

Chapter - 7

Other Notation Systems

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Though dance is considered mother of all arts and man has danced forever, there has been not many tools developed to preserve and document it. The notation of dance movement is recent and can be perfected much more. The Egyptian hieroglyphs, Indian temple sculptures and paintings, the Greek and Roman frescoes and ceramics, all show dancers and dance movements. They are evidences of how dance must have been performed. But did any of these seriously notate dance or they were more decorative figures? Perhaps they were recording the event of past and present at times future. The first era of dance notation began by the 15th century, in the form of letter writing in the West. In India, not notation, but verbal descriptions of various body movements were articulated in the numerous technical texts of the field, though for a long time almost till the 17th-18th centuries, they described movements and a few and varied dances.

There have been and are many who have tried to preserve the art of dance, dedicating long hours, perhaps a life time to capture the essence of movement. There are many, who have not invented new systems, but perfected and utilized the already existing ones. Dance notation or Choreo-graphics means writing or drawing of dance. There have been many approaches, presentations, using different symbols; each one records on paper the elements of movement. The structure of any dance notation system must have provision for form, rhythmic movement, dynamic quality, style and expression. It must point out

the details of movement of each limb, simultaneous and separate, space levels, with visual and kinesthetic associations. The earliest and oldest known dance notation system dates back to about 15th century.

CERVERA SYSTEM

The most remarkable discovery by chance was that of two manuscripts, known as the Catalanian manuscripts, to be found in the municipal archives in Cervera, Spain. The writer is unknown but it is the earliest record of dance notations. One contains only a series of symbols, the other, gives the Letter Code above the symbols, thus providing the key to their meaning. The signs in the Cervera manuscripts are basically pictorial. It has four different signs, consisting merely of combinations of horizontal and vertical strokes. They show the principle direction of movements and steps.

ARBEAU SYSTEM

The Thoinot Arbeau system, namely orchesographie, appeared in 1588 and describes in considerable detail not only the steps to perform but also the prescribed etiquette for men and women on the dance floor. Timing is indicated by placing the name of the step alongside the music note on which it should occur. Arbeau placed the music vertically on the page to accommodate the text, the reading direction being from the top down. By so doing he provided an interesting precedent in placement on the page of the music notation in relation to the indication of movement. Another earliest notation dates back to the 15th century by Gulielmo Ebreo, employs the initial letter

method. The next concrete evidence of dance script is found in the personal dance notation book belonging to Queen Margaret of Austria dating back about 1500. It describes 59 dances in notes with the first words of songs underneath each. Marco Fabritio Coroso was the next important Italian to follow, publishing his “Il Ballarino” in 1581 in Venice with other editions coming out in 1600, 1605 and 1630. Using letter notation he transcribed fashionable French dances.

MEUNIER SYSTEM

Antonine Meunier was a premiere danseuse and later taught at the Paris Opera. Her method of recording was through abbreviations of the names of the steps placed within a box, e.g. [Ar] – arabesque; [As] – assemble; and so on.

SAUNDERS SYSTEM

Saunders provided printed sheets designed to serve particular forms of dance. These sheets contained balletic terms. The process of recording a dance consisted of circling the appropriate words in the correct order. Word abbreviations for the names of known steps is an obvious practical device for jotting down memory-aid notes. A music staff is provided on which to indicate timing and an area for stage location. This idea, while hardly practical, is given here to illustrate the range of ideas still being presented in this century.

FEUILLET SYSTEM

The dancing which flourished in the courts of France and Italy in the 17th century increasingly featured floor patterns, the path of the dancers across the performance area. In addition to showing off the dancers and their costumes to advantage, the floor designs had specific significance - significance related to metaphysical ideas. It is therefore not surprising that the next system to evolve was one which traced the path, the design made on the floor, with indications of the specific steps to be performed on that path. The Feuillet system, now called the Beauchamp Feuillet system, was first published in 1706, the book being entitled *Choregraphie ou L'art de decrire la danse*. He notated steps and gave a graphic picture of dancing by step sequences. He is supposed to be the first to outline the five basic balletic positions and have notated the movements. Feuillet succeeded in indicating steps, jumps and movements of the head, arms and knees, along with tempo and directional notations. 18th century was dominated by Feuillet and his system was accepted by dancing masters of England, Italy, Spain, Germany and France.

Andre Lorin was the first to introduce the English Country Dances to France, his book *Livre de contredanse* having been published in 1688. Movement indications are placed under the music; word descriptions for the overall action are written at the top of the page for the man and at the bottom of the page for the lady. His code for the abbreviations of steps, is basically a letter abbreviation for the name of each step; he does not describe the step itself.

The French dancing master, Landrin, published collections of contredanse between 1768 and 1785. Each comprised a sheet with title page, simple verbal description of the steps, floor plans and music. In 1825, Carlo Blasis wrote in his Code of Terpsichore that the symbols might be created on the basis of human anatomy. Some systems which come under the heading of 'visual' or 'pictorial' use obvious stick figures, other are more stylized. Some recent inventions which use more abstract indications are still concerned with representing movement visually.

SAINT-LEON SYSTEM

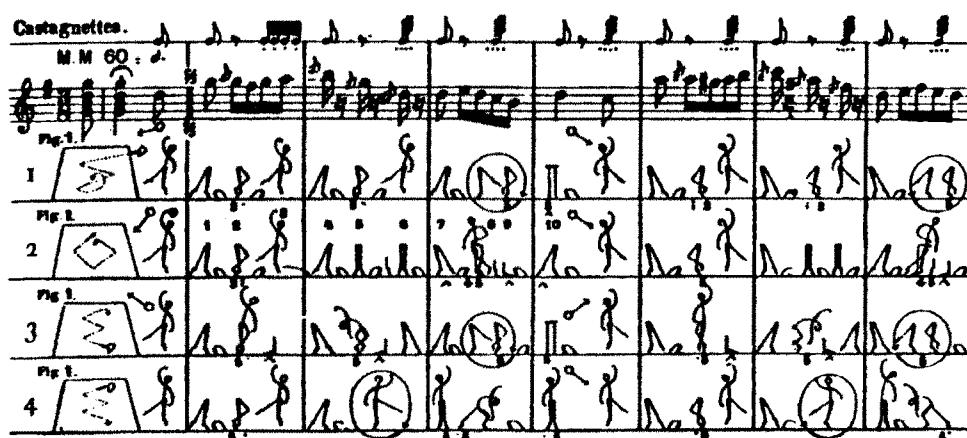
Historically, the first stick figure system emerged in the middle of the 19th century. Published in Paris in 1852 by Arthur Saint-Leon, the system was called *stenochoregraphie* and an important contribution to the notation literature. Here he used for the first time two distinct features, the musical staff and the skeleton drawings or stick figures. It is written from the point of view of the "audience". He notated each movement of a step with its corresponding body, head and arm movements. The principal disadvantage of a stick figure system is the lack of accurate indication of continuity or relationship and flow of movement.

Representing on two-dimensional paper a position or movement that exists in three-dimensional space poses the question of how the missing third dimension is to be indicated. In some systems the stick figure is drawn in profile for clarification and a note added to state that a turn has not occurred. When the dancer faces at an angle to the viewer the need for perspective

arises if the figure drawing is also made to turn. In addition to directional placement of the arms, legs, torso and head, the reader needs clear indication of where the dancer is facing in relation to the audience, i.e. the orientation to the front of the room.

Visual systems are based on the idea that all dance is visual, that movements are designed to 'make pictures'. This may have been true of classical with its vocabulary of selected, clearly defined positions, but not all movement has 'picture-making' as its purpose. Not all movement can be indicated through arrows linking one position to another; ancillary indications - letters, numbers or ciphers - must be added to clarify what is drawn and added detail that cannot be visually represented. For stick figure drawings subtleties of timing are not easily indicated

ZORN SYSTEM



Zorn Notation : Excerpt from the Cachucha

The next system to emerge was that of Friedrich Albert Zorn, whose book *Grammatik der Tanzkunst* (Grammar of the Art of Dancing) was published in Leipzig in 1887. His book aroused considerable interest among the wide circle

of dance teachers in Germany. It also later received acclaim in the United States, where an English translation was published in Boston in 1905. Zorn's book is principally concerned with describing in detail the correct performance of the established dance technique of the time. The notation is used to analyze movements and to record exercise and dance steps. The book includes several social dances. His method falls into that category of notation which might be called skeleton drawings.

BENESH SYSTEM

One of the best known visual system is that of Joan and Rudolf Benesh, first published in 1956 in London as *An Introduction to Benesh Dance Notation*.

Inspiration for the system came from her need for a way to write down dance sequences. The first teaching of the system was based on ballet. However, in the book published the next year Benesh stated that he looked upon it as a pure movement notation with no consideration other than it had to cover every possible movement of the human being. In due course it was applied to other dance forms and other types of movement and was developed to meet these needs. A center in London, the Benesh Institute of Choreology, was established in 1962.

It is interesting to note that the initial idea behind the Benesh system bears a strong resemblance to that of Sol Babitz, a system published in California in 1939 of which Benesh had no knowledge. It is a pure movement notation with no consideration other than it had to cover every possible movement of the human being. In due course it was applied to other dance forms and other types of movement and was developed to meet these needs.

Because dance and music have the element of time in common, it was inevitable that someone would base a system of dance notation on music notation, the common element of duration being indicated by the same signs. Music notes were adapted and placed on a modified staff to fill the needs of dance. The idea has been tried several times.

For anyone already familiar with music notation, use of the same symbols to show time value has an immediate appeal; learning only one set of signs would seem to be killing two birds with one stone. Use of a staff derived from the music staff has a similar appeal, although most staffs are somewhat modified to serve movement. Nikolais' system is the exception with his vertical staff.

Some people who have a musical background object to having music notes and their placement on the staff 'mutilated'. They believe such usage is confusing rather than helpful, particularly to a young student, and prefer non-music signs for recording dance.

STEPANOV SYSTEM

The first music note system was evolved by Vladimir Stepanov and published in 1892, the book being entitled *L'Alphabet des mouvements du corps humain*. He was from Imperial Maryinsky Theatre in St. Petersburg and was the first notator to produce a full-fledged system using musical notes. Stepanov's approach to writing movement was from an anatomical angle. Movement was analyzed in terms of the joints of the body and movements of which each was capable. Basic direction, flexion, extension, rotation, abduction and adduction

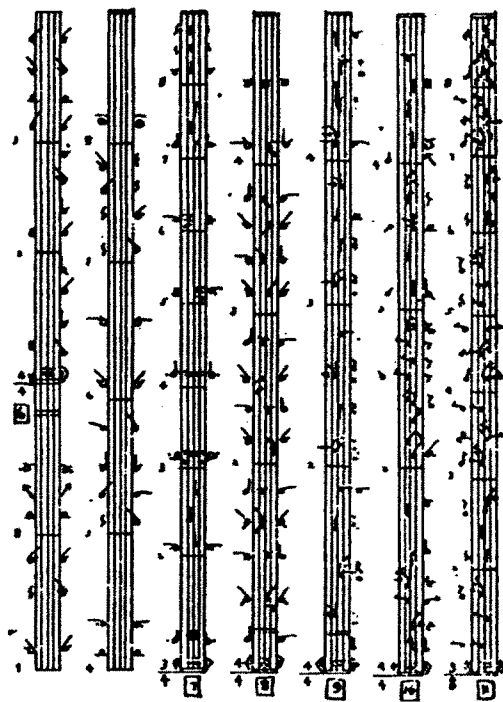
were featured. The Stepanov system has the advantage of basic simplicity. There are not many signs to learn and it is adequate anatomically. The Stepanov system has the advantage of basic simplicity. There are not many signs to learn and it is adequate anatomically. Placement of actions of bending the mid-joint, rotating, etc. on the stem or alongside the note makes it possible to show several movements happening at the same time. Stepanov's method was built upon the scientific basis of human anatomy. But here the body was treated like music and not like human movement.

CONTE SYSTEM

The major system employing music notes was that devised by Pierre Conte, *Ecriture*, first published in 1931. Conte, an ex-soldier and musician, became interested in the problems of writing movement when he found rhythm was a great help in teaching gymnastics. Unaware at that time that other notation systems existed, he invented his own. Whereas Stepanov's system was basically developed for human movement of any kind (although it was specifically applied to ballet), certain features of the Conte system reveal a ballet influence even though he recorded different forms of dance. Conte's system gained widespread exposure through the film made on the system by Jean Painlevé in which the dance score ran side by side with the dance movement. Conte was a prolific worker who notated many of his own ballets and for several years published a magazine containing many examples of notated dance materials. Conte was obviously well versed in music notation as well as being fluent in his own system.

Conte, with his musical background, gave careful consideration to the question of timing, indeed to a far greater extent than any other inventor of a music note system. Several features in Conte's system suggest that it is ballet-biased, a feature which can be a disadvantage to universal application. He uses the abbreviation 'cp' for cou-de-pied, a position of the free foot at the ankle of the supporting leg which is well known in ballet circles but not elsewhere. By adhering to music notation rules he complicated indications of timing for movement. Because he used his system for his own dance compositions he did not encounter the needs of other choreographers and did not provide for details considered important by others.

NIKOLAIS SYSTEM



Nikolais Score

Alwin Nikolais' system, called *Choroscript*, was first taught in 1939 at his studio in Hartford, Connecticut. The system as such was never published, but appeared in magazine articles in the early 1950s. Alwin Nikolais, a modern dance teacher and choreographer with a strong musical background, became interested in notation after attending lecture on the Laban system in 1937. He decided that as signs music notes were more practical than block symbols. The development of his system coincidentally links closely with that of Laban, particularly in his analysis of movement. His particular adaptation of music notes provides certain advantages not found in other systems in this category, particularly in indicating timing. Nikolais' system is based on sound movement analysis and the indication of direction is pictorial. He chose music notes since the note immediately indicates the duration of the movement.

So far, in following through the countries, we have seen the expected progression in the type of method used to record movement; from word abbreviations to track drawings, to stick figures (visual systems), to modified music notes and now, finally, to use of abstract symbols.

THELEUR SYSTEM

The 19th century saw an isolated instance of an abstract symbol system, published by E.A. Theleur in 1831, *Letters on Dancing*. Little is known about Theleur; he was an English dancing master (probably Taylor) who studied in Paris and established his school in London. Theleur was concerned with the art of dancing and the correct performance of the prescribed steps. His book

includes many prints of dancers in costume in various poses as well as analysis of the movements and introduction of the symbols. He provides signs for seven basic movements, bending, rising, sliding, circular, jumping, extension and adhesion.

SUTTON SYSTEM

A virtually full-figure system appeared in the U.S.A. in 1973, in the book *Sutton Movement Shorthand, The Classical Ballet Key*, invented by Valerie Sutton, a young ballet dancer. The system has recently been developed to include sign language for the deaf, regular publication of a sign language newspaper has been established in Denmark as well as in the U.S.A.

MORRIS SYSTEM

① TWO PART FUGUE. BACH

② SOLO DANCE. MINUETTO GRIEG. GLOXINIA

Scores in the Morris System

Margaret Morris, a pioneer in a free style of dance, was very much self-taught and hence not moulded by any one school of dance. She also had a universal outlook on movement and developed a system designed to record movement of any kind. Morris was interested not only in theatrical dance and in teaching children, but also in the therapeutic side of dance, remedial work in which she combined her sense of movement flow with her medical experience. Her system is totally body-centered, being based on an anatomical analysis of movement.

LORING SYSTEM

In 1955 Eugene Loring and D.J. Canna published a notation system called *kineseography*. Loring purposely avoided the study of the notation systems; he preferred to work on his own, deeming his system to be faster to write. The notation is read from the top down, the heavy horizontal lines indicate bar lines, beats being marked by lighter horizontal lines. The movements of the parts of the body being indicated within the columns while step direction is shown outside on the left.

ESHKOL-WACHMANN SYSTEM

The first book on the Eshkol-Wachmann system, entitled *Movement Notation*, was published in London in 1958. Noa Eshkol met the Laban system when she was studying in London with Sigurd Leeder during the early 1950s. Eshkol's immediate purpose for evolving a movement notation system was to provide herself with the means of composing movement sequences in terms of degrees of movement, that is, motion of a particular kind, not only description of

destination. She and her associate, architect Abraham Wachmann, dissected movement impersonally and analyzed the basic motions which the various limbs and torso are capable of, as being circular in nature, thus providing indications of rotatory, planar and conical movements. The system has been developed to record gestural movements in these terms and, in addition, there are indications for weight placement and progression, for front and other such practical considerations.

Eshkol aimed for a movement description separate from any style or 'school'. The body is seen as a series of connected 'rods' moving in space. Her concern has been anatomical, or, as she prefers to stress, geometrical in the sense of dealing with the human body as a part of space and the limbs as spatial entities. The system has been used to record forms of dance such as folk and ballet to reveal the inner content and structure in her terms. In teaching and choreographing she uses the notation as an integral part, thus breaking away from established dance conventions and finding new ways of composing. For Eshkol the basic movement itself gives the expression; she is not concerned with theatrical aspects of dance.

Most abstract symbol systems work on the basis of 'spelling out' movement patterns through signs representing basic elements; body part, direction, flexion, extension, rotation, use of time, energy, etc. Such systems have the advantage that any movement can be recorded by determining its composition in the selection and arrangement of this gauge which must be learned - in contrast to the direct visual representation seen in figure drawings. It will

have been observed, however, that all visual systems must include some signs; the more detailed the movement representation, the greater the need for signs. It can be argued, therefore, that if many abstract signs are required to indicate important details, it is better to start with abstract symbols and have logical follow-through in development.

LABAN SYSTEM

Rudolf von Laban's book, *Schrifttanz* – (Written Dance) – appeared in Vienna in 1928, this being the first presentation of his system as we know it today. His first attempt, shorthand for the type of space harmonies with which he was involved, gave way to a more universal approach to the recording of movement. This developed in two stages into the system as it was published in 1928 which basically has remained unchanged despite further development by others.

Any visual representation of movement on paper provides obvious advantages. The Laban system contains more visuality in its structure than may at first be apparent. The Laban system has been developed on a universally-based analysis of movement, thus making it suitable for all forms of human movement. Although the system is generally presented through commonly understood spatial description of limb placement, e.g. arm raised forward horizontal, head inclined sideward to an upward slanting line, etc., the basis of its analysis is as scientific as those which proceed from a wholly mathematical concept. Universality in development and application of the Laban system has been guaranteed by the fact that the system is not the

product of one person's ideas; many different people working in a variety of movement disciplines have contributed to it from their experiences.

A significant advantage in the Laban system is the fact that one symbol provides four pieces of information: the part of the body that moves, the direction and level, the moment when the movement begins and the duration of the movement. There is no change in the meaning of the symbols when they are applied to different forms of dance; once the movement analysis and the representation of it on paper are learned, the symbols are applicable to every form of movement. However, specialists in a particular form may evolve special usages for their needs, such usages being carefully placed on the staff.

Every system needs widespread trial under a broad variety of situations; only from such use can healthy growth take place in the development of a system. Spread of the Laban system has provided such trial through its professional application in recording choreography of many types, classical and contemporary, as well as ethnic dance forms and non-dance activities such as sports, swimming, riding, etc. not to mention its application to zoology. In the publication of books the Laban system has the greatest number and widest range, textbooks alone being available in eleven languages. Much dance material in the public domain has been published; now, increasingly, choreographers with faith in Labanotation are agreeing to publication of their works.

There are social changes taking place in India which demand the preservation of important, vast and priceless heritage of the performing arts and Dance. The patterns are changing of the purpose of dance, the audience, in patrons, in dancers, in the relationship between gurus and pupils. So the traditional system of transmission can no longer be relied on to pass on the whole of the great heritage from the past, and the question of the movement notation has become a topical one in India, as it has been in the West for some time.

But the possibility of developing an adequate notation system is still the matter of controversy. Most dancers and teachers believe that for memory and record, the best way is to practice so much that the movement becomes a part of oneself. Also, it is widely and genuinely believed that such formal records take away the spirit of creativity. Yet there are a few bold and creative futuristic dance professionals and theorists like Shri G. Venu, Dr. Padma Subrahmanyam, Prof. Judi van Zile who have attempted to create notation systems for Indian Classical Dance. "Notating Dance is by no means a simple task. To make a proper graph of the leg, ankle and foot in action in proper tempo and sequence and with precise transference of weight is certainly next to impossible. If such a system is evolved, it certainly will be a high watermark in the history of choreography. In India, in Bharatanatyam many popular numbers have retained their shapes and form over a century because they were learnt by rote. Even teachers have been depending upon their computer-like memory and not on notation. But with the passage of time, many new forms and movements are created as is evidenced at various levels.

In this process of evolution it is necessary to keep a record of at least whatever we are familiar with. The system of Adavus seems to lend itself to notation”¹. The late Smt. Anjali Merh had worked out a practical and easy ‘stick drawing’ system for students’ records and journals at the department of Dance, Faculty of Performing Arts, M. S. University of Baroda in late 60s. This was not a formal system, but grew out of the need of students, who came from all over the world to learn, help them remember, preserve and recreate, and which continues till today.

DR. PADMA SUBRAHMANIAM

The famous dancer and choreographer is pioneer for her in-depth research, analysis and reconstruction of the Karana-s of Natyashastra. Based on this intense work, she has created the dance style called “Bharata Nrityam” Karana-s and their recreation, may have been the motivating factors for her to create a notation system for the Adavu-s.

In the West, the Italian Carlo Blasis, The Frenchman St. Leon, Russian Vladimir Stepanov, F.A. Zorn Prof. Peters and others adapted music notes to record dance because of the common element of time. The music note itself tells which foot moves, the direction to be taken and the length of the time of movement. Only a few basic characters indicate positions of the parts of the body.

Dr. Padma also has created the notation for the Adavus of Bharatanatyam based on the staff notation of the Western music. Her attempt is to aid the memory of the feet movements of the adavus. Footwork has been notated on

horizontal lines through symbols which indicate the right and left foot respectively. The vertical lines form the bars that measure the rhythm. The adavu bols are written below the bit and the hand gestures explained separately, with the notation written for the base speed.

Dr. G. Venu's work on the notation of Hasta-s, "Alphabet of gestures in Kathakali" was first published in 1968. He took the 24 basic mudra-s as given in the "Hastalakshandipika" and put them symbolically with considering the viewing frontal, side and profile views. He made symbols for the rotary (Rechaka) movements of the wrist, movements of the fingers and that of the whole arms as well as combined them to create a whole arm action.

Though not created as notations, the detailed writings and drawings of legendary dancer Ramgopal in his book "Indian Dancing, The series of photographs of Smt. M.K. Saroja with detailed article by the only Indian dance historian Shri Mohan Khokar in Marga Magazine (1957), the later version of the same by Dr. Padma Subrahmaniam (Marga publication "Bharatanatyam" 1979, 1982, 1997) on Nritta and the Adavu-s does provide details of positions of Adavu-s of different schools of the dance style. The article "An introduction to Indian dance" in the book Reading Dance has simple notation developed for the Adavu-s based on the musical timing, simple symbols for basic head gestures and abbreviations for the Hasta-s. The author projects this work as the "voyage of exploration into the realms of dance notation in general" More details would require a book of its own. A most enriching and futuristic research article by Laban experts, Irmgard Bartenieff, Peggy Hackney, Betty

True Jones, Judy Van Zile, Carl Wolz is “The potential of Movement Analysis as research tool: a preliminary Analysis” that has used the Cholkettu from the Mohiniattam for analysis using Laban’s Effort-Shape. The whole dance is notated directly using the Labanotation, with detailed descriptive notes on cultural context and research methodologies. The idea was more exploratory. “The movement analysis of Adavu-s” and “Movement Analysis of the different schools of Bharatanatyam” is the ongoing research projects since early 90s by the guide of this research work Prof. Parul Shah and Prof. Mary Alice Brennan.

Notes:

1. Dance Notation of Adavus, Bharata Natyam, Indian Classical Dance Art, Dr Padma Subrahmanyam, edited by Sunil Kothari, Marg Publications, pg 35).