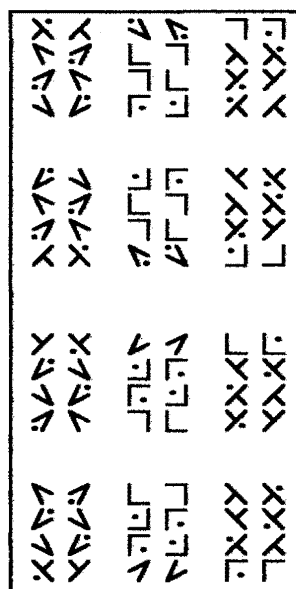


Figure 26. Series of "augmented three-rings" (Laban, 1926, p. 50).

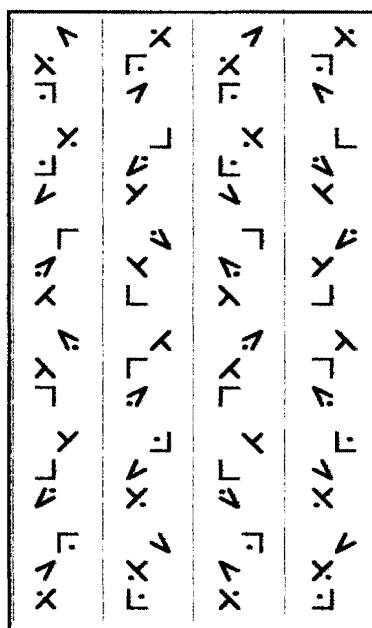


Figure 27. Vector signs used as transverse inclinations in "Volutes with volute-links" (Laban, 1926, p. 50).

pure diagonals	deflecting inclinations		
	vertical 'steep'	sagittal 'suspended'	lateral 'flat'

Figure 28. Key to vector signs, showing signs for 'pure diagonals' modified in three ways to produce signs for flat, steep and suspending inclinations.

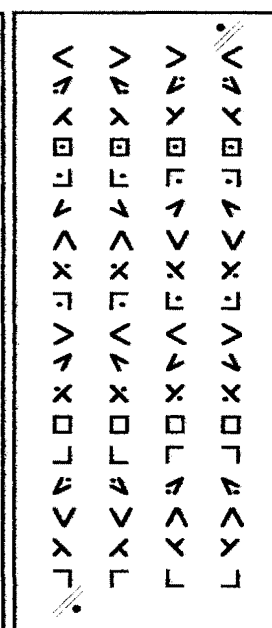


Figure 29. "Scales assembled from short peripheral directions" (Laban, 1926, p. 47).

The sign system looks more complete when the diagonal signs (see Fig. 18) are placed next to the vector signs exhibiting their similar shapes. Each inclination sign can be seen in the same graphic structure as a diagonal sign, modified to indicate its deflection as either flat (lateral), steep (vertical) or suspended (sagittal) (Fig. 28).

The similarity of diagonal signs to vector-like signs raises again a question of whether the diagonal signs always indicate positional-directions as considered earlier (Fig. 18). While the diagonal signs are not used in any of the notated sequences in *Choreographie*, they obviously share their graphic and conceptual structure with the vector signs.

Just as with the inclination numbers, the same vector signs are also used for peripheral inclinations which are parallel to the longer transverse ones, particularly demonstrated in the "scales assembled from short peripheral directions" (Fig. 29).

Considering the sequences of vector signs, translations into Labanotation direction symbols (Longstaff, 2001) demonstrates that each vector sign, or 'free space line' can be translated in at least four possible ways; as either two possible transverse lines, or two possible peripheral ones, all of these being exactly parallel (Fig. 30). This is an example of theories of harmony embedded the notation, as parallelism between transverse and peripheral lines is only true in an icosahedron (dimensional-planes) but not for 45° planar diagonals (see Fig. 15).

	transverse	peripheral
" = high-forward-right"		
= forward-right-high"		
= right-high-forward" (Laban, 1926, p. 101)		

Figure 30. Four possible translations of vector signs into Labanotation direction signs. The example shows flat, steep, & suspended inclinations of 1 diagonal (hrf), deflected into 6 transverse & 6 peripheral inclinations.

The identity of each vector sign is its orientation, while its size and location can change. Sequences with vector signs also include signs for dimensions together with signs for inclinations, for example in “scales combined from primary-directions with dimensions and volute-links which are traversed twice” (Fig. 31). When translated into Labanotation these dimensional signs are found not to refer to positions, but must be translated into dimensionally oriented lines of motion (Longstaff, 2001).

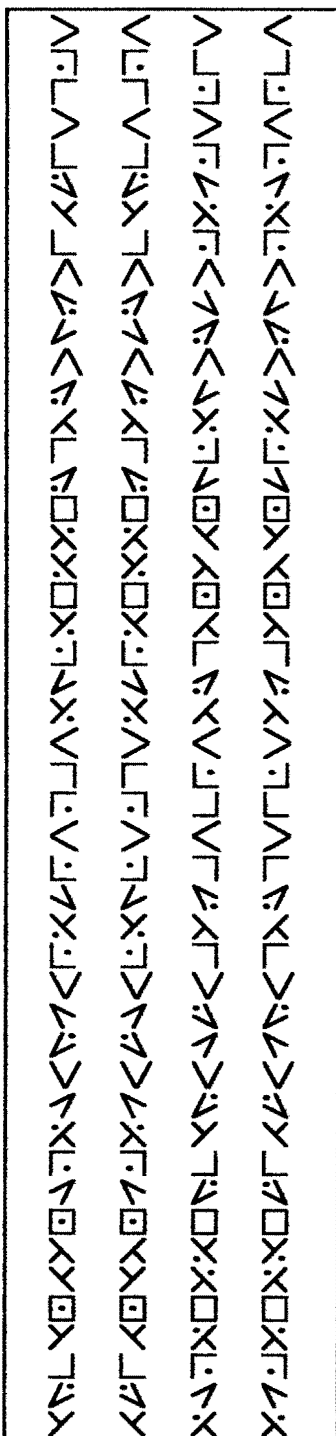


Figure 31. “Scales combined from primary-directions with dimensions and volute-links which are traversed twice” (Laban, 1926, p. 53).

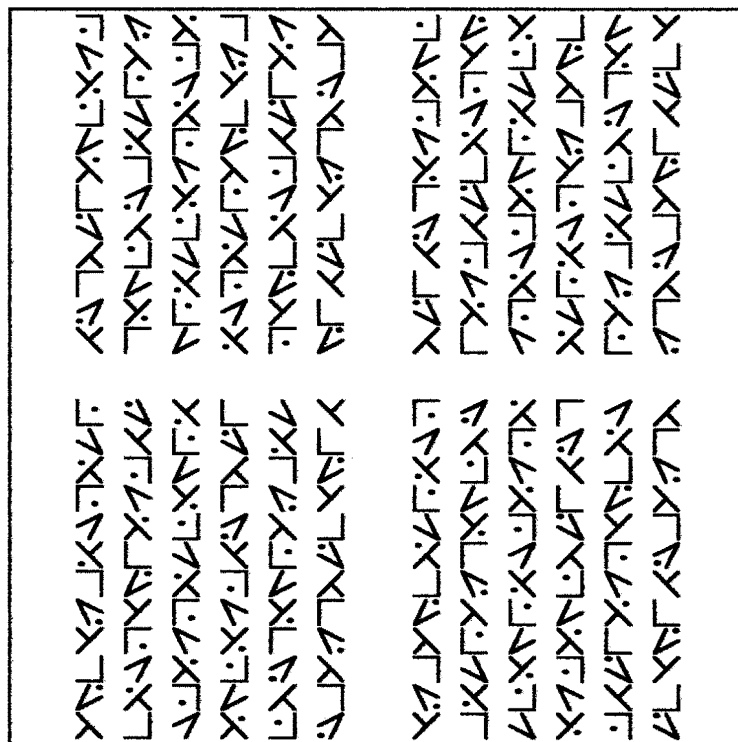


Figure 32. “Scales combined from primary-directions in four diagonals over twelve directions (Laban, 1926, p. 51).

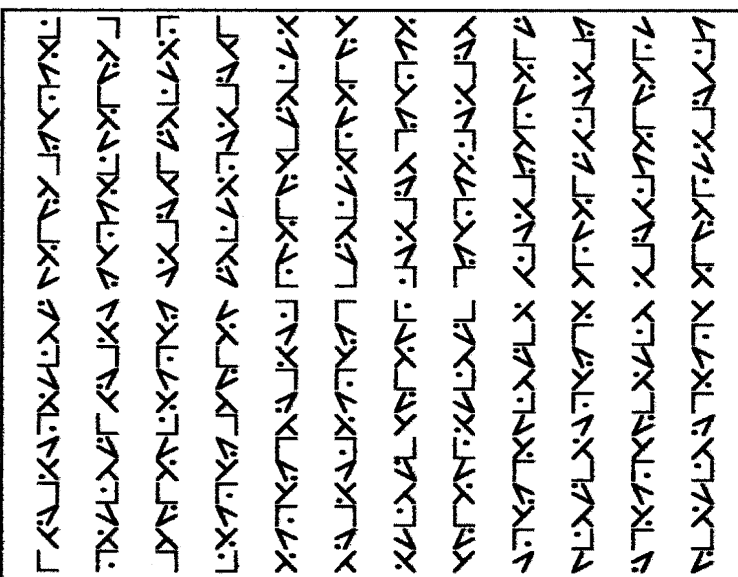


Figure 33. “Scales combined from primary-directions in four diagonals over all 24 directions” (Laban, 1926, p. 52).

These dimensional signs are similar to those used earlier and considered to be positions (see Fig. 18) however in the notated sequences the signs can properly be considered to be dimensional vectors (dimensionally oriented lines of motion). In the same way as inclinational vector signs, the dimensional vectors might also occur either as transverse dimensions (Fig. 31) or as dimensional lines in the periphery (Fig. 29). This reveals again theories of harmony embedded in the signs as the distinction between transverse and peripheral dimensions only occurs with dimensional-planes (icosahedron).

Vector signs seem to be the most favoured script in *Choreographie*, used in the longest sequences with most variations. In addition to those already shown, vectors are used in "scales combined from primary-directions in four diagonals" which are spread either "over twelve directions" (Fig. 32) or "over all 24 directions" (Fig. 33).

Diagonal script. Another group of signs called "diagonal script" are only used rarely in *Choreographie*. An initial translation is given when diagonal script signs are presented in a list showing their equivalence with inclination numbers (Fig. 34).

Translating the script is further assisted in the final chapter "guidelines for writing" where a group of almost-identical diagonal signs are listed so as to show how signs are based on a pure diagonal sign, which is then modified in three ways to indicate suspended, flat, or steep deflections (Fig. 35).

Apparently the diagonal script is quite similar to vector signs, each of these indicating a pure diagonal, and then modifying the signs to indicate the deflection. However, looking closer at the two types of script reveals a basic distinction in how 'deep' space is represented with the 'dot'. In an example showing equivalence of motion scripts it can be seen that when adding a dark dot to show the opposite direction of motion, the 'point' of the diagonal script is reversed, indicating a change of direction with the horizontal (as in Labanotation), while the vector sign remains 'pointing' the same way, the black dot emphasising the opposition on the same deflecting diagonal line (Fig. 36).

Diagonal script is used rarely in *Choreographie* but does provide another example of a motion script following the same concept of deflecting diagonal inclinations. Further, the diagonal script may bridge a gap as a writing method perhaps mid-way between more freely drawn scripts such as path signs (see below) compared to more strictly written signs such as vectors.

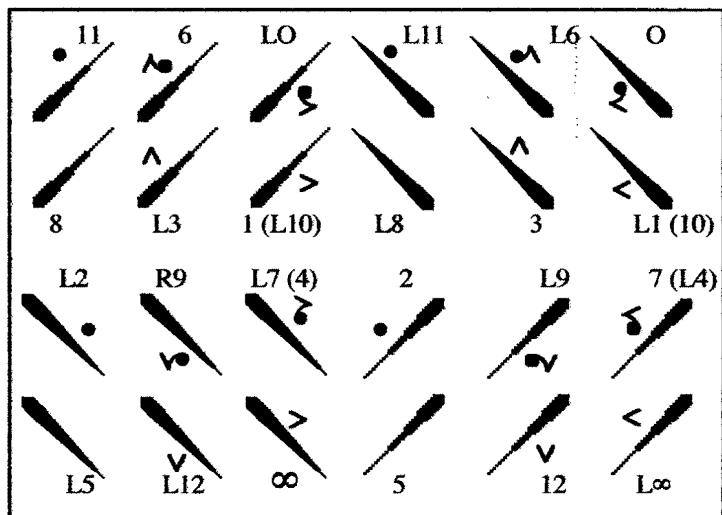


Figure 34. "Signs for the 24 basic-directions (diagonal-script)" (Laban, 1926, p. 32).

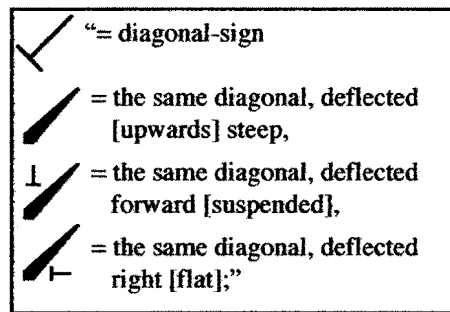


Figure 35. Diagonal script as deflected diagonal sign (Laban, 1926, p. 100).

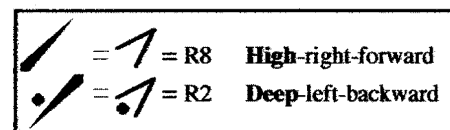


Figure 36. Difference in diagonal script and vector signs when signifying 'deep'.

Deflecting ballet positions. Much of *Choreographie* presents a “new dance-script” as developing from or responding to existing traditional dance methods of that time such as ballet. An entire chapter (though only 1 page) is given to explicitly summarise a contrast:

For I. Ballet: Leg-movement	New dance-script: Unified movement of the whole body.
For II. Ballet: Separation of bodily kinesphere and dance-space.	New dance-script: Unified spatial-picture
For III. Ballet: Eight-part organisation of movement- manifestations (really two-part, into movement-manner and movement-form). Additionally: direction-elements and rhythm.	New dance-script: Leading-back the organisation towards spatial reasoning.
For IV. Ballet: Statement of the body-parts and body-side.	New dance-script: Recording the plastic complete-form of a movement-development from which the use of particular limbs occurs by themselves.
For V. Ballet: Oriented in dimensional stability	New dance-script: Oriented in diagonal lability (Laban, 1926, p. 64)

Similarly, an entire chapter was devoted to the “minuet” (Laban, 1926, pp. 56-61) as an example of a traditional dance of that era and how this is typically documented (with verbal description and Feuillet notation). Interviews with Laban’s students also reveal that the minuet was used as a model to reveal spatial concepts such as the dimensional planes for use in the new dance script, and further, giving examples of spatial practices such as symmetrically rotating or reflecting a spatial pathway (Longstaff, 2004).

Laban’s “Analysis of Movement” begins by considering the five positions in ballet, not only as foot positions but as full body postures:

The so-called five positions are handed down to us as the simplest spatial-orientation-method in the art of dance. It is now generally assumed that these positions only signify placings of the feet. This is however not so. It is much more a matter of spatial-directions, which are striven towards by the legs, and to which the upper-body makes the natural counter-movement. The leg-positions are handed down as a unity (one sometimes finds the usual five positions supplemented by a sixth). The arm-positions also show a very clear and neat spatial-organisation. (Laban, 1926, p. 6)

Later in the text Laban (1926) uses foot pins to identify the five positions as the “most important signs of Feuillet-type script” (p. 54) (Fig. 37), however earlier in the “Analysis of Movement” (p. 6) a slightly different set of foot pins is used, and shows all possible variations of the five foot positions, including whether the dancer stands with the body weight distributed on both feet, or with weight only on one leg (Fig. 38). It can be noticed in the figure if the weight is on both legs, then two positions are written twice (in the 3rd, 4th, and 5th). However the reason for the complete methodical listing of positions is evident when the weight is on one leg, where all the variations are unique.

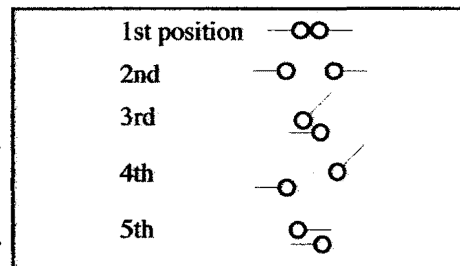


Figure 37. Feuillet script signs for five positions of the feet (Laban, 1926, p. 54).

While traditional dance script methods such as those by Feuillet (1700), mostly give indications of leg movements and steps, *Choreographie* also includes arm movements as “contrapositions” (*Kontraposition*). The ‘pin’ signs for foot positions (Fig. 38) are used again, but with ‘c’ indicating contra-, the arms (Fig. 39).¹

			Weight evenly distributed between both legs		Weight on one leg	
			right	left	right	left
1st position						
2nd	“					
3rd	“	fore				
3rd	“	back				
4th	“	fore				
4th	“	back				
5th	“	fore				
5th	“	back				

Figure 38. Five foot positions in Laban's (1926, p. 7) “Analysis of Movement”.
 Key: Left standing foot = Right standing foot =
 Left gesturing foot = Right gesturing foot =

			Evenly-distributed arm-tension		One-sided arm-tension	
			right	left	right	left
1st contrary-position			c	c	c	c
2nd	“		c	c	c	c
3rd	“	fore	c	c	c	c
3rd	“	back	c	c	c	c
4th	“	fore	c	c	c	c
4th	“	back	c	c	c	c
5th	“	fore	c	c	c	c
5th	“	back	c	c	c	c

Figure 39. Five “contrapositions” (*Kontraposition*) of the arms (Laban, 1926, p. 10).
 Key: c = Indication that notation refers to arm contraposition (rather than feet).
 Left extending arm = Right extending arm =
 Left relaxing arm = Right relaxing arm =

Each of the five ballet positions is analysed as deflecting vertical, sagittal, or lateral:

1st & 5th positions	“leading steeply downwards” and with a “pronounced verticality”;
3rd position	“leading steeply downwards” and “towards the diagonal”;
2nd position,	“leading more horizontally” (laterally);
4th position	“leading more horizontally” (sagittally) (Laban, 1926, p. 6).

The same deflections are translated upwards to the five contrapositions (c1, c2, c3, etc.):

As directions leading upwards there appear: first, second, third, fourth and fifth contrapositions of the arms. These directions upwards have the same spatial-situation as the corresponding ones downwards, thus c1 and c5 stand steeply as representative of pure vertical, c3 is a steep diagonal, c4 and c2 are suspended upwards directions. (Laban, 1926, p. 10)

An entire chapter “Comparison with the Ballet-positions” (again, only 1 page) makes the deflection of ballet positions explicit in two figures giving cross-reference between the five positions and five contrapositions with corresponding inclination numbers and vector signs (Fig. 40).

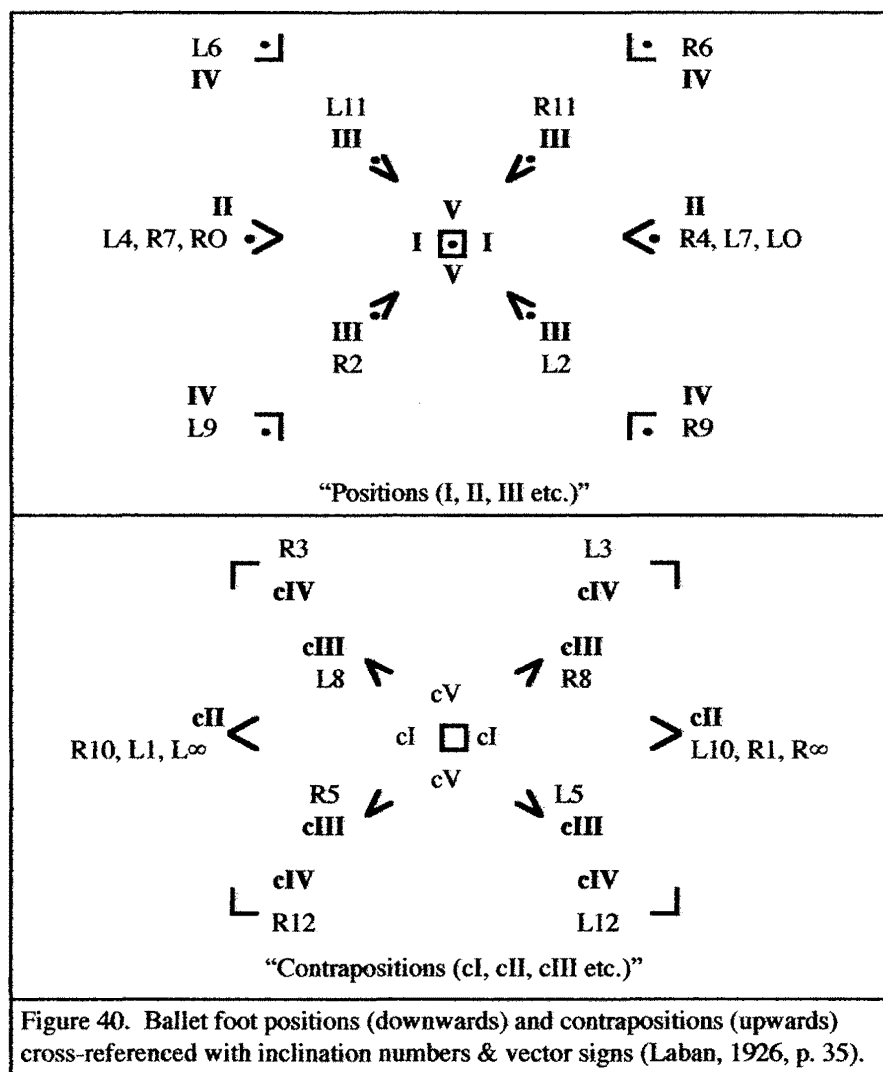


Figure 40. Ballet foot positions (downwards) and contrapositions (upwards) cross-referenced with inclination numbers & vector signs (Laban, 1926, p. 35).

A discrepancy seems to occur here where 2nd position is assigned with more inclination numbers than other positions. Further, signs for lateral 'flat' deflections as listed here (Fig. 40) are different than in all other places in *Choreographie*. These discrepancies appear firstly, because in some cases two different numbers have been assigned to the same inclination and further, it may be that the signs for flat inclinations used here on page 35, later split into two when fully specifying the forward/backward component of 2nd position (Fig. 41).

R10, L1, L ∞ < > L10, R1, R ∞	R10 (L1) L10 (R1) L ∞ R ∞
L4, R7, R0 > < R4, L7, L0	R0 L0 L4 (R7) R4 (L7)

Figure 41. Signs for 'flat' deflections of ballet 2nd position (p. 35) split into forward & back variations.

This splitting of one sign into two may occur because the five positions of ballet do not have a '2nd position front' or '2nd position back' (as there are for 3rd & 4th positions). Forward and backward variations of second position do not emerge until it is considered as a motion. When moving from 3rd or 4th position front, into 2nd position, it will mean that as well as a very lateral sideways movement into 2nd position, the weight will also shift somewhat backwards. Likewise, when moving from 3rd or 4th position back, into 2nd position, there will be a large movement sideways as well as motion somewhat forward. This results in each 2nd position being deflected in two different ways, forward or back.

These issues might be associated with several mistakes in the "explanation of the signs" where fourteen vector signs are not listed with the correct inclination number (perhaps a mistake by printers when inserting graphic signs into printed text). These mistakes are corrected here to show the full cross-reference amongst ballet positions (2nd, 3rd, 4th), corners of cardinal planes (rh, lf,...), vector signs, and inclination numbers (Tables 7, 8).

"Explanation of the signs:					
The flat inclinations;	leading to Position	2 right	(dr) is		= L0
	" " "	2 right	(dr) is		= R4(L7)
	" " "	2 left	(dl) is		= R0
	" " "	2 left	(dl) is		= R7(L4)
The steep inclinations	leading to Position	3 right-fore	(fd) is		= R11
	" " "	3 left-fore	(fd) is		= L11
	" " "	3 right-back	(bd) is		= L2
	" " "	3 left-back	(bd) is		= R2
The suspended inclinations;	leading to position	4 right-fore	(rf) is		= R6
	" " "	4 left-fore	(lf) is		= L6
	" " "	4 right-back	(rb) is		= R9
	" " "	4 left-back	(lb) is		= L9"

Table 7. "Explanation of the signs" for ballet 2nd, 3rd & 4th positions: two-dimensional directions, vector signs, inclination numbers (Laban, 1926, p. 44).

"The contradirections are:			
Contra to the [flat] inclination[s]	Leading to point	lh	[is]  = L ∞
"	"	lh	[is]  = L1 (R10)
"	"	rh	[is]  = R ∞
"	"	rh	[is]  = R1 (L10)
[Contra to the steep inclinations]	[Leading to point]	bh	[is]  = R5
"	"	bh	[is]  = L5
"	"	fh	[is]  = L8
"	"	fh	[is]  = R8
[Contra to the suspended inclinations]	[Leading to point]	lb	[is]  = R12
"	"	rb	[is]  = L12
"	"	lf	[is]  = R3
"	"	rf	[is]  = L3 "

Table 8. "Explanation of the signs" for "contrapositions": two-dimensional directions, vector signs, inclination numbers (Laban, 1926, p. 45).

Summary; Direction of motion. Several formats are used to write lines of motion and while the writing formats are different, these all represent space according to the same concept of deflecting diagonals and inclinations. Comparing these signs to present-day Labanotation, only "direction of the progression" signs (Fig. 42) offer a complete representation of motion, however they do not afford a ready method for representing deflecting diagonal orientations, the closest possibility might be to combine signs into a direction of progression 'half-way' between a dimensional and a diagonal (Fig. 43).

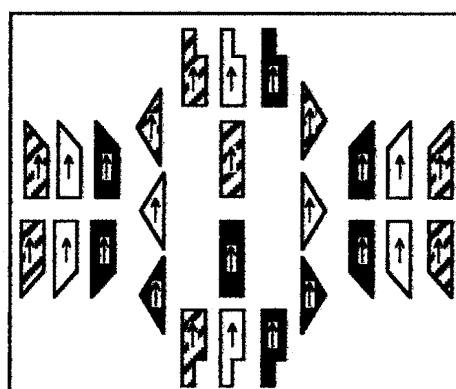


Figure 42. Direction of the progression signs (Hutchinson Guest, 1983, p. 261).

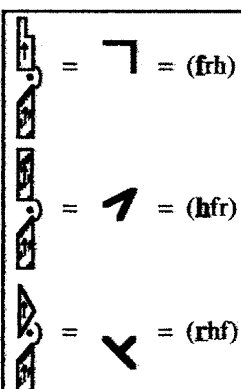


Figure 43. Half-way direction of progression

As described above, after the decisions in 1927 'steps' were represented as motions in the support column; but as can be seen by comparing this with direction of progression, it is only sometimes true (Fig. 44).



Figure 44. Directions of 'steps' vs. direction of progression.

Toward / away signs are regarded as "motion" (Hutchinson, 1970, p. 508, 1983, p. 260) however these signs are also based on destinations rather than giving orientations of motion (Fig. 45).

Thus, it can be seen that motion writing methods in *Choreographie* demonstrate concepts for analysis and also theories of 'harmony' which have not continued into Labanotation today.

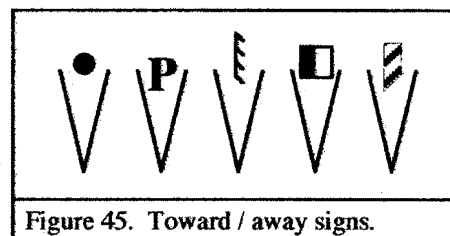


Figure 45. Toward / away signs.

PATHWAYS

Straight, curved, round, twisted. Also explored in *Choreographie* are signs for the forms, shapes or designs of movement pathways. Foremost consideration is given to "step-forms" such as notated by Feuillet (Fig. 46).

These categories of pathways were used later in later works (Laban, 1966, p. 83, 1980, p. 33) with a few differences in the exact number of basic forms listed, in some cases giving three, or four, and here as in Feuillet, listing five different forms. Comparable analyses of "body carriage" as being either "pin-like", "wall-like", "ball-like", or "screw-like", similar with the five step-forms, was also presented (Laban, 1980, p. 63). This was accordingly followed by a variety of taxonomies that have evolved for designs of pathways and shapes such as by Hackney (1998, p. 221) and Preston-Dunlop (1980, pp. 87-92).

Path signs. Laban (1926) adapts Feuillet's step-forms into four "path signs" (p. 102) representing basic designs of pathways by any part of the body (Fig. 47). Several other elaborations of path signs are explored such as more-or-less drawing the design and then placing it in a body cross or linking it to inclination numbers. While some path signs are written more fluidly such as turns and rotations, others are drawn more geometric (Fig. 48).

	= straight	step	forwards	(droit)
	=	"	sideways	(")
	= open	"	outwards	(ouvert)
	=	"	inwards	(")
	= round	"	outwards	(rond)
	=	"	inwards	(")
	= twisted	"	forwards	(tortille)
	=	"	backwards	(")
	=	"	sideways	(")
	= step backwards and immediately thereafter forwards			
	= step forwards and immediately thereafter backwards			
	= beaten step sideways, then forwards			

Figure 46. Feuillet step-forms (Laban, 1926, p. 54).

	✓ = straight (<i>droit</i>)
	✓ = open (<i>ouvert</i>)
	✓ = round (<i>rond</i>)
	✓ = twisted (<i>tortille</i>)

Figure 47. "Forms of movement", based on Feuillet, in the body cross (Laban, 1926, p. 94).

8 "indicates the circle 8-9-L0".	"turning-jump" 	L4 7 = "cartwheel" L1 10
1 11 12 = "turning (<i>tourné</i>)"	L3	4 = "hitting (<i>battu</i>)" 10 4

Figure 48. Path signs written as fluid curves or as geometric designs (Laban, 1926, pp. 95-96, 99, 101).

The practice of path signs in *Choreographie* has carried on to present-day practice, virtually identical with "design drawing" in Labanotation (Hutchinson, 1983, p. 173) where arrangements of paths can be drawn within a path sign (Fig. 49).

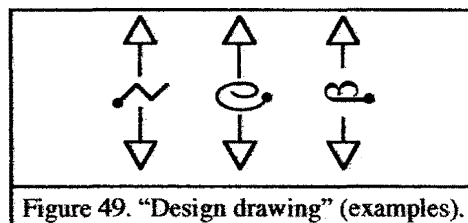


Figure 49. "Design drawing" (examples).

Transferring the weight. Path signs refer to both gestural paths and also travelling paths across the floor. The basic unit of travelling, transferring the weight, is shown in the script with a dark 'dot'. The dark dot is common in Labanotation and is also used in several ways in *Choreographie* for indications of downward motion or gravity. The dot occurs in directional signs (see above) and also in various 'body' indications such as contact with the floor, placed in the body cross indicating the centre of gravity moving downward, or in series indicating transfers of weight such as hopping or leaping or as a more general motif indicating transfers of weight (Fig. 50).

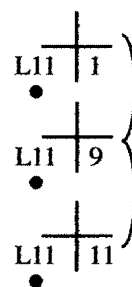
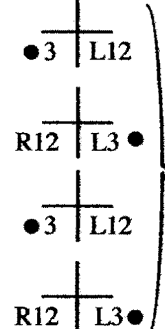
● = contact with the foot (if it stands next to the striving-arm, with the arm) ●● = with the knees (kneeling) ●●● = contact with the seat (sitting) ●●●● = contact with the upper-body (lying)	"Standing-leg bent (● in the cross = lowered center-of-gravity)" 	
 in "hopping" we have the same leg in contact with the floor over and over...	 springing from one foot to the other	 Denotes striving-leg -- right forward on the 6th pathway [Right A-scale], Then again left forward on L 6th pathway [Left A-scale].

Figure 50. Dark 'dot' for deep, gravity, or as transferring the weight (Laban, 1926, pp. 67, 93, 95-97).

Figure 50. Dark 'dot' for deep, gravity, or as transferring the weight (Laban, 1926, pp. 67, 93, 95-97).

Path signs and transfer of weight in *Choreographie* are similar to script presented earlier by Klemm (1910, pp. 54-59, 103-109) in musical motifs with dance script on the lower line giving indications of level (dots, marks, increase/decrease), transfers of weight to right or left ('notes' with stems on right/left sides) and path signs (spiral) (Fig. 51).

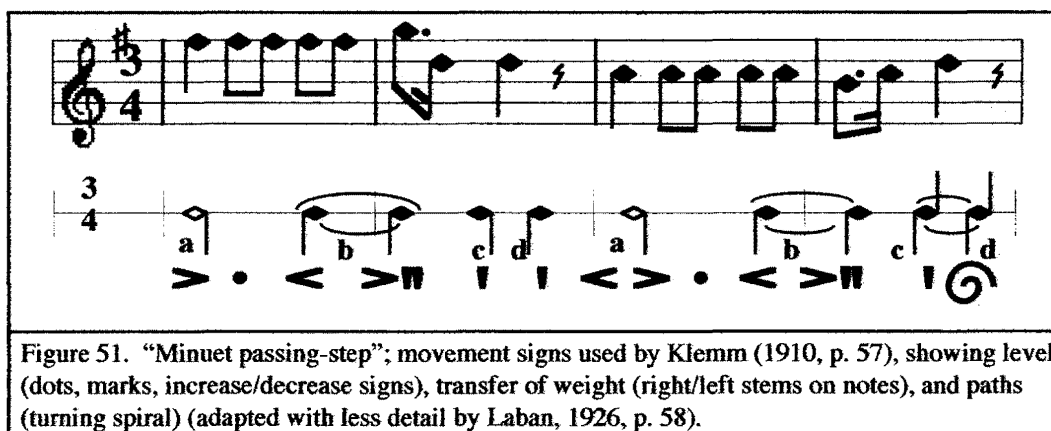


Figure 51. "Minuet passing-step"; movement signs used by Klemm (1910, p. 57), showing level (dots, marks, increase/decrease signs), transfer of weight (right/left stems on notes), and paths (turning spiral) (adapted with less detail by Laban, 1926, p. 58).

These earlier dance script signs were obviously an influence on the similar scripts used by Laban (1926, pp. 56-58) who virtually duplicates Klemm's (1910) notations though never cites Klemm and also omits details of the earlier script (Longstaff, 2004).

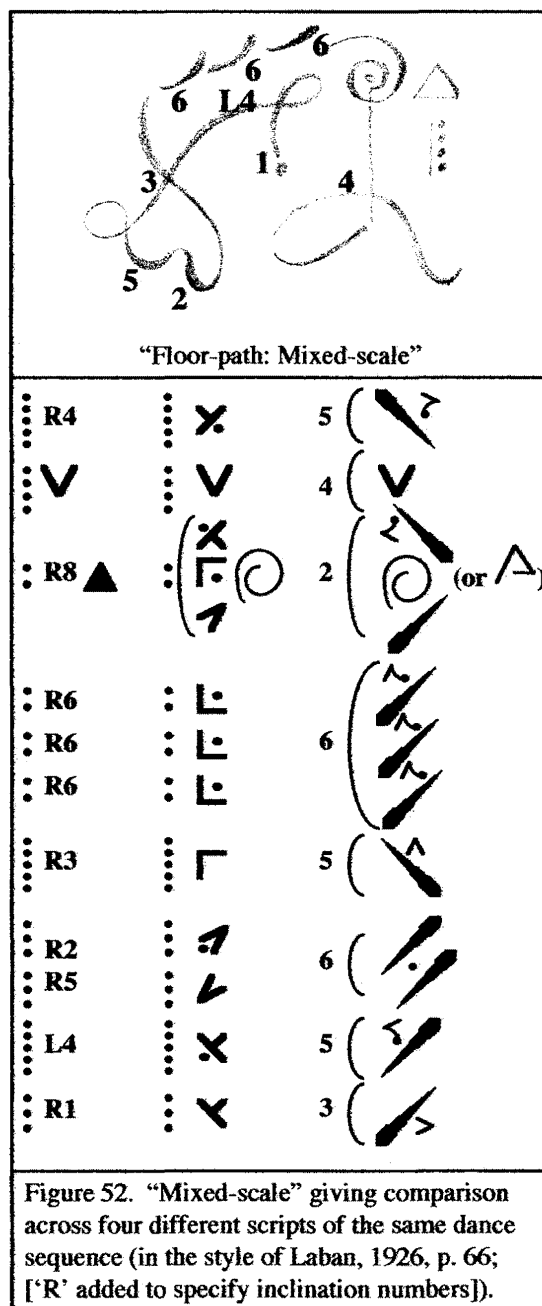
Transferring the weight and travelling are elaborated in the "Floor-path: Mixed-scale" where four representations are given of the same sequence; a kind of 'Rosetta stone' with the same series of paths read in four types of scripting (Fig. 52).

In the 1st column, the transfers of weight are shown by series of dots and motions are indicated with inclination numbers. A dark triangle path sign shows a turn in low level; only R8 is stated for the turn, but as written fully in the 2nd column an entire 3-ring is implied by the triangle. A dimensional direction also follows immediately after the turn, indicating movement backwards.

The 2nd column of signs also uses dots for number of steps, though here the directions of motion are indicated with vector signs and the turn shown with a spiral path sign.

In the 3rd column the number of steps are written with numbers and motions are given in diagonal script. The turn is written in two ways; as a spiral or an open triangle. Again, an entire 3-ring is implied by the triangle so not all three inclinations are written.

The 4th representation of the dance series is in the drawing which contains more details in addition to a floor plan. A dot defines the beginning. Directions of motion are shown in inclination numbers as well as thickness of the lines which bulge and narrow giving a sense of level (high-deep) just like a fluidly drawn diagonal script written right inside of the floor plan. The turn is shown both as a spiral and as a triangle followed by the dimensional motion also shown twice, as the long straight line backwards (upstage) or as the line with dots (detail of the four steps backward). The final inclination has a long winding path, implying the number of steps.



Spatial continuity. Separating supports (transfer of weight) and gestures (inclinations) in the "mixed-scale" (Fig. 52) may be a forerunner of support and gesture columns in Labanotation. However there is also a strong tendency in *Choreographie* to consider a continuity across gestural space and locomotor space. This is demonstrated by using the same or similar script signs in both cases which appear in floor plans, in columns of writing, and for both large and small sized pathways.

Laban (1926) distinguishes this approach of the “new dance-script” from ballet when describing how gestures and locomotion blend together continuously so that ‘directions’ can range from floor pathways, to gestures, and even to small movements of the hand:

Ballet: Separation of bodily kinesphere and dance-space.
 New dance-script: Unified spatial-picture. (p. 64)

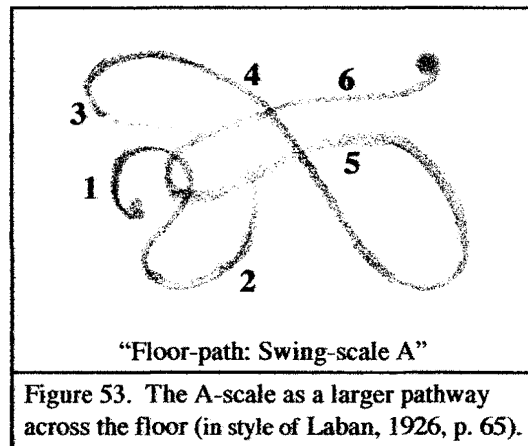
What is most important for us is that dance can be described as a movement-progression along a ground-plan-path with added signs for the spatial-direction... But one can also conceive of the floor-path as a projection of a very large swinging-movement. (p. 65)

If inclinations leading downwards are correspondingly enlarged, they will lead to the floor. They thus give the lower limbs (or upper ones if inclined downwards) the opportunity to touch the floor, and thus to become supporting-points for the moving body... (p. 68)

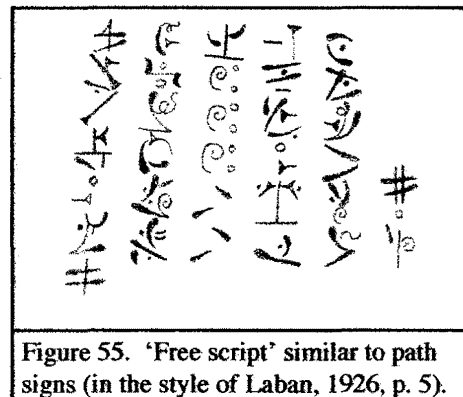
Progress in Space... spatial-pathways can be given as ground-plan-drawings, but that will mostly not be necessary, as they are understood as projections of the bodily-strivings onto the floor (p. 102)

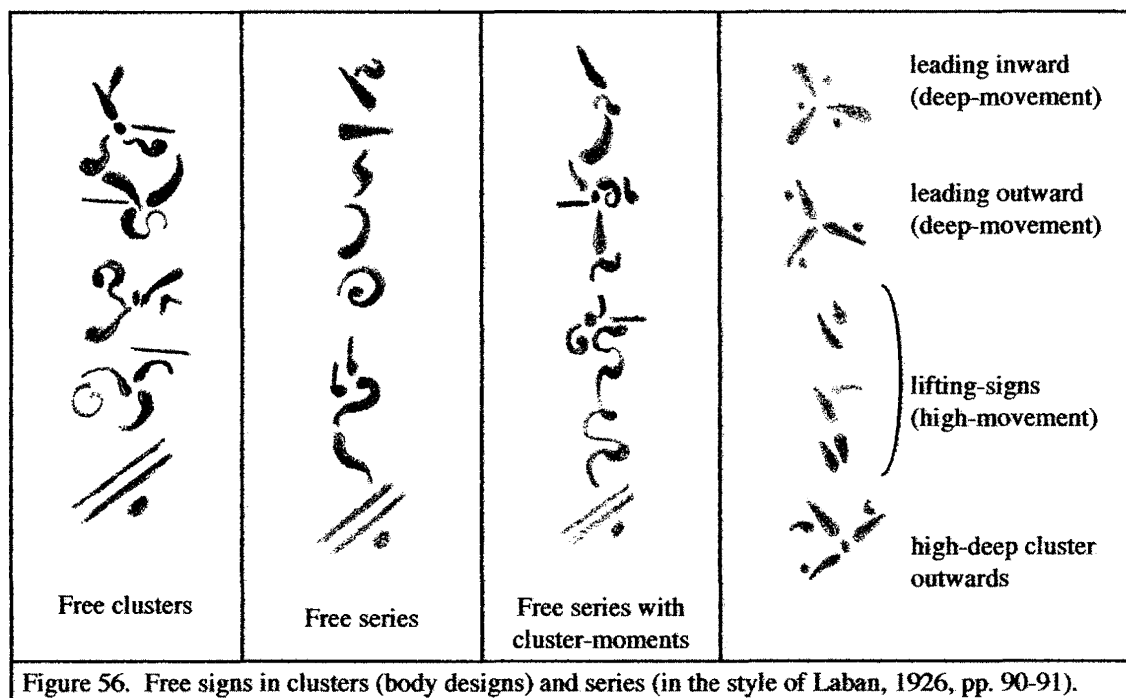
Both the hands and the feet can independently perform all the swing-scales which come to be expressed by specialised postures. (p. 93)

Continuity across space is also implied in the German concepts where a floor plan, literally “ground-plan-drawing” (*Grundrißzeichnung*) uses *Zeichnung* (drawing, portrayal), coming from *Zeichen*, the same term used for “signs” or symbols in dance script. ‘Drawings’ and ‘signs’ might be taken as extensions of each other. The explicit example of this continuity being shown in the A-scale; commonly it is performed as body and limb movement while remaining in place, however it might also occur as a larger floor path (Fig. 53) or as a series of small “hand-tensions” (Fig. 54).



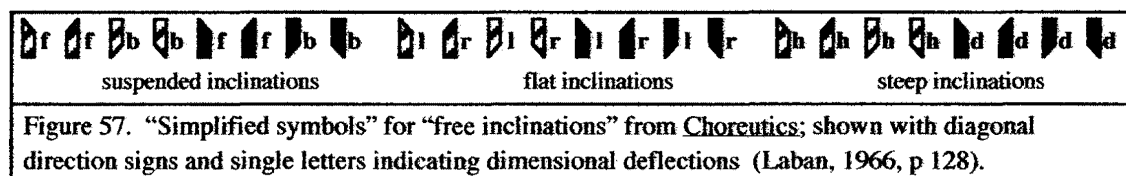
Free signs. Continuity of space for path signs and using a fluidly written style of diagonal script and dimensional pins, seem to combine into a flexible, motif-like script in Laban’s (1926) chapter about “free signs”, where no explanation is offered on how to read the signs except that “The application of free signs naturally remains left up to future convention” (p. 89). Similarities with dimensional pins, diagonal script, & path signs give indications of their meaning, but used with with a more open, less strict definition (Figs. 55, 56).





A parallel occurs between the structure of *Choreographie* and *Choreutics* where both texts have as their final chapter an account of a sign or script considered to be “free”; either “free signs” (Laban, 1926, p. 89) or “free inclinations” (Laban, 1966, p. 125) (part II was added later by Ullmann). Here “simplified symbols” are used to represent inclinations, consisting of a diagonal sign and a letter for its deflection (Fig. 57):

... an infinite number of parallel inclinations, including those of the transversals and the surface-lines of the scaffolding, do not go through the centre. To write these, we suggest the use of the simplified symbols... With these we can represent any free inclinations which are not bound to a centre, but occur anywhere in our surrounding space. (Laban, 1966, p. 128)



And again, as in *Choreographie*, the development of a ‘free’ script for representing an infinite number of parallel inclinations is ascribed to future researchers:

The future development of kinetography must include the possibility of recording forms in free space ... the conception of a notation capable of doing this is an old dream in this field of research. (Laban, 1966, p. 125)

Summary; Pathways. The development of path signs is drawn from Feuillet (1700) and also from other contemporaries not cited by Laban such as Bernhard Klemm (1910). Path signs in *Choreographie* are written similar to Labanotation “design drawing” and are applied continuously through all sizes of space from small hand gestures to full body movement, to travelling across the floor.

DYNAMICS; EFFORT

Primary- & secondary-streams. While *Choreographie* devotes the greatest attention to 'space', emphasis is also given to signs for dynamics, obviously forerunners of what would become **Effort** (Laban & Lawrence, 1947). Space is seen as "primary" (*haupt-*) while dynamics are seen to occur "secondary" (*neben-*) literally 'next to' the space:

Each movement has a primary-stream (basic-direction, basic-form). In addition there appear secondary-streams, which... give the movement the temporal, dynamic and spatial-metric nuance. (Laban, 1926, p. 74)

And this concept of "secondary" is continued into later English writings:

When we move... a kind of secondary tendency appears in the body, namely a dynamic quality which is not always clearly definable by the spectator but is very real to the mover... They create "secondary" trace-forms... indicated by using the directional signs... (Laban, 1966, pp. 30-33)

Effort factors & elements. Laban, (1926) specifies four "degrees of intensity", each extending on a continuum between extremes, showing similarities to present-day effort factors (space, weight, time, flow) and effort elements, though stated a bit differently:

The form is characterised:

a) In the flight	(degree-of-lability)	by its kinetics	[kinetischen],
b) In the force	(degree-of-tension)	by its dynamics	[dynamischen],
c) In the time	(degree-of-speed)	by its rhythmicity	[rhythmischen],
d) In space	(degree-of-size)	by its metric content	[metrischen]. (p. 4)

There are four regulators-of-intensity...

1. the intensity-scale of force
2. " " of time
3. " " of space
4. " " of flux (lability).

The extreme contrasts... are:

Force:	weak	-	strong
Time:	quick	-	slow
Space:	near	-	far
Flux:	rigid	-	mobile. (p. 74)

Affinities of effort & space. Also clearly formulated at this time and later referred to as "correlations between space and expression" (Laban, 1966, p. 27) or as an "affinity" (Lamb, 1965, p. 63), are introduced by Laban (1926) as "preferences" (*Bevorzugung*) whereby it is purported that certain combinations of spatial directions and dynamic qualities are "more naturally performed" (Laban, 1963, pp. 38-39) and "most easily take place" together (North, 1972, p. 260). The basic correlations of spatial dimensions and effort elements are described in many places (Bartenieff & Lewis, 1980, p. 85-93; Lamb, 1965, pp. 63-70, 98) and a similar account is given in *Choreographie*:

taking-of-force... leads downwards (heavy).

If the body stretches upwards... there appears a condition of non-tension, of weakness...

Wide and narrow are influenced by sideways out-turning or in-turning...

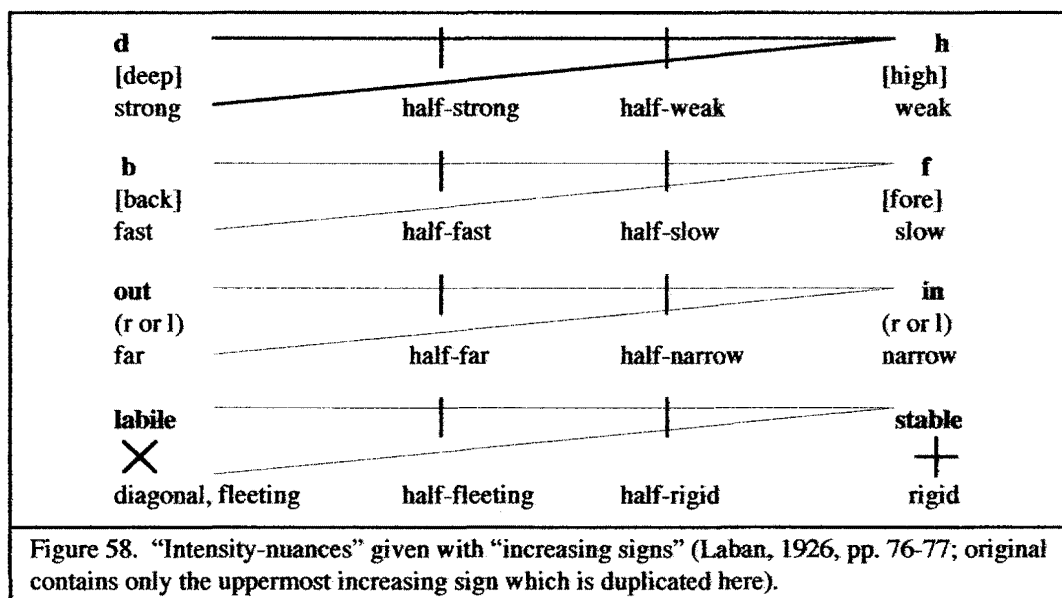
Every quick movement will be... characterised by a jerk of the body center backwards.

Slow movements are allied with bulgings and expansions... forwards...

... dimensional directions are supporters of stability, ... while the diagonals ensure the labile flow.

(Laban, 1926, p. 74-75)

Laban (1926, pp. 75-76) describes dynamic phrasing: beginning, middle & conclusion, during which time there is a continuous process of increasing and decreasing intensity. These dynamic intensity fluctuations are highlighted as part of "harmonious liveliness" and to reveal this in the script it is asserted that "notation of intensity-nuances arising from secondary-streams can thus only be given by increasing-signs". Accordingly, the intensity-nuances (efforts) are shown with their spatial affinities (d, h, b, f, in, out) as contrasting along a range of increasing or decreasing (Fig. 58).



This scheme of intensity-nuances (Fig. 58) has obvious similarities with present-day 'effort' but also shows variations. Using an increasing / decreasing sign along the continuum implies how one extreme has 'more' of something, while the opposite extreme has 'less'. This seems to suggest how these opposing effort extremes were later characterised as either "fighting", or "indulging" (Bartenieff & Lewis, 1980, p 51):

These dynamic traits have different degrees of intensity, leading to two contrasting elements within each. Rapidity is a higher degree of speed than slowness. Strength is a higher degree of force than weakness. Straightness is a higher degree of directional flux than roundaboutness. (Laban, 1966, p. 55)

These accounts particularly reveal the different ideas about 'space' effort which has developed considerably from early concepts of "degree-of-size" (*Weitegrad*); "near" or "narrow" (*nah, eng*) to "far" or "wide" (*weit*) (Laban, 1926, pp. 4, 74-79) with the fighting/indulging polarity reversed compared to later works (see Fig. 58) to later ideas of "directional flux"; "straightness" or "roundaboutness" (Laban, 1966, p. 55) to recent ideas of "space effort" ranging from "flexibility" to "directness" (North, 1972, p. 233).

Secondary-stream-signs. The theory of effort / space affinities provides a rationale for representing dynamic qualities with directional signs:

In this way we have the means to establish the spatial-temporal-dynamic nuance of a movement, by the introduction of particular secondary-directions. (Laban, 1926, p. 75)

One group of "secondary-stream-signs", similar to dimensional pins, is listed but never used in any examples (Fig. 59). Another group of signs, almost identical to signs for spatial dimensions, are used for "intensity-manifestations" to show the "preference" for dynamics in inclinations of the A-scale (Fig. 60). It may be interesting to note how the pattern here in three-dimensional inclinations is more sophisticated than the simple one-to-one correspondence between effort and dimensions as portrayed in Figure 58.

Also notable is how secondary-streams of stable and labile (Figs. 58, 59) do not occur in preferences for the A-scale (Fig. 60). In *Choreographie* the effort 'flow' was already standing out as more of a base for the other three efforts of space, force and time, and this role of flow effort continues such that it is not included with the scheme of affinities but acts as an additional modifying factor (Laban, 1966, p. 31; North, 1972, p. 260).

"The secondary-stream-signs are written directly in the column of writing, because they affect the direction of the movement line...

⊥ = slow
 T = quick
 ⊙ = strong
 ○ = weak
 —|— = wide
 |—| = narrow
 + = stable
 X = labile.

"Then as intensity-signs we have also used:

> = increasing
 < = decreasing.

Figure 59. Secondary stream signs written with spatial direction signs (Laban, 1926, p. 102).

Each spatial inclination has a "preference for particular intensity-manifestations. Right-leading:

rhf (1)	is preferably	weak	□
dbl (2)	"	strong	⊙
flh (3)	"	narrow	><
rdh (4)	"	wide	<>
hbl (5)	"	quick	∨
frd (6)	"	slow	∧
ldb (7)	"	strong	⊙
hfr (8)	"	weak	□
brd (9)	"	wide	<>
lhf (10)	"	narrow	><
dfr (11)	"	slow	∧
bhl (12)	"	quick	∨

The even-numbered swings have their character in their primary-dimensional, eg DBL (2) is strong; the odd-numbered [swings have their character] in their first dimensional secondary-stream, eg RHF (1) is weak." (Laban, 1926, pp. 78-79).

Figure 60. Secondary stream signs as affinities with the A-scale.

This same practice of using spatial signs for notation of effort dynamics was continued in *Choreutics* where qualities of the "dynamosphere" are considered to be "secondary" trace-forms which can be indicated by using the directional signs of the kinesphere and adding the letter 'S' (Laban, 1966, p. 33) and notated parallel to space (Fig. 61).

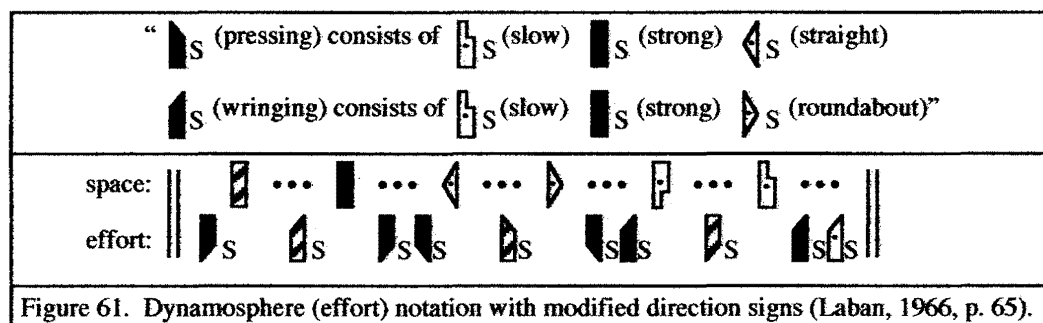


Figure 61. Dynamosphere (effort) notation with modified direction signs (Laban, 1966, p. 65).

Transferring across effort & space. The theory of preferences or affinities also provides a rationale for the method in practice of transferring a 'form' between its spatial and its dynamic manifestations. This is demonstrated in Plate 19 (Fig. 62) where one dancer performs an inclination as dynamics, while the other performs it purely as spatial design.

This possibility of transferring across effort and space leads to the idea of an "effort scale" which is so to speak, 'parallel' with its spatial counterpart (Bodmer 1979b, p. 12). This might also be seen as analogous to the physical transformation between matter and energy, in this case the identity of the 'form' remaining but as a metamorphosis.

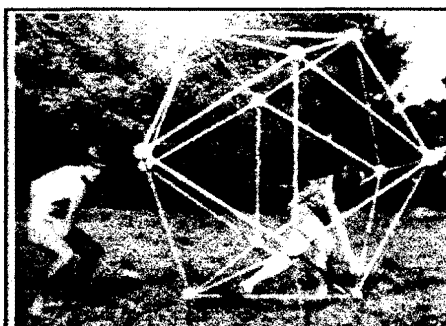


Plate 19. "Inclination 7 (lbd) A-Scale with expressive-tension purely formal"

Figure 62. Transferring a 'form' across effort & space (Laban, 1926, pp. 80-81).

In *Choreographie* the transference is sometimes portrayed within dynamic phrasing:

The contribution of the secondary-streams comes into the body-posture at the movement-beginning, thus a kind of preparatory-swing which can be visibly seen in space. The spatial visibility so to say dies away and transforms itself into intensity-degrees, while the primary-stream proceeds as victor from the split, and comes to an end as a purely spatially definable directional-aim. (Laban, 1926, p. 77)

These parallel scales are contrasted again in *Choreutics*, conceiving of space as external trace-forms in the kinesphere, and effort as internal shadow-forms in the dynamosphere:

The natural scales in the kinesphere showed us the struggling of the body with outside obstacles such as matter, ... The natural scales of the dynamosphere lead us to the discovery of ... the inner struggle in the world of emotions...

Sometimes these [dynamospheric forms] and the outer kinespheric form have the same shape. We can speak of a transference of a shadow-form to the kinesphere or of a transference of an outer trace-form to the dynamosphere. (Laban, 1966, pp. 60-61)

SUMMARY

A review of 'script' methods in Laban's (1926) *Choreographie* highlights four principal features of movement analysis or studies of 'harmony' which had been embedded in the early "trial-scripts" at that time:

1. Directional signs were used in two ways, for indicating the orientation of body positions (points) or as orientations of lines of motion (vectors);
2. A system of motion analysis was presented based on the two contrasting tendencies of stability (3 dimensions) and mobility (8 diagonals) in interaction and yielding deflecting lines of motion in actual movement practice (24 inclinations).
3. Path signs revealed a conception of space as a continuity ranging from small gestures of the hand, to full body movement, to travelling across the floor. Direction and path signs apply indiscriminately throughout this spatial extent.
4. A theory for the affinities or "preferences" between space and dynamics is outlined providing the rationale for representing both of these with a shared set of direction signs and for the practice of space / effort transference.

NOTE

1. No obvious explanation is given for the 'c', and while it translates nicely into English, none of the German concepts used to describe arm positions begin with the letter 'c'. Laban (1926) frequently uses the prefix "gegen-" (against) usually translated here as "counter-" in concepts such as "counterdirection" (*Gegenrichtung*), "counterweight" (*Gegengewicht*), "counter-swing" (*Gegenschwung*), and others. The prefix "kontra-" appears less often and could be translated identically with *gegen*, however the difference is maintained here such as in "contradirection" (*Kontrarichtung*), or "contraposition" (*Kontraposition*).

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BRIDGING LMA AND KINETOGRAPHY MOVEMENT NOTATION AND BODY CONSTRUCTION

by

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With the support of Jacqueline Challet-Haas

I. Introduction

This paper is the result of the meeting of Jacqueline Challet-Haas, whose work on the movement notation field is well-known, and myself, CMA. Both of us were interested on enlargening our knowledge and experience on Laban's movement research. Our work together soon guided us to explore the common ground where the different domains of this research are rooted.

LMA guided me to notation. Labananalysis has been at the core of my professional life since 1978, when I became a member of the brazilian contemporary dance company called Actors and Dancers of Rio de Janeiro. This company was, and still is, directed by Regina Miranda, CMA. Artistic training and choreographic process were both deeply anchored on LMA/BF, what gave me the wonderful experience of apprehending them through a creative and artistic point of view.

The Certificate Program confirmed my commitment with this movement proposal. My advisor Peggy Hackney and the other faculty members have been since then, as movers and thinkers, a reference to my own practice.

My first approach to notation was done in this context. Some years later I was able to follow the notation program taught by Jacqueline Challet-Haas at the Conservatoire de Paris.

Jacqueline Challet-Haas met Irmgard Bartenieff for the first time in 1959, at the first gathering of Notation experts, initiated by Lisa Ullmann. Over the next ICKL meetings she could meet her again and confirm her interest on I. Bartenieff's work. Later at the OSU ICKL Conference in 1981, Peggy Hackney's lecture renewed her desire to experience Bartenieff's Fundamentals. When we met in 1998 at the Conservatoire of Dance and Music of Paris, Jacqueline Challet-Haas and myself began to thought about sharing our previous experiences. This project was materialized through the introduction of Labananalysis in her movement notation classes at the Conservatoire de Paris, and the notation of Bartenieff Fundamentals.

II. Common ground

Even if we can practice Labananalysis and movement notation as different domains, bridging and crossing them enlightens common thoughts about movement process: they show, as Bartenieff says, "how powerfully the notation is woven into the whole of Labananalysis"(1).

Some of the following aspects have already been pointed out as characteristics of Labananalysis (2). I would like to add that they also are at the basis of movement notation.

1- Movement is considered as a process of constant dynamic changes: movement is not seen as a position or a change of positions, but as a process. We can find an emphasis on the path, on the traceform, on the way movement appears, transforms itself, disappears, appears again.

2- Movement is composed of a configuration of elements that are in constant interplay. As Laban says, "To separate bodily functions (meaning anatomical and physiological) from spatial activity (meaning that which creates the shapes and lines in space) is in reality as impossible as to separate the mental and the emotional parts of movement from the space forms in which they become visible" (3). Labananalysis and notation will always consider bodily, spatial and expressive aspects of movement. The idea of interplay is central. It is certain that notation will focus on the question "What is the movement?" and that Labananalysis, through the Effort domain, will clarify the "how is movement done?"(4). But it is important to consider that "dramatic impact and expressive meaning of movements are sustained by the order in which the symbols appear (...) " and that the "symbols themselves (...) are direct representations of which part of the body does in space and time and with what kind of dynamic stress. The skilled notator can identify the rhythms and body-spatial tensions within the movements; these are keys to the expressive content" (5).

3- The focus is on human movement, not in style, and on its basic elements, their combination and sequencing. Because analysis is independent from style, it can explicit different movement styles.

4- Elements that allow transition and progression have a main role, as we can see when we deal with the weight transfer: it occupies a central place in the score, in Space Harmony, in Fundamentals.

5- To move, to observe, to imagine, to create, to notate, is an educational process and a real confrontation with your own movement and your personal path. If movement is change, the experience of movement changes.

III. The experience of bridging LMA and notation

Two experiences confirm the richness of crossing these domains. The first one is the introduction of LMA classes on the notation Certificate Program at the Conservatoire de Musique et Danse de Paris, and the second one is the notation of the Bartenieff Fundamentals.

1. Conservatoire de Musique et Danse de Paris

The Laban notation cursus was created within the Dance department of the Conservatoire National Supérieur de Musique et Danse de Paris in 1990. A similar one for Benesh notation was introduced in 1995. They are open to professional dancers or researchers with a solid dance background. The two first years cover the three levels of proficiency (elementary, intermediate and advanced). Another cycle of one or two years is offered to acquire a professional level as notator, reconstructor or teacher of Laban notation. Complementary courses in Labananalysis, kinesiology and music are included within the cursus.

Labananalysis classes (20 hours a year) were introduced in order to give the students, as far as possible, an approach of the various domains of Labananalysis. It is certainly possible to learn and practice movement notation at a high level without this knowledge, but it is illuminating to have even a minor approach.

In these LMA classes, I have been trying to create links, to facilitate transitions, to emphasize common aspects but also the specificity of each domain in the understanding and practice of movement.

Students are trained movers, with their own facilities and difficulties, affinities and non-affinities. In spite of their training, the experience with notation has definitely a sense of enhancing their movement performance.

The following aspects deserve to be noticed:

a- Independently of their major training dance style, students are opened to an active investigation of movement. The analysis inherent to notation was a real support for experiencing, improvising and phrasing during LMA classes. For example, to experiment different body parts in partnership was supported by horizontal bows and students could integrate them through very poetic improvisations. Another example was projection of body parts into space, when I could notice how students could easily "visit" a large spectrum of directions. Through LMA class, their personal spatial affinities, their "obscure zones", a spatial kinesthetic feeling was explored.

b- The learning process is a real face to face : is your whole body and its parts able to enter in motion? How do you transfer your weight? Are you orienting yourself in space? How is your mastery of time? Are you crystallized in one movement pattern? Have you a variety of choices when you move? How is your body/mind integration? These questions are certainly present when you follow a notation class. They are embodied in LMA classes, that will also bring experiences and elements concerning these fundamental issues.

c- Notation needs thinking about what is fundamental in a movement event and how it must be notated, in order to keep the score readable and “alive”. LMA classes follow this same idea and can help students enhance perception skills.

d- Spatial intent was richly invested by students. As Peggy Hackney says in her book “Making connections”, “having in mind a clear purpose or aim in space will lead to more efficient movement. (...) Spatial intent organizes the neuromuscular system” (6). An interplay of notation and LMA could easily be seen: symbols made directions be born, investing these directions made them alive.

e- Dynamics was also an interesting experience. There is no doubt that the different colors of symbols and the accent signs, combined with other aspects of a score, indicate dynamics. Nevertheless, exploring different qualities of movement gave the students an experiential support that gave them elements to invest the score differently. Looking for dynamics through a score after improvising on movement qualities is then facilitated.

f- Shape variations are also indicated in a score simply through the succession of symbols, but once again focusing in these variations can clarify and give a support to notation.

There is a remarkable difference in movement awareness and performance between the first and the second year of notation classes. This difference comes certainly from living notation and letting it pass through the body. LMA classes certainly contribute to this process, but I would like to stress that notation itself guides students through their own body in motion.

2. Notating Bartenieff Fundamentals

The project of notating Bartenieff Fundamentals, first evoked in 1999, was materialized only in 2005 through the publication of “Les exercices fondamentaux d'Irmgard Bartenieff” by the Centre National d'Ecriture du Mouvement (7).

Notating Bartenieff Fundamentals came together with experiencing them. "Recording should reflect movement experience itself as in Laban's initial conception" (8). It is important to notice that every notational decision was preceded by the performance of the exercise.

An important challenge was to choose what should be expressed by symbols, what should be expressed by verbal language and what should be left to the individual experience of the reader. We decided to offer a notation as simple as possible trying to choose the necessary details illuminating the essential features of each exercise. Each exercise needs an internal preparation and is also grounded on personal perception and sensation. These layers do not belong to the notation domain, but they have to be kept in mind if the score intends to guide movement exploration. Only the interplay between notation and experience could answer this questioning.

Body/space orientation was another important issue. The role of spatial intent on body organization, the creation of space through body orientation showed to what extent they belong to each other.

Fundamental questions as "From where do you come from?" "Where are you going to?" "Where and what is you facing?" were always pronounced in search of some clarity of paths, transitions, transfer of weight. This fundamental conjunction of bodily and spatial awareness was differently stressed in the notation: depending of the aim of the exercise, it seemed more appropriate to stress one or the other element, even if both were always present.

Bartenieff reported that Laban considered her as the person who would develop the body perspective of Space Harmony. In her book, the appendix concerning Fundamentals begins with a quotation from Laban: 'Don't think of back bending but think "your head leads into backward arc towards the floor...!"' The choice of this quotation confirms that I. Bartenieff considers the body/space conjunction as fundamental and that spatial intent plays a main role in movement.

Conclusion

Bridging Labananalysis, Bartenieff Fundamentals and kinetography has been a rich and deep experience. They bring to each other new lights and challenges, for each domain has its own goals and develops an aspect of movement experience. Having in mind the idea of interplay, already present in each domain, seems important not only to have a general view of Laban's thoughts on movement, but to allow Effort, Shape, Body, Space and Notation to dialogue and open different doors to a multiple, plastic, adaptable movement experience.

Notes:

- (1) Bartenieff, I. with Dori Lewis, *Body Movement – Coping with the environment*, 1980, Gordon and Breach Science Publishers, New York, p. 16.
- (2) Cf. Moore, Carol-Lynne and Kaoru Yamamoto, *Beyond Words – movement observation and analysis*, 1988, Gordon and Breach Science Publishers, Pennsylvania, chapter nine. Cf. also Groff, Ed, *Laban Movement Analysis: an historical, philosophical and theoretical perspective*, 1990, unpublised thesis.
- (3) Laban, Rudolf, *The language of movement – a guidebook to Choreutics*, Plays, Inc., 1974, pp. 48-49.
- (4) Bartenieff, I., *op. cit.*, p. 224.
- (5) Bartenieff, I., *op. cit.*, p. 218.
- (6) Hackney, Peggy, *Making Connections – Total Body Integration through Bartenieff Fundamentals*, 1998, Gordon and Breach Publishers, Amsterdam, p. 242.
- (7) Challet-Haas, Jacqueline, and Loureiro de Souza, Angela, *Les exercices fondamentaux d'Irmgard Bartenieff, Bartenieff Fundamentals*, 2005, CNEM, Crépy en Valois.
- (8) Bartenieff, I., *op. cit.*, p. 218.

Scale Monologues
Laban's Space/Harmony Theories as applied to actor training.
By
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What is Movement for the Actor?

The specialized field of movement for the actor instructor is a recent phenomenon. In the early part of the 20th Century movement ideas were incorporated into acting techniques. There was no specialist coaching actors to enliven their bodies. Over the course of time, as more realistic acting styles developed (partially due to the development of film), the connection to physicalization was diminished. Because of the ability of a camera to zoom in on an actor's face, the relationship between physicality and character was not emphasized. This lack of attention to the body even carried over to stage acting, focusing on naturalistic movement and emotional recall. However, over the last 15 years the need to reconnect to the body has become apparent, with movement instruction becoming a specialized addition to actor training.

What does a movement for the actor instructor teach? Some movement teachers see actor movement training as physical conditioning and awareness. These movement teachers tend to use Yoga, dance technique, Pilates, or some form of martial art as the main curriculum. Some see movement training as connecting the physical and the emotional, or the body to the mind. Some disciplines, which focus on this idea, are Chekhov, Suzuki, and Viewpoints. However, these techniques are limited in that they only focus on a single aspect of movement, i.e. gesture, or quality of movement. They do not focus on movement as a whole. I see the use of Laban Movement Analysis (LMA) in movement training as a way to address both needs of physical conditioning and awareness, examining movement as a whole, plus developing and enlivening the connection between the physical and the emotional.

As a movement for the actor teacher for 12 years, I understand my job to be as follows:

1. To help the actor understand their own movement personality and choices.
 - a. Including physical coordination, movement habits, postures and gestures.
2. To help the actor understand how to change or adapt their physicality to portray a character.
 - a. Including physical coordination, movement habits, and postures and gestures.

At a recent gathering of USA movement teachers at the Southeastern Theatre Conference, in Greensboro, NC, the job of the movement teacher was defined as follows:

1. Train actors for Partnering and Physical Listening.
2. Build Ensemble and provide physical Warm-ups
3. Help actors to enliven stillness
4. Develop physical impulse
5. Physicalization of Inner Life

6. State of Readiness/Tone/Availability

All of the above are a necessary part of movement training. However, the main goal must be to train actors who can physicalize the inner life of any character. For through this process the actor comes to an understanding of actual physicality and coordination, as well as an awareness of physical expression. Such a process allows the actor to literally *embody* the character.

In Choreutics, Laban states, “We should never forget that every gesture and action of our body is a deeply rooted mystery and not a mere outward function or trick...” (Fifth fact of space-movement, p. 54). He goes on to state in the Sixth fact of space-movement,

The manifestations of our inner being become evident in almost invisible shadow-forms, giving more emotional colour than spatial form. These often occur in very small expressive movements of the face, hands and other parts of the body.¹

Thus, according to Laban every individual posture and gesture has meaning and significance. No movement is random; all of our rhythms, gestures and physical nuances are connected to our inner being, impulse, desires and needs. This is the physicalization of the inner life. This inner and outer awareness is vital for all individuals who are seeking to improve their communication skills and expressivity. But it is absolutely crucial for an actor to develop this awareness and ability to embody a character from the inside out. Such an embodiment creates a three-dimensional character, a character with depth and honesty of intention and action.

Why Space?

Of all the aspects of BESS (Body, Effort, Shape and Space), Space is often the least understood and most difficult to apply. It is very clear why an actor would need to study elements of the Body, Effort, and how the body Shapes itself in Space. But why would it be important for an actor to have an understanding of Space? Dimensions? Planes? Diagonals? Spatial Pathways and Tension? Polyhedra? Scales? Because in Laban’s own words: “*Where does the impulse of motion lead? – Into space.*” (Modern Educational Dance, p. 27).

“Empty space does not exist.” (Choreutics, p. 3) All of our small movement ticks, habitual as well as function postures and gestures, plus over all body attitudes exist in space.

“All bending, turning and elevation of the body, the instrument of motion, is filled with dynamism, integrating the two elements, shadow and light.”²

Through studying all aspects of Space, the actor experiences the integration of shadow and light through BESS, discovering their own movement capabilities and habits as well as the movement capabilities and habits of any character they will ever portray.

Working with Space enlivens the actor’s whole body in a very informed and meaningful way. The actor is provided with concrete tools, which can take her from thought and

intention to actual meaningful movement, connecting the inner impulse to the outward movement.

Often actors don't even know where to begin to create the physical life of a character. Even worse, they receive comments from acting coaches such as, "Your body is not alive," "You're acting from the neck up," "You're not connected to your body." These comments are very vague and provide no specific direction for the actor. With study of all of the aspects of Space, the actor has a practical, specific and realistic process to create the physical life of the character. With an understanding of Dimensions, Planes, Diagonals, Spatial Pathways and Tensions, Polyhedra and Scales, the significance of small gestures and postures becomes apparent and the actor has resources to discover the movement connection to the inner life of the character.

Through the study of Space and BESS in general actors make amazing discoveries about movement and character. One student in particular expressed, *"Physically, I discover something new every day."* Another expressed, *"Finding the movement this way has led me to more discoveries in my monologue...it sometimes surprises you with what comes out."*

In response to a question about using Scales to discover and/or physicalize a character's inner life, student Sarah Fineout states, "The process of her movement is ingrained. I have a sense of her movement within me," "Studying Space breaks me out of my shell and forces me to explore possibilities I would otherwise never would have explored." "It helps me to get the character inside of my body."

The Process.

By the time the acting students reach this stage of study it is important that they have a solid understanding of the nature of LMA itself and how to apply Body, Effort and Shape concepts. It must be stressed here that the goal is not to train CMA's, but to develop actors with a deep knowledge of the body and its relationship to expressivity and communication. It is not extremely important for the actor to memorize every concept, or be proficient at creating action profiles. What is important is for the actors to have a physical understanding of all the concepts, to know how the actual physical application of Body, Effort and Shape elements affect the outer body and also inner attitude. It is the physical experience, which informs the actor and helps them to connect the mind to the body and emotional life.

The first step in exploring Space is to acknowledge it. To realize that there is no such thing as empty space. The actors are encouraged to explore the room, notice the walls, corners, and any object (chair, pole, book bag, person) that displaces empty space. Then they are asked to notice how their own bodies displace the air. How do their gestures, movements and various postures disturb the empty space around them? The class is exploring the idea that "Space is a hidden feature of movement and movement is a visible aspect of Space." (Choreutics, p. 4)

The next step is to explore gestures and postures through Spatial Pathways and Spatial Tension. The basic exploration requires the students to choose 3-4 simple gestures and repeat them in a specific, memorized order, creating a form, or mini-scale. They are asked to repeat this scale trying different pathways through space and different tensions in the body. How do these different pathways and tensions change your inner being, thoughts and attitude? How do *you* change when you change the way the gestures are performed?

Through this process the actor has already created and performed a Space Scale, but they aren't even aware of it.

The next step is to get very specific about Space. The class explores the definitions of Dimension, Plane and Diagonal. What is the nature of these different aspects of Space? How does moving in a Dimension differ from moving within a Plane or on a Diagonal? What personality types do the movements bring up? Again, how does shifting from one to another change your inner being, thoughts and attitude? This exploration also includes the concept of Spatial pulls, and how different Spatial pulls actually pull the body into a Dimension, Plane or Diagonal.

From here the actor is ready to learn the basic scales, Dimensional, Cube and A Scale. The actor explores the character of each scale by creating a Scale Story. The story is created improvisationally while moving through the scale. The actor is directed to take note of the internal physicalization of moving from one part of the scale to the next. What does each pathway bring up inside of you and what does each spatial point bring you to? The actors are encouraged to connect the intent of the line with the intent of the movement through Space and points in Space.

Through this process the actor instantly creates a story that reflects the personality or character of the scale as they experience it in their bodies, thus connecting outer movement to inner impulse and attitude. The actors also explore the scales with various body parts, from the eyes to the nose, to the knee, to the ear, etc. Using these various body parts, the scale is performed in the Kinesphere and the Dynamisphere.

Scale Monologues.

“Forms are closely connected with movement. Each movement has its form, and forms are simultaneously created with and through movement.” (*Choreutics*, P. 3)³

Space has meaning. And as illustrated through the basic scales, Dimensional, Cube and A, there is a harmonic relationship with the architecture and basic movement of the body, quality of movement and expression. Literally, every scale has a specific personality and is a character as expressed through the person moving through Space. But as we know, there are many sides and facets to a personality. If personality has only one dimension, we think of that person as flat, or uninteresting. The same is true in acting. All characters have multi-faceted personalities. Therefore, it is important to

develop rich characters with multiple layers; a term that is often heard in the acting world is 3 dimensional.

I find it ironic that acting world so casually uses this reference to Space. A “3 Dimensional” character is a metaphor for a character that has depth and complexity. But as a student of Laban, I believe this term is more than just a metaphor. A “3 Dimensional” character is one that is expressed accessing all aspects of Space, one that connects to different pathways and points in Space, as needed for expression, in a certain moment in time, in accordance with the character’s core personality. Thus, even though a certain person or a certain character may have an inclination to be more stable and be comfortable in the Dimensional Scale, that same person or character may have traits or need of expression that are more mobile and are better expressed through the Cube.

In creating Scale Monologues the actors are instructed to stay true to impulse. The process is very improvisational. Remembering that the students have had extensive exposure to Body, Effort and Shape work, the first step is to just *move the monologue*. Through their work with BES, the students have a foundation in exploring text through movement. They have been required to allow text and impulse to move them into extremes that they would never perform on stage. This process is the Movement Template Monologue, and they have used it to explore Body, Effort and Shape. Thus, beginning with *moving the monologue* through BES, they are making almost dance-like movement choices, taking them out of the “realistic” realm of acting.

The next step in the process is to solidify the improvisation. This requires identifying the choices that are being made repeatedly and allowing those choices to come into the conscious, rather than the unconscious. The actor is required to notice what body parts seem to have the most importance in the choices, what Efforts are coming up, how is the body Shaping itself and what type of pathways and Spatial Tensions are being used.

The final step in the process is to acknowledge where the impulses are going in Space, and the precise Spatial points the impulses are leading to. The actor then enlivens the pathway and really goes to the extreme of the Spatial choice, whether it’s with an arm, a hip, the head or an elbow. I ask the actors, *Where is the line taking you? Why? And how does enlivening the Spatial choice inform the character?* In this process the actors create a Scale, specific to the character in the moment and time of the monologue. These Scale Monologues include any pathway and any point in Space from any Polyhedra and change from right to left. What makes them “correct” or “true”, is if the intent of the character in the moment is connected to the intention in Space.

At this point, the actor experiments with the Scale within the Dynamisphere, making the Scale as large as possible to enliven the body and exaggerate the inner and outer connection. The actor is also asked to allow the movement to inform the voice, letting the quality of the body be reflected in the quality of the voice. A realistic performance, in terms of movement and sound is not expected. The actor plays with this experience and gradually turns the volume down on their exaggerated choices.

The final step of the process is to perform the Scale Monologue in a diminished manner. This performance is “realistic”, but the Scale is still being executed at the actor’s core; literally in their muscle memory, guts and sinew. The memory of the large Scale is alive and activated through very subtle movement, allowing the Scale to inform the character, leading to a truly 3 Dimensional Character, literally and metaphorically.

Sarah Fineout’s Scale Monologue (PG-13)

Once again, it is important to remember that the objective here is *not* to train CMA’s, dancers or supreme athletes. The objective is to train actors who have a skillful use of their bodies and are able to make a connection between movement and meaning as that relates to personal expression, of self and/or character. The final step in this training is to really connect the inner to the outer; inner expression and impulse to outer expression in Space. This process literally examines how the exterior surfaces of the body displace air/space, resulting in physical expression. This brings me back to Laban’s theories of movement and form and the significance of Space. The Sixth fact of space-movement:

“The manifestations of our inner being become evident in almost invisible shadow-forms, giving more emotional colour than spatial form. These often occur in very small expressive movements of the face, hands and other parts of the body. They have, nevertheless, a spatial architecture, which can be controlled and investigated.”⁴

The following discussion will focus on acting student Sarah Fineout applying the previously described process. For the purposes of this paper Ms. Fineout created a full scale and an abbreviated Scale Monologue, using only a portion of the monologue. The scale written below is representative of the abbreviated scale performed in Ms. Fineout’s Dynamisphere.



(Right Side High, Place Low, Forward Low, Place Middle, Back Low, Place Middle, Right Side Low, Place Middle, Left Side Low, Place Middle, Right Forward Low, Left Back High, Place Low)

Ms. Fineout’s scale uses various body parts, spatial points and changes from right to left.

The right shoulder initiates her first point, Right Side High. In the line, “*So I started dating this guard dog trainer...*” there is an intention of Light Weight that might be expected with the idea of a new love, and the choice of the shoulder as the leading body

part definitely adds a sense of Narrowing and Widening that comes when one is slightly embarrassed or shy when telling a personal story.

Her next choice is Place Low; lead by her fists on the line *“was a Vietnam Vet”*. Her choice of Space and body part definitely relate to the idea of war as she utilizes Strong Weight.

It is interesting to note that in the heart of the scale, Place Middle serves as a transition. Logically, because these scales allow the mover to change from Polyhedra to Polyhedra, it makes sense that Place Middle would serve as a necessary Spatial Transition. Literally, it is very difficult to instantly move from a point in the Cube to a point in the Icosahedron, and in many ways such a shift does not make sense in the body. But returning to Place Middle, *home base* as it were, allows for the use different Polyhedral points. I think this choice also serves the actor and the character. As the actor portraying the character travels through the journey of the monologue, each line expresses another step in the journey. The journey requires a plethora of expressive choices and Place Middle serves as a grounding point, and allows the actor/character to find their next spatial choice in accordance with the moment in time. Literally, Place Middle allows the actor/character a chance to come to neutral, and then follow a new intention as related to the next point in the story.

As Ms. Fineout travels through Forward Low, Place Middle and Back Low on the lines *“Real nice and reserved”*, the instability of the Forward and Back pulls reveals the instability of this new relationship, and the Strong Weight demonstrates the character’s determination and ground. Instead of remaining Light and dreamy, the character has experience in matters of the heart, and has a realistic sense of the weight of love.

The next part of the journey takes us through the lines *“Met him out to the fair grounds at the fish and game show”* moving through Right Side High on the right side of the body, and Left Side High on the left. In this part of the Scale, Ms. Fineout is utilizing the whole right and left sides of her body. The Light Weight and Indirect Space give the character a sense of listing. She is calm and easy in the moment reminiscing about how she met her lover. There is an attention to Free Flow in this section.

In the last part of the Scale Ms. Fineout moves from Wring to Dab in a traditional manner and ends with Place Low. This spatial intention is related to the lines *“He had forearms as big as my waist; wore a shoulder holster too. Even in bed.”* The Spatial choices here relate to the physicality of the lines. An image of a man with large forearms brings up the ideas of strength and sexuality, thus leading to the Strength in Wring, and the sensuality of Indirect Space coupled with Sustained Time. The choice of Dab relates to the character’s attitude toward the “shoulder holster”. She is impressed and a little aroused by the idea of a man with a weapon. This is a playful moment. The final line of *“Even in bed”* is connected to Place Low, demonstrating a moment of stability in the life of the character before the chaos begins.

Ms. Fineout’s scale does go on for the entire length of the monologue leading with various body parts ranging from the right hip, to the head, shoulders, and the forehead.

Each of these choices originates from the physical impulse generated by the text. Literally, where in the body the physical memory/impulse lies.

In a comparison of Ms. Fineout's full Scale to the realistic performance of her monologue, the internal memory of the Scale remains. This is especially clear in the Wring moment near the beginning of the monologue, as well as a series of playful Flicks. In the "dream" section of the monologue there is also a clear connection between the Scale Monologue and the realistic performance. The intention toward Space is used to bring the dream alive and recreate the experience in the present moment.

This process is very helpful to the actor and has many applications. The obvious application is related to the audition monologue. Working with a one – three minute text an actor can dig in and create a Scale, which brings insight and meaningful physicality. In applying the above process to audition monologues students have reported the following:

"I feel like there is a complete environment around me when I do the realistic performance."

In reference to the Scale points while performing the realistic monologue, the next student has this experience:

"It was almost as if they were underneath the surface of my skin, trying to bulge out in many different directions!"

And finally:

"I think that, above all, the most important discovery that I've made through this process and with this specific piece is that the comedic elements of the piece come through in the sincerity of the character, and I think that I have been able to truly find the sincerity of the character through his movement. ...has opened up an endless amount of movement for the character that I can pull from in order to create the most unique character that I can while still remaining honest and sincere."

A less obvious, but very useful application is applying this process to the text of an entire play. Clearly, creating such a scale would be an overwhelming and tedious task. However, an actor can create a composite scale, one that comes from the character's pivotal moment or moments. The actor can chose the crucial text and create a representative monologue that embodies the character's journey through the course of the play. Creating a scale from this text is not as daunting and serves the actor well, providing the actor with a very practical physical warm-up before each run of the play, literally helping the actor get inside the character's body. As Ms. Fineout describes the benefits of the scale process, "[This work allows me to] decipher characteristic movement – physicality that is based on [their] psyche."

Conclusion.

Ninth fact of space-movement;

Movement is man's magic mirror, reflecting and creating the inner life in and by visible trace-forms, and also reflecting and creating the visible trace-forms in and by the inner life.⁵

Overall, working with Space has many benefits for actors. The obvious physical benefits are increasing range of motion, developing physical endurance for the stage, developing inner connectedness that allows the mover to execute the scales successfully, and a sense of the interplay between the physicality of Stability and Mobility.

It is especially important to address the benefit of range of motion. As stated previously, actors are often told that they are acting "from the neck up", a talking head as it were. Even actors, who do utilize their body, often don't engage the lower body. Working with Scales enlivens the actor's lower body and informs the actor of physical choices that come from the core. It is then a very small step for the actor to experience how Scale choices made in the low level can be embodied in a realistic performance, that engages the whole body, through the use of the lower body.

Other benefits of Space work include increasing the physical palette. Working with Scales impresses upon the actors that Space has meaning! The actor's experience of the Space around them is enlivened and this awareness helps the actor to make *specific* movement choices. Understanding Space allows the actor to know exactly where they are in Space and how that connects to the inner impulse. Through Space work, actors come alive with meaningful bodies, the inner impulse and outer gesture are connected through sinew and kinesthetic memory. The outer posture and gesture are truly connected to motivation, objective and inner life.

Applying the study of Space to actor movement training accomplishes the main goals of the movement instructor. The actor comes to understand their own movement personality and choices, discovering their physical strengths and weaknesses as well as habitual postures and gestures. Through this work the actor really begins to understand how the essence of their own being is expressed in their body; the physicalization of their inner life. When applied to exploring a character, the work provides the same insights, allowing the actor to portray the character from the inside/out. In essence, discovering the physical nature of the character's psyche and physicalizing the character's inner life.

In studying Space and BESS as a whole, I believe one of my students expressed precisely and succinctly:

"When I find a movement for a character, it affects my voice, my emotional connection, my speech patterns...it basically affects everything."

Notes

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- ¹ Laban, Rudolph, *The Language of Movement, A guidebook to Choreutics*, (Macdonald and Evans Ltd., Great Britain, 1976), 66.
- ² Laban, *Choreutics*, 100.
- ³ Laban, *Choreutics*, 3.
- ⁴ Laban, *Choreutics*, 66.
- ⁵ Laban, *Choreutics*, 100.

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GERTRUD BODENWIESER'S *THE DEMON MACHINE* (1923)

workshop: reading session and presentation

by

Karen Mozingo

Many college dance curriculums have grown over the last twenty years to include emphases on non-western dance traditions in order to prepare students for an increasingly globalized world. While new courses in non-western dance history and technique have been added to curriculum requirements, dance history courses often focus mostly on the modern traditions of American dance pioneers Martha Graham, Doris Humphrey, Charles Weidman, and Hanya Holm, and European pioneers Rudolf Laban and Mary Wigman. Yet modern dance sprang out of a wave of globalization that began as early as the late nineteenth century and included a diverse spectrum of aesthetics, including the work of dancers who emigrated from Germany and other European countries during World War II.

This reading session of excerpts from Gertrud Bodenwieser's 1923 dance, *The Demon Machine*, represents a small part of a project that I began as part of the Teacher Certification Program at the Dance Notation Bureau for Extension and Research in the Summer of 2004. As my final project, I designed a course that investigates the influence of emigrant female modern dancers who fled Germany between the years 1933-1939, and who contributed diverse artistic perspectives that can still be found in modern dance traditions around the world. While the course is limited to emigrant German dancers, it is intended to encourage students to study other Western dancers and choreographers whose work may have disappeared from the dance history curriculum and to recover the influence of the multiple dance perspectives found within the western modern dance tradition. By giving students a deeper understanding of the diversity of western dance forms, I hope to increase their interest in and respect for what has always been an international, multicultural dance world.

This course is a five-credit upper-level undergraduate/graduate dance history seminar designed for a 10-week quarter. With the generous support of both the theatre and dance faculty at The Ohio State University, I had the opportunity to teach a pilot version of the course during the first term of the 2005 summer quarter. Eleven students enrolled. Ten students were theatre majors and one student was a dance major. Two were graduate MFA students, and nine were upper-level undergraduates completing their B.A. in the areas of acting or technical theatre (lighting, design, etc.). None had completed any previous studies of Labanotation. The course met four days per week for two hours each day over a five week period. The first hour of each class was devoted to video showings and discussion, and the second hour was devoted to learning Elementary Labanotation concepts through reading excerpts from the notated scores of exiled

women dancers. Some Intermediate Labanotation concepts were also introduced when demanded by the scores.

Although it is difficult to account for the number of exiled German dancers during World War II, the official statistics show that 132 out of 5,122 dancers, choreographers, and dance educators lost their professional positions due to the April Laws of 1933, which expelled Jews from civil, governmental, educational, legal and medical professions. Many found work with private ensembles and organizations, while others found work with the dance ensemble of the Jüdisches Kulturbundes Deutschland. According to the research included in the *Handbuch der deutschsprachigen Emigration* (1998), at least 120, probably more, dancers emigrated. The majority were Jewish, and a small number were politically engaged, leftist dancers.

The dancers who left Germany were instrumental in the development of modern dance in Germany and abroad. Many had already begun successful careers in Germany before 1933, and they continued their contributions to the dance profession in their countries of exile. In spite of the significance of their work, exiled dancers have been overlooked in both exile and dance research. In the dance literature, German dancers who remained in Germany and had affiliations with the culture program of the Third Reich overshadowed the histories of emigrant dancers. In many cases, their work was better documented, and their affiliations with National Socialism created controversies that reverberated throughout the international dance community, generating more publicity and scholarship (Guilbert-Deguine 1998, 1111).ⁱ For many emigrants, materials documenting their work (reviews, letters, photos, etc.) were lost, destroyed, or scattered throughout Europe and abroad. Many dancers, especially female dancers, did not leave behind journals, memoirs, or books documenting their years in exile (Hoffman 1993, 45). Of the dancers who emigrated, the most well-known are men like Kurt Jooss, Sigurd Leeder, and Rudolf von Laban (45).ⁱⁱ

In addition to uncovering the history and dance works of exiled women dancers, this course seeks to introduce students to an integrated research approach that combines traditional historical methodologies with contemporary theory and Labanotation. In the past twenty years, many of the historical methodologies for studying performance have been developed within the fields of theatre, feminist, and cultural studies. One of the problems for scholars applying these methodologies to the study of dance is the tendency of these approaches to focus heavily on textual material and speech. Similarly, many courses for dance scholars center around anthropological and visual perspectives with less focus on textual approaches. In order to provide dance scholars and artists with a wide base of research skills for studying dance performance, more courses combining visual, textual, choreographic and performance methodologies to prepare students for historical and creative research are needed. As Susan Foster argues:

Like performativity, choreography consists in sets of norms and conventions; yet unlike performativity, choreography encompasses corporeal as well as verbal

articulateness. Choreography therefore serves as a useful intervention into discussions of materiality and body by focusing on the unspoken, on the bodily gestures and movements that, along with speech, construct ...identity. Choreography also focuses attention on the interrelationality of various sets of codes and conventions through which identity is represented. (Foster 2001, 4-5)

Labanotation is one approach that allows dance scholars to study historical dances and choreographers from multiple perspectives. By studying the notated scores of dance works, scholars are better able to understand the way choreographers represent their artistic visions and how those representations are affected by issues of history and culture. For a population of students who are predominantly kinesthetic learners, a multi-sensory approach to dance history is integral to educating a group of dancers who value and respect the traditions of their own art form. Labanotation is especially relevant to the study of *Ausdruckstanz* because of its beginnings in Germany during the 1920s and '30s. It is also integral to the study of exiled dancers, since many of the dancers who went into exile during World War II had studied with Laban or were connected to him in some way. For this course, the connection that exiled dancers Lisa Ullmann and Erika Milée had to Laban's theories and teachings are evident throughout their professional lives. For the works of many exiled dancers, labanotated scores are some of the few documents remaining, making them valuable resources for dance history scholars and students and living artistic remnants of lives otherwise lost to the dance community.

It is my hope that this course will serve to broaden the research skills available to dance scholars, artists and educators, and that it will encourage collaboration among the diversely gifted professionals within the dance community. I also hope that it will bring the body of work created by exiled women dancers into the dance curriculum and enrich our understanding of the international phenomenon of modern dance.

Gertrud Bodenwieser (1890-1982) began her career as a dancer, choreographer, and dance teacher in Vienna in 1919. She became the first female professor of choreography at the Vienna State Academy, before emigrating to Australia just before the 1938 German annexation of Austria. Her work was rooted in a combination of *Ausdruckstanz*, ballet, and theater, emphasizing curvilinear movements, deep torso arches, ecstatic turns and leaps. Beyond technique, Bodenwieser's hope for dance was "to have fought in the great revolution of freeing the human mind [and] to have lifted up a great art and placed it on the pedestal of ethics where it should stand."¹ Bodenwieser's commitment to dances that responded to the events of her time are reflected in her many dance dramas, including *The Masks of Lucifer*, *The Pilgrimage of Truth*, and *The Demon Machine*. Choreographed in 1923, between the wars and before Bodenwieser's emigration, *The Demon Machine* explored the "frightening aspects of

¹ *The New Dance* by Gertrud Bodenwieser, edited by Marie Cuckson. Private edition. Rondon Studios, Vacluse, NSW Australia, p. 98.



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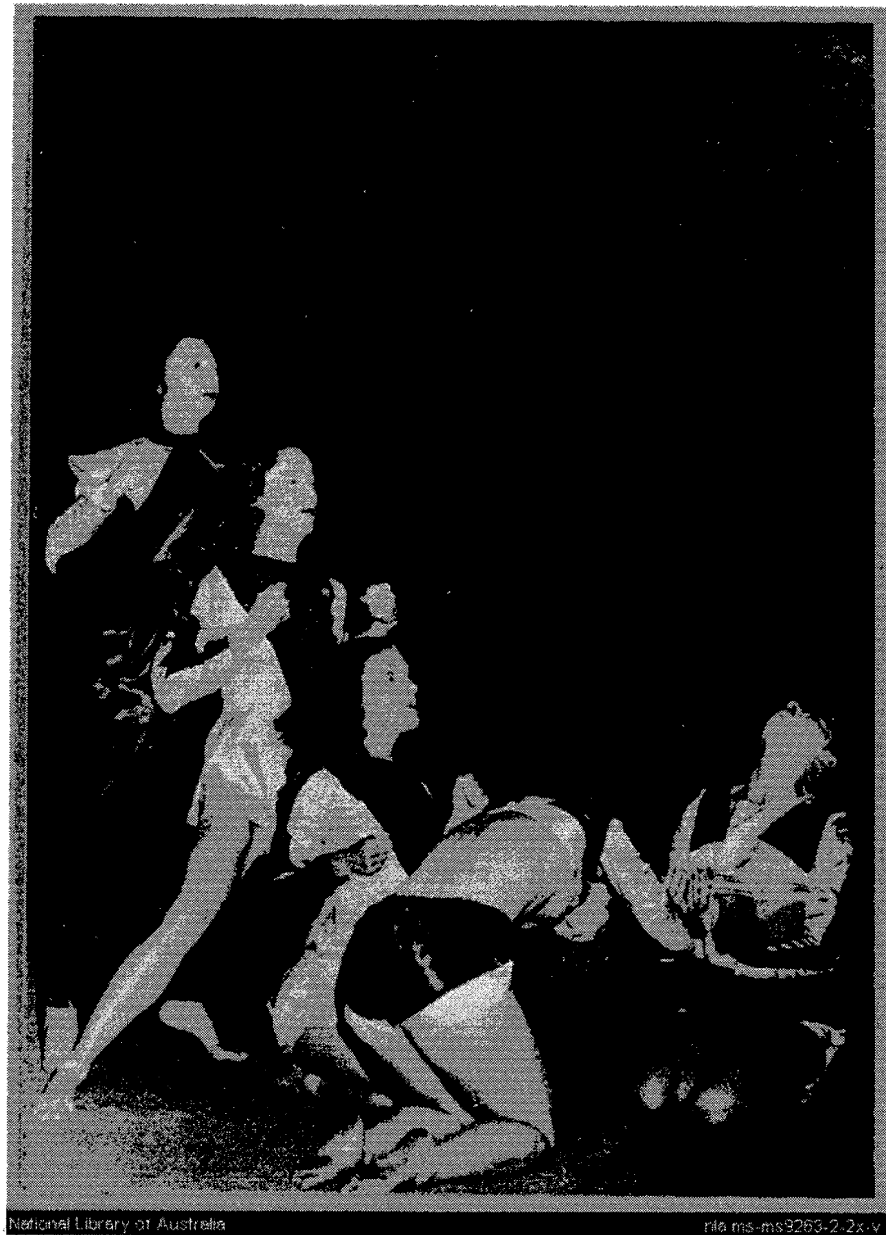
mechanization, with the dangerous effects it could have on humanity”² and won first prize at the Florence International Concours in 1931. By focusing on *The Demon Machine*, this presentation will explore Bodenwieser’s early themes of the machine and power through examples from the notated score and discuss how experiencing the embodiment of her work can contribute to a broader understanding of dance history.

Gertrud Bodenwieser’s *Dämon Maschine* was begun in Austria in 1923 with a small group of dancers and premiered in 1924. Born in Vienna in 1890, Bodenwieser was the child of wealthy parents, was raised by governesses, and was well-educated. She was greatly influenced by the artists who lived in or visited Vienna, artists like Frank Wedekind, Stefan Zweig, Thomas Mann, Max Reinhardt, Oscar Kokoschka and others (MacTavish 2-4). Having studied ballet, *Ausdruckstanz*, and other movement forms, she became the first female professor of choreography at the Vienna State Academy, before emigrating to Australia just before the 1938 German annexation of Austria.

Dämon Maschine was the second part of a longer work entitled *Gewalten des Lebens* (1924). The entire work consisted of four parts, but *Dämon Maschine* became so popular that it was often performed by itself, out of its dramaturgical context. My study of the dance has included the notated score of the dance, a videotaped reconstruction of the dance from its notated score, photographs of the dance, and descriptions from former Bodenwieser dancers.ⁱⁱⁱ The *Dämon Maschine* section begins with four dancers at the edges of the stage in different poses of sitting or standing and the fifth dancer, who represents the demon spirit of the machine standing upstage center. The dancers open the dance with flowing, peaceful movements oriented upward, and the naturalness of the dance is reflected in the $\frac{3}{4}$ meter of the music. Tensions build in the dancers’ movements and relations to one another as the machine’s spirit begins to pull them closer. The dancers are pulled toward the demon and counteract its force by pulling in opposite directions. As the demon’s strength wins, the dancers are pulled toward the center of the stage, where they form a constellation around the demon. As the music changes to a militaristic 4/4 meter, the dancers become parts of the machine. They pound, push, pull, kick, stand lie, interlock limbs and move like pistons, gears, and levers. At first the dancers resist the demon by attempting to return to their earlier fluid movements, but the insistent movement and the strength of the demon overcome them.

Like the girls in *Anmut der Mädchen*, Bodenwieser’s dancers become parts of a larger machine; however, Bodenwieser’s dance does not require the dancers to perform identical movements. Each dancer forms as different part of the machine, and in order to make the machine function, each dancer must do her part. Unlike the Olympic spectacle, Bodenwieser’s representation of the machine does not demand sameness. The importance of individuality is reflected in her dance

² “A Dancer Speaks” by Hede Juer in *Gertrud Bodenwieser and Vienna’s Contribution to Ausdruckstanz*, edited by Bettina Vernon-Warren and Charles Warren.



philosophy: "Since the idea of using minor dancers only to form a symmetrical pattern in the background has been given up, and the corps de ballet gave way to individuals taking a living part in the action. . . the type of a well-trained automaton has no place any longer on the contemporary dance-stage" (Bodenwieser 90). Because of the architectural structure of Bodenwieser's dance machine, each dancer's part is different and irreplaceable.

Bodenwieser's image of the machine is inextricably connected to gender, in that all of the dancers, including the demon, are women. The dancers are clothed in lavender and black long-sleeved blouses that bare their midriffs and short boy shorts that emphasize their legs, especially for the two dancers who spend part of the dance perched on their shoulders with their legs in the air to form levers of the machine. The demon is dressed in a black bodysuit and wears a swim-like cap with a lightening bolt on her forehead. In one photo, she wears a blouse and shorts like the other dancers. The femininity of Bodenwieser's dancers is not hidden, but is actually accentuated by the costumes and the movements they perform in the dance. Most of the dancers have long hair and wear it loose, so that when they arch their backs, their movements are accentuated by their flinging hair:

Bodenwieser chose not only good dancers but also beautiful ones for her company. She was also careful to choose a good selection of blondes and brunettes, and red heads too if they were around. If the blonde dancers became a little mousey, they were asked to bleach their hair blonde again. Great stress was given to the hair, as in Frau Gerty's work, the long sweeping hair became in her gifted hands yet another limb! (MacTavish 65)

Within the context of the Bodenwieser's larger work, *Dämon Maschine's* mimetic strategy disrupts patriarchal mimesis in a different way. In the first section, *Ein Wesen*, two female dancers (called He and She) dance intimately around each other as the rhythms of life urge them toward union and the ecstatic abyss (Toepfer 267). The second section is the *Dämon Maschine*. In the third section, *The Golden Calf*, two dancers form a single body—an idol with four arms, a crown, and a golden aura. Five Corybants dance lustfully around the idol; they move in a frenzied state of ecstasy until they collapse. In the last section, downcast women wander across the stage in columns. A priestess walks through the group as a symbol of reason and good. Although Bodenwieser names the couple in the first section He and She, both parts are danced by women, so that the demon machine of the second section interrupts the connection between the two women. The images in the dance are of connections and intertwinings of women's bodies until interrupted by the symbol of the demon machine. In a critic's review of Bodenwieser's later machine dance, *Strömung und Geströmung* (1928), a spectator noticed similar themes: "With shining eyes, girls wander happily in pairs. Demonic mechanization emerges. Sucks them into its black-red song. Compels them to convulsive gliding, stamping and swinging, to pushing and shoving" (MacTavish 37). By making the position of women caught

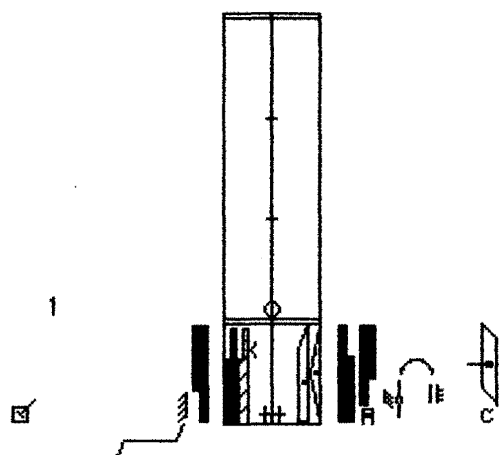


within the machine of society visible through mimetic strategies, Bodenwieser also creates a space in her longer dances for theatricalizing how the patriarchal machine works. In both dances the demon machine separates women and attempts to prevent their mimicry of a couple. By mimicking women imitating a couple, Bodenwieser's choreography again creates a possibility for women to reflect their own truth by mimicking the patriarchal "real." She creates a space where women not only resist the restrictions of mimesis but also resist the restrictions of gender and sexual roles within the machinery of the patriarchal society.

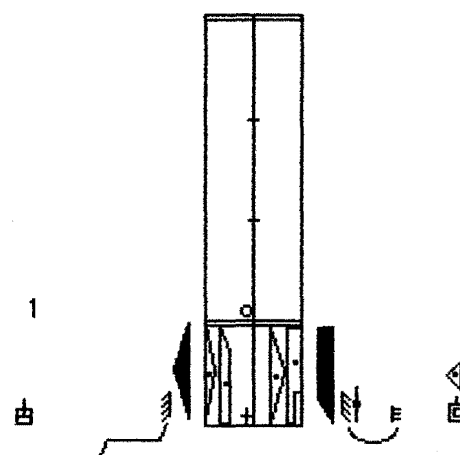
ⁱ The controversial climax of Mary Wigman's affiliation with fascism was her participation in the opening ceremony for the 1936 Berlin Olympic Games. See Susan A. Manning's *Ecstasy and the Demon* for a discussion of the many facets of Wigman's assimilation during the Third Reich.

ⁱⁱ While in exile, Jooss collaborated with Leeder to codify the Jooss-Leeder technique, and Laban continued his development of a method for notating dance movement. The systematic inventions all three men brought to the dance field and their connections to other emigrés may have contributed to the documentation of their work and its significance during exile.

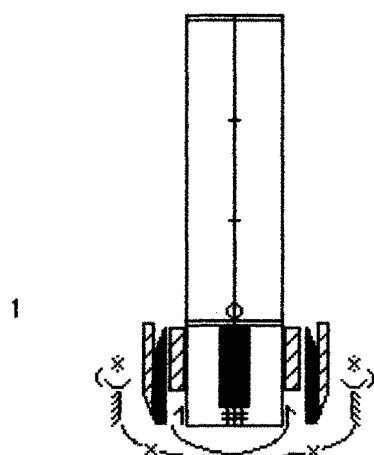
Body Parts and Supports
Gertrud Bodenwieser's *The Demon Machine* (1923)



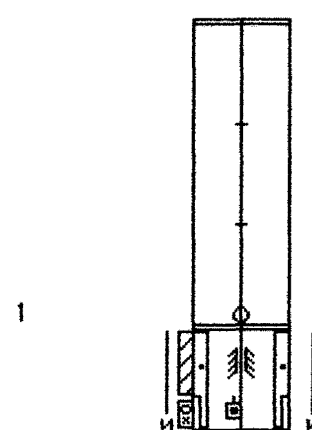
Example 1



Example 2



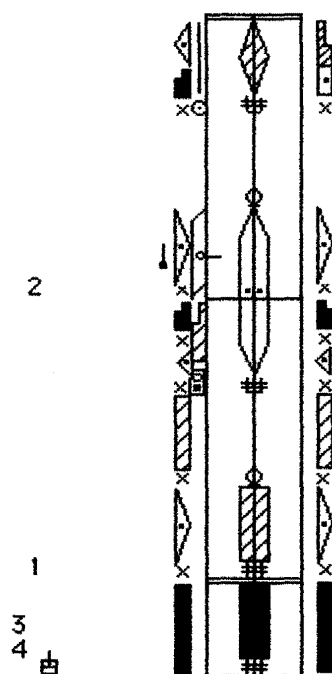
Example 3



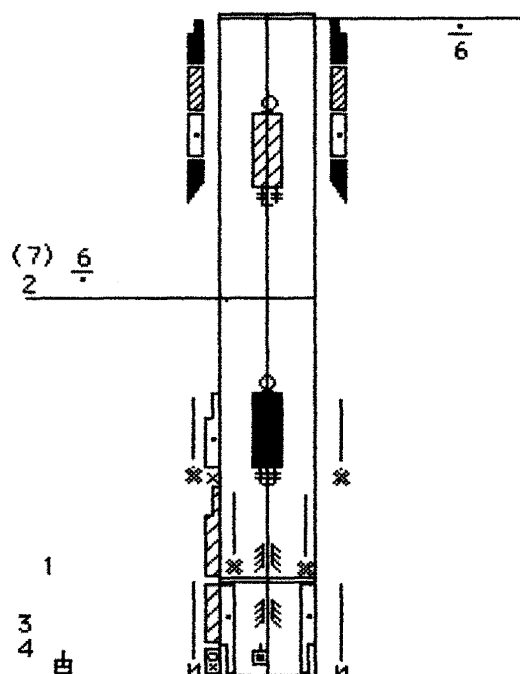
Example 4

Bodenwieser, Gertrud. *The Demon Machine*. Notated by Margaret Abbie Denton and Genvieve Shaw. Dance Notation Bureau, 1984.

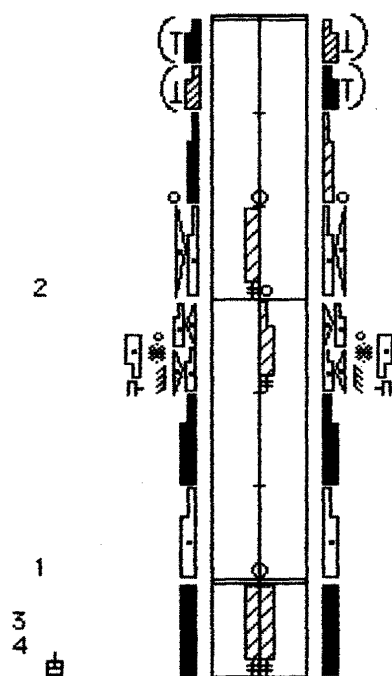
Body Parts and Supports
 Gertrud Bodenwieser's *The Demon Machine* (1923)



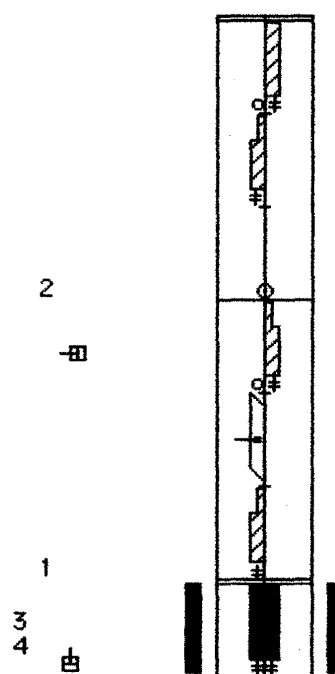
Example 5



Example 6

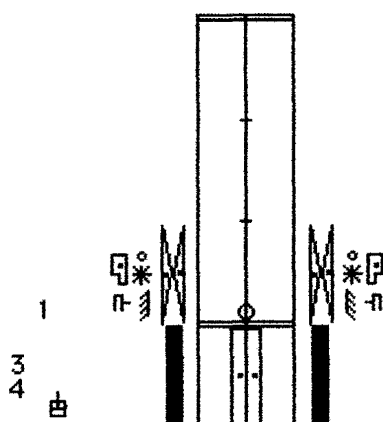


Example 7

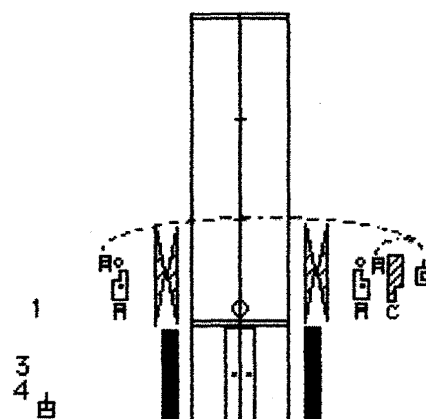


Example 8

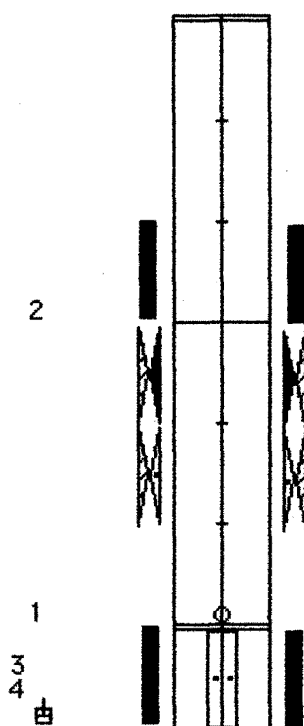
Divided Columns
Gertrud Bodenwieser's *The Demon Machine* (1923)



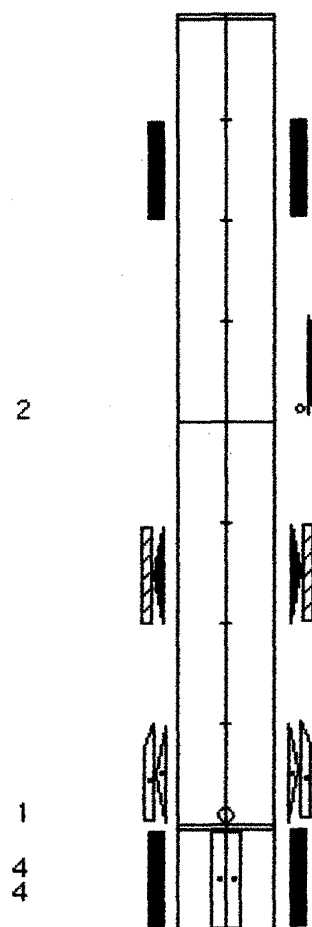
Example 1
E32



Example 2
D29

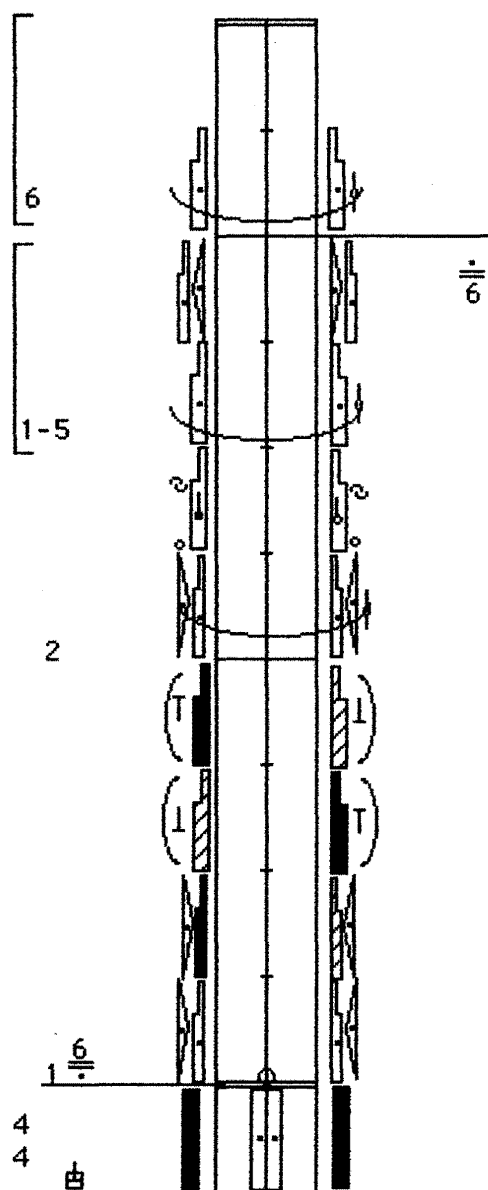


Example 3
D30-31

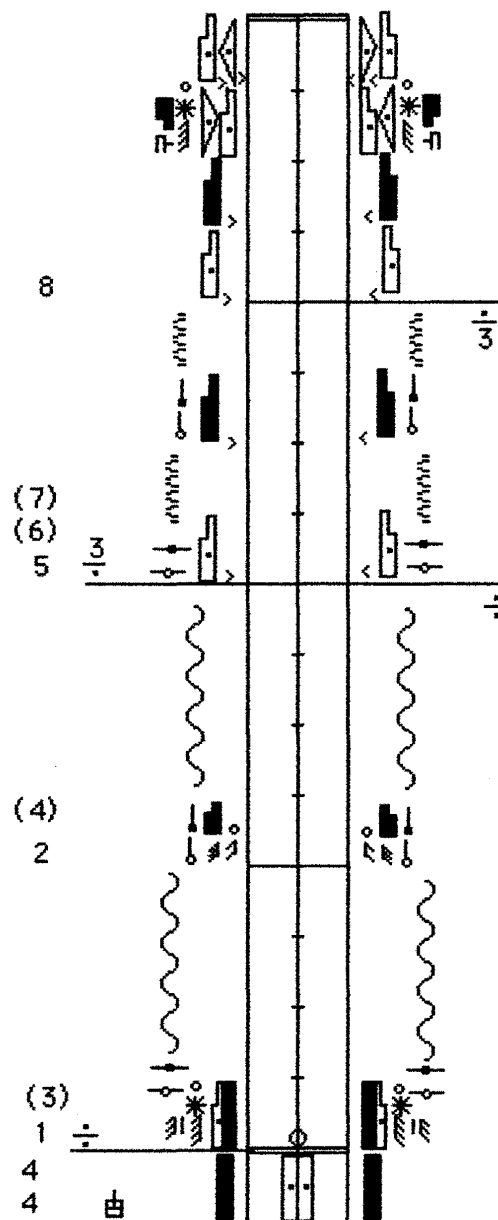


Example 4
B82-83

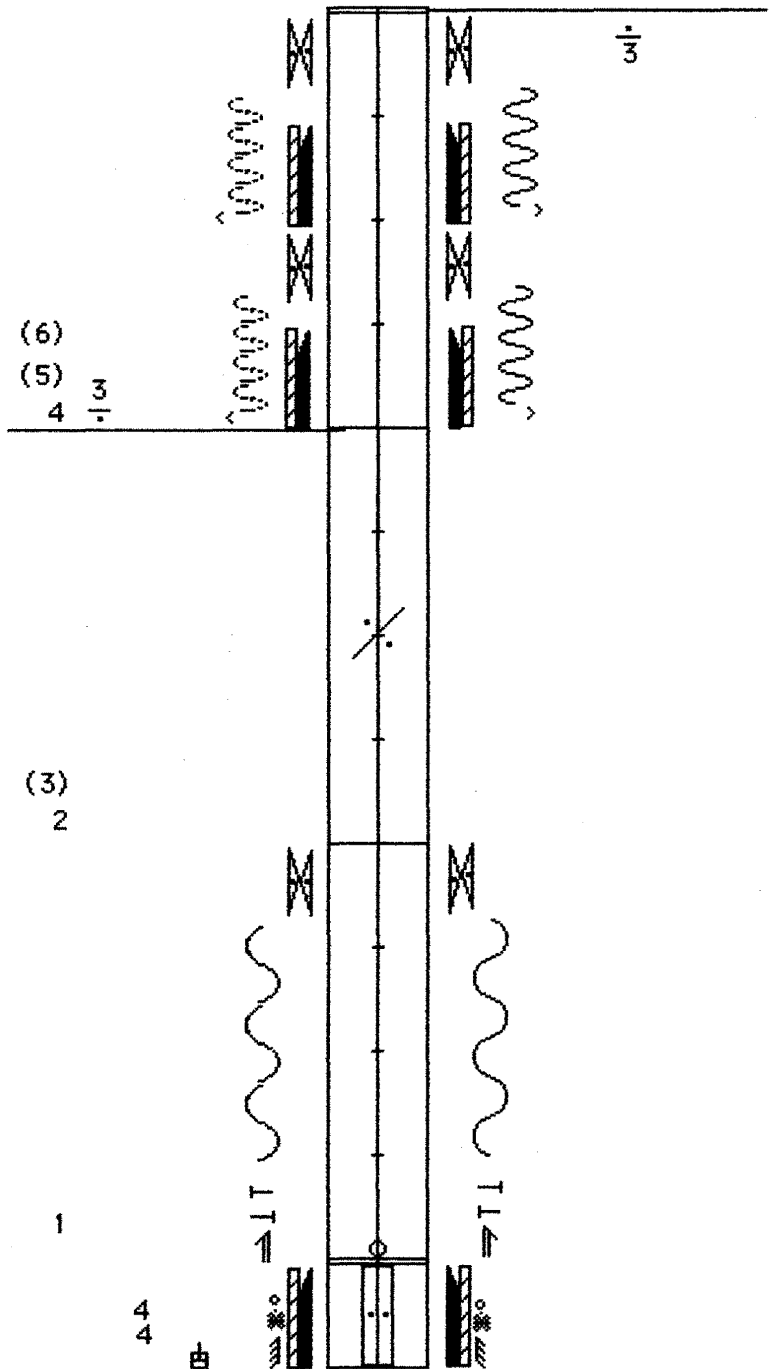
Bodenwieser, Gertrud. *The Demon Machine*. Notated by Margaret Abbie Denton and Genvieve Shaw. Dance Notation Bureau, 1984.



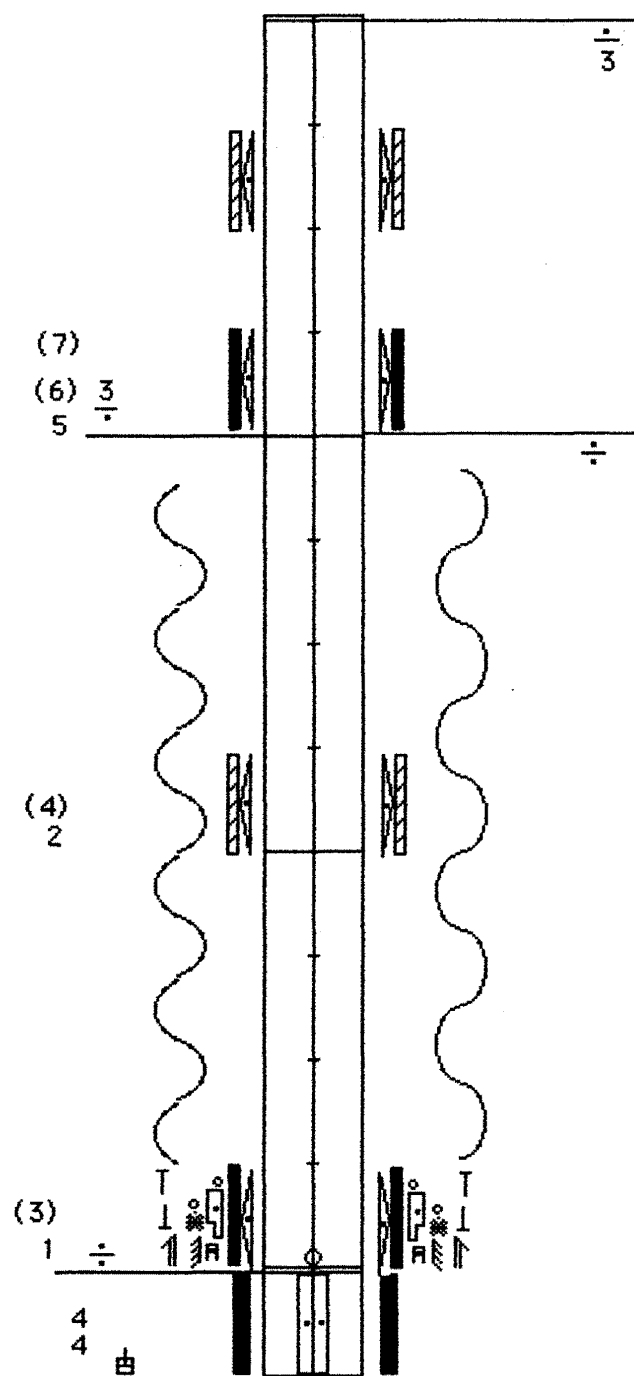
Example 5
B70-71



Example 6
B62-69



Example 7



Example 8

FOLLOWING A CREATIVE PROCESS

by

Jean-Marc Piquemal

Presentation

Three years ago, I got in touch with Loïc Touzé and Latifa Laâbissi, two young French choreographers. They wished to converse during the creative process with a person who took notes, and to ask each other questions about the notation associated to their work. The aim wasn't necessarily to make a score.

Progress

So I followed their work for about half the time it lasted. Latifa and Loïc's work pattern involves improvisation, instant composition, performance, and it was impossible for me to take any notes, because the creative process was different every day. I started to take notes of propositions and commentaries. After a while a script was written. When "Love" was created in November 2003, we decided to write a score.

Description

"Love" is a ballet for six dancers, lasting around one hour. A small stage built in the front middle stage is where the action takes place. This space is over-exposed, extremely well lit and near the audience – which isn't very numerous. The rest of the stage is under-exposed and the dancers go back there between every actions. The scenes last from one to ten minutes and don't evolve except two of them which have a story-telling value. The idea is that everything is already there at the beginning of the action. The dancers have different activity levels, creating depth. There are degrees of variations but not evolutions.

Questions

The duration, the order, and imagination that the scenes involved are for me the spine of this play, his writing. The scenes are choreographic materials, which have their own identity and were built and refined as they were performed, and thanks to the experience that arose from these shows. This choreography, which will be different each time mustn't be taken for granted, but how to be sure to maintain the quality of every aspects of the work?

Working on this creation was very exciting, but I was hired as a notator and at one point THE question couldn't be avoided any longer: "What notes will I take? "

I already worked as a restager, and my experience makes me think that it all comes down to being a mediator, to developing the potential of the writers. Once the moving structure

is assimilated, the restager is there to connect the dancers, to make sure the activities are well balanced on the stage, creating a polyphony.

During a restaging, the restager recreates his own process which will allow him to reveal the spirit of the play from his intimate point of view. It's impossible to take notes concerning this phenomenon.

In the case of a more traditional choreography, the dialog between the performers and the story or the adventure they will live together, comes to life through combinations or mandatory movements. Making these combinations and going through these movements will bring out to the spirit of the ballet, and then you will be able to have a point of view.

It's what we call the performer's part, his influence. But when a play is centered on the performers' independence, and has a very simple and free choreographic writing :

- How to identify the necessary ingredients which guarantee the spirit of the play?
- Maybe taking notes at one performance will give a reference ?
- How to identify the composition which was just created, so that another performer will be able to slide into this movement, but add his own creativity ?
- Should one give the original ingredients, the process, and let the performers and restager have it their own way?
- The problem is that as we were watching the new performances, it was extremely obvious when a dancer didn't fit in. Is it necessary to have a very precise score in order to recreate the process, or are the original ingredients enough ?
- The solution is maybe in between these two extremes, with different degrees of freedom.

Solutions

Global notation

I started by undertaking a global notation based on motive combined with some elements of Laban cinetography, and added a title for each part, describing the imaginary point we started with. This score gives the spatial and temporal constraints, especially the relation between the stage and the set, the succession of materials and their proportions. I associated the action line to an entire scene. The action in itself is to do the scene. After, I develop what is inside each scene.

Collected informations

Then I tried to provide the framework for each improvisation period, with a description in words and in cinetography describing the unvarying factors and the constraints that surfaced, in order to be able to retrace the specificity of the movement vocabulary used. (It sometimes happens that a work doesn't make it to the final composition. But it still contributed to the construction of the ballet. All these propositions and commentaries are tracks to follow, or points from which to try new experiments.)

Examples

However, this wasn't enough to show precisely what happens on stage, and we finally added some examples. The different parts last from thirty seconds to ten minutes, and I took notes on some excerpts which will allow restagers to understand the movement as it was during one of the performances.

Those parts are meant to be used as a tool showing the atmosphere at a moment in time, but shouldn't be replayed identically as it would go against the idea that the dancer is during the performance the author of his/her own dance, which is one of the main characteristics of this work.

The written scenes

Two parts ended up being quite structured, so I did the full notation in cinetography.

The photos and videos

Photos and videos are essential. The different versions show the degree of variation you have between several performances.

To take notes about certain scenes seems such a huge work in relation to the possibility these notes would offer, that the videos are maybe the best tool to get an idea of the vocabulary used.

Effort-shape analysis and body-mind-centering

Effort-shape analysis and the knowledge of bodymindcentering can be other entries.

Restaging with different degrees of freedom

I believe that these notes taken in three layers illustrate rather well the steps of the creative process, and that the aim of the notation was respected. It allows a restaging at three levels and with different degrees of interpretation. One can rely only on the general score by using the root elements, which are the starting point of the play. Another solution would be to include the parts completely written and their associated constraints to those freer moments in the work's composition. The solution that would be closest to the play as it is performed today would be the use of examples, but without trying to recreate exactly the same thing.

Through this means a well-documented score, that also gives access to all the roots elements of the work, it is possible to keep the creative spirit and the ever changing processes which give its vitality to this material.

MOVEMENT TRAINING AND PERFORMANCE ENHANCEMENT UTILIZING LABAN MOVEMENT ANALYSIS AND BARTENIEFF FUNDAMENTALS

by

Bala Sarasvati

For the past fifteen years, I have integrated Laban Movement Analysis and Bartenieff Fundamentals with the technical training curriculum in a university setting, experiencing how this application can support a comprehensive foundation in dance education. Laban and Bartenieff theories provide methodologies to increase the capacity to integrate the physical moving experience; expand expressive range; explore personal, historical and contemporary perspectives in training; and stimulate the creative process.

Ten years ago, students approached me with “What *style* do you teach? “I teach motion, momentum, ROM, level change, dynamic alignment” “Oh....” was the typical response with varying degrees of interest. Recently, I have experienced a notable shift of this response in that the students are less concerned with “names” of techniques and/or styles and they seem more responsive to learn movement principles that result in a “motional” experience. They are eager to learn concepts, principles and processes related to organizational patterns, physics and the science of dance training, discovering that they can achieve movement that they could not do before. LMA/Bartenieff theories remain the connecting thread in this approach to acquainting students to an applied multidisciplinary study. Knowledge acquired through these theories provides the opportunity to explore harmonies between different or opposing disciplines and styles and extends the movement experience of students – stimulating interests beyond any one single domain. The application also teaches students to learn about “learning.”

Shifting the Training Perspective

When students arrive at the university, their typical comprehension of “performing dance” primarily reflects their experiences in dance studios, and what they have seen on the main stages and on television. The students’ expressive movement capacity lies primarily within their ability to produce specific movement skills reflecting vocabulary from their previous ballet, jazz, tap, and gymnastic training. Often, the new student identifies his or her primary goal as “to become a better performer and choreographer”- but if you ask everyone in the class - they respond with a variety of different goals -and expect to accomplish these personal goals in the same manner in which they were originally trained. Students typically alternate their daily technical training in the ballet,

modern and jazz styles realizing that versatile dancers who also possess incredibly specific technical skills are in demand. Emerging innovation in the media arts, technology interface, pop culture, and vast range of interdisciplinary movement experimentation currently demonstrated in all of the contemporary dance styles that inspire youth contribute to an increasing interest in increasing movement possibilities. They are not only interested in “concert dance” but in learning movement reflecting televised “hip hop” stars, Cirque de Soleil specialists as well as the sophisticated dancers trained to receive the Russian Gold Medal.

Decades ago, Irmgard Bartenieff, stated in Body Movement –Coping with the Environment that the range of diversity and choices in today’s dance styles can produce dancers that lack the ability to integrate what they perform or create if they do not gain a movement foundation in their early training.

The development of a dancer must go beyond just correction of functional difficulties and should not be overburdened with endless repetitions of fragments of mechanized movement. Neither technical perfection nor the creative atmosphere of an inspiring choreographer or director alone develops the artist. What is essential is a deep familiarity with the spatial-dynamic potential of his/her own movements that should be stimulated early in a dancer’s education (Bartenieff, 1980).

When first exposed to Laban/Bartenieff approaches, many students typically feel that the integration of LMA/BF to dance training might inhibit and even drastically alter their goals to becoming a “competitive” dancer in the field. LMA/BF infusion within the context of technical training places motivational emphasis on the developing movement awareness and the “internal dancer.” Although considerable skill development involving the execution of the steps, turns, level changes and positions is still required in the class, teaching and coaching with LMA/BF approach shifts the focus to performance qualities that reflect vital physical associations regarding:

established anatomical relationships to support and articulate movement
efficiency acquired through proper neuromuscular coordination adaptability and
increased range of full bodied movement through dynamic alignment
connectivity, and other aspects of the fundamental movement principles
Effort/Shape processes derive dynamics and replace emphasis on “counted”
phrasing

Space Harmony configurations organize the transitional pathways in space and are perceived as equally important to achieving stylistic “lines” and ending “poses”

simple motion factors combined to create more complex motion

increased strength and “groundedness” that promotes maturity and personal empowerment

Learning and Performance Enhancement

Common to the LMA/BF approach is the practice of experimentally based learning, which allows time to explore, investigate and integrate a movement concept. Experiencing a personal process not only can become more satisfying when learning and practicing dance technique beyond its function as a physical discipline, but enhances the learning process by renewing personal investment (inquisitiveness, perseverance and concentration). This can move the focus away from the goal of reaching (or not) “the look of model perfection”. Over dependence on watching the mirror image is also highly distracting to the body/mind integration that affects the overall performance progress.

At first, I begin a typical class with simple floor exercises that emphasize basic Bartenieff fundamental concepts, principles and processes (Basic 6, inner shaping, spatial intention, rotary element and full ROM etc.) The movement forms eventually become more complex by mixing movement patterns and incorporating a variety of weight support transitions and level changes. Every few classes, LMA and Bartenieff terminology is described throughout an exercise or movement combination to clarify movement ideas and provide specific technical focus. On other days, only brief verbal cues are used as well as breath, vocalized sounds and musical phrasing are provided. Overall, the class “collective whole” informs focus, direction and pace of each class session.

Students are still encouraged to explore and develop his/her own individual style or dynamic phrasing emphasis, however very specific phrasing clarity can be achieved through coaching through LMA Effort factors (time, space, weight and flow). Artistic license is given to the students to reform movement sequences in a personal way can enhance the process, as well as targeting specific effort combinations. When concentrating on effort phrasing, the students are reminded to incorporate breath, generate vocal sound production and devise imagery as a means to connect to their emotions and sensations to the movement qualities, motion and momentum.

Partner and group observation promotes gaining a different perspective of individual image and decreases emphasis of reaction based on the mirror’s reflection. Students often respond differently from verbal cues from their partners than they do from their teachers. Partner teaching may also be incorporated in the form of tactile touch, which may supply additional

sensory information about “subtle inner physical processes” such as inner shaping, anatomical relationships with space and weight distribution. Bi-semester technical performance assessment exams by at least two or more assessors that reassure students of their progress and targets personal movement issues has proven to be beneficial. Make available a variety of multi-modal approaches so that dancers have the opportunity to integrate concepts, processes and intricate movement patterns in their own learning style.

Because contemporary dance choreography often requires physical competency acquired in other movement disciplines, students are encouraged to augment their dance technique training with supplemental training activities. Knowledge acquired from LMA/BF theories assists the dancers in making intelligent choices about individual training needs and facilitates the learning of fundamental movement principle that exist across the movement styles. Through the participation of a variety of movement disciplines, the students become capable of formulating their own qualitative and motor skills associations, while reinforcing basic principles inherent in a solid technical foundation. An occasional presentation of various movement disciplines (such as Yoga, Pilates, aerial dance, contact improv) in the technique classes generates interest, and some students often seek out supportive movement disciplines that will improve their overall performance on their own.

Fundamental Training Concerns

Common reoccurring movement issues that arise in the training process hinder technical development and inhibit the achievement of optimal performance. Individual structure, anatomical concerns and physical injury history produce a variety of weaknesses in the body that are directly related to the ability to produce optimal movement functioning and technical skill performance. Muscular overuse and incorrect habitual patterns also restrict efficiency and refinement. In performance, inefficient habitual movement patterns produce undesirable movement “noise” interrupting continuity of flow in movement transitions. Lifting ribs, overuse of lower leg, “muscling” out lower curve of spine, hip and shoulder hiking, restricted scapula humeral articulation, restricted lumbar articulation, “locking” elbows, are common inefficient movement habits that teachers and dancers seek to change. Bartenieff’s concept of gradated rotation and emphasis of full ROM in the global joints is critical to the corrective process. Homeostasis is restored through neuromuscular re-education, along with specific stretch and strengthening exercises to balance targeted reciprocal muscle groups, and increased mechanical and postural awareness

Applied LMA/BF

The following are some major Bartenieff Fundamental considerations integral to accomplishing desired technical efficiency, refinement and strength:

- Establishing a relationship with all parts of the body as a moving constellation (whole body connectivity)
- Access the fundamental (developmental) body patterns essential to developing whole body integration
- Clear initiation, effort/spatial readiness and follow through
- Head, neck and eye coordination to promote spinal integration
- Inner shaping to support weight shift and movement gestures of the arms and legs
- Establishing a spatial-dynamic relationship with environment to extend the energy beyond the physical body
- Timing of the flexing and extending joints in level changes
- Differentiating force and controlled flow from gravitational pull

The dancer with mastery of (some or many) of the above mentioned processes embody connectivity that is characteristic of the “underpinnings” of an accomplished dancer. My observation is that he/she is better prepared to excel in a range of technique styles that our particular dance program requires, and that there is evidence that the dancers achieve optimal technical performance in the various contemporary choreographic styles they perform.

LMA/BF Approaches

Various methods and approaches have proven to be effective, educational and empowering when integrated in the technique class-learning environment. The following strategies inform and invest dancers, and most important shift their dancing process from more limited or obsessive perceptions to positive experiences.

- Delicately balance familiar basic dance technique vocabulary related to past training with the subtle to complex intricacies of LMA/BF components,
- Add physically challenging movement combinations integrating the two, so that students remain challenged and their interests are sustained.
- Provide historical reference of the stylistic movement source and use LMA/BF vocabulary to describe and clarify the movement content. *This can demystify movement styles.*
- Inform students of the movement principles that are similar between two seemingly different movement styles (such as how core support and upper body connections required in aerial arts are utilized in the ballet and modern technique classes.)

Plan of Action – Strategies in Teaching/Learning - Beyond the Steps

Carry out a clear “plan” for each exercise and run through of a movement combination, providing two or three strategies each class. Clarify the organization of movement by identifying which of the six Bartenieff Fundamental patterns should be emphasized (breath, navel radiation, head/tail, upper/lower, body half and cross lateral). Establish preparation, initiation and follow through sequencing, stressing how clarity of movement phasing can promote kinesiological integrity and movement efficiency (such as full hip flexion and “grounded” pushes off the floor by accessing “core” bone strength.). Emphasis on inner shaping, energy projection and the moments of exertion and recuperation might be the focus of the third session. Three-dimensional support, eye tracking and very specific (trochanter and pelvic floor) weight shifts are explored in another session, and so on. The order of the focused elements should reflect performance assessment, movement content and expressive emphasis. Working with three ideas/processes per class is plenty. Over a period of time, the various movement processes begin to integrate and become simplified, and it is no longer necessary to focus on various elements.

When the complex movement combinations are performed at the speed of today’s styles- students recognize improvement and the benefits from this form of rehearsal. Providing verbal coaching reinforcement that stress particular movement sequencing, spatial pathways and energy relationships such as: “rudder the pelvis,” “shift to initiating and carving the scapula and spiral it to your tail;” “feel the back of the skull complete the turn;” “weight shift as you carve the toes until they set down on the floor” are common descriptions that assist the dancers in transitioning and/or completing movement ideas.

Other Strategies:

Follow-up to Guest Artists Master Classes

Provide a follow-up to guest artist master classes utilizing LMA/BF components to clarify style and performance qualities of the artists’ work. When LMA/BF perspectives support the students’ ability to perform rigorous, challenging and dynamically engaging technical movement combinations, they become more motivated and inspired to apply the theoretical information.

Movement Meditation

Slowing down complex movement combinations and repertory to slow motion, such as in Tai Chi, has proven to be a powerful method of integrating various movement processes in order to gain optimal performance. Full engagement of the body must be reinforced during this practice in order to achieve optimal effectiveness and success in

developing complex movement combinations. Dancers typically need reminded to maintain weight shifts and full torso engagement, rather than “marking” with arms and legs. The experience should be physical, not a “mental visualization.”

Technology and Observation

Visual feedback in the form of videos and QuickTime movies has become integral to the learning process in the technique classes and rehearsals. Students become accustomed to viewing themselves, and LMA/BF application allows them to become more skillful in analysis. Utilizing both internal and external evaluation of their training process becomes more effective and fulfilling, particularly as students become more competent with the ability to problem solve technical/artistic challenges by themselves. Many students eventually request to maintain a concise digital record of their technique and performance progress.

Conclusion

In a dance technique class, students respond to what the instructor pays attention to and how it is assessed. In practice, it is evident to me that when students are presented experiences that promote interdisciplinary perspectives that extends beyond their traditional daily technical training regime, self esteem, motivation and daily performance improves. Students become better equipped to develop their own strategies to resolve undesirable movement issues, hone technical skills and expand expressivity, thus increasing their capacity to reach unique technical, performance and even life long goals.

A period of adjustment is required by the students in order to adapt to this frame of reference. Over time, a profound shift takes place in both the individual perspectives and the group dynamics of the class. When the students access a means to identify the various components of their moving experience, and acquire a language to express the phenomenal internal sensations they are now in touch with, positive modifications in personal attitude and behavior take place. Usually by the second or third year of training, when students experience and observe amongst their peers visible improvements in performance, they become much more receptive to learning more about the LMA/BF aspects of technique and performance and grow more appreciative and receptive of the interdisciplinary training perspective and approach.

Contemporary trends in dance training have shifted in the past twenty years, and interdisciplinary dance styles are currently generated throughout the world. Today's dancers need to possess a wide range of abilities and be exposed to a variety of movement styles. Learning and integrating the underpinnings of fundamental movement principles and empowering students the ability to make qualitative choices are critical to

the process. Now more than ever, Laban Movement Analysis and Bartenieff Fundamentals™ seems to hold relevance in the fuller realm of technical and performance training.

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THE POSSIBILITY OF USING 3D COMPUTER ANIMATION AS A COMPLEMENTARY TOOL TO DANCE DOCUMENTATION

by

Johan Stjernholm

ABSTRACT

This paper aims to encourage fruitful collaborations between movement notation practitioners and computer animators. The objective is to demonstrate how a very basic humanoid skeleton may be rigged and animated in a commonly used, industry leading 3D modeling and animation software tool.

The fact that there are relationships between Laban Movement Analysis and computer animation is already established (Bishko, 1992; Chi et al., 2000). However, by experiencing a demonstration of some of the computer animation principles, movement notators may feel more at ease in establishing collaborations across the professional boundaries of notation and animation.

In order to collaborate efficiently, notators and animators need to understand the similarities and differences between certain fundamental and commonly used concepts within each profession. Some instances of such concepts may be the relationship between a rigged virtual skeleton and a physical human skeleton; forward and inverse kinematics versus motion and destination writing; and the use of space and body holds in virtual and physical space. (Guest, 2004)

There are already a number of existing technologies for the computer digitization of human movements, such as motion capturing and the EMOTE Model (Chi et al., 2000). Newer technologies may also be in the pipeline, involving computerized procedures for automated interpretation and graphical display of notated scripts. However, the type of notator/ animator collaborations outlined in this paper have the advantages of being immediately available, using existing, proven, well documented knowledge and technologies, as well as being extremely flexible for a very wide range of applications.

One project involving Laban theory/practice and computer animation is a work entitled "Animations of Laban's Basic Space harmony" (Stjernholm and Preston-Dunlop, 2005). This collaboration, commissioned by Laban, aims to facilitate the process of learning

Rudolf Laban's Space Harmony scales, previously only graphically available as printed material, represented through various drawings and Labanotation (Preston-Dunlop, 1984). By transforming some of this static, printed material to computer animations, it is now possible to study Laban's Space Harmony using a visually dynamic and easily accessible form of documentation. (Stjernholm, 2005)

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MOVEMENT ANALYSIS OF "THE GREEN TABLE"

By

Makiko Takano

Introduction

The purpose of this paper is to consider the relationship between movement and expression in dance by applying the Jooss-Leeder Method to "The Green Table" choreographed by Kurt Jooss (1901-1979 Germany). Having professed himself "a Playwright of Movement" 1), Jooss thought that dance should be able to talk in a language of movements. He devised a style of expression, which he termed "The Dance Drama"2) and created many works. The most well-known of these was his anti-war work; "The Green Table", which won a competition in 1932. He also founded the Jooss-Leeder Method, which is a teaching method based on the theories of Rudolph Laban. We have made reference to "Modern Dance: the Jooss-Leeder Method" (J.Winearls, 1958), and analyzed the movements of "The Green Table" on video.

Before our movement analysis, we would like to explain the circumstances surrounding performances of "The Green Table" in Japan. The first performance of "The Green Table" in Japan was by The Star Dancers Ballet Company in 1977, and created a huge sensation with the Japanese public. After that, the company continued performing "The Green Table". Now, this year is German year in Japan. The company performed "The Green Table" after an interval of twelve years.

As you know, the Japanese have a very different culture and religion from Europeans. However we are able to accept the idea of death and life, and sympathize with the message of "The Green Table". We have a great question-why is "The Green Table" a universal work? So we would like to illuminate the characteristics of this work.

Methods

1. Analyze the videotapes

- 1) Star Dancers Ballet, The performance video, 10/8/1983, (Tuchiura, and JAPAN)
- 2) Star Dancers Ballet, The performance video recording by NHK, 7/1979, (Asakusa, JAPAN)
- 3) Jeffery Ballet, TV program recording by PBS, 13/12/1982 (New York)
- 4) The Wuppertal Tanz Teatre, 1985. (Koln)
- 5) Folkwang Ballet, TV program recording by BBC, 1976

We analyzed the 1st videotape mainly. This tape is the performance video by Star Dancers Ballet Company in Japan, 1983. And we referenced these following videotapes that

performed by Jeffery Ballet, The Wuppertal Tanz Teatre and Folkwang Ballet. We thought that it was no problem to use the Japanese performance video, through Anna Markard, Jooss's daughter and the supervisor of Jooss's pieces, has endeavored to maintain the identity of this work. In addition, we were pleased because of the perfect notation published by Ann Hutchinson Guest, which has assured the eternity of the work.

2. Interviews

- 1) Anna Markard, 29/1/1993
- 2) Anna Markard, 14/1/1994
- 3) Hermann Markard, Anna's husband and the art director, 15/1/1994
- 4) Ruriko Tachikawa, the ambassador of Star Dancers Ballet. 8/12/1991

We interviewed Anna Markard and Hermann Markard, too. He is Anna's husband and the art director. What's more, Ruriko Tachikawa, who is the ambassador of Star Dancers Ballet Company.

3. Visiting the rehearsals

- 1) The Stage rehearsal 29/1/1993
- 2) The Studio rehearsal 14/1/1994, 15/1/1994

Results and Discussion

1.The Time Structure

This piece consists of eight scenes. A detailed account and the running times are given below. (Reference Figure.1)

- | | |
|------------------------------|-------------------------------------|
| I. The Gentlemen in Black | 2'48" |
| II. The Farewells | 1'38"(The Death solo part) & 4'45" |
| III. The Fight | 4'37" |
| IV. The Refugees | 4'48" |
| V. The Traitor | 3'00" |
| VI. The Brothel | 4'12" |
| VII. The Aftermath | 5'11" & 0'50"(The Death solo part) |
| VIII. The gentlemen in Black | 1'42" |

This piece was in the ABA form. It began with the green table scene that was performed by the ten Gentlemen in Black, the same scene was repeated at the end. It represented the idea that conflict of interest has repeatedly been the cause of war without reflection. Foolish and pompous conferences were ruthlessly caricatured in these scenes.

Various war tragedies were expressed and Death appeared in the middle scenes. The running times of the middle scenes were fairly equal. Each scene was composed from 4 to 5 minutes. Each scene had one episode that revealed the misery and sorrow of war. M. B. Siegel (1968) 3) suggested that there is a similarity between *The Green Table* and "Stationsdrama", which was the theater of Expressionism.

Death is a key character of this work. On the figure 1, the thick black lines represent Death's appearances. Death's appearances take place towards the end of each scene. The time structure is very monotone length during the middle scenes, but the time interval between Death's appearances become gradually shorter leading up to the climax, symbolizing Death's inevitability and emphasizing the personal relationship of every human being to his or her own death. His appearances reflect the high tension of the work, and arouse the emotion of the audience.

2.The Space Structure

Anna Markard (1993) said that direction is very important in this piece.4). This section is focused on the direction of movement. Figure 2 shows the basic formations. There were many diagonal lines from upstage left to downstage right. You can see that, the old mother died gently at downstage right. (Fig2-7) The partisan woman also died in the same place. (Fig2-8) In the 7th scene, Death robbed the flag of the Standard Bearer at upstage left, and then they started marching towards downstage right. Following that, Death took the lead in a line of all the victims from upstage left to downstage right. (Fig2-11) This formation represented destiny and the fact that there is no escape from death.

3.Movement Analysis

M. B.Siegel (1983) confirms Jooss as saying, "This theory developed and its peak was *The Green Table*. It is really the showpiece of Eukinetics and also of Choreutics". Eukinetics is the theory of dynamics and expression, and Choreutics is the theory of space and expression in the Jooss-Leeder Method based on Laban's Theory.

We focus on four significant characteristics in the Jooss-Leeder Method under the following headings: 1) design, 2) direction, 3) pathway, and 4) diagonal. We considered Death to be the main character in this work. He appeared on stage in every scene except the table scenes. His appearance and makeup was black and white, like a skeleton's. He had black leather straps, which outlined his rib cage and wore a black helmet with two wings on top.

Initially, Death appeared suddenly in the second scene (II. The Farewells), and danced solo movements for 98 seconds. These solo movements consisted of one main phrase and

some variations. The main phrase was repeated twice at the beginning and the end. Figure 3 shows movement analysis of the main phrase.

Death stamped both feet regularly. (Fig 3-1~10) Both his arms swung down on the flat plane (Fig 3-1, 2), and he repeated the swinging movements like a pendulum in double time. (Fig 3-3~10) Then, his right fist swung up and down on a steep plane. (Fig3-10~12) While his left hand pointed towards downstage right, he slid to upstage left, twice. (Fig.3-12~14) Finally, he did a jump turn, and stood stretching his arms out horizontally, like a cross.

3.1. Design

Table1 summarizes elements of the movement and the expressive contents about Eukinetics. The design of the body movement depends on the starting point of a movement. There is a Central movement, which originates in the center of the body, and a Peripheral movement, in which the activity starts at the extremities of a limb. In Figure3, Death's arms swing around and his fists are swung up with the trunk stretched out. Because all arm movements started from the shoulders, it was possible to say that Death's movements were of the Central design. The Central movements of Death represent the power of Death growing throughout the world. Death's movements were composed of three elements: quick, strong and central, especially, the latter two. These movements represented the existence of Death and that he was powerful and strict.

3.2. Direction

Table1 summarizes elements of the movement and the expressive contents about Choreutics, too. There are three dimensions in direction, and the characteristic point is the horizontal dimension, which has a narrow-wide classification instead of right-left in the Jooss-Leeder Method.

The first swung down actions were high and deep (Fig.3.1-2), and the second phrase moved forwards. (Fig.3.2-10) The swinging up and down actions had high and deep directions (Fig.3.12-14), both arms were stretched wide in a horizontal line and direction. The jump turn was high, and the last cross pose was in the wide direction. Wineals (1958) explains that the narrow element expresses doubt and modesty.⁶⁾ Jooss did not select the narrow element for Death, in order to show that Death has no hesitation in descending on people.

3.3. Pathway

Death's movements followed semi-circular paths from the first action to the second phrase. (Fig 3.1~10) When Death's right fist swung up, it followed an almost circular path (Fig.3-10~12) followed by semi-circular paths again, while the right fist swung up and

down. (Fig.3-12~16) Finally, it followed a perfectly circular path with a jump turn. (Fig.3-22~25) Consequently, there are many semi-circular paths and two circular paths in the movements of Death. J.Winearls (1958) explained about the relationship between pathway and expression as follows;

“The name given to all opening and closing movements of this type. The expression is easy and economical. Taken slowly it is gracious and gentle, or if with strength, it can convey veneration.”⁷⁾ Jane Winearls (1958, reprinted 1973), p.103

“The name given to all movements which describe a complete circle is Rond, and the expression contained in them is that of full physical vigour.”⁸⁾

Jane Winearls (1958, reprinted 1973), p.105

This interpretation shows that Death is dignified and supreme, while on the other hand, the movements of The War-Profiteer and The Gentlemen in Black, who are politicians and diplomats, were winding S paths. As you can see, Figure 4 shows the pathway of the gentlemen in black. It revealed S path, which expressed their insincere and cunning characters.

3.4. Diagonal

There are four diagonal lines in the Jooss-Leeder Method. The important point to note is that the 4th diagonal line is emphasized and repeated in Death's movements. (Figure 5) J.Winearls (1958) explained the diagonal expression as follows;

“A diagonal line of movement gives a sense of volume and portent even when supported on a stable base.”⁹⁾ Jane Winearls (1958, reprinted 1973), p.110

Additionally, the focus was very important; the power of Death was transmitted to the audience by using focus. C.Holder, who performed Death, described the focus as follows;

“The opening steps with the “Scythe” motif were differentiated so that for the first three counts the gaze was fixed front at a specific target at close range as the arms crossed the body. Then as the arms and head returned to their upwardly diagonal the gaze became “universal”, scanning all the way to the back of the auditorium and infinitely beyond, only to surprise the audience once again by reverting inexorably to the front.”¹⁰⁾ C.Holder (1993) p.83

Thus, we are able to see that Death's forward gaze transmitted a great sense of dread to the audience; the upwardly diagonal gaze showed his limitless power. This use of focus

emphasized the direction of movements and we were able to determine that Death's 4th diagonal movement was aligned with the basic diagonal formation.

4 .Gesture

The Green Table is marked by gestures. We were able to see many gestures in this work. Death's solo movements included the gesture of the fist swung up. (Fig 3-12,14) Death pointed in the direction of downstage right when he urged the old mother to die in the second scene. (II.The Farewells) In the fifth scene (V.The Traitor), when The Partisan begged for her life by reaching out her right arm to Death, Death made a gesture of sheathing a sword indifferently. The gasping gestures in the seventh scene (VII.The Aftermath) were used as a way of killing The Old Soldier and The Profiteer, despite the fact that Death does not touch them directly.

The same observation applies to *The Gentlemen in Black*. The following are several random examples: resting one's chin on one's hand, pointing, sitting, nodding, swinging a fist up, and pointing a gun and applause.

These gestures were very useful for clearly conveying the character's emotion to the audience. It was easily possible for everyone to understand the message of this piece.

5. Movements and Lighting

The lighting by Ralph Holmes was very effective and dramatic. The area, where Death came on, was blacked out. Death drew a bead on his next target under the cover of darkness. When Death rose up on stage, he was illuminated by a blue spotlight. The blue light spread around the stage gradually, as if to represent the expanding power of Death. When a victim died, the blue light diminished, so that Death and the victim were profiled. This shows that human beings encounter death alone.

Conclusion

These are 5 main conclusions of this research.

- 1) This piece was in the ABA form, the running times of the middle scenes especially, were fairly equal, and the interval between Death's appearances became shorter, leading up to the climax when all the characters died.
- 2) Jooss emphasized the diagonal line from upstage left to downstage right and harmonized the direction of the basic formation with Death's 4th diagonal movements. This diagonal line operated so that the power of Death was transmitted to the audience.
- 3) Death's movements were composed of three elements of Eukinetiks: quick, strong and central. This represented the existence of Death and that he was powerful and strict.
- 4) Jooss did not select the narrow element for Death, in order to show that Death has no hesitation in descending on people. Semi-circular paths and circular paths characterized Death's movements. This indicates that Death is dignified and supreme.

5) Jooss made appropriate use of many gestures, so that everybody was able to understand the message of "The Green Table" clearly and easily.

"The Green Table" is Jooss' masterpiece, which still remains relevant today. All the movements are expressed very clearly, so consequently, the anti-war message has been poignantly expressed to people all over the world.

Because it has been said that the elements of movement in the Jooss-Leeder Method are the indexes of expressive content, we can refer to this, in order to analyze the choreographer's intention for the movements of "The Green Table." There still needs, however, to be further consideration of its wider use for other works.

Notes

- 1) Roy Koch (1976) I'm a playwright of movement. The New York Times, 14.March, p.8
- 2) Kurt Jooss (1933) The Dance of Future, The Dancing Times, August, p.455
- 3) M.B.Siegel (1968) The Green Table: Movement Master piece, Art in Society, pp.447-452
- 4) Anna Markard, Interview, (1993)
- 5) M.B.Siegel (1989) The Green Table-sources of a classic, Dance Research Journal, Vol21, No.1, spring, pp.15-21
- 6) Jane Winearls (1958, reprinted 1973), MODERN DANCE The Jooss-Leeder Method, Dennis Dobson, p.96
- 7) Ibid, p.103
- 8) Ibid, p.105
- 9) Ibid, p.110
- 10) C.Holder (1993) Dancing for Jooss, Recreating the role of Death in The Green Table, Choreography and Dance, 1993, Vol.3, Part.2, p.83

Portions of this study, in altered form, have appeared in *Choreology* and *Anthropological Science*.

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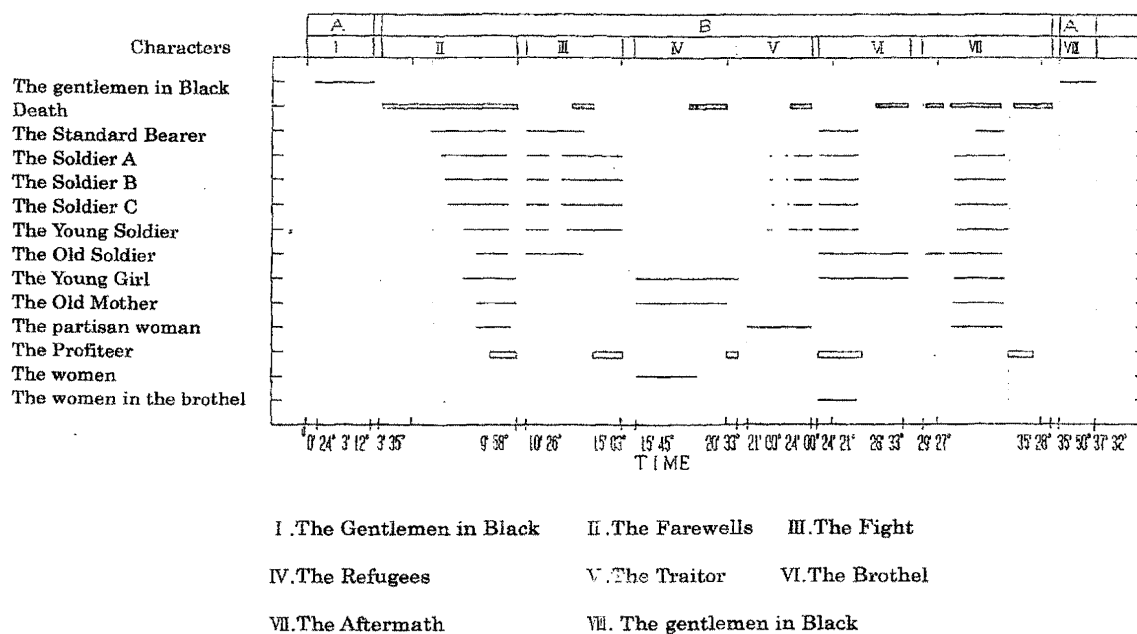


Figure 1 The Time Structure

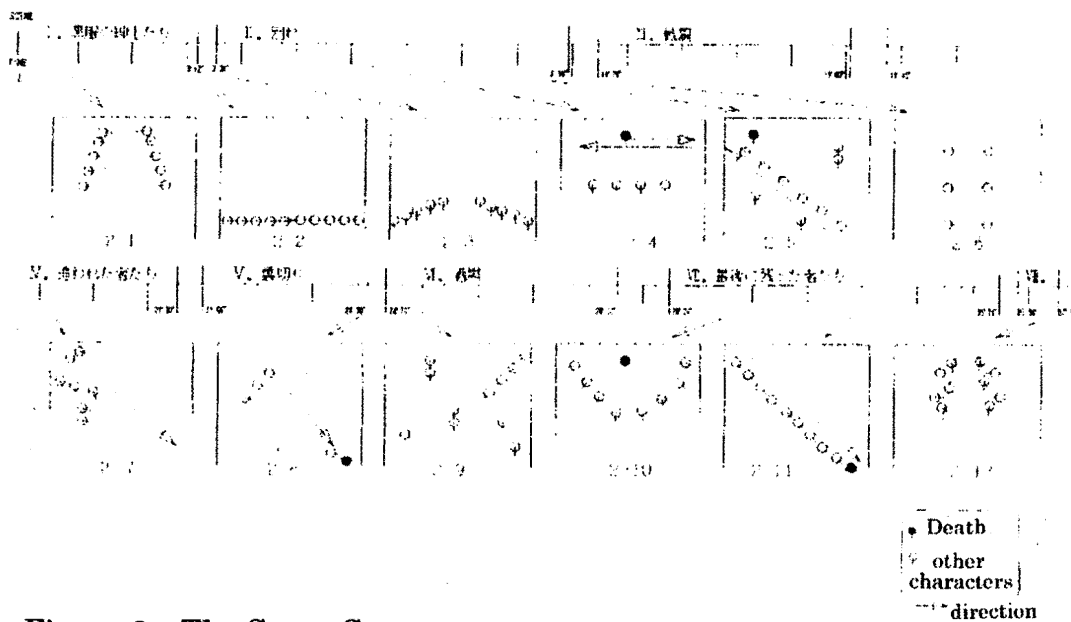


Figure 2 The Space Structure

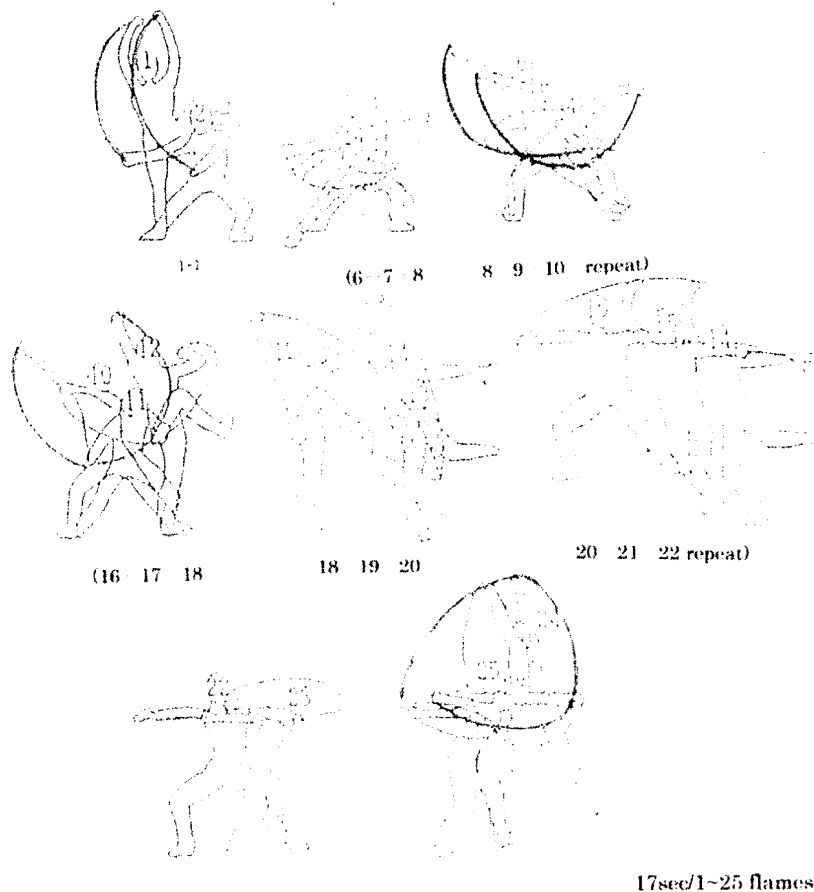


Figure 3 Death's Movements (the main phrase)

Table 1 Element of Movement and Expressive Content in Jooss-Leeder Method

	Elements of movement	Expressive content
Dynamics (Eukinetics)	Energy: strong – light Design: central – peripheral Speed: quick – slow	The basic combination of elements, which make the eight fundamental qualities possible
Space (Choreutics)		
Dimension	High - Deep Narrow – Wide Backwards - Forwards	Release and Bondage Doubt and Trust Antipathy and sympathy
Pathway	Droit: A direct path Ouvert: A half circular path Tortille: A winding S path Rond: A circular path	Direct and purposeful Balanced and simple Personal and complex Complete participation in physical action

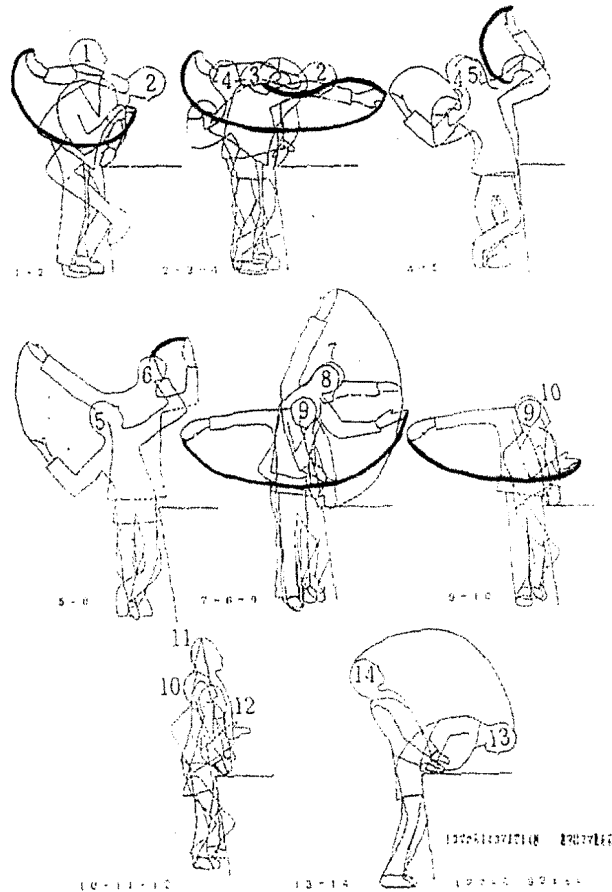


Figure 4 Pathway of The Gentlemen in black

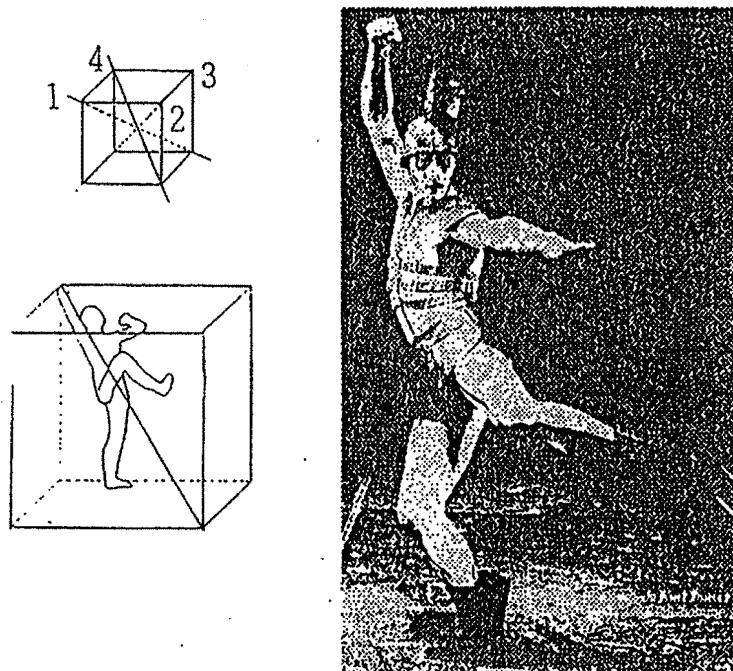


Figure 5 The diagonal of Death's movements

THREE FOLK DANCES FROM ROMANIA

reading session by

Andrea Treu-Kaulbarsch

Romanian dances are typically circle dances. They are defined by strong rhythmic movement and countless combinations of steps. Often they are challenging in speed, dexterity and stamina.

In my notation, to help visualize fine changes in accents and dynamics of the chosen dances and to facilitate the reading thereof, I explored the use of Effort combined with Phrasing signs as presented by Maletic (2001) at the 22nd ICKL conference at the Ohio State University, as well as accent signs used in the conventional way.

Being very interested in movement observation and movement qualities I have often missed explicit information on effort in many Labanotation scores. When I came across an effort sign it would most likely be an isolated accent, a punch – strong, direct and sudden – someone pushing himself off the floor for instance. I started using more and more effort signs alongside my notation but would not be completely satisfied, feeling that effort signs would need to be more connected with timing and phrasing. I also felt that there would be the need to show the intensity of the effort. Combining effort signs with addition bows, increase and decrease signs to produce various phrasings seems only a logical consequence and works very well for me. Having watched participants of this reading session dance I believe that it helps to convey the quality, mood and feel of a movement.

Readings:	Murguletul	
	Jiana	
	Hora Strigaturi	(all traditional)

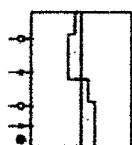
After reading and dancing the dances a little discussion evolved among participants on how to notate a certain aspect:

In *Jiana* (bars 5 – 7) a slight bounce occurs with the emphasis on the upward movement on the beat preceded by a preparatory downward movement on the off-beat.

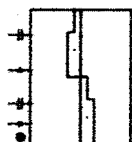
In *Hora Strigaturi* (bar 1, bar 33) the same happens with the emphasis on the downward movement on the beat with a recovery on the off-beat. To show this I used the place high and place low pin above the centre-of-gravity symbol (example 1).

The issue was raised whether this actually lifts the centre-of-gravity above Middle Level rather than producing a mere recovery. Suggestions were made to notate this movement as the centre-of-gravity moving to Place Low followed by either a Place Middle pin (ex. 2), by a return-to-normal sign (ex. 3), or using a go-away-sign (ex. 4). Another suggestion was to notate this showing the degree of contraction of the legs (ex. 5).

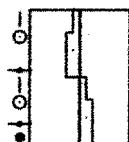
Examples from *Hora Strigaturi*, bar 33



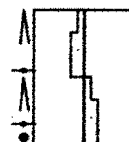
ex. 1



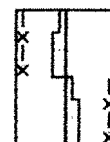
ex. 2



ex. 3



ex. 4

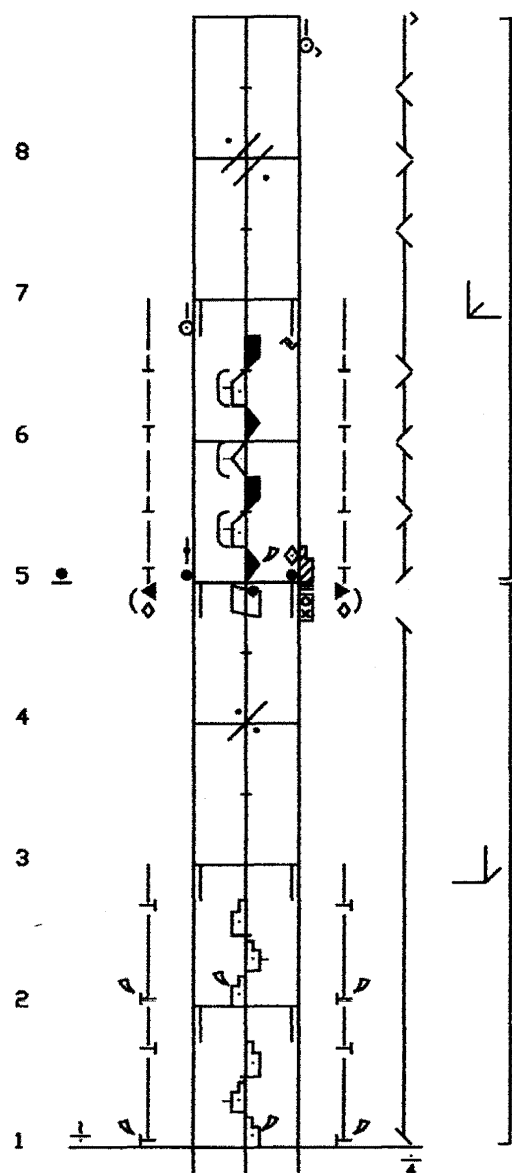


ex. 5

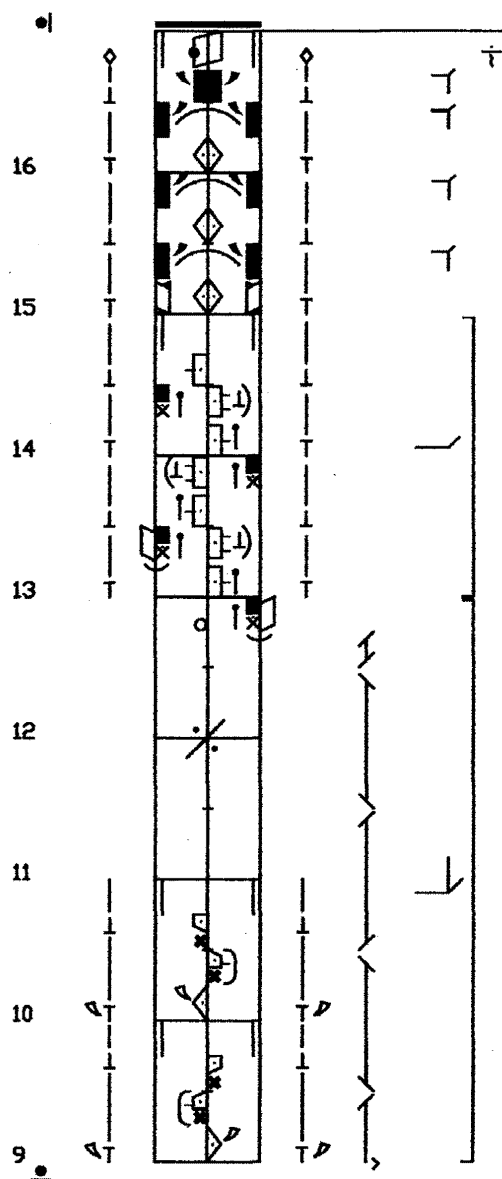
Reproduced below are the dances in my original versions. Any comments or suggestions are welcome and may be sent to my email address: drea.treu@gmx.de

Murgăleț

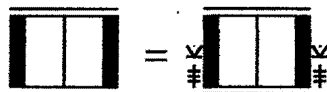
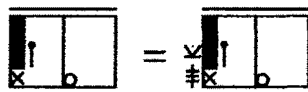
Romanian Circle Dance (traditional)



Intro

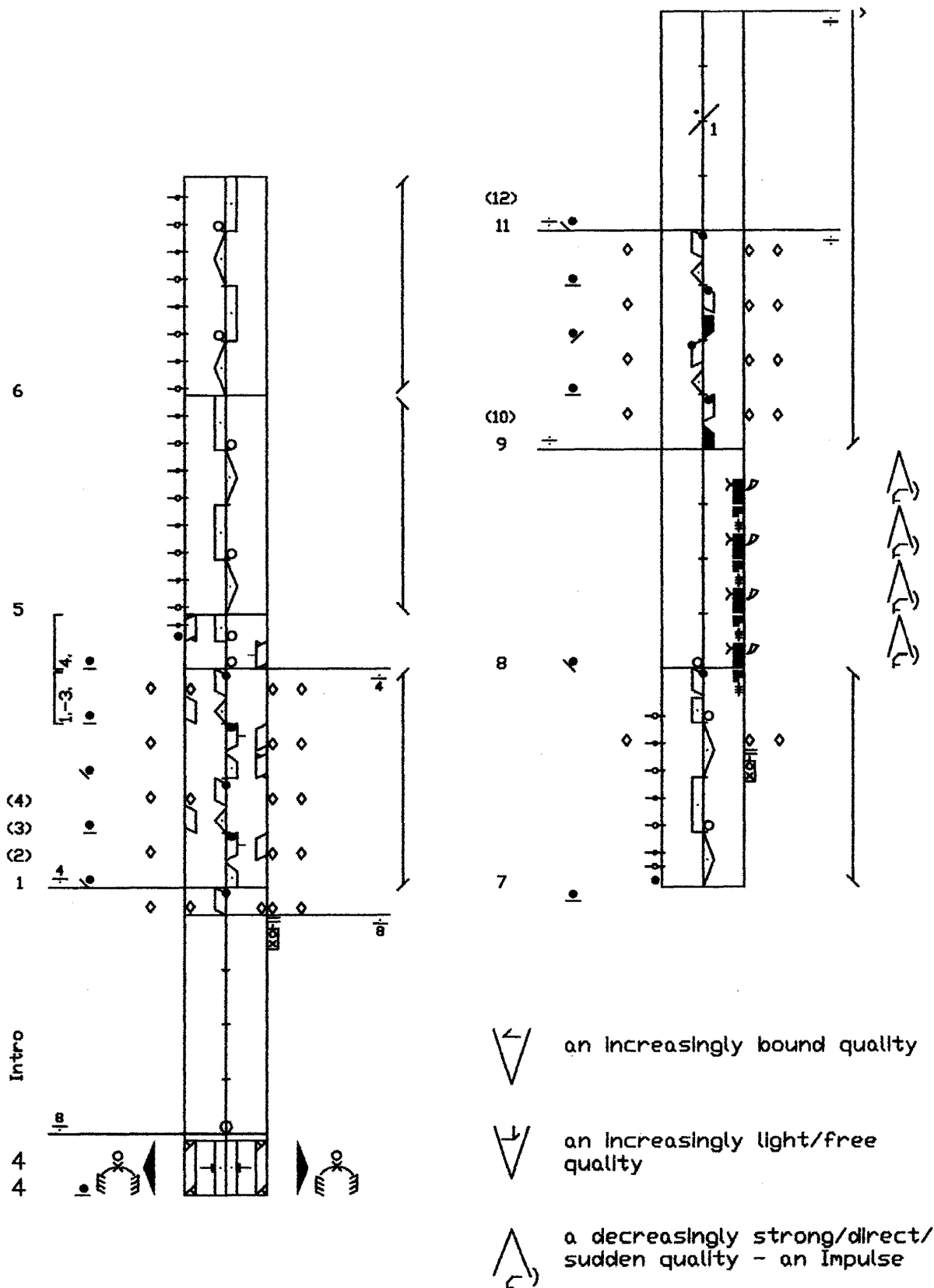


-  a maintained light/free quality
-  a maintained light/bound quality
-  a maintained free quality
-  a free/strong accent

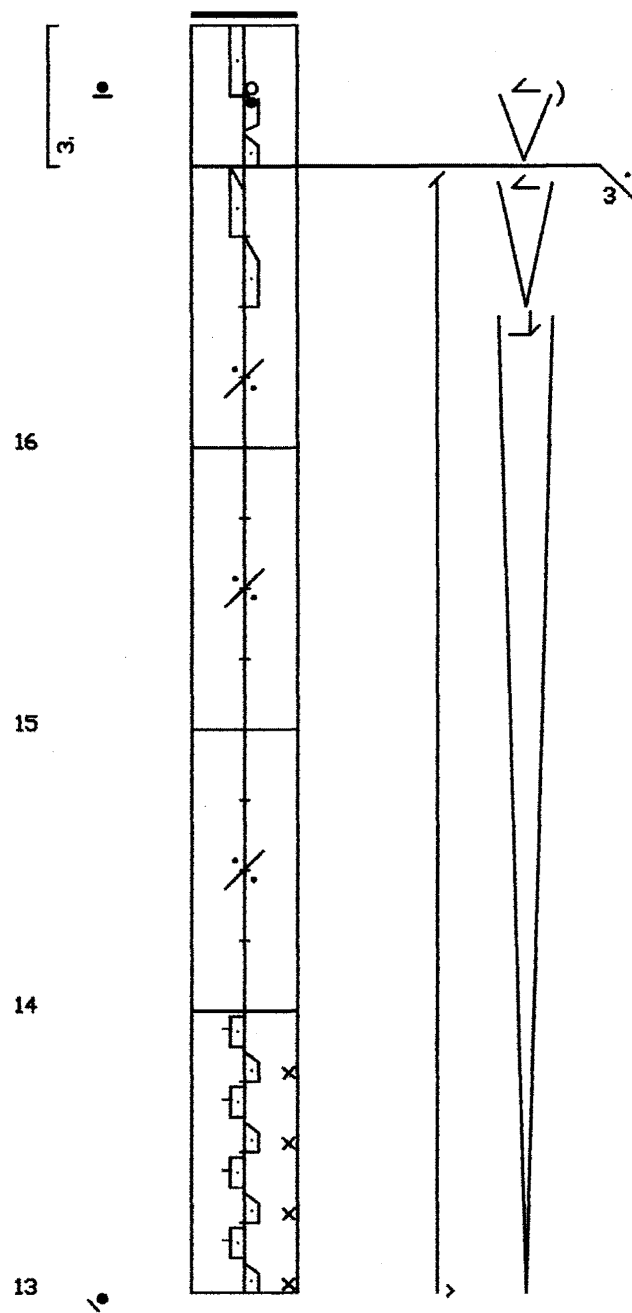


Jiana

Romanian Circle Dance (traditional)

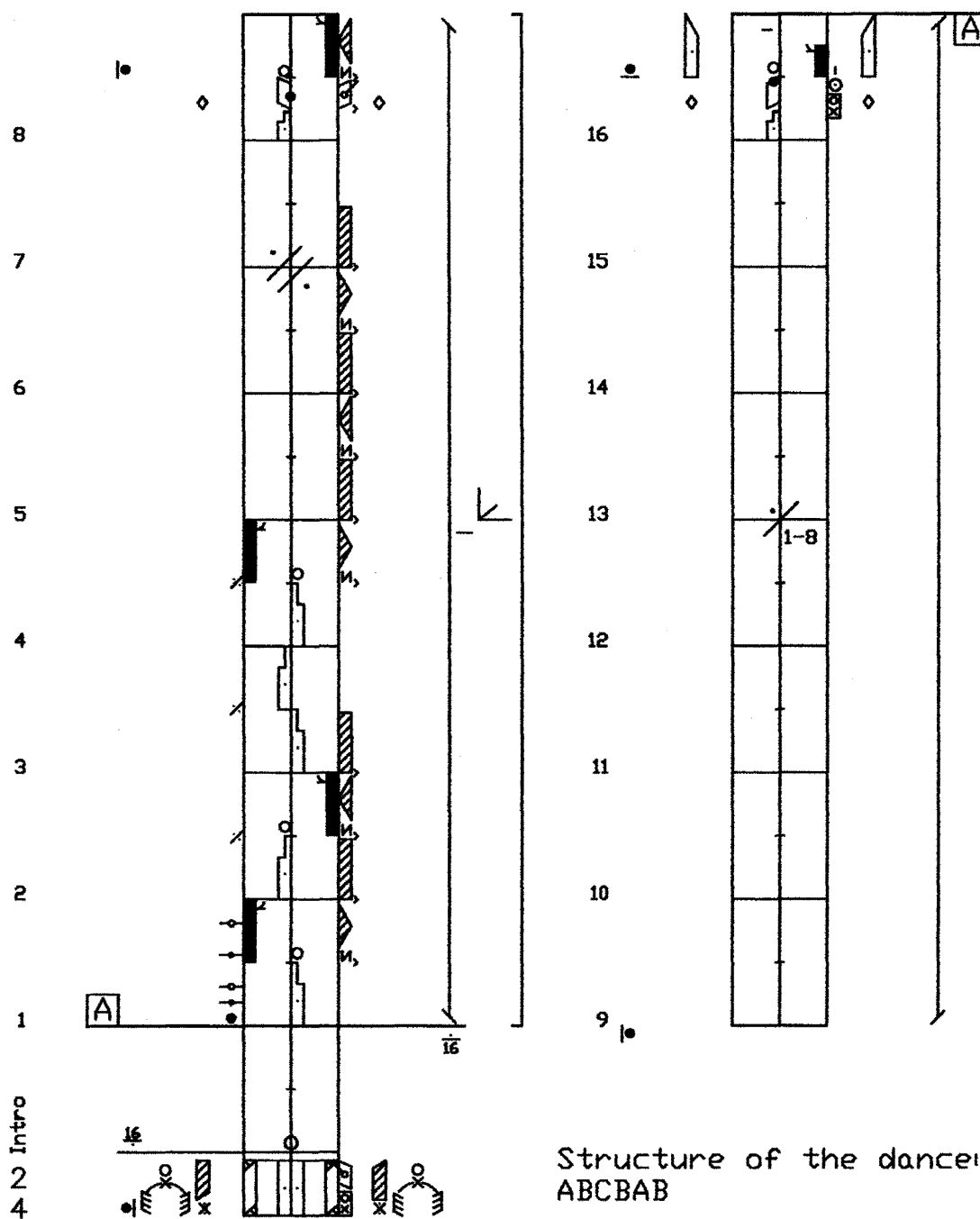


Jlana .cont.



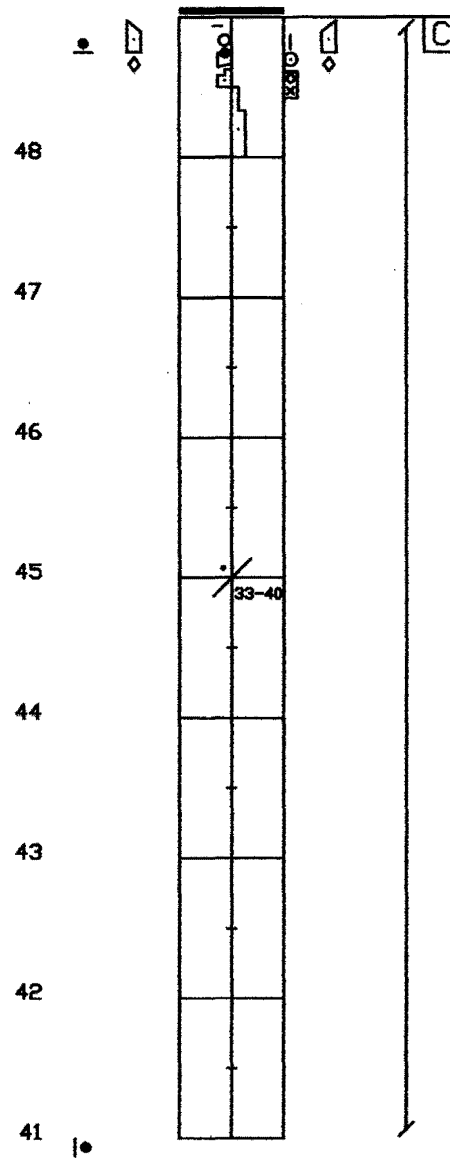
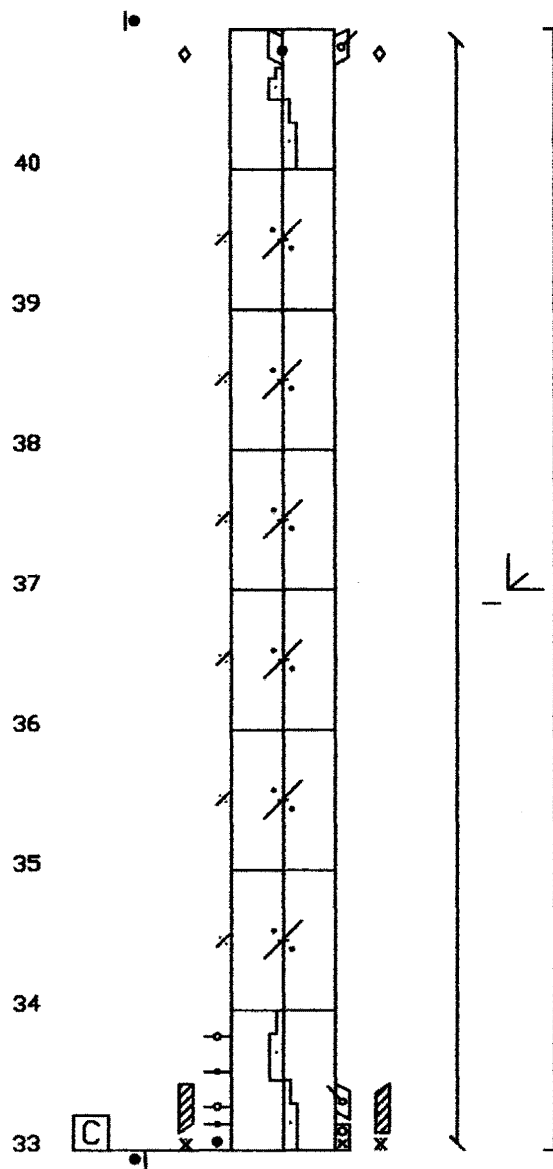
Hora Strigaturi

Romanian Circle Dance (traditional)



 a maintained light/sustained/
 bound quality

Hora Strigaturi cont. 2



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LABAN MOTIF OF ALGORITHMS GOVERNING AUTOMATIC GENERATION OF DANCE SEQUENCE IN “WEB3D DANCE COMPOSER”

by

Bin Umino
Jeffrey Scott Longstaff
Asako Soga

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 - 3.1 Algorithms and Laban motif
 - 3.2 Format for motif description in this study
- 4. Algorithms for automatic composition
 - 4.1 Definition of the target for *enchaînement*
 - 4.2 Derived algorithms
- 5. Conclusions
- Notes
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1. INTRODUCTION

Recent discussions regarding usage of Labanotation signs for making general statements, or “open” indications allowing certain degrees of freedom of choice by the reader, have led to the wider question of the relation between methods of motif description compared to full structured Labanotation description [1]. While fully structured Labanotation is able to notate precise details of body movement, the related method of motif writing, or motif description allows representation of general themes or tendencies present in body movement.

Preston-Dunlop recounts that while working with Laban on Kinetography during the 1950s that they began exploring possibilities to “take the notation apart” with the intention of developing “motif” symbols for use in freer improvisations allowing a more creative use of the formally structured Kinetography Laban [2]. This exploration continued together with Paddy MacMaster, during the 1960s at the Beechmont Movement Study Centre, some of which was presented at the Laban Art of Movement Guild [3] and at ICKL [4]. Similarly, Hutchinson-Guest also developed the “movement alphabet” [5], and various assortments of symbols and writing formats have been

presented as motif, especially for use in education for learning about movement concepts [6]. This current study explores an application and an adaptation of motif description in representing the choices made by a computer algorithm when automatically composing dance sequences.

2. WEB3D DANCE COMPOSER

2.1 Overview

“Web3D Dance Composer” is a web-based dance simulation system developed for educational and artistic purposes. The system consists of an online dance motion archive and user editable simulation system for dance steps and step sequences. An exhaustive archive of 3D motion captured ballet movements can be browsed, previewed, and selected to compose extended sequences [7].

There are the three basic concepts of the system which were set out at the beginning of the research.

(1) Web-base 3D animation

The technology of 3-dimensional (3D) animation emerged in 1990's and it has a wide range of application. Using motion capture systems, 3D human animation can be easily created with extremely lifelike movement of animated characters. For purposes of dance learning, dance creation, or dance recording, 3D animation has an essential advantage over 2-dimensional video since it allows viewing from any direction or distance.

As 3D human animation is further integrated into various media types, such as movies or TV, the demand for such animation is expected to increase. Therefore much research on dance using 3D human animation through motion capture systems has been recently developed. However, little attention has been given to share and use those motion data on the Internet [8].

For many years, various animations have been composed by using applications for choreography [9]. Such applications, though widely used up until now, do not work on the Web and they are not suitable for online application. Powerful tools for scripting complex movements and behaviours have already been created [10], but coming up with artistic human motions on the Web still remains a challenge.

The approach in Web3D Dance Composer focuses on sharing 3D animation data over the Web and creating a system capable of animating virtual dance performances. The 3D

environment accessible through the Internet is called "Web3D". Sharing motion data on the Internet allows anyone to access various artistic dances from all over the world. These motion data can be applied in online systems for educational and artistic purposes.

(2) Dance motion archive

With the view toward Web3D, a "Dance motion archive" was constructed using motion capture systems to gather 3-D motion data. For the first stage of the project, classical ballet was selected amongst various dance categories, and this was further restricted to beginners' female *petit allegro* and limited to the movement of the lower body at this stage due to the sheer amount of ballet vocabulary.

Ballet steps were captured from female professional ballet dancers over several weeks employing both the EVa System [11] and Vicon51 [12] optical systems, and Motion Star Wireless [13] magnetic system.

The archive is intended for use through the Internet, so raw data obtained from motion capture was transformed into standard format to make it sharable according to our original standardisation methods developed for this research project.

To make the dance motion archive and compose a virtual choreography an original method was developed for segmenting motion data and representing classical ballet steps on computer [14]. The dance movements were articulated into short pieces of motion, called 'manipulated units', for the benefit of information storage and retrieval. As ballet is a dancing method which has rigid and codified system of motions and poses, we could divide the movement into the manipulated units relatively more easily than other genres of dance. We recorded most natural arms movements that correspond to each step at the same time.

Such independently manipulatable motion units make it easy to access and recompose actions easily as well as reuse the same data. The program is always processing the data, one unit at a time, either to simulate dance movement or to create new dance sequences in the Web3D environment.

(3) Automatic composition

The program handles short units of dance motion as if building blocks. Due to this segmentation, we could develop the automatic composition system.

A numbered catalogue of basic ballet steps needed to be constructed to allow for subsequent automatic composition by computer. The comprehensive catalogue of 543

basic ballet steps was organised with collaboration with expert ballet teachers in Tokyo. The 543 steps were further categorised into 4 families, allegro, rotation, transition, and fragmentary steps, and also sub-families, allowing the algorithm to constrain transitions between step families and sub-families (described below).

The algorithms for composition which are built in the program can automatically compose ballet step sequences from motion units in the step archive. Initially, the character of the algorithm was designed for automatic composition of beginners *petit allegro enchaînement*, and later other variations on this algorithm were derived, such as might occur in more contemporary ballet choreographies. Details of the algorithms will be discussed in the later sections.

2.2 User interface

The user interface (Fig. 1) uses a VRML viewer and six control panels which allow a variety of manipulations. The recommended viewer is Cortona VRML Client which is free plug-in client software and can be downloaded through the Internet [15].

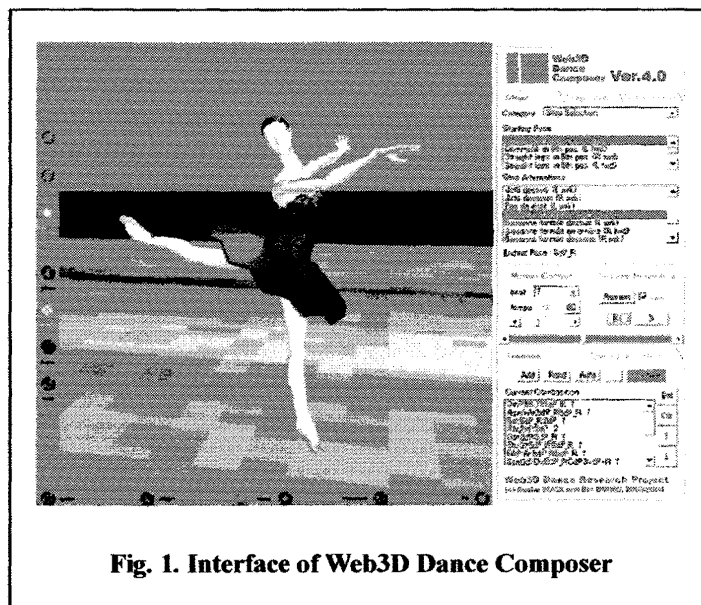


Fig. 1. Interface of Web3D Dance Composer

(1) VRML Viewer

The VRML viewer displays the 3D motion captured dance movement and allows the view point of the performing area to be transformed in several ways. Using buttons, the view point can be changed forward & back, side-to-side, up & down, rotated and zoomed in/out.

(2) Control Panels

The "Step catalogue panel" allows selection of positions, steps, and entire pre-composed sequences (Fig. 2).

The "Display control panel" allows many combinations to be selected amongst dancer model, type of stage space, number of dancers, and arrangement of dancers. Two possible selections are shown in Fig. 3.

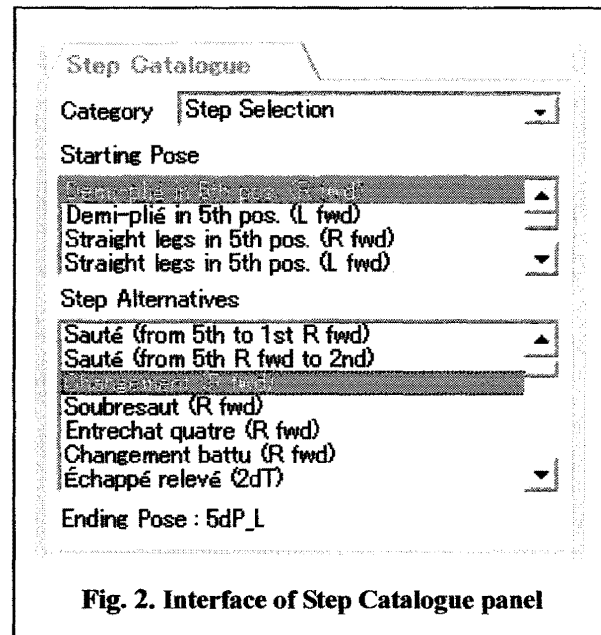


Fig. 2. Interface of Step Catalogue panel

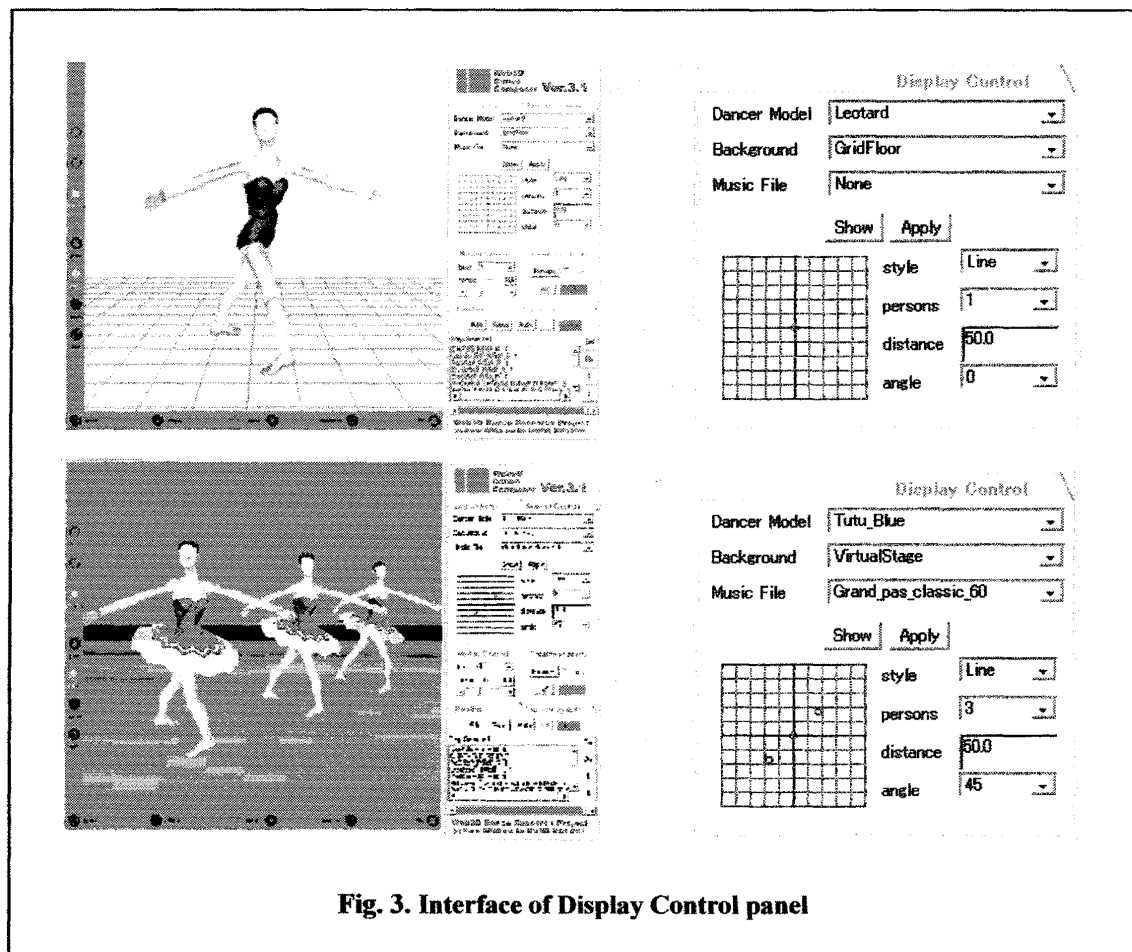


Fig. 3. Interface of Display Control panel

The “Motion control panel” allows these steps to be previewed and manipulated in their duration, speed, and manually controlled with a horizontal scroll bar (Fig. 4).

Using the “Time line panel”, users can “add” steps to the sequence and combine (“Cmbn”) these steps to create the final sequence, ready for viewing (Fig. 5). In addition, by using the “Auto” button on this panel, the automatic composing system self-generates an entire dance sequence according to a particular algorithm prescribing its structure.

The “Compositions panel” is used to select one of the five algorithms for automatic composition (Fig. 6). Buttons and links allow details of each algorithm to be seen, represented in Laban motif, with further explanations of motif signs also provided [16].

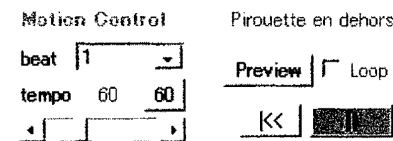


Fig. 4. Interface of Motion Control panel

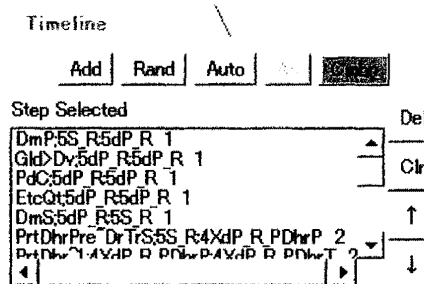


Fig. 5. Interface of Timeline panel

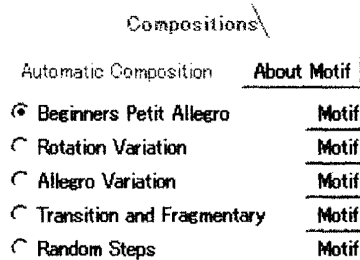


Fig. 6. Interface of Compositions panel

3. LABAN MOTIF OF ALGORITHMS FOR AUTOMATIC COMPOSITION

3.1 Algorithms and Laban motif

The automatic composing system in Web3D Dance Composer generates entire dance sequences according to particular algorithms prescribing its compositional structure. These algorithms consist of collections of rules, choices, and constraints according to which the motion captured ballet movements in the archive are selected and combined into dance sequences. Each subsequent composition by the same algorithm generates a new unique sequence, yet following the same characteristic pattern as defined by the particular algorithm. Originally designed for generation of beginners *petit allegro enchaînement*, four other variations on this algorithm have also been distilled for generation of new original dance sequences such as might occur in contemporary ballet choreographies.

When attempting to gain a realistic, practical understanding of the structure and inner-workings of an algorithm, how it predicts or regulates production of a movement sequence. It also appeared that algorithms used in automatic composition of dance sequences are very similar in function to movement descriptions with Laban motif. Similar to an algorithm, motif description represents possibilities and rules serving as guidelines for creating a movement sequence. Therefore, an attempt was made to represent details of algorithms used in Web3D Dance Composer in visuographic displays such as offered by Labanotation and Laban motif description.

3.2 Format for motif description in this study

The formal layout of motif descriptions can be adapted to fit the application. In this study the traditional formats of Labanotation and Laban Motif are modified as appropriate and several signs were derived where necessary. Verbal propositional lists of rules were also included with the motifs to help interpret the graphic signs.

(1) Motif staff and duration

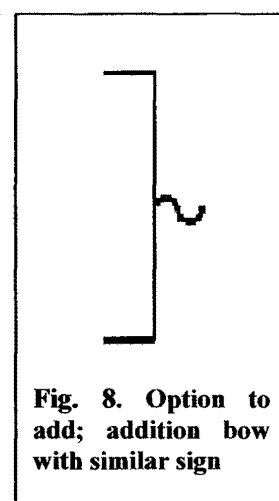
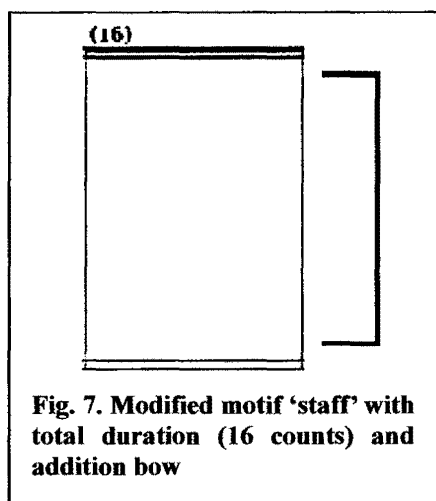
The sequence of steps are represented in a vertically running motif 'staff' modified from Labanotation by removing the centre line so that movement indications refer generally to the entire body.

The algorithms constrain the overall duration of the dance sequence. This is indicated on the staff by the bar lines at the beginning and ending of the sequence. Intermediary bar lines were removed from the staff, if not specified by the algorithm, so that movement during the sequence was not constrained to a particular musical bar. Duration of the entire sequence was indicated in a manner similar to Labanotation by placing the total number of counts within parentheses after the final bar line (Fig. 7).

(2) Addition bows

The algorithms also impose constraints on the entire sequence overall. These were indicated in motif with an addition bow placed to the right of the staff (Fig. 7).

In some cases, the algorithm required a yes / no choice, giving an option to add



something or not. In these cases an addition bow was combined with the 'similar' sign to indicate an option to add (Fig. 8).

(3) Families of ballet steps

The basic material for use by the algorithms, the dance movements, steps and positions, consist of 543 motion captured ballet steps, specifically those most applicable to beginners women *petit allegro*. Each of these is pre-defined as lasting from 1/2 to 4 beats in duration. For purposes of selecting and blending different types of movements in automatic composition these ballet steps were classified into 4 step families; Allegro, Rotation, Transition, and Fragmentary. The complete list is available online [17].

The 4 families were represented in Laban motif as general themes which seem to be shared amongst members of each family. Ballet steps in each family were not all the same type of movement action. For example the rotation family includes preparation and recovery steps, and the allegro family also includes some rotation movements. However 4 general action themes were identified which characterised each family. The families of allegro, rotation, transition, and fragmentary steps were represented in motif by themes of ariel actions, rotations, travelling, and flexing / extending respectively. In addition, short sub-series of steps from the same family were designated as short 'phrases' and represented in motif as the theme for that family, enclosed in a phrase bow (Tab. 1).

Tab. 1. Movement actions, general themes for 4 families of ballet steps, and 'phrases' of steps (short sub-series and repetitions) within a single family

	Allegro step family	Rotation step family	Transition step family	Fragmentary step family
Typical action in the family	 ariel action	 turning action	 travelling action	 flexing / extending action
Theme for an action in the family	 theme for action in allegro family	 theme for action in rotation family	 action with theme of travelling	 action with theme of flexing / extending
Phrase (short sub-series) in the same family	 phrase in Allegro Family	 phrase in Rotation Family	(none defined)	 phrase in Fragmentary step Family

(4) Subfamilies and repetitions

Within each step family, smaller subfamilies were distinguished to allow the algorithm to define detailed constraints on step selection and repetition. Labanotation repeat and analogy signs [18] were used and adapted to indicate the type and number of repetitions allowed in a dance sequence. Four types of repetition were used and defined relative to families and sub-families (Tab. 2). "Identical repeats" indicate an exact repetition of the previous action. "Symmetrical repeats" from Labanotation are used in this study specifically to indicate a repeat in the same sub-family where members generally consist of a dance step performed in different directions (*devant*, *derrière*) or different body parts (right leg, left leg). The 'similar' or ad lib. sign was used to create two other types of repetition, a "similar repeat" indicating a repetition to another movement in the same family (but different sub-family), and "any repeat" indicating any repetition in the same family or same sub-family.

Tab. 2. Four types of repetitions

	Identical repeat (same movement performed again).
	Symmetrical repeat (in this study defined as being a repeat in the same sub-family).
	Similar repeat (derived from the similar sign, in this study defined as indicating a repeat in a different sub-family, same family).
	Any type of repeat (derived from the similar sign, in this study defined as any type of repeat in the same family).

(5) Number of repetitions

The number of times that a movement can be repeated, either identically, symmetrically (same subfamily), or similarly (same family), is specified using sectional repeats as in Labanotation. The total number of performances allowed by the algorithm is written as a number within the sectional repeats. To allow for more choices by the algorithm, indications for number of performances included indications of equal-or-less-than ($\leq$) and also the 'similar' sign to indicate a choice of any number of performances (Tab. 3).

Tab. 3. Examples of total number of performances in sectional repeats

			
			
Performed any number of times, identical repeats.	Performed less or equal to 2 times, symmetric repeats.	Performed less or equal to 3 times, similar repeats.	Performed any number of times, any type of repeat.

(6) Transition to new family

In some cases the algorithm specifies that the next movement must come from a different step family. This was indicated with the 'cancellation' sign, meaning 'going away from', but which was given a specific meaning here, that the next step must come from a different family (Fig. 9).



Fig. 9. Cancellation sign; next step from a different step family

(7) Alternative parts and preferences

The algorithms allowed multiple choices of 2 to 4 alternative dance steps or phrases, in some cases one alternative given greater weighting as the preferred choice. Traditional Labanotation and motif methods did not readily offer signs for multiple choice and preferences. Therefore, a method of "alternative parts" was derived from

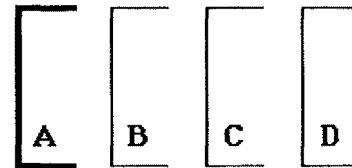


Fig. 10. Alternative parts with thickened bow indicating preference

Labanotation / musical signs for 1st and 2nd endings. To distinguish these, they are labelled 'A', 'B', 'C', etc. and placed in parallel (simultaneous) to indicate a forced choice amongst alternatives (Fig. 10). A preferred choice was indicated by thickening one of the bows, adapted from the practice of thickening relationship bows to indicate the more "active" side of the body, or partner [19].

(8) New movement beginning (Phrasing)

Some of the algorithms set a constraint that movements should not carry over from one bar to the next, that is, movements should be phrased so that a new dance step always begins on count 1 of each bar. This was indicated with the Labanotation method for showing counts, in this case showing a new action ('action stroke') beginning on count 1 of the bar. Because this



Fig. 11. New action begins on count 1 of the bar

constraint refers to the sequence overall (not just one particular bar), it was placed in an addition bow (Fig. 11).

(9) Degree of exertion

After trial runs of the automatic composition system, it was found that some of the dance sequences created were physically impossible. Therefore another constraint was developed to address the level of physical exertion. Default exertion 'scores' from 1 to 8 were assigned to each step with assistance of expert ballet teachers. Allegro, rotation, and transition steps have from 2 to 8 points; for example, "*pirouette en dehors*" has 8 points, "*assemblé*" has 4 points, and "*rond*

de jambe as a preparative movement for a "*pirouette*" has 2 points. All fragmentary movements have 0 points. These offer a way to estimate the overall physical exertion required in a single dance sequence.

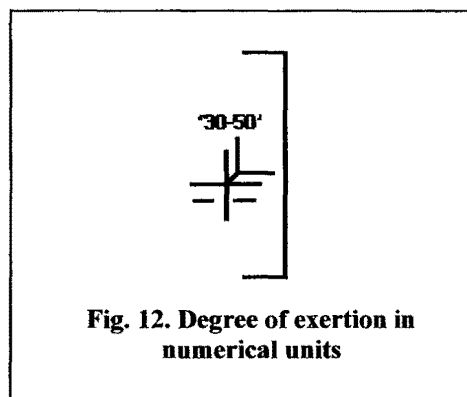


Fig. 12. Degree of exertion in numerical units

Labanotation or motif does not offer such a quantitative method for indicating levels of exertion in a sequence. Therefore a sign was devised using the 'Effort graph' [20] as a general indicator of dynamics or exertion, with an arbitrary numerical scale added to correspond to the exertion ratings of the motion captured ballet steps. This was applied to the sequence overall in an addition bow (Fig. 12). This is admittedly an imperfect solution for representing constraints of dynamics, exertion, and intensity, but was used here for this immediate purpose.

4. ALGORITHMS FOR AUTOMATIC COMPOSITION

4.1 Definition of the target for *enchaînement*

The initial target of the algorithm was for the automatic composition of classical ballet *enchaînement*. Later, variations of this algorithm were developed for automatic composition of other types of sequences, such as which might be used in more modern choreographies. Five algorithms are described here: beginners *petit allegro enchaînement*; allegro variations; rotation variations; transitions and fragments; and random steps. Each of these has their own particular set of algorithmic options and constraints.

4.1.1 Beginners female *petit allegro enchaînement*

The intricate details of algorithmic constraints for *enchaînement* necessitated, for practical writing purposes, to format the motif at two levels; 1. as short sub-series or

phrases of repeats within a single step family, and 2. the entire *enchaînement* sequence overall. Shorter phrases in a single family were motified separately and then indicated as a single sign in the overall *enchaînement* motif.

(1) Sequential constraints within a single family

Several constraints were developed regarding how short sub-series of steps might be linked, either within a single family, or as the basic anatomical possibility for joining any two steps. These were developed for the *petit allegro enchaînement* and sometimes used or modified in the other algorithms.

a. Allegro family phrase

A portion of the beginning *petit allegro enchaînement* algorithm defines repetition of steps in the allegro family. In motif this was represented as a phrase in the allegro family (Fig. 13).

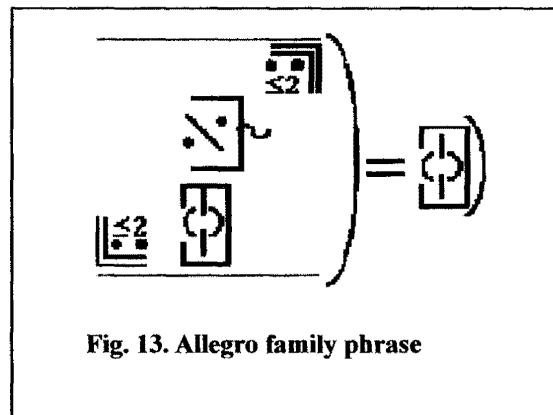


Fig. 13. Allegro family phrase

The motif shows that this portion of the algorithm gives two constraints. Firstly the algorithm allows an allegro step to occur either once, or there is an option to repeat this same step once (maximum 2 performances). Secondly, another allegro step in the same sub-family (symmetrical repeat) can occur with an option to repeat that step. This means that steps in the same sub-family can be performed up to four times in succession. For example, this portion of the algorithm allows an “*assemblé devant*” to occur twice in succession, immediately followed by an “*assemblé derrière*” also performed twice.

b. Rotation family phrase

A portion of the algorithm also defines repetition of steps in the rotation family. The target of the *petit allegro enchaînement* algorithm was for beginners level so only a single turns was allowed. The motif shows that the algorithm requires, firstly, that a rotation phrase always begins with a preparation action, followed by the rotation step. Next, there is an option to add a terminative step, since it is possible to end the order of rotation steps without

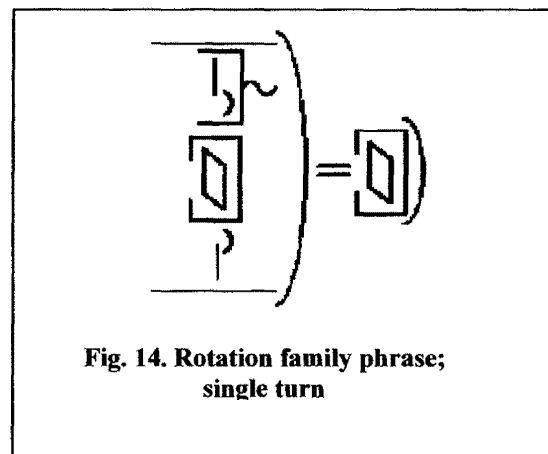
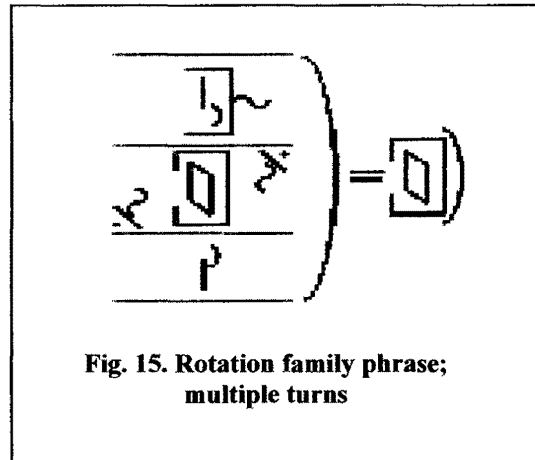


Fig. 14. Rotation family phrase;
single turn

terminative steps, but it logically cannot start without preparative steps (Fig. 14).

Some of the other algorithms included rotation family phrases with multiple turns. *Petit allegro enchaînement* allows only a single turn because it is for beginners level, but a rotation family phrase with multiple turns was used in both the 'rotation variations' and 'random steps' algorithms. The motif shows this multiple turn variation, requiring that it always begins with a preparation action, followed by the rotation step which can be repeated identically as many times as desired. Finally, there is an option to add a terminative step (Fig. 15).



**Fig. 15. Rotation family phrase;
multiple turns**

c. Fragmentary step family phrase

All of the algorithms include a portion defining repetitions of fragmentary steps. As the name 'fragmentary' implies, the actions in this family are a short step fragments serving as short links for joining together other steps such as rotation or allegro. The motif shows that this portion of the algorithm gives a choice of two possibilities; A) 2 actions of 1/2 count each, or B) 1 action of 1 count. The entire series will always be 1 count in duration (Fig. 16).

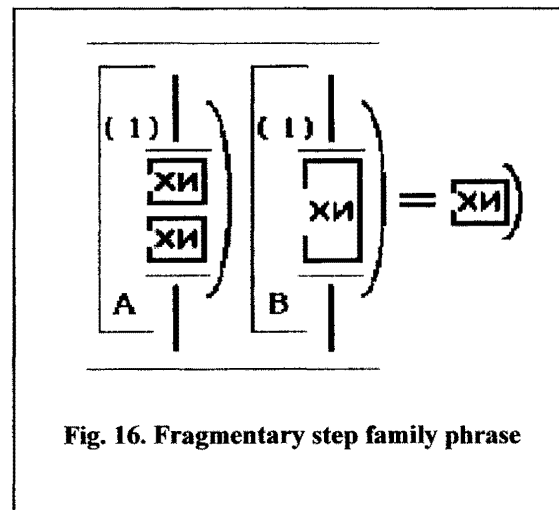
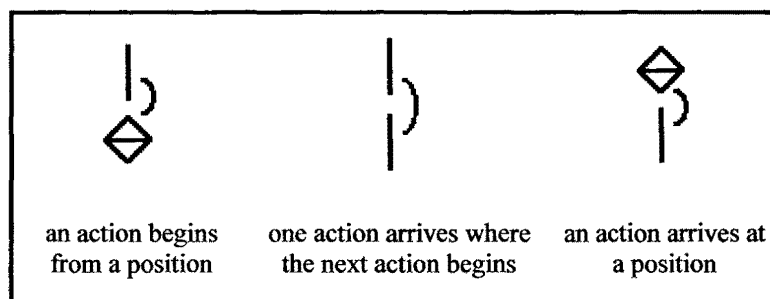


Fig. 16. Fragmentary step family phrase

d. Anatomical transitions

Steps are arranged in a consecutive order and follow a logical progression. While much of the constraints in algorithms are towards defining aesthetic characteristics, the 'logical progression' is determined firstly by basic anatomical constraints for transitions between body movements. In motif this physical constraint can be indicated using the signs for a 'shape', an 'action', and linking these with a small bow indicating that any movement (or position) must begin from the place where the previous movement (or position) arrived at (Tab. 4) [21].

Tab. 4. Basic physical constraint on transitions between movements and positions



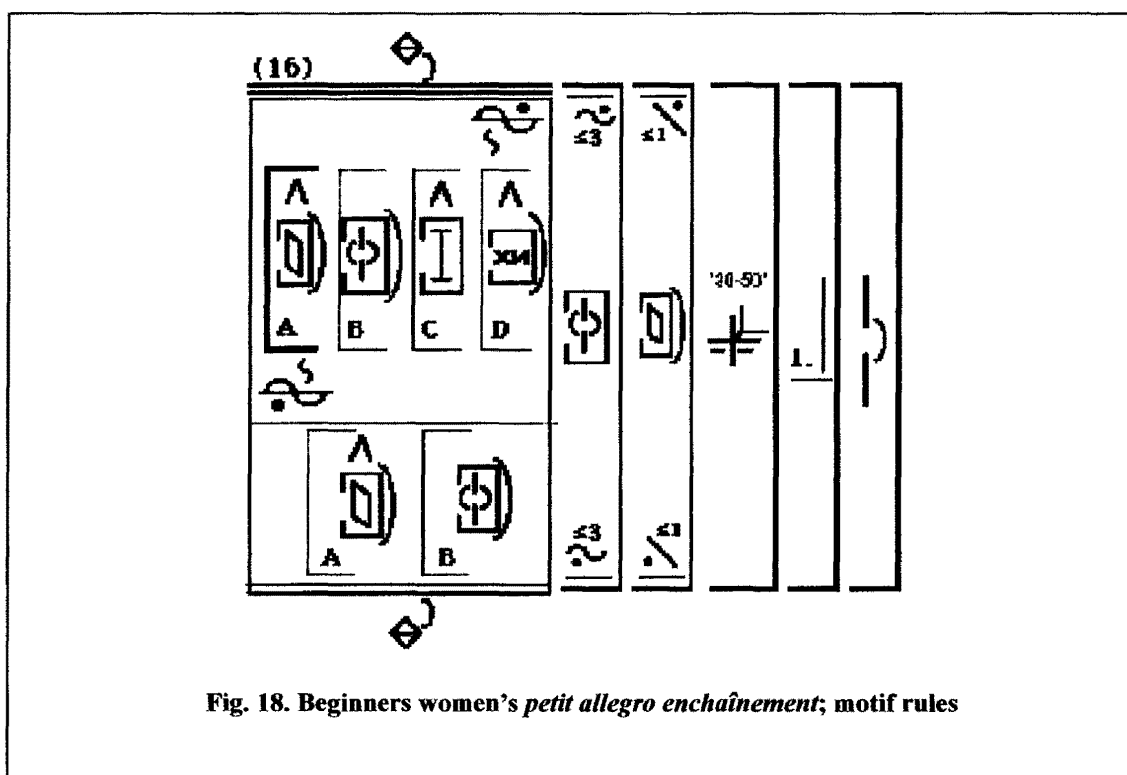
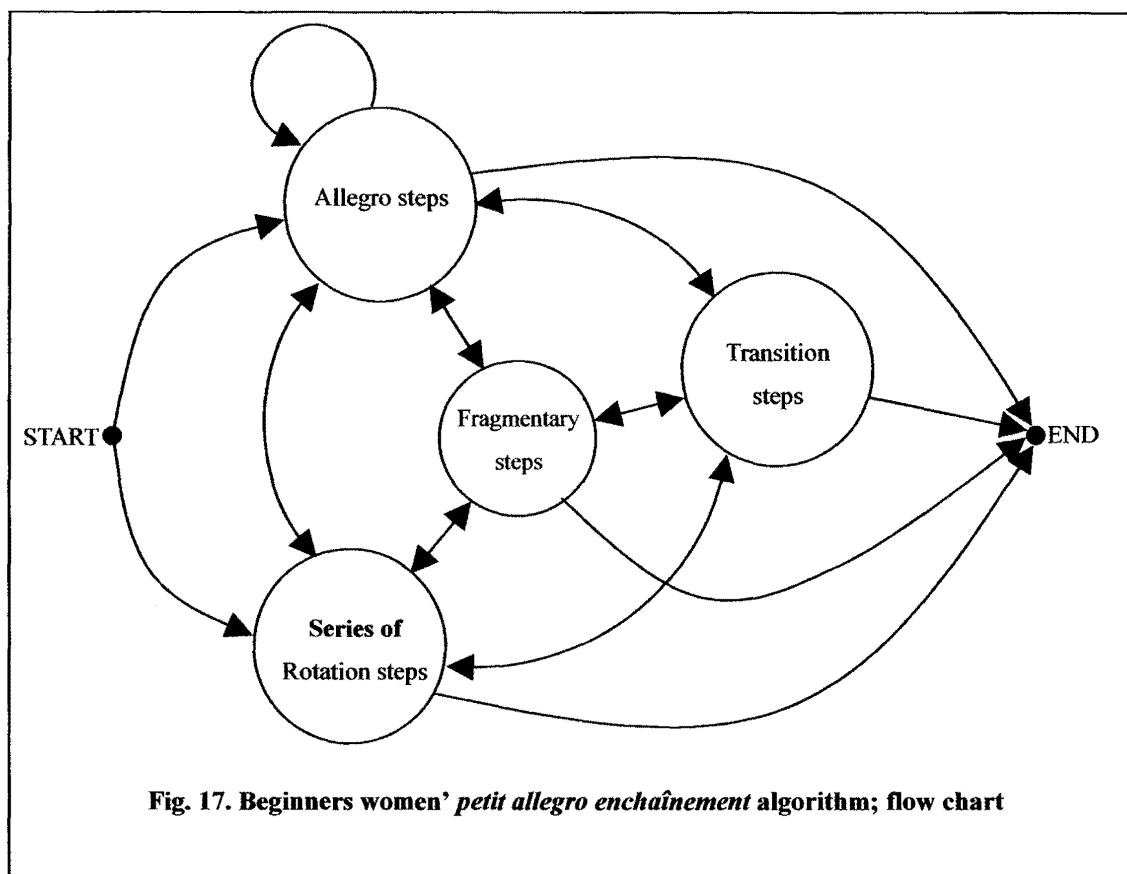
(2) Sequential constraints overall

The order of the steps in *petit allegro enchaînement* is also determined by ballet aesthetic considerations. The sequence and combination of steps was worked out through interview with expert ballet teachers. The transitions between step families in the *petit allegro enchaînement* algorithm can be displayed as a flow chart (Fig. 17) and detailed constraints can be represented in motif (Fig. 18).

The algorithm constrains which positions can be used at the beginning or the ending of the sequence. In interviews with ballet teachers, a selection of positions was designated as most appropriate for beginning and ending *enchaînements*. The 5th position of the feet was chosen as the starting position for all the *enchaînements*, as this is the most commonly used position to begin *enchaînements* in *petit allegro*. At the end of an *enchaînement*, the algorithm selects 1 out of 12 positions. In motif, these appear as 'shape' signs, indicating a selection amongst designated beginning and ending positions.

The sequence of steps can be read from the motif. First, there is a choice of either a rotation family phrase, or an allegro family phrase. Next is a choice amongst four alternative parts. There is a preference to choose a rotation phrase, with other possibilities being an allegro phrase, a transition step, or a fragmentary phrase.

This choice amongst four alternatives repeats until the full duration of the sequence. It was recognised that the length of *enchaînements* depends on its purpose and the steps employed. In real ballet lessons the duration of *enchaînements* vary from 6 beats (2 bars in three-four) to 64 beats (16 bars in four-four or 32 bars in six-eight). However, in *petit allegro enchaînements* the standard duration would be four or eight musical bars (12, 16, 24 or 32 beats depending on the time signature). Accordingly the duration of *enchaînements* was restricted to just 16 beats (4 bars in four-four) in the first trial. This is indicated at the top-left of the motif staff.



These choices amongst alternative parts are also subject to additional constraints. Some of the dance steps appear in the motif immediately followed by the 'cancellation sign', indicating that after these steps must come a step from a different family. This allows for the likelihood that intermediate fragmentary movements, or a transition step, might interpose between steps from other families.

Further constraints, represented in motif addition bows, interact with these sequential constraints. While rotation family phrases are encouraged in the sequential constraints, the motif shows how they are also restricted to ' ≤ 1 ' performance. Allegro family phrases are also encouraged in the sequential constraints, while the motif addition bow shows the interaction with another constraint restricting allegro steps to performances from ' ≤ 3 ' different sub-families ('similar' repeats).

Other constraints are also indicated in motif addition bows. In accordance with traditional balletic relationship with music, the movement phrasing is controlled such that steps do not carry over from one bar to the next. For example even if the algorithm selects a 3-beat or a 4-beat step, it shortens the duration of that step so that it finishes at the end of the current bar. This is indicated in an addition bow showing that a new action will always begin on count 1. As discussed earlier, a constraint was developed to address the level of physical exertion. Default physical exertion "scores" were assigned to each step, and after trial runs a final range of scores was decided. The range of scores within a 16-beat *enchaînement* was constrained to be between 30 to 50. Finally, the basic anatomical constraint (movements arriving where the next begins) is added to all algorithms.

The *petit allegro enchaînement* algorithm also placed a few special constraints were placed on certain combinations of steps which are inappropriate for beginner level students. These detailed constraints on individual steps were not represented in the motif. For example, the algorithm does not allow:

- an *enchaînement* with a "*changement battu*" before or after a "*pas de chat*";
- an "*entrechat quatre*" is not allowed before or after a "*sissonne fermée*";
- and a "*fouetté coupé raccourci sauté*" is not allowed before or after a "*temp levé*".

4.2 Derived algorithms

Four other algorithms were derived to allow exploration of other ballet sequences which might be used in more contemporary choreographies. The four new algorithms; rotation variation, allegro variation, transitions and fragments, and random steps, were each developed from the *petit allegro enchaînement* algorithm, so their constraints relate back to the original version.

Some of the constraints developed for *enchaînement* were also used in all of the derived algorithms. Two of these are primarily functional, helping to facilitate joining movements together into sequence. Firstly, the basic anatomical constraint (movements arriving where the next begins) is added (see earlier Tab. 4). Secondly, this physical requirement for connecting movements is assisted by the options available in assembling a phrase of step fragments (see earlier Fig. 16). Finally, the position catalogue used for beginning and ending positions in *enchaînement* was also used for all of the derived algorithms.

4.2.1 Rotation variation algorithm

The rotation variations algorithm was intended as an experiment in automatic composition when rotation movements are prioritised (Fig. 19).

As shown in the motif, the rotation variations algorithm always begins with a rotation family phrase. After this follows one of four alternatives. There is a preference to choose another rotation phrase, with other possibilities being an allegro step, a transition step, or a fragmentary step phrase. This choice amongst four options is repeated until the final duration of the sequence, 16 counts as in *enchaînement*.

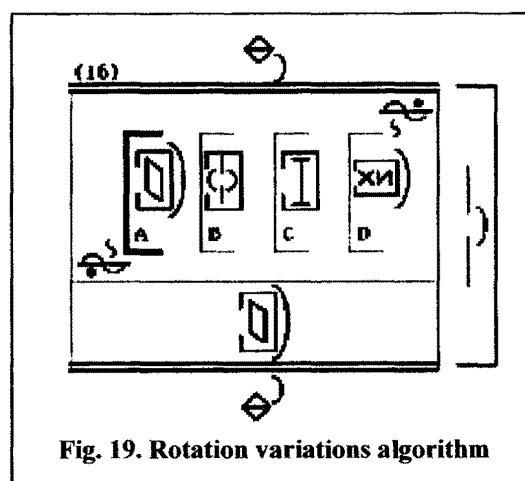


Fig. 19. Rotation variations algorithm

A characteristic of this algorithm can be seen in comparison to beginners' *enchaînement* where rotation family phrases were constrained to a single turn and only one rotation phrase was allowed in the sequence. In contrast the rotation variations algorithm allows any number of rotation family phrases, and also allows multiple turns within each rotation family phrase (see earlier, Fig. 15).

4.2.2 Allegro variation algorithm

The allegro variations was intended as an experiment where allegro steps are prioritised, both by putting them as the preferred movement option, and by allowing only allegro and fragmentary steps to occur in the sequence. As shown in the motif, the algorithm primarily consists of a choice

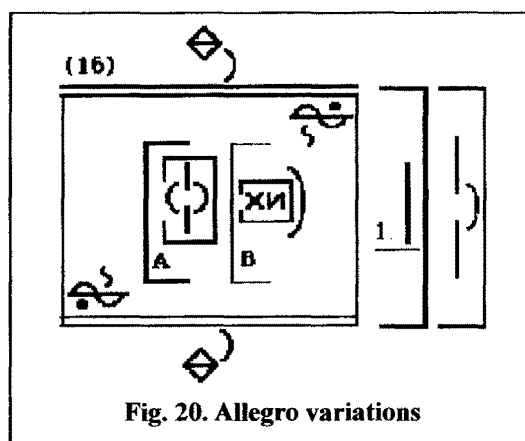


Fig. 20. Allegro variations

between two alternatives, a preference to choose an allegro family step, or the other possibility of a fragmentary step phrase. This two-option choice is repeated until the final duration of 16 counts. Another constraint is added from *enchaînement* where new movements must begin on count 1 of each bar, in accordance with typical musical phrasing (Fig. 20).

4.2.3 Transition and fragmentary algorithm

As the title implies, this algorithm is intended as an exploration of the two families of steps which are typically used only as linking and intermediary movements. This might compose interesting dance sequences for abstract choreography using an assortment of small movements (Fig. 21.).

As shown in the motif, the transitions and fragments algorithm primarily consists of an equal probability choice between two alternatives, either a transition family step, or a fragmentary family phrase. This two-option choice is repeated until the final duration of 16 counts. The musical phrasing constraint from *enchaînement* is also added where new movements must begin on count 1 of each bar.

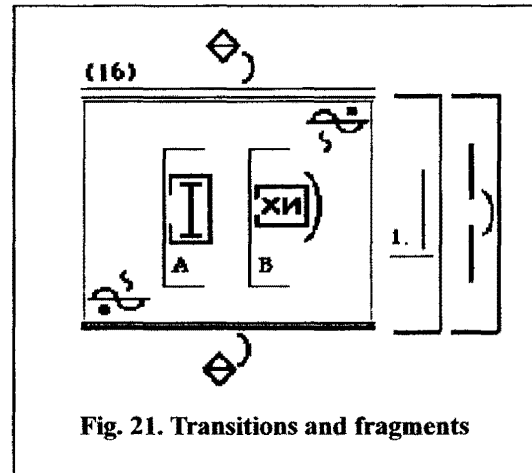


Fig. 21. Transitions and fragments

4.2.4 Random steps algorithm

As the name implies, the random steps algorithm is an experiment into a random selection amongst all steps available in the step archive. This is a chance to see the performance of the algorithm when the choice of movements is equal, constrained only by anatomical requirements (Fig. 22).

As shown in the motif, the random steps algorithm primarily consists of an equal probability choice amongst four alternatives, either a rotation family phrase, an allegro step, a transition step, or a fragmentary step phrase. These four options are repeated until reaching the final duration of the sequence.

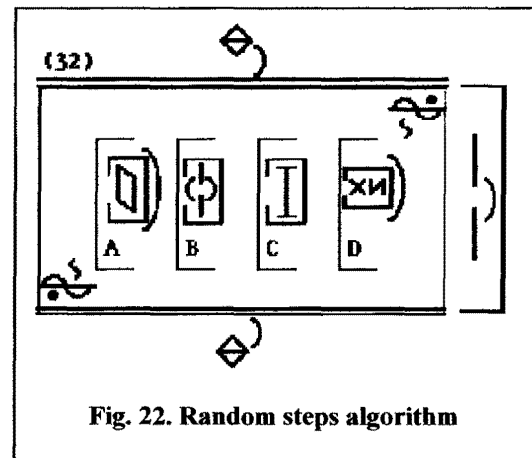


Fig. 22. Random steps algorithm

While the *enchâînement* algorithm allowed only single turns, both the rotation variations, and this random steps algorithm use a rotation family phrase giving the option of multiple turns (see earlier Fig. 15). Also characteristic of the random steps algorithm is that it is the only algorithm to constrain the duration to 32 counts.

5. CONCLUSIONS

Algorithms used in the automatic composition of dance sequences in Web3D Dance Composer can be represented in Laban motif, thus allowing mathematical models to be expressed in a language of body movement. This application indicates how Laban motif description can be adapted for particular circumstances, and also how motif symbology seems to share a natural kinship with the information contents of algorithms.

Web3D Dance Composer is valuable for online virtual dance experimentation and exploration by teachers and choreographers involved in creative practices, improvisation, creative movement, or dance composition [22]. Laban motif also reveals details of the algorithms, expressed in a language of body movement, and gives practical examples, produced in the automatic compositions, of how rules and choices can be used when composing a dance sequence. This might also indicate methods for representing improvisational or non-linear compositions, not as sequences of steps, but as collections of options and constraints.

This research is a pilot study for an automatic composing system for dance e-learning. This initial phase of research and software development heralds an exciting phase in the creation of ballet/dance education software aids. Whilst not yet achieving its long-term aims, the system evidences significant breakthroughs and exciting promise.

NOTES

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- [22] A demonstration movie of Web3D Dance Composer 3.1 is currently available online.
http://pinakes.soc.toyo.ac.jp/BIN/web3D_demo.mpg

APPENDIX: Simplified User Instructions of Web3D Dance Composer ver. 4.0

VRML Viewer		
plan	Change view point forward / backward; side / side	
pan	Change view point side / side; up /down	
turn / roll	Rotate view point	
view	Switch between 7 pre-selected view points	
restore	Returns to the last selected view point	
Display Control panel		
Dancer model	Select costume	Skeleton Leotard Tutu pink Tutu blue Tutu red Stuffed dog
Background	Select scenery	None Grid floor Wide grid floor Virtual stage
Music File	Select music	None Grand pas classic Pirate man Pirate woman
style	Select formation	Line Circle+1
persons	Select number of dancers	1 3 4 8
distance	Select distance between dancers	Input any number
angle	Select angle of formation	0 30 45 90 120 135 180
Show	Show the formation after selecting “style”, “persons”, “distance”, and “angle”	
Apply	Apply the formation to 3D Viewer after clicking on “Show” button	
Compositions Panel		
Select an algorithm for automatic composition and view Motifs		
Steps panel		
Category	Modify panel to select single steps or sequence	Step Selection <i>Enchainement</i> list
Starting Pose	Select a starting pose	See list of poses Select “ALL STEPS AVAILABLE”
Step Alternatives	Select a step	See list of steps
<i>Enchainement</i> List	Select an <i>Enchainement</i>	See list
Step sequence	Displays steps in the selected <i>Enchainement</i>	
Display Control panel		
beat	Select duration of the step	1/4 1/3 1/2 2/3 3/4 1 1+1/2 2 2+1/2 3 3+1/2 4
tempo	Adjust tempo	Slide bar to adjust tempo click on ‘60’ to return to 60
Preview	Plays the selected step (displayed in blue font above the “Preview” button)	
Dual-function buttons in Motion Control panel		
After clicking on “Preview” button:		
>	Plays or pauses the selected step in the “Step Alternatives” box	
<<	Rewinds the selected step in the “Step Alternatives” box	
After clicking on “Combine” button:		
>	Plays or pauses the entire composition	
<<	Rewinds the entire composition	
Timeline panel		
Add	Adds the selected step to the “Current Composition” box	
Rand	Adds a randomly selected step to the “Current Composition” box	
Auto	Adds an automatically composed 16 beat <i>Enchainement</i> to the “Current Composition” box	
Del	Deletes the last added step from the “Current Composition” box	
↑ ↓	Moves the step highlighted up / down in the “Current Composition” box	
All	Adds the selected <i>Enchainement</i> (displaying in the “Step Sequence” box) to the “Current Comp.” box	
Clr	Clears all steps from the “Recording Symbols” and the “Current Composition” boxes	
Combine	Combines all steps from the “Current Composition” box to make the entire composition and enters them into the “Recording Symbols” panel	
Recording Symbols panel		
Clr	Clears all steps from the “Recording Symbols” and the “Current Composition” boxes	
Save	Saves the entire composition to the sequence archive on the Internet	

- Note: **Bold** font in the table denotes default setting.

BIOGRAPHIES

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BIOGRAPHIES OF THE AUTHORS

André AUSTVOLL has received his GLCMA from the University of Surrey, England. He specialises in the integration of technology in dance and movement oriented activities. The main focus of this work is on the application of Laban Movement Analysis to describe the choreographic relationship between camera and dancer. André has produced several internationally screened dance films and has taught workshops in dynamic camera movement. In his choreographic stage works, he applies movement analysis to refine the integration of video technologies. As well as working with the camera itself, he is also utilising computers to simulate and storyboard camera movement. Most recently, André produced the DVD "Momentum", which is a collection of nine works of choreocinema. Info: www.microdance.org

Melanie BALES teaches dance technique and courses in Laban Movement studies to undergraduate and graduate students in The Ohio State University's Department of Dance, where she also choreographs and is chair of graduate studies. She received a BA from Carleton College, an MFA from the University of Illinois and was certified through the Laban/Bartenieff Institute of Movement Studies, New York. She performed both classical and operetta repertoire in West Germany and danced principal duet roles with Douglas Nielsen Dance in New York. Professor Bales' research interests have revolved around two main themes: dance style analysis and how contemporary dancers train. She has recently completed a manuscript that addresses selected issues in postmodern dance training.

Elena BERTUZZI - Dancer, choreographer and assistant for French and Italian Companies. Certified Notator, she has reconstructed some repertory pieces from Anna Sokolow, Doris Humphrey, Carolyn Carlson, Irene Hultman for performances and conferences, and has notated different choreographies in contemporary and traditional dance. She is lecturer at University Paris X Nanterre in Kinetography Laban for ethno-choreologists, and teaches Laban Analysis at the Dance Therapy Course held at the Schola Cantorum -Paris.

Leslie BISHKO (MA, OSU) is a computer animator, Certified Laban Movement Analyst and Associate Professor of Animation at Emily Carr Institute in Vancouver, British Columbia, Canada. Leslie integrates the rich movement theories of Laban Movement Analysis (LMA) with her art and teaching, towards creating expressive movement in computer animation. Leslie's research investigates the use of animated imagery to visualize Choreutics. Lectures and workshops on LMA and animation include the Laban/Bartenieff Institute for Movement Studies, the Game Developers Conference, Xbox Sports, Surreal Software, Radical Entertainment, Tisch School of the Arts and Max the Mutt School of Animation.

Suzanne BODAK - Was taught by Malkovsky from 1959 to 1965, training with him. She pursued her training with him at his Paris studio until his departure for the south of France in 1970. Suzanne has been teaching Free Dance in Paris and all over France since 1978; she simultaneously worked as a school teacher and adviser with the French

Ministry of Education. She took part in the "Dance at school" curriculum, organizing workshops in schools with special needs.

Rachel BOGGIA teaches video editing, web design, and multimedia authoring in the Department of Dance at The Ohio State University. She is interested in exploring digital media as means of expression, experimentation, and educational communication. In June, 2003, she presented her DVD-based documentation and documentary on the internationally acclaimed performing artist Meredith Monk at the Society of Dance History Scholars Conference in Limerick, Ireland. She also recently collaborated with OSU Dance Professor Sheila Marion to create "Labanlab," a series of interactive internet-based Labanotation tutorials. In love with dancing, she and has performed in works by John Jasperse, David Dorfman, Bebe Miller, and Victoria Uris. She holds an MFA in dance from The Ohio State University and a BS in Biology from Cornell University.

Rose BREUSS - Born in Vorarlberg, Austria. Studied at University for Music in Vienna, Theaterschool Amsterdam, Temple University Philadelphia, Labanotation in Guildford. Teaches at IDA - Institute for Dance Arts at Anton Bruckner Privatuniversität Linz and Universität Salzburg. Choreographer in collaboration with different dance companies and houses in Austria: Ballett of Wiener Oper, x.IDA, Tanztheater Wien and Tanzquartier Wien. Collaborations with composers and orchestras as Klangforum Wien, Konzerthaus Wien. Participation at festivals: Wiener Festwochen, scene salzburg, Feldkircher Tanzherbst, Hörgänge, Regensburger Tanztage...

Julie BRODIE is an Assistant Professor of Dance at Kenyon College, where she teaches modern, ballet, dance kinesiology, Labanotation, and choreography. Brodie received her B.F.A. and M.F.A. in Dance at the University of Illinois and completed her Labanotation studies at The Ohio State University. She is an active choreographer and performer, and her research explores ways of integrating dance science and Labanotation principles into the dance curriculum. Brodie has presented at national and international conferences and has published in *The Journal of Dance Education*. Her most recent project was an interdisciplinary, site-specific work exploring issues of identity for women and utilizing dancers, non-dancers, and children, including Brodie's six-year-old son.

Begoña CAPARRÓS currently serves as a visiting research scholar at Stanford University on a National Science Foundation funded study exploring human movement using Laban Movement Analysis. She also teaches, performs and works as a movement consultant in Spain and San Francisco. More recently she has taught classes and explored the uses of the Laban System with seniors and disadvantaged children in Sub-Saharan Africa. Currently she directs a project which aims to support the artistic and creative development of young people and artists from disadvantage communities in the developing world.

Melanie CLARKE has a BA Hons Dance Theatre and a MA Dance Studies from Laban. She has also undertaken the specialist diploma in Dance notating at Laban

studying with Jean Jarrell and Ann Hutchinson-Guest. Melanie has been a member of the teaching faculty at Laban since 1996, teaching Release-based Contemporary Technique and Labanotation and is now First year coordinator of the BA Programme at the centre. Melanie also choreographs for her own company 'blue white' and has presented seven original works in Britain and abroad.

Tina CURRAN, MFA is the Director and co-founder with Dr. Ann Hutchinson Guest, of the Language of Dance® Center, USA. She teaches nationally and internationally in both academic and professional venues presenting the Language of Dance®. Through her work as a dance reconstructor, she has restaged and directed several masterworks from Labanotation score. Curran is an associate researcher and co-author, with Christian Matjias, of the George Balanchine Critical Editions, the first of the series featuring Concerto Barocco. She is currently pursuing her doctoral degree at New York University, where she is researching ways in which new technologies can enhance and broaden dance literacy.

Kathie DEBENHAM is presently Associate Dean for Humanities Arts & Social Sciences at Utah Valley State College. She received her C.L.M.A from the University of Utah Integrated Movement Studies Program in 1997 and has found seemingly endless applications in her teaching, choreography, writing, performance, administrative duties, and life work. She teaches it on an ongoing basis as part of the Dance major at her institution and is fascinated with human movement in all its expressive possibilities. Kathie has presented the Laban/Bartenieff work at numerous regional, national, and international conferences in dance and the humanities.

Pat DEBENHAM (MA, UCLA) is a CLMA and is a Professor of Modern Dance and Music Theatre at Brigham Young University. His choreography, workshops, presentations and published papers demonstrate how Laban principles can be woven into and through dance curriculums that focus on teaching, performing, composition and research. He has presented nationally and internationally on a variety of subjects and he has published in BYU Studies, Research in Dance Education, The Journal of the Utah Academy and most recently in the NAHE Interdisciplinary Journal. Most recently he, his wife Kathie, their three dancing daughters, two grand children and three sons-in-law produced a lively and artistically satisfying concert entitled "Debenham Dance."

Henner DREWES has been teaching movement and notation since 1994 and currently works at the Kibbutzim College of Education in Tel Aviv (Israel) and at the Hochschule für Musik, Köln (Germany), where he lectures on dance and movement related technology. In 2002 he obtained his PhD at the University of Leipzig with his dissertation *Transformations - movement in notation systems and digital processing*. He is the author of the software EW Notator, a "word-processor" for creating Eshkol-Wachman Movement Notation scores. Within his dance and notation studies, Henner studied Kinetography Laban at the Folkwang Hochschule Essen in Germany (1994-1996) and the Eshkol-Wachman Movement Notation system at the Jerusalem Rubin Academy for Music and Dance (1989-1991) and at the Kibbutzim College of Education in Tel Aviv (1991-1994).

Dianne DULICAI (Ph.D., ADTR) founded the dance/movement therapy section of the Creative Arts Department at Hahnemann Medical School and College where she remains senior consultant to the program and replicated the program at the Laban Centre, Goldsmiths' College. She served as President of the American Dance Therapy Association and chair of the National Alliance of Pupil Services Organizations. She continues her research and consulting in dance/movement therapy both in the US as well as programs in Europe and South America.

Candace FECK, PhD, is Assistant Professor in the Department of Dance at The Ohio State University, where she teaches courses in contemporary dance and theatre history, theory and criticism. She holds a B.A. in Cultural Anthropology from Webster College, an M.A. in Dance and a PhD in Art Education from The Ohio State University. Feck's dissertation, *Understandings about Dance: An Analysis of Critical Writings with Pedagogical Implications* (2002), reflects her ongoing concern with curricular issues in dance criticism. She received Teacher Certification in Labanotation in 1982 and has taught classes in Labanotation and in Motif writing. She received a National Dance Association award for her achievements in dance documentation in 2000.

Ciane FERNANDES is a tenured professor in Performing Arts Graduate Program at Federal University of Bahia, Brazil, Associate Researcher at the Laban/Bartenieff Institute of Movement Studies, with a Ph.D. in Arts & Humanities for Performing Artists from New York University (1995) and CMA from LIMS (1994), author of several books and international articles, recipient of scholarships, prizes including the Virtuoso Grant 2003 from the Brazilian Ministry of Culture for comparative study at the Rajyashree Ramesh Academy for Performing Arts, Berlin. For further details/photos please refer: www.cianefernandes.pro.br

Ilene FOX is the Executive Director of the Dance Notation Bureau. She is a Certified Professional Notator, teacher of Labanotation and a Certified Movement Analyst. She has a Bachelor of Arts in Dance Education from the University of Illinois. Among the choreographers whose works she has notated are George Balanchine, Robert Joffrey, Anna Sokolow, Murray Louis, Pilobolus, Hanya Holm and Ted Shawn. Additionally, she notated the Classical Chinese Dance Syllabus for the Hong Kong Academy of Performing Arts and Hawkins Technique for the book *The Erick Hawkins Modern Dance Technique* by Renata Celichowska. Ms. Fox has taught Labanotation in Israel, China, Japan, Thailand and England as well as various places in the United States.

János FÜGEDI (Ph.D.) is an ethnochoreologist and dance notator at the Institute for Musicology of the Hungarian Academy of Sciences. His main research area is notation theory, movement and dance analysis, notation education and computer application in the field of dance notation. His notation activity focuses on the ethnic dances of Central Europe, especially on the authentic Hungarian folk dances. Fugedi is also a professor of Labanotation at the Hungarian Dance Academy. He is a fellow member of ICKL since 1989, had a position in the Research Panel of ICKL between 1991-2001, and chaired the RP at the 1997 conference of ICKL in Hong Kong. He is now a member of the ICKL Board of Trustees.

Jorge GAYON (PhD), movement-actor, choreographer/director, choreologist, ethnoscenologist. He is lecturer at the theatre department of University Paris 8 and at the arts-department of University of Valenciennes. Member of FIRT-IFTR, he also collaborates with the Laboratory of research on performing arts (CNRS-France) and with the CENIDI-Danza "José Limon" at the INBA of Mexico. Since 1995, he works in permanent artistic collaboration with Greta Maes.

Esther GEIGER holds an MA in Movement from Wesleyan University's Liberal Studies program, and a certificate in Laban Movement Analysis (CMA) through the Laban/Bartenieff Institute for Movement Studies. Her applications of movement analysis have included playground design, yoga practice and instruction, and personnel administration, as well as audio description. Currently, Esther coordinates professional gatherings and enrichment activities for WACMA (Washington DC Area CMAs). She has served as an Assistant Faculty member in the LMA Certificate Program at the University of Maryland and as an Instructor for pre-requisite courses. She is also the full-time administrator and a faculty member at Unity Woods Yoga Center, the USA's largest Iyengar studio.

Gabriela GONZALEZ (MA, Lancaster) is actually finishing the Labananalysis and Somatic Studies Master course at Surrey University, UK. Trained as an actor and Theatre researcher in Argentina, she performed and directed theatre pieces, and published several articles and papers in conferences about actor training. She has taught Movement for actors at University in Argentina for several years, combining different somatic disciplines such as "Sensopercepcion", and actor training disciplines such as Physical Actions and Anthropological Theatre with psychosomatic approaches such as bioenergetics. She is now incorporating the LMA material in a new short course of movement for actors taught at La Casona (Theatre training and research centre) in Barcelona.

Matthew GOUGH is a Ph.D. student in the School of Computing Science at the University of East Anglia. A practising dance artist, his research is situated on the interface between art and science, and concerns the development of an esoteric, avatar scripting notation. Matthew holds a Master of Arts in Contemporary dance performance.

Oona HAARANEN, BFA Juilliard, MA in Dance Research and Reconstruction from The City College of New York. Oona was born in Finland where she first studied dance and music. She danced with the Finnish National Theater and Helsinki City Theater, working with Jorma Uotinen among others. In 1992 Ms. Haaranen brought her vision of dance to the creation of her own company, The Oona Haaranen Dance Company, NYC. Since 1990, she has belonged to the dance faculties of The New York City College, St. Joseph's College and New York University. Ms. Haaranen is currently the Education Director Consultant for Brooklyn Ballet.

Patrick HAGGARD trained in Natural Sciences (Experimental Psychology) at Cambridge University, where he also obtained his PhD in 1991. He worked as a postdoctoral researcher in Neurophysiology at Oxford University, before joining

University College London Psychology Department in 1995. When UCL opened its new Institute of Cognitive Neuroscience in 1998, he was invited to lead a research group in sensory and motor processes. He was made Professor of Cognitive Neuroscience in 2004. His active research interests focus on the relations between conscious experience and brain activity. Currently, these are studied in three different topic areas: voluntary action, bodily sensation, and observing the actions of others. He has published over 70 papers on these topics in a range of scientific journals including *Science* and *Nature*. His research is funded by UK research councils, the EU, the Wellcome Trust, and the Leverhulme Trust.

Mary HAYNE is certified in Laban Movement Analysis from IMS in Berkeley, California, as well as Elementary and Intermediate Labanotation. She has completed doctoral coursework in Dance at both The University of California-Riverside and Texas Woman's University where she is currently a doctoral candidate teaching Laban Movement Analysis, and researching/writing connections between the Laban work and Cultural Theory.

Teresa HEILAND is an assistant professor of dance at Loyola Marymount University in Los Angeles, CA. She received her PhD in dance education at NYU and her CLMA in Integrated Movement Studies during the summer of 2004. She is a certified Language of Dance instructor (Level III). She teaches modern dance, choreography, Bartenieff Fundamentals, Dance Pedagogy, and Costume Design for dance. She choreographs, teaches Motif description, teaches Pilates, works with clients with movement repatterning, and performs Javanese dance while she continues to explore movement from every angle possible.

Deborah HULL, MFA, CLMA, is a San Francisco-based performer, choreographer, and teacher. She teaches dance and chairs the performing arts department at the Hamlin School, an independent school for girls in kindergarten through eighth grade. Ms. Hull is also an independent choreographer and a member of Maxine Moerman Dance Theatre, a San Francisco based modern dance company. She holds a BA in French from Amherst College, an MFA in dance from Arizona State University, and certification in Laban/Bartenieff Movement Analysis from the Integrated Movement Studies Program (IMS).

Corinne JOLA (Ms Psychology) is a PhD Student in cognitive neuroscience at the University of Zurich Switzerland. She is presently studying the cognitive processes in reading Labanotation and the human brains processes in observing dance as a visiting researcher at the Institute of Cognitive Neuroscience & Dept. Psychology, University College London and as an independent student at the Laban Center London. After her Study in Psychology she received a dance teaching diploma at the IWANSON Contemporary Dance School in Munich and recently finished her postgraduate study in Dance Culture at the University of Berne. She presented her work on several cognitive as well as dance related congresses and she has some forthcoming peer-reviewed publications in both fields as well. She is also fascinated in choreographing works on her insights from the cognitive aspects of dancing bodies (e.g., "egogogo", "Brainstorm").

Barbara KENNEDY has been teaching dance on faculty for the Physical Education & Kinesiology Department at Brock University, Ontario, for the past six years. She has taught Creative Dance; Dance Choreography; Folk & Social Dance; Physical Activity and Aging and Movement Observation and Analysis Courses. Emphasis on Laban's concepts are stressed as an integral part of the curriculum for Movement Studies. She has worked with Ministry of Education to develop dance as a credit course in the secondary schools in the province of Ontario and is the co-artistic director of "Rainbow Artists" – a group of professional performing and visual artists teaching integrated arts workshops in the schools. Her current research interests include dance therapy and the supervision of students interested in teaching dance.

Chommanad KIJKHUN - She finished her Ph.D. in Thai classical dance From Chulalongkorn University, Bangkok, Thailand, in October 2004. The topic of her research is "The Essence of Male Classical Dance". She has attended the technique of Labanotation and Its Implementation for Teachers of Performing Arts, The Intermediate Level Technique of Labanotation and Advanced Level Training Course on Labanotation, in Indonesia, Singapore and Thailand which granted by SPAFA since 1989-1993. Among those courses, she also had opportunities to study with Ilene Fox, Prof. Rhonda Rhyman, Madam Zhang LingLing, Prof. Judy Van Zile and Prof. Chua Soo Pong. Currently, she holds the academic position as Associate Professor at Rajabhat Suan Sunandha University, and expertise in Labanotation, Thai Royal Court Dance and Thai Folk Dance. She is also a guest lecturer at Chulalongkorn University.

Harumi KIMURA (ME) Associate professor of Yamanashi University, Dance and philosophy. Studied on dance in graduate school of University of Tsukuba, studied Labanotation under the guidance of Rob van Haast and Jean Jarrell in Laban Centre 1991-1992 PDDS course as a overseas researcher of Japan Ministry of Education, and from Carl Worz as well in Japan. Studied on semiology and notation theory under the guidance of Prof. Akiko Tsukamoto in University of Tokyo in 1998 as a within the country researcher of J.M.E. Since 2002, every summer, study Your Move system from Valerie Farrant and Reiko Morita in Japan. (In 2004 could received the lecture by Dr. Ann Hutchinson Guest.) Now, study Japanese Traditional Dance such as Kagura and Gagaku.

Joukje KOLFF received a MSc in Computational Linguistics (University of Amsterdam) and a MFA in Dance (Ohio State University). She has been research assistant to Dr. Ann Hutchinson Guest at the Language of Dance Centre, co-writing the Advanced Labanotation Textbook Issues, and has taught Labanotation at the University of Surrey Roehampton. Joukje has also worked as multimedia programmer and teacher.

Maria I. KOUTSOUBA - Lecturer of Greek Folk Dance at the Physical Education and Sport Science Department, University of Athens where she also teaches the course of "Dance Notation", and course Co-ordinator of Greek Music and Dance at the Greek Open University. Bachelor from the PE Department, University of Athens, with major on Greek Folk Dance (1989), MA in Dance Studies, University of Surrey, UK (1991), Ph.D. in Ethnochoreology, Goldsmiths College, University of London, UK (1997),

postgraduate title on Open and Distance Learning, Greek Open University (1999). She has published articles and conference papers on various aspects of dance research and is working on a book on dance notation and Labanotation in Greek. Interests: ethnochoreology, dance notation (Labanotation) and morphology, dance education.

Billie LEPCZYK an Associate Professor of dance education at Virginia Tech, holds a doctorate from Columbia University where she was a Teachers College Fellow and Dance Notation Bureau Certifications as Professional Notator, Laban Movement Analyst, and Labanotation Teacher. She is also certified as a Hatha Yoga Teacher and Pilates Teacher. Dr. Lepczyk is a Fellow of the International Council of Kinetography Laban and the AAHPERD Research Consortium and is the recipient of the 1998 National Dance Association Scholar/Artist Award. Her current research concerns integrating aspects of yoga into dance technique class to facilitate achieving optimal body alignment.

Jeffrey Scott LONGSTAFF (MS, CMA, PhD) consults on movement research and is principal editor of Laban-analyses <<http://www.laban-analyses.org>>, an online searchable database of practitioners and annotated bibliography for works utilising Laban-based methods.

Angela LOUREIRO had her first contact with Laban/Bartenieff System through Regina Miranda's work and her Companhia de Atores Bailarinos do Rio de Janeiro of which creation Angela participated in 1978. As a dancer, choreography assistant, coach and teacher, her experience extends to the fields of dance, theater and cinema. Graduated in History, her interest leant towards the history of brazilian medical sciences. In 1995, she got her certificate in the Laban/Bartenieff Institute for Movement Studies, under the orientation of Peggy Hackney. In 1999, she graduated in Laban Kinetography in the Conservatoire Supérieur de Musique et Danse de Paris, supervised by Jacqueline Challet-Haas with whom she has been collaborated notating the Bartenieff Fundamentals. Angela Loureiro has lived in France since 1988, where she works with different population groups – professionals and students of dance, theatre and singing; nurses in training, psychomotriciens, older adults – and has, through master classes, workshops, lectures and teaching, contributed to diffuse Laban-Bartenieff System.

Greta MAES, from Belgium. Co-founder and co-director of the movement-theatre company INTREPIDO and of L'Atelier International de Mime Corporel in Paris. Since her arrival in France in 1983, to study with Etienne Decroux, she was invited to join Théâtre de l'ange fou, where she developed her skills as performer, choreographer, teacher and actress of Decroux's repertoire. Today, Ms. Maes directs the 'actor's training based on mime' program (AToM), and most of Intrepido's pieces. Also interpreter of text-theatre, she regularly coaches the physical training of the actors; such as for the most recent production 'Viva Verdi', written by Eduardo Manet, in which she plays the main female role under the guidance of Jacques Connort, director the Comedie Française's Studio Theatre and Valérie Thomas. Ms. Maes continuously develops her personal practice and her teaching with different approaches of physical theatre (Nôh, Kabuki, Kuttiyatam.) and works in permanent collaboration with Jorge Gayon within his Laban-Decroux Project.

Jennifer MIZENKO is an Associate Professor of Dance at the University of Mississippi. She has a B.A. in Psychology from Kenyon College, and an M.A. in dance from The Ohio State University. Her expanded studies include period dance with Wendy Hilton and Richard Powers, plus the study of Tai Chi with Maggie Newman. Jennifer is a teaching member of Alexander Technique International. She is also a certified Laban Movement Analyst from LIMS. Mizenko has presented internationally at Laban and Alexander conferences and has been recognized by ISMETA as a Registered Movement Educator. She is currently combining her knowledge of The Alexander Technique and Laban Movement Analysis, developing an exciting new approach for the training of dancers and actors.

Reiko MORITA is a professor of physical education at Kawamura Gakuen Women's University, Chiba, and the chair person of Tokyo Academy Dance Association. She received BA in physical education from Nihon Sports Science University and in Child Studies from Japan Women's University. She has studied ballet, modern dance, Isadora Duncan Dance from Ms. Hortense Kooluris, Labanotation from Dr. Nadia Chilkovsky Nahumck and Dr. Carl Wolz, and Your Move from Dr. Ann Hutchinson Guest, Ms. Jane Dulieu, Ms. Valerie Farrant, etc. She published *Easy Introduction to Dance Aesthetics* in 1995.

Karen MOZINGO currently lives in Columbus, Ohio and is a Ph.D. student in the department of theatre at The Ohio State University. From 2001-2003, she was Executive Director of OhioDance, the statewide service organization, and adjunct faculty in modern dance at Stivers School for the Arts in Dayton, OH. She is a participating artist in the Greater Columbus Arts Council Artists-in-Schools program and the Ohio Arts Council Artists in Residence program. From 1999-2000, Karen was a Federal Chancellor's Scholar with the Alexander von Humboldt Foundation in Bonn, Germany. Karen received her M.F.A. in Dance and Choreography from the University of North Carolina at Greensboro (1999), and her M.A. in Theater Arts from Case Western Reserve University (1996).

Jean-Marc PIQUEMAL - Trained in ballet and contemporary dance, he danced classical and neoclassical repertory in several theatres. After two years at the Staatstheater in Mainz (Germany), he obtained his Dance Teacher diploma. Interested in baroque and contemporary dance he has been a member of "Fêtes Galantes" led by Béatrice Massin since 1997. He studied notation at Conservatoire de Paris graduating 2002. He has worked with Noelle Simonet and her repertory company Labkine since 1998, and is regularly invited to reconstruct repertory pieces.

Valerie PRESTON-DUNLOP Dip.Ed, MA, PhD, Consultant, LABAN. Planning Project at LABAN. Valerie's biography *Rudolf Laban: An Extraordinary Life* (1998) received the Dance Perspectives award, she is a well known practical scholar and author working internationally. A founding member of ICKL, chairman of the Research Committee for several seasons she was honoured as a Core Member. In 1966 she introduced Motif Writing and has been at the forefront of developing Laban Studies for dance theatre as Choreological Studies. Curator of The Laban Collection in the Archive

at LABAN, translator of *Schriftanz* 1928-32, recreator of Laban's Kammertanz works 1923-28, she is currently directing an archive film *The American Invasion* 1962-72. Most recent book: *Dance and the Performative: a choreological perspective*.

Rajyashree RAMESH, trained in Bangalore and Chennai, India, living in Germany since 1977, teacher, performer and choreographer with a dance career in India and Europe spanning four decades, presenting *Bharatanatyam* in classical and contemporary context in performances, lectures, workshops, articles, radio/TV interviews and outreach programmes. Launched special training programme in the 80's for aspirants of all origins, with several accomplished dancers today. Recipient of several grants, her choreographic credits include multinational experimental productions with various world dance forms and disciplines. Has published articles both in German and English and presentations at international conferences (IFTR, CCU/DNB) to her credit. For details/photos/video clips please see: www.rr-dance.com

Rhonda RYMAN is currently an Associate Professor at the University of Waterloo, Ontario, Canada, where she has taught courses including Dance Notation and Reconstruction and Principles of Dance Technique for thirty years. She is an Adjunct Professor in the Graduate Program in Dance, York University, Toronto, Ontario, and a Fellow of the International Council of Kinetography Laban and of The Benesh Institute, London, England. She has authored a number of publications related to classical ballet. Her electronic publication Ballet Moves II uses DanceForms computer animation software (<http://www.danceforms.com>), to represent classical ballet movements and repertoire. She is working with Ilene Fox of the Dance Notation Bureau, NY, and Dr. Tom Calvert of Simon Fraser University, Burnaby, BC, on the LabanDancer, an application that translates Labanotation scores into animations.

Bala SARASVATI, CMA, MA and MFA, has specialized in the application of LMA/BF to dance training and performance for the past twenty years. She has presented dance training and performance workshops throughout the US, and in Taiwan, Republic of China and Rio Janeiro Brazil. She is Head of the Department of Dance at the University of Georgia and Artistic Director of CORE Concert Dance Company.

Asako SOGA is a Research Associate at the Department of Media Informatics, Faculty of Science and Technology, Ryukoku University. She received her BE in Engineering from Ibaraki University in 1999, her ME in Human Informatics from Nagoya University in 2001, and her PhD in Human Informatics from Nagoya University in 2004. Her research interests are computer animation, networked virtual environments, and their applications for artistic media. Currently she is working on human animation systems for dance using computer, the Internet, and motion captured data.

Johan STJERNHOLM currently lives in London, UK, and is a Ph.D. student for Professor Helen Thomas at the newly established Research Centre for Fashion, The Body and Material Cultures at University of the Arts London. From 2002-2004, Johan worked as Research Assistant to Dr. Valerie Preston-Dunlop at Laban. Since 1997, Johan has been active as a dancer and choreographer both in his own dance company,

LCSE, and in other dance companies based in, New Zealand, Sweden, and UK, including Protein Dance Company. Johan also gives lectures in Laban Choreology to post-graduates at Central Saint Martins, London. He received his M.A. in European Dance Theatre Practice from Laban in 2003.

Makiko TAKANO is an associate professor at Yamanashi Prefectural University, Japan. She majored in dance education and choreology at Ochanomizu University where she began her study of Kurt Jooss and "The Green Table". She was selected as the recipient of a scholarship to study in England by the Ministry of Education and Science in Japan. She studied at the Professional Diploma in Dance Study Courses, Laban, from September 2003 to February 2004. She also holds a Master of Arts degree in Dance Education from Ochanomizu University.

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