

RUPRECHT-KARLS-UNIVERSITY HEIDELBERG,
FACULTY OF EMPIRICAL BEHAVIORAL SCIENCES,
DEPARTMENT OF PSYCHOLOGY

MOVEMENT ANALYSIS IN DANCE THERAPY: SEMANTICS OF MOVEMENT QUALITIES, RHYTHM AND SHAPE ACCORDING TO LABAN AND KESTENBERG

SABINE C. KOCH

SUMMARY

This paper outlines how approaches from dance therapy can contribute to our understanding of movement. Two major systems of movement analysis (notation and observation) are introduced focusing on movement qualities, for which they provide basic categories and a basic vocabulary. It is argued that these approaches can contribute to a fuller understanding of movement and its semantics, particularly in its qualitative and dynamic aspects.

Key words: movement qualities, movement rhythms, movement analysis, metaphor, dance/movement therapy

Movement is used in dance therapy in order to promote the healing process of patients with a variety of different disorders. In the process of therapy movement can become a metaphor for a process that is going on in the patient's life or that has been going on in the patient's past and that cannot easily be put into words. One important task of the therapist is to provide an environment in which the patient feels safe to express any kind of inner turbulence in outer movement. As evidenced by practice and empirical investigation, movement therapy can help people to better handle their body, emotions, and relations. Therapy can be conducted either individually or with groups of patients. In such groups one patient can, for example, be asked to express his/her process by moving to a piece of music and the other participants can be asked to follow the patient's movements by mirroring them. After the movement part the group can come together and exchange their experience and feelings as they moved with the initiating patient. They might express what they felt, when they mirrored a particular movement that seemed to be meaningful to the initiating patient. The patient who initiated may confirm or disconfirm the observations of the group and a dialogue may evolve about the process of the initiating patient. This is just a brief glimpse into one form of dance/movement therapy. Another example would be to take the bizarre idiosyncratic gestures of a schizophrenic patient mirror them back, evolve them with the patient into full body movement, verbalize feelings and associations and thus verbally and conceptually carefully connect the gestures with the associated meaning. By this means, the therapist could help the patient make the underlying symbolic processes conscious and communicable, ready to be shared with others.

Dance therapy relies on different theoretical approaches and differentiated systems of movement observation. Two of the major systems are introduced here. One is Laban effort-shape notation (Laban, 1980, Laban & Laurence, 1974), the other the Kestenberg Movement Profile (Kestenberg, 1975; Kestenberg-Amighi, Loman, Sossin & Lewis, 1999). Rudolph von Laban was a dancer and choreographer who in the first half of the 20th century developed notational systems for movement similar to the notational systems for music. This endeavour made the development of clear systems of movement observation a focus of his work. His observational systems were then taken into the clinical practice of movement analysis (Laban Movement Analysis, LMA; Laban, 1960; Laban & Lawrence, 1974) and further developed, for example by child psychiatrist Judith Kestenberg from the 1950s on. She differentiated the developmental aspect of movement and its semantics in the Kestenberg Movement Profile (KMP; Kestenberg, 1995; Kestenberg-Amighi et al., 1999).

A basic idea of both systems is that movement falls into two major categories: *shape* and *quality*, which are separate but interrelated. Shape refers to the form of a movement and all shape changes originally result from breathing. We grow as we breathe in and we shrink as we breathe out. According to Laban and Kestenberg next to considering shape changes in movement it is also important to consider quality changes in movements, as changes in movement are often only the outer expression of an internal qualitative change (Best, 1974; Merleau-Ponty, 1966). One can, for example, perfectly imitate the shape of a gesture of one's interlocutor but use an entirely different quality of movement (I may, for example, use much more lightness in my movement than my interlocutor) and thus totally miss the feeling of it.¹ The distinct set of qualities hypothesized by Laban is listed in Table 1.

Laban effort-shape notation resulted from Laban's long years of movement studies and attempts to develop a movement notation that would give dancers and movers a similar possibility to write down their choreographies as note writing allows a musician to do. He first worked with dancers, and later on with industrial workers in England, matching their personal movement affinities with the task requirements. Laban distinguished next to the shape changes, changes in quality of movement, which he called effort changes ('effort' = 'Antrieb', next to motivational and volitional implications there are also "drive" implications in the German word). Effort is the inner impulse, the motivation, the drive from which movement originates.

Effort refers to our attitude towards time, space and weight. People employ time, space and weight differently as they move or gesticulate. They also use different loci of initiation and degrees of tension in their bodies (flow). Each of these dimensions can be further differentiated into a *fighting* pole and into an *indulgent* pole i.e., on each dimension there is an effort element with a more aggressive quality and an effort element with a more yielding quality. Their alternating role will be further explained below in the context of Kestenberg's work.

The following Table gives an overview of Laban's category system of movement qualities:

¹ For example see <http://www.eternalmoonwalk.com/>, where as a tribute to the recent death of pop star Michael Jackson, people from all over the world have taped their own moonwalk crossing their rooms or public places from right to left walking backward into a fixed camera picture and out of the picture at the other side, followed by the next clip: one movement shape and many different qualities (Eberhard-Kaechele, 2009).

Table 1. Efforts (Laban, 1980)

Dimension	Fighting	Indulgent
Use of Space	Direct	Indirect
Use of Weight	Strong	Light
Use of Time	Quick	Sustained
Use of Flow	Bound	Free

According to Laban (1980), the effort elements can be described as follows:

Space: Direct space consists of a *straight line* in direction, of a movement sensation of “*threadlike*” extension in space and a sense of *narrowness* and *focused attention*. Indirect space consists of a *wavy line* in direction, of a sensation of *pliant* extension in space and of a sense of *everywhereness* and *spread/distributed attention*.

Weight: Strong weight consists of *strong* resistance to weight, a sensation of *heaviness* and a sense of *weight/strong pull* of gravity. Light weight consists of a *weak* resistance to weight, a *light* sensation and the sense of *weightlessness/weak pull* of gravity.

Time: Quick time consists of *quick speed*, a sensation of a *short time span* and a sense of *momentariness*. Sustained time consists of *slow speed*, a sensation of a *long time span* and a sense of *endlessness*.

Flow: Bound flow consists of the *readiness to stop* normal flux and the movement sensation of *pausing*. The movement (corresponding to a high degree of body tension) is *controlled/restrained* and the flow seems to *stream backward* to the central area of the body, in a contrary direction to that of the action. Free flow consists of *released flux* and the movement sensation of *fluidity*. The flow (corresponding to a low degree of body tension) *streams out* through the body from the central areas to the extremities, producing a feeling of onward streaming. Extremes are: completely stopping or going on and on.

For notation purposes the efforts can be arranged as follows:

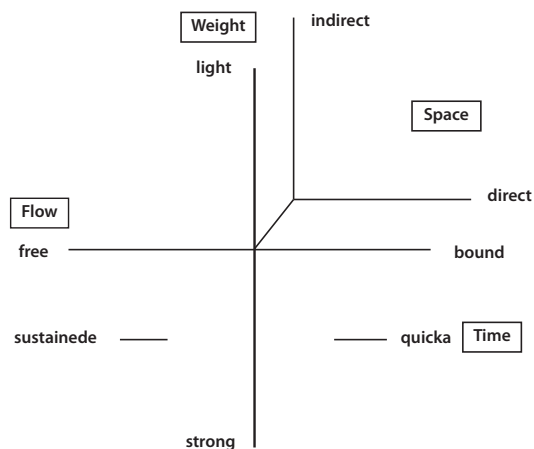


Figure 1. Basic dimensional cross of Laban’s Effort-Shape Notation System (Source: Kolter & Koch, 2009)

Starting from Figure 1, we can now follow how Laban developed his notation system for effort-shape. Regarding the shape side of his system Laban generally distinguishes movement in the horizontal, the vertical and the sagittal plane. These three planes develop successively during the first three years of life as outlined in the Kestenberg system.

The Kestenberg Movement Profile (KMP) is a clinical and developmental assessment instrument of movement behavior. As in Laban's system quality and shape of movement are differentiated into two lines, separate but interrelated. Kestenberg was a child psychiatrist in New York with a particular interest in the parent-child relation. She argues that small children just after being born do not yet have full efforts, they have what she calls *rhythms* with certain *attributes*. The baby in the beginning is a small bundle with rather chaotic movements that change according to the baby's changing needs. The first rhythm that organizes this chaotic little bundle is the *oral sucking rhythm*, an inborn reflex in every newborn that gives the body a first regular and organizing structure. The rhythms result from constant tension flow changes, the alteration of tension and relaxation in the baby's body. Given a time line on which to write the tension flow changes we would find constant alternations between free and bound movement in the approximate form of a sinus curve. Kestenberg was especially interested in parent/child interaction and the bodily processes that mediate the quality of their relation. She described different degrees of attunement and clashing on the body level between parents and small children in their everyday interactions, causing different degrees of harmony (attunement and clashing) in their relationship with each other.

The KMP consists of nine profiles. I want to discuss four of them: the rhythms and the attributes profile on the side of the movement qualities and the bi- and unipolar shape flow on the side of the movement shapes. Kestenberg describes *ten rhythms* that develop over the first five years of life, and that will continue to play a role in adult life, as far as the *unconscious* expressions of our *needs* is concerned. She uses Anna Freud's developmental theory and Laban's effort shape theory as backgrounds for her system. Yet, the KMP is observationally founded and thus does not necessarily depend on psychoanalytic theory background.

KMP-Rhythms Overview

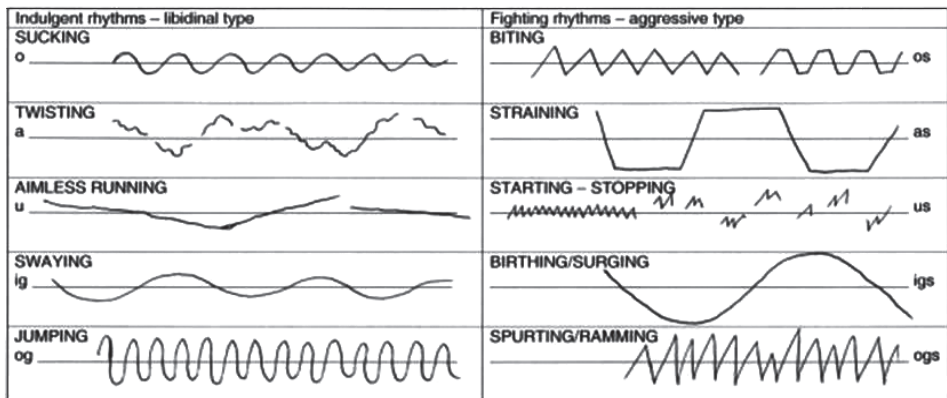


Figure 2. Movement Rhythms according to Kestenberg (Profile 1 of 9; source: Koch, 2007)

The sucking rhythm is developmentally followed by the biting rhythm. Each phase has an *indulgent* and a *fighting* part (in Figure 2 the left side shows the indulgent rhythms). The indulgent part marks the discovery and exploratory part of the phase where satisfaction through a newly accessed body source is experienced, and the fighting phase marks the moving out of one phase and transitioning into the next phase.

We use these rhythms as adults, too. If we need some self-soothing for example we might use an oral sucking rhythm somewhere in our body (e.g., a soft and small amplitude rocking in the torso, if we feel some anxiety). If we need to transition out of something that just starts getting unpleasant (like, for example a goodbye-embrace that starts getting too long) we might use an oral biting rhythm. Fighting rhythms have also been termed aggressive rhythms. However, only if we have a mixture of at least two fighting rhythms can we talk about aggression in the everyday meaning of the word.

In clinical work with children, for example with autistic children, the therapist can make use of the KMP for assessment purposes. Assessing the developmental level of the child helps to find the necessary treatment interventions to move the child further to the next developmental step. The underlying belief is that moving the child further along on the body level will have positive developmental implications for the emotional and cognitive development of the child as well.

Since small autistic children are mostly nonverbal, dance/movement therapy has a special potential in assessing and treating their disease and is therefore widely used in some special needs organizations. Movement therapy is useful to be employed with any kind of nonverbal patients or those for whom the spoken word is not their preferred or main modality of expression.

In the method of Kestenberg rhythm writing, rhythms have to be singled out in a specific rating procedure from handwritten charts. The charts are produced observing the targets from 5–10 minutes video-tapes, using kinaesthetic empathy, transforming tension-flow changes in the body of the target into one’s own body, particularly into the writing hand. The method provides frequency as well as sequencing information. Next to classes with the author, Kestenberg rhythm writing can be studied with Susan Loman (Antioch New England Graduate School: Contact: sloman@antiochne.edu) who teaches Kestenberg classes worldwide.

In addition, the Profiler looks at the manner in which the rhythms are performed. This is part of the second of the nine profiles: the attributes profile. The attributes contain information about the child’s affect and temperament (see Table 2).

Table 2. Attributes

Age/corresponding plane	Indulgent	Fighting
First year (Horizontal plane)	Flow adjustment	Even
Second year (Vertical plane)	Low Intensity	High Intensity
Third year (Sagittal plane)	Gradual	Abrupt

The attributes specify the qualities of the rhythms and develop into the *pre-efforts* and then into the *efforts* (with an increasing degree of *conscious* control). The use of the planes

develops successively in the first three years of life. The predominant plane in the first year of life is the *horizontal plane* (as the child mainly lies or crawls, etc.) in which the child discovers the use of *space*; followed by the *vertical plane* in the second year as the child gets up on his/her own feet and discovers the use of *weight*. When he or she has gained enough security in the vertical plane, the child moves into the *sagittal plane* (as he or she starts to move forward) and discovers the use of *time*. This is where in a normal developmental process speech starts to increase exponentially. Likewise, Kendon (1983), in his chapter about gesture and speech, points out that “gesture has properties very different from those of speech. In particular, it employs speech as well as time in the creation of expressive forms, whereas speech can use only time” (p.14). The predominant use of the planes continues to have its implications in adult life. The sagittal plane, for example, is the plane of decision. Predominant use of the sagittal plane has an affinity to decision making.

Table 3. Bipolar Shape – Flow

Age/corresponding plane	Gowing	Shrinking
First year (Horizontal plane)	Widening	Narrowing
Second year (Vertical plane)	Lengthening	Shortening
Third year (Sagittal plane)	Bulging	Hollowing

Finally, I would like to discuss the shape flow side of the KMP (Tables 3 and 4). The shape flow side gives structure to the qualities of movement arising from needs and attitudes. Breathing in makes the body grow in all three dimensions (widening, lengthening and bulging) and breathing out makes the body shrink in all three dimensions (narrowing, shortening and hollowing; Table 3). Growing and shrinking can occur because of external reasons (e.g., if it is cold the body shrinks, if it is warm the body grows), because of feelings about the self (e.g., if I am proud of myself the body grows, if I am ashamed the body shrinks) or as a reaction to being attracted to or repelled from some external stimulus (e.g., I may grow by extending my arms towards dad while shrinking away from mom or vice versa).

Table 4. Directional Shaping

Age/corresponding plane	Open	Closed
First year (Horizontal plane)	To the side (lateral)	Cross the midline (medial)
Second year (Vertical plane)	Up (ward)	Down (ward)
Third year (Sagittal plane)	To the front (forward)	To the back (backward)

As shape flow develops in the child (and becomes more conscious) it is eventually used in order to build bridges to other objects and people, for example by pointing to them (profile “Directional Shape Flow”; Table 4) and in a next developmental step to a more complex and conscious shaping of the body to relate to the environment in three dimensions (profile “Shaping in Planes”).

DISCUSSION

Movement analysis has developed clear categories and many hypotheses of how movement is related to meaning (for further reading see Kestenberg-Amighi et al., 1999, 2007; Eberhard-Kaechele, 2007). These approaches can contribute to a fuller understanding of movement as we are trying to capture its essence, function and correlates in humanistic sciences.

Yet, movement observation systems need to be critically examined as well. Can anything as dependent on minute to minute differences as physical movement be put into an adequate language at all? David Best expresses doubts about attempts to capture the aesthetic and feeling qualities of movement and dance in language:

The plausibility and pervasiveness of the traditional view of the mind can be traced to two fallacious, if very natural, assumptions about meaning in language. These are, first, that the meaning of a word is what it stands for, and second, that we can be said to know the meaning of a word only if we can define it. These mistaken assumptions lead to a misconceived theory of the symbolic meaning of art and expressive movement (Best, 1974; p. 198).

In a similar vein, Wittgenstein in his *Philosophical Investigations* (1953) argues that words themselves have no certain meaning outside of the language games we play. Wittgenstein particularly points out the meaning-as-naming fallacy, asserting that naming is only one of the many functions of words.

We do here what we do in a host of similar cases: because we cannot specify any **one** bodily action..., we say that a spiritual (mental, intellectual) activity corresponds to these words.

Where our language suggests a body and there is none: there, we should like to say, is a spirit (Wittgenstein, 1953; § 36).

One needs to clearly state that the function of the movement analytic systems introduced above is not to provide a vocabulary to movers that search for self-expression in movement. Their function is rather to provide the movement professional with a comprehensive theory system and method to work with in order to develop understanding, diagnosis and interventions.

Movement is used in different ways in dance/movement therapy and other arts therapies, on concrete as well as on symbolic levels. One aim is to put the movement in the context of the patients healing process and to use it to further this process. This can, for example, be done by developing central gestures into metaphors, supporting the patient in expressing what he or she may not or not yet be able to express in words.

A number of observational systems help the movement therapist to assess movement behavior of the patients. The systems of Laban and Kestenberg include vocabulary for qualities and quality changes in movement and therefore have a special contribution to offer to kinanthropology. Like any descriptive system they have their limitations. They are, however, theoretically based systematic approaches to start from as we move further on our way to understand the complexities and interrelations of human movement and meaning.

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ANALÝZA POHYBU V TANEČNÍ TERAPII: SÉMANTIKA KVALIT POHYBU, RYTMU A TVARU PODLE LABANA A KESTENBERGOVÉ

SABINE C. KOCH

SOUHRN

Článek popisuje, jak přístupy taneční terapie mohou přispět našemu porozumění pohybu. Jsou představeny dva základní systémy pohybové analýzy (notace a pohled), které se zaměřují na pohybové kvality, pro které poskytují základní kategorie a základní slovní zásobu. Je ukázáno, že tyto přístupy mohou přispět lepšímu porozumění pohybu a jeho sémantice, zvláště v jeho kvalitativních a dynamických aspektech.

Klíčová slova: kvality pohybu, pohybový rytmus, analýza pohybu, metafora, taneční/pohybová terapie

PD Dr. Sabine C. Koch, M.A.
Sabine.Koch@urz.uni-heidelberg.de

The author's dissertation was on "Nonverbal Communication of Gender" (micro-analysis), her habilitation on "Embodiment: Effects of Movement on Affect, Attitudes, and Cognition".