Introduction

To dance is to express what lies within, giving shape, form, and intensity to the inner intention of the mover. To dance, with or without the intent to perform, is to communicate, potentially addressing the full gamut of human experience. This communication may be intended only for one's own self-discovery, but the visibility inherent in movement implies the presence of an audience. Therefore, in all dance, even dance explored alone in a room, social behavior is implicit.

However, the purposeful cultivation of communal dance forms has waned as art has become secularized; the sacred aspect of art has dwindled across all the expressive disciplines (Moore, C. L., 1987). The major challenge for dance educators today is to re-embodie a form of danced communion that speaks to all aspects of human experience. This parallels the challenge of re-training the public in the art of experiencing dance, since it is not well-appreciated (other than music-video dance and ballet) in comparison to the other arts. One way to raise public understanding of dance is to increase participation in dance classes. Dancing activates one's own bodily intelligence, enabling one to observe dance with greater responsiveness.

Dance teachers will continue to impart performance skills, such as the projection of personal energy from the stage to the audience. However, they should also be teaching body-mind communication, the embodiment of inner motivation, and the sheer pleasure of moving with others. They can also bring awareness to movement impulses, revealing the deep creative source that lies within everyone. Focusing on the emotion within the movement, rather than the outward appearance,
New Insights into the Body-Mind

The feeling of movement can be taught kinesthetically. In the last twenty years, a burgeoning awareness of the body and its movement has taken place, so that dance pedagogy can now be a very different experience than ever before. This new understanding has been inspired by emerging sciences such as kinesiology, biomechanics, motor learning, sports psychology, athletic training, exercise physiology, and dance medicine. However, these analytic disciplines cannot supply the powerful emotions of awe and wonder, which are so necessary for artistic creation. Jungian and transpersonal psychological approaches are trying to re-integrate the traditional concept of the mind/body duality into a greater whole. The new somatic movement therapies (such as the Alexander Technique, Feldenkrais' Awareness through Movement, Bartenieff Fundamentals of Movement, Rolfing, Skinner Releasing, Body-Mind Centering, and ideokinesia) have begun to bridge this internal and external reality.

Integration of the new body-mind perspectives from the sciences, body therapies and psychology has important implications for dance pedagogy. We now know, for instance, that learning through a variety of perceptual channels enhances retrieval of information from the cerebral cortex and accesses greater associative processes, especially when movement is involved (Rose, 1987). We know that mental imagery can improve movement skills, optimizing kinesthetically efficient movement (Sweigard, 1974), and can enable one side of the body to learn from the other (Feldenkrais, 1977). We know that non-verbal communication makes up about 60% of all human interaction, so we can use movement to improve communication skills (Moore, J., 1960). From the Eastern martial arts, we have learned that movement can increase self-integration, self-empowerment, and spirituality, and bring into conscious awareness the personal center from which movement impulses arise (Tohe, 1978). From advances in exercise physiology and biomechanics, we know how to increase blood flow to the muscles, increase the range of motion and optimize muscle strength to improve performance (McCardle, McCardle & Katch, 1981). As artist/educators, our task is to apply these advances in dance, particularly to modern and post-modern dance, as well as ballet (where this process has already begun). Both dancers and health professionals must keep in mind the dancer's challenge, to be "simultaneously athlete and interpretive artist" (Vincent, 1979, p. 2).

Body-Mind Movement Systems

Another important body-mind link originated in the work of Rudolf Laban, which was brought to the U. S. in the 1930's by Irmiward Bartenieff. This approach is now called Laban Movement Analysis (LMA). Laban's student, Warren Lamb, explains:

... the unique element which isolates Laban from his contemporaries in analogous fields is that although rooted in the study of body movement (his work) goes beyond the physical ... Laban saw movement as the common denominator of mind-body functioning which also takes in the spirit and expression of emotions (Moore, C. L., 1987, p. 10).

LMA teaches us the following universal movement principles (LMA Certification Curriculum, 1982):

1. All movement involves a constant interplay of mobilizing and stabilizing factors.
2. There is a need for: recovery after exertion; but this can be a dynamic change of energy use, rather than passive resting.
3. Dynamic energy shifts can involve changes in the body parts in use, spatial positioning, and exertion of weight, space, time and/or muscular tension.
4. Movement occurs in all three spatial planes; movement training ideally utilizes the complete kinesphere (the area which can be reached without taking a step).

Training in LMA includes the Space Harmony Scales, geometrically proportional movement sequences that serve the same purpose as musical scales (Laban, 1975), and the floor and level-change exercises of Irmsgag Bartensief's Fundamentals of Body Movement™ (Bartenieff, 1980).

Body-Mind Centering™ (BMC) is another holistic movement system, involving thoughts and feelings expressed through the body. BMC is an experiential approach to movement re-education and analysis developed by occupational therapist Bonnie Bainbridge Cohen, who also studied LMA. It is based on anatomical, physiological, psychological and developmental principles.

My lifelong integration of movement science, martial arts (Aikido), body therapies, exercise physiology, kinesiology, perceptual-motor development and Dance/Movement Therapy led me to develop a new approach which I call Body-Mind Dancing™. Body-Mind Dancing™ is a system of movement training that extends the principles of holism to the modern dance classroom.

Body-Mind Dancing™ is influenced by my positive experience with Dance/Movement Therapy, a process of psychotherapy that uses dance or movement. Dance/Movement Therapy provides sensitive listening to the memory of muscles and the wisdom of the unconscious mind, while paying close attention to transference relationships that bring us in touch with aspects of our past that need healing. Aside from the benefits of improving one's mental health, these methods are also definite assets in choreography, personal growth and in all aspects of bodily healing. Dance/Movement Therapy, along with traditional verbal psychotherapy, can help to address other psychological factors that affect dancers' lives.

Gestalt Therapy, Process-Oriented Therapy, Hakomi Therapy, Bioenergetics, Co-Counseling and Psychosynthesis are other therapeutic methods that include a strong bodily component.

Psychological concerns that have already been identified for professional dance company members include the pressures of hard work and low pay, constant travel with time and cultural changes, eating disorders, and body-image problems. Dance/Movement Therapy has the advantage of being a kinesthetic pathway to insight, which is often an effective avenue of self-discovery for dancers. Authentic Movement is a particular approach within Dance/Movement Therapy that is now offered in several dance departments and in summer dance festivals. It gives the mover an opportunity to spontaneously express movement impulses unbounded by preconceived frameworks and without pressure to achieve a particular outcome. This non-judgmental exchange is often extremely beneficial for relieving the emotional stresses of highly-trained dancers who have spent many hours of their lives having their movements dictated, controlled, reviewed, perfected, and judged.

Body-Mind Dancing™ draws particularly on the movement principles of LMA, BMC and the Kestenberg Movement Profile (KMP), developed by Judith Kestenberg. BMC, LMA and the KMP are externalized frameworks for understanding body movement, taught through a psychophysical training process. The Fall, 1990, course description of Antioch New England Graduate School lists the Body-Mind Dancing™ course as follows: "participants will return to rhythmic involvement in full-scale dance to enhance the embodiment of movement theories."

The Influence of the KMP

The KMP is related to LMA and BMC, because Kestenberg's early research was influenced by her studies with Irmsgag Bartensief and Warren Lamb. Several aspects of the KMP are similar or identical to LMA, including the concepts of mobility and stability (Kestenberg & Bueelle, 1983) and the framework of effort/shape (Deit, 1977). However, Kestenberg also adapted and expanded LMA in important new directions, especially as applied to the neurodevelopmental process of infancy. The KMP has been particularly influential in providing detailed, in-depth, psychological and functional meanings for a given type of movement and offering powerful research tools for human
movement analysis. Some of Kempen's additions to movement analysis are:

1. Tension-flow rhythms and attributes.
2. Unigonal shape-flow and shape-flow design.
3. Precursors of effort (pre-efforts).

A comparison of the developmental perspectives of the KMP and BMC shows further contributions. Kempen provides a clear analysis of a child's progressive use of space. In the KMP, each of the first three years of life represents mastery of a new plane of motion (Kempen, 1975). She observed the first six years of childhood in great detail, leading to insights into adolescence and adulthood.

The KMP enhances the teaching of dance in many ways. It reveals richer detail for rhythm, movement patterns, group interactions and emotional expression. Dance sequences can be based directly on the KMP, or it can be used as a source for improvisation. KMP-based improvisations have subtle rhythms originating in developmental tension-flow patterns, such as sucking, biting, swallowing, etc. These tension-flow rhythms help clarify the emotional motivation behind physical movements. My students say that working with KMP imagery is emotionally involving, fun and meaningful, and stimulates the natural developmental flow of movement.

The KMP also sharpens the dance teacher's powers of observation. An understanding of pre-efforts helps me to see whether students are in a learning or defensive mode, and to recognize when they have mastered the rhythm and dynamics of a movement. For example, in teaching a highly dynamic movement involving a combination of efforts (such as strong, direct and accelerating), if instead I observe a flow-based movement (free or bound muscle tension) or a pre-effort-based movement (vehement, channeled or sudden), I might ask the student whether they are feeling successful or frustrated. Perhaps they need help to more clearly define the movement they are trying to learn. Using the KMP, I can develop activities to help students access their dynamic repertoire in an appropriate developmental progression. I am also able to perceive more about each student's feeling state by observing their habitual body shape and body attitude. These observations help me to assess variations in the mood of the group and the needs of individual class members.

In Body-Mind Dancing, I use the KMP to describe rhythm changes, to increase the dynamic interplay of the class, and to observe shape changes for their choreographic content. I often use a developmental framework in structuring the flow of the class outline. I allow personal exploration time for expressing feelings and sensations (shape-flow activities), bridging and boundary-setting (arc and spoke-like movements), and finally planar and multi-dimensional relational activities (shaping in planes). This parallels the developmental progression of structuring self-feelings, defenses and learning modes, contacts with others and the cognitive creative process.

Another basic developmental framework is to proceed from floor activities to sitting, to standing, with careful attention to the transitions between those phases. The KMP inspires me to proceed from floorwork to standing with attention to the more simplified concept of planar use. This can become more complex by adding the reflex activities which are the baseline of both BMC and the KMP. Once the class is standing and moving across the floor, group movement can be allowed to emerge organically through attunement to a common rhythm: class members move through the room exploring different body movements to this rhythm (Kempen, 1975). Some of the emerging movement shapes are combined, and the group begins to mirror common shapes as well as the rhythm. The shared creative process leads to heightened appreciation and enjoyment of the resulting movement experience. Finally, the stretching activities that end the class include visualizing the organs beneath the stretched muscles. In terms of the KMP, this may involve tension-flow rhythms and shaping of space through all directions and planes.

The KMP also provides insight into one's style of teaching. For instance, I tend to teach in a containing rhythm, a mothering type of style. Kempen identifies this developmentally as a swaying (inner-gentility-derived) rhythm. This is the rhythm that a person feels as female or female first experiences between ages three and four, while identifying with the mother's caretaking role and enjoying caretaking
Principles of Holistic Dance/Movement

Body-Mind Dancing is based on two universal human experiences: being in the body, and experiencing thoughts and feelings. It assumes an integral relationship between these two phenomena and seeks to bring them both into full awareness. It enables consciousness to be brought to various thoughts and feelings through the movement of the body. Therefore, while learning to better utilize our anatomical and physiological resources, we also learn to embrace our emotional and expressive selves, and this provides a powerful way to experience the mind-body connection. What better way to prepare oneself for creation or expression in an art form that requires the physicalization of thoughts and feelings?

Sandra Horton Fraleza, dance philosopher and aesthetician, speaks to this view of dance as a physical art medium that resonates within the bodies of both the dancers and the audience:

Because dance is in essence an embodied art, the body is the lived (experiential) ground of the dance aesthetic. Both dancer and audience experience dance through its lived attributes — its kinaesthetic and existential character. Dance is the art that intentionally isolates and reveals the aesthetic qualities of the human body-of-action and its vital life (1987, p. xiii).

While dancing from this body-mind union, our thoughts and feelings often emerge spontaneously, as different parts of the body express the messages of our different selves. Even when dancing spontaneously, patterns occur (as in all natural phenomena), as can be seen in the personal styles which permeate the works of most choreographers — whether their starting points were rational conceits or ineffable feelings.

BMC teaches that every part of the body and every physiological system has its own uniquely-patterned movement quality, and in some cases, spatial range, that we can consciously access. Cells are grouped by types of tissues: skeletal, muscular, nervous, organ, fluid and glandular. The first three types form the voluntary system and are the anatomical concepts most commonly explored in dance training. The remaining three systems are the areas in which we bring our awareness to the autonomic (involuntary) components of our body. Exploration of this subcortically controlled autonomic experience helps us to access unconscious feelings and information, and can assist us in our “journey toward wholeness” (Thompson, 1982, p. viii).

Laban was also interested in the nature of cellular existence, speculating that if we could follow the wisdom of individual cells, instead of the commands of complex governing units, we might learn from them both self-defense and self-sacrifice for the good of the whole: “all the possible virtues and volitions exist, and are fulfilled in an exemplary way, in the life of cells” (Thornton, 1971, 25). Of course, the wide prevalence of cancer and the growth of AIDS in our society show that even the cellular environment is not immune to damage and distortion and, in addition to its own cellular wisdom, needs to ally with what Laban calls the “central controlling mind” or “governing cell-groups” (Thornton, 1971, 26).

As one moves, one can change mood by varying the dynamics of spatial use, the level of physical exertion, or the locus of initiation. This allows one to experience different internal qualities that underlie different expressive statements, as taught in BMC classes. For instance, kicking the leg by activating the femur (thigh bone) and attending to the sensation in the iliofemoral joint (hip joint) is a skeletal image which brings out the intention of clarity. By placing one’s attention on bones, the shape and form of the action becomes very precise and clear. Alternatively, one could perform the same kick while attending to the sliopsoas and other hip flexor muscles, bringing out more power and force, and perhaps a more assertive feeling. Or one could deepen the source of
movement to the organic level by initiating the movement from the intestines. This would allow more obscure feelings to emerge, resulting in a more voluminous, three-dimensional action, possibly accompanied by an emotional association, such as letting go, surrendering or resisting. In this case the muscles and bones are still the primary movers, but the style and expression of the leg action is in-formed by a deeper organic intent. One could even allow the sciatic nerve to initiate the movement, adding an alertness and largeness to the movement; this nerve runs the length of the leg and stimulates its many sensory-motor choices. In each of these examples, all tissues of the leg are involved, with the musculo-skeletal system providing the primary force of locomotion. The difference between them is the mental intention that calls upon particular resources of the body, influencing the meaning of the action and eliciting, in the above cases, clarity, power, emotion, or alertness. At the same time, choosing to explore clarity, power, emotion or alertness through movements based on LMA or KMP could bring out these particular bodily resources, unless inhibited by deeply ingrained fear. The benefits of this approach to dance training are twofold: (a) ready access to a wide range of expressive potential, which is necessary to maintain the vitality of dance creativity, and (b) deeper awareness, understanding and nurturing of the body, since access to a variety of movement choices enhances body-mind health.

It is very important that dance professionals know the health hazards of rigorous dance training — including anorexia nervosa, bulimia, exercise-induced anemia, dysmenorrhea, amenorrhea, anxiety, and injuries to the musculo-skeletal system. These hazards can be greatly diminished by allowing students, dancers and teachers to take personal responsibility for their bodies and minds, since unfortunately the choreographer's artistic desires often defy the practicalities of both physical and psychological health (Vincent, 1979). This does not mean that professional organizations should ignore their dancers' health concerns, but rather should shift to a dancer-based approach. Bureaucracies adapt slowly, and dancers' own responses to training techniques, institutional conventions and the dance lifestyle/culture must be considered in order to keep the art of dance alive, healthy and up-to-date. Some commonplace dance practices may be forced to change for the better, if the participating dancers learn to trust their own experience and speak out about it. For dance to mature as an art form, dancers must be taught to carefully regard their own physiological and psychological experience. It may seem that there is no space or time in a dance class to learn the intricacies of physiology and psychology. How can one learn to dance while simultaneously attending to one's anatomy, physiology, kinesiology and emotional counterparts? The solution is a balanced attention to both the internal and the external environment, a major theme of both BMC and LMA. Healthy movement requires an integration of these two types of attention. Dance classes can teach this.

Movement/dance classes are available around the U.S. (and in Canada, Europe, Asia and Australia) led by teachers trained in BMC, LMA, KMP or other somatic education systems. In these classes, which utilize knowledge from somatic movement, this balanced use of inner and outer concentration is a conscious objective. New names are often created for these approaches, since their experience offers a different level of awareness and sensitivity than traditional dance classes. This new approach to teaching dance, with all its variations, quite possibly will be fully absorbed into the mainstream of dance technique training (including ballet). Although the end result — a holistically trained dancer — is potentially magnificent, a word of caution is in order about this process: the shift from the present paradigm can be disruptive, especially if introduced haphazardly or forced in an untimely way. Our present training paradigms, based on the ethics of elitism (with its struggle for competition and petty individualism), challenge a dancer's technical prowess only, and in making the shift to empowering the whole person by training their body-mind, we are asking dancers and teachers for a major change of consciousness.

Teachers may speculate that this shift would produce more choreographers than ensemble dancers. If the holistic training is complete, however, dancers will actually appreciate both self-initiated expression and participation in group dances created by others. Holistic training could also minimize the
addictive and co-dependent behavior that is now rampant among dancers, fostered by the super-authoritarian approach to teaching dance technique. This approach dictates not only the dancer’s attire, attitudes and demeanor, but exactly where to position what parts of the body in space, and to what rhythm, in accord with the dynamics of the movement style being taught. Closed skill sports and choreographed dances leave little room for personal expression. Ideally, performers could select the movement style which matches their creative and expressive needs. Often this does not happen, however, especially with child dancers.

**Application of Holistic Principles**

Holistic learning, involving experiential anatomy, kinesiology, and physiology, can occur in the context of a dance class. I use the following six-phase class structure, loosely based on a traditional model of a modern dance technique class (class format can vary from week to week or even day to day and class length can vary from 90 minutes to three hours):

- **Phase I**: Information about anatomy, kinesiology, and physiology.
- **Phase II**: Warm-up.
- **Phase III**: Floor exercises (includes partner work for kinesthetic and tactile learning aides).
- **Phase IV**: Center floor and across the floor full-out moving.
- **Phase V**: Further synthesis of anatomical information into dance (long dance sequence, solo or group improvisational structure).
- **Phase VI**: Cool-down and stretch-out, including non-verbal and verbal sharing about the experience; questions and comments.

**Outline of a lesson plan**

The objective of this class is to learn the musculo-skeletal kinesiology of the ilio-femoral joint within the context of a dance class.

Phase I of the class begins with pictures or skeletal parts that depict the active interaction between the ilium and the femur in an iliofemoral flexion. In Phase I we might also work with partners, in either a quadrupedal or side-lying position, to locate bony landmarks (greater trochanters, iliac tubercles, etc.) which are potential points of initiation of movement. Attention could be given to isolating this action from spinal flexion and extension, as leg work is often performed with over-involvement of the back. Different movements would then be explored, with the femur as either the active mover or the stable support (leg swings or pelvic extensions). These movements readily lead to an improvisational warm-up (Phase II), beginning with self-attunement. This leads into Phase III by gradually increasing the circulatory rate with an exercise sequence of leg swings and pelvic extension/flexions, done on the floor. Phase IV includes a standing variation, while focusing on maintaining the clarity of action that was achieved with the partner’s help in Phase I. This could lead into Phase V, a long dance sequence that involves battements, jumps, and moments of balancing on one leg, followed by turns initiated by a twist of the pelvis. This choice of actions exhibits a periodic alternation of proximally and distally initiated ilio-femoral movement. Phase VI, the cool-down, would most definitely include a thorough stretching out of the hamstring and quadriceps muscles as they often tighten (and strengthen) considerably in classes that include repeated ilio-femoral action.

Discussion might include a review of those principles that enhance a balanced use of muscles around the ilio-femoral joint (proximal-distal alternation, use of rotation, etc.) and comments about the state of mind elicited by working in a concentrated way with this joint and the muscles surrounding it. (Although during each phase after Phase I, every other major body part is also brought into active movement.) This focus on the ilio-femoral joint might lead to responses such as feelings of power, centered connectedness, and the ability to move.
through space more effectively.

**Analysis of a Lesson Plan**

The following section explains the logic of each phase of the class, while giving more in-depth examples of teaching about the autonomic as well as the musculo-skeletal functioning of the body.

Phase I teaches some aspect of anatomy and physiology, using a particular part of the body. This will include how that body area affects movement when focused attention allows its particular quality of expression and non-verbal message to emerge. Experimenting with these images in class, it is helpful to take them to their exaggerated limits, focusing on one part of the body-mind, for the sake of clarity. For instance, imagine doing a progressive spinal roll-down from a standing position by passively allowing your bones to drop into gravity, one at a time. Now imagine this same action done by actively lengthening the muscles of the back (eccentric contraction) and then using the same muscles with shortening (concentric) contraction to rise back up. These two experiences have very different dynamics and states of mind. Letting the bones fall with the pull of gravity is a very passive state, allowing the laws of nature to exert more control than usual. Moving by fully contracting the musculature is a very active doing, which may be accompanied by feelings of power, vitality and strength. Intense muscular initiation is done less in dance than it is done in sports, so the quality of the movement appears as athletic dancing.

Phase II begins with enough low-intensity aerobic activity to get the blood circulating to even the deepest musculature. In Body-Mind Dancing™ class often begins with this warm-up process, in the form of a structured improvisation to help students get in touch with their specific body needs on that particular day. Specificity is an important principle of sports training that is also needed in dance: in a form of movement which uses thousands of different body actions, an individual's idiosyncratic movement patterns and life habits need to be taken into account in preparing to move, even in the most predictable and stylized actions. To satisfy this need, the Body-Mind Dancing™ improvisational warm-up includes both a physiological component (aerobics, circulation) and a psychological component (self-attunement). This can come, for example, from smooth level changes from the floor to a standing position, and back down again, with a conscious awareness of breathing rhythms. These movements can be accompanied by images such as "feeling supported by the floor," "bonding with the earth," or "befriending the pull of gravity" to increase stability. Other warm-up methods could include:

1. Large shifts in weight (varied stepping patterns), finding one's own rhythm and then interacting with others.
2. Vigorous whole-body swinging, emphasizing release of control, followed by suspended lightness and the resulting feelings.

The student personalizes each of these warm-ups, selecting their preferred use of movement intensity, body parts, pace and spatial configuration. Actively watching, the teacher monitors further for safety and effective warm-up.

Movement that is relatively formless, such as shaking and wagging, can facilitate a gentle circulating effect of the synovial joint fluid and the blood. In these movements, the body fluids may be used as the primary initiators. Although muscle action causes the movement to occur in space, the subtle coordination and quality of the shaking movement is governed by the reality of moving the body fluids, increasing the circulatory flow. Again, the body-mind statement being made is that of willingness to loosen up. Often students will be shy to shake in this way until they feel that the rest of the group is actively involved and non-judgmental about the silly playfulness that results from letting go of muscular control.

It may be difficult to fathom the concept of using conscious movement of body fluids to spark a sense of freedom. However, physicists know that all matter moves. The mind-body link shows us that in every externally-visible movement, there is an invisible cellular response, and that each movement that stimulates a particular pattern of cellular action is associated with a specific point of view or attitude. As humans have
observed each other through the ages, we have at times sharpened and at other times neglected our ability to perceive another’s mood, personality characteristics, or state of health from non-verbal cues. So if you don’t usually jiggle or shake in your dance warm-ups, you may be surprised by the benefits that can be derived from it. For instance, for a person with arthritis or bursitis, the image of jigging the synovial joint fluid can be used as a metaphor for achieving greater fluidity and a greater range of body-mind movement.

During Phase III, which includes floor and level change exercises, it is often appropriate to reinforce experiences from ontogenetic (childhood) movement history that help babies develop balance and locomotor abilities. For instance, the explorations of the tibio-femoral joint described earlier can be related to neurodevelopmental movement skills, such as pushing homologously or homolaterally, crawling, creeping and standing up (Cohen. 1984, 1989; Batson. 1987, p. 13).

Continuing in Phase III, the teacher may choose to take either of the themes from Phases I or II (skeletal initiation versus conscious muscular initiation, or the active use of body fluids) to create a series of floor or level change sequences that further exemplify these energetic contrasts, perhaps focusing now on the dynamic results of alternating them.

In Phase IV, the class moves into even more vigorous, large-scale activities, and can play with different rhythms as the foundation of the movement impulse. For example, the class could follow the rhythm of the arterial pulse, with faster shifts of weight or with rhythmic jumping — like aerobic dance. Or they could experiment further with body fluids, using the rhythm of the venous blood returning to the heart, perhaps in large wall-like swinging motions. Since venous circulation is not assisted by the muscular action of the heart, it can be helpful to assist the return of the venous blood with squeezing movements of the fingers and toes, using the distal body parts as a peripheral pumping mechanism. For those with a blocked heart function, the “venous’ rhythm provides a more gentle approach than the “all out” arterial rhythm. The teacher can either present these movement sequences, without elaborating on their effects (perhaps in a conventional modern dance technique class) — or the teacher can describe their physiological basis. The decision whether or not to explain the underlying rationale and effects of the movements should be made with the overall continuity of the class in mind.

These experiential visualizations can also be seen and interpreted by a viewer. Sometimes the viewer can clearly distinguish these shifts of quality or mood, and sometimes they cannot be perceived at all. Whether as mover or viewer, however, one does not need to consciously know all about physiology and the psyche in order to experience the dance; anatomical systems and their dynamics are used spontaneously, because they are inherent in the movement itself. One can inspire the same body-mind experience by motivating movement with descriptors from the KMP or LMA, such as light, strong, bound, free, direct, indirect, accelerating or decelerating. A full variety of expression results from our intention to express the full diversity of our selves, including all of our body parts.

In Phase V, the intent is to dance, to feel the full joy of moving, and perhaps to prepare for performance. At this time, the teacher can let go of the physiological information, allowing it to become the background knowledge that helps the student develop a new skill. Or, the teacher can guide the entire class in freely experiencing anatomical imagery through a structured improvisation. For example, different dancers could choose different biological rhythms (arterial, venous, lymphatic, cerebro-spinal, cellular breath exchange, etc.) and then interact with these diverse rhythms (as a whole or in half groups), imagining that they are one body, with the room as the skin, the outermost membrane.

Awareness of Our Movement Repertoire

There are times when we strive to broaden our movement range to get out of a rut, to communicate better, or to learn and accurately perform the style of a particular teacher or choreographer. The use of the KMP, BMC, and LMA to structure the elements of movement and their meanings allows us much greater access to diversity of expression.

We also benefit by gaining greater awareness of the very tool that we use to create our art, like a visual artist learning the difference between pastels, guache, oils and watercolor.
Movement artists benefit from information about different body tissues, a dynamic resource to bring greater health and balance to the body. Stress develops in the body when the same actions are done repeatedly; after a while, the mechanisms in use become physically and emotionally worn, stuck in a fixed behavior pattern. When this happens, we can ask ourselves what we need; what part of ourselves is dormant, unexpressed, repressed, what aspects of ourselves do we need to express, to feel as whole? Since stress can also result from the need for adaptation when the organism perceives that it is already in homeostasis (Seelye, 1974), a case can be made that an expanded dynamic repertoire, with its broader definition of homeostasis, reduces stress by giving us greater flexibility to cope with change to our inevitably changing lives (Bartenieff, 1980).

I use my skeletal leverage/articulation and the sensitivity of my nervous system as unconscious themes in my movement repertoire. I do hands-on body work in which I use the receptors of my nervous system to assess another's condition, and then act with clear structure and leverage to present new options. Therefore, it is helpful for me to actively express my feelings (from my organs) and my intuitions (from my autonomic system) in my movement choices during the day, rather than to be guided by neuro-skeletal control at all times. This also leads to taking care of the body; being aware of the potential for injury prevention, while simultaneously increasing expressive range.

I'm very excited about the power of sharing the feelings stimulated by dancing in Phase VII, whether through singing, talking, questioning, or fully expressive dancing. By being open to this interchange, especially during the cool-down phase (when it won't disturb the developing momentum), it's amazing how smooth and well-integrated the class remains. This opportunity to exchange also breaks the traditional pattern that technique classes are the teacher's stage, rather than the students' laboratory.

After participating in the class, students are often curious about some significant aspect of themselves that they have never considered before, or excited about a new sense of their bodies (for instance, their spine feels longer). I have had many

Summary and Conclusions

It is both artistically and physiologically useful for a dancer to understand anatomical principles: how to warm up by activating body fluids, how joints work most efficiently, how to fully activate the muscles, and even how to integrate the functions of organs and glands to add greater volume to movement. As we explore these concepts, the result is both increased range of expression and ease within the body, created from mental shifts accompanied by an easy, relaxed parasympathetic state.

Potential teachers of this integration of dance science and psychology-in-action need to become familiar with the flexible format of all classes, which distinguishes them from typical modern dance classes. For instance, in Body-Mind Dancing, each class involves improvisation, vocalization, hands-on work and anatomical discussion, as well as movement sequences. In order to properly teach Body-Mind Dancing, one needs to be an experienced dancer who is certified in either RIM, BMC or LMA, with additional training in their application to dance teaching. The potential teacher also must be comfortable working with students at different levels of skill since people with a wide range of dance ability are attracted to this approach and I encourage it. In Body-Mind Dancing, mutual respect grows out of the shared vulnerability of the participants, who learn from each other as well as from the teacher (modelled after Aikido). This highly valuable exchange follows the holistic paradigm of the body-mind connection by emphasizing horizontal relationships versus vertical (hierarchical) relationships in the dance classroom. It goes hand-in-hand
with focusing on our personal reasons for studying dance, so that we are not distracted by self-judgement and inappropriate competitiveness. There are other benefits to class diversity: at times all class participants are able to share their reactions with each other; and, a person who lacks training in dance, but has a background in other areas, often has a fresh outlook on movement, inspiring even a highly-skilled professional dancer. That can be terrifically insightful, especially when the performer is attempting to communicate to an audience of nondancers. Working with this dynamic mixture of people is extremely rewarding.

On occasion, however, it is helpful to separate groups by skill level, in order to appropriately challenge balance, visual-motor memory, range of motion, and strength for each student. So far, the skill level of Body-Mind Dancing™ has been primarily at the level of the intermediate dancer, so new dancers have not been put into potentially injurious situations. In any case, advanced dancers can always benefit from a slower class, especially when the focus is on making new physical connections, which requires concentration by everyone. It is interesting that many dancers who have suffered injuries have re-entered dance through Body-Mind Dancing™.

Another aspect of this training that balances differing levels of dance movement ability is the use of the neuro-developmental framework. We are all on an equal level when exploring our developmental roots. This includes activities such as discovering our responsibility to stimuli which elicited primitive reflexes in infancy, righting reactions (that upright the head), and equilibrium responses (off-vertical balancing). In pure activities such as the neuro-developmental movements of rolling, creeping, crawling, sitting up, standing and walking, everyone has areas of potential improvement; everyone has some aspect of perceptual-motor ability that can be enhanced (an underlying premise of the KMP, BMC and Bartenieff Fundamentals of Movement™).

The teacher of Body-Mind Dancing™ also benefits from some training in dance therapy or some other psychotherapeutic method, in order to appropriately handle the emotional reactions resulting from body exploration that will occur in the classroom and to perceive and maintain boundaries. The training received in somatic movement therapy (inclusive of Bartenieff Fundamentals and Body-Mind Centering) aims to improve physical functioning and in turn enhance expressivity and a person’s overall sense of well-being. Dance/Movement Therapy achieves this end result also, but through a psychodynamic interaction requiring several years of training. For instance, classes on the heart can bring out strong emotions of pain and sadness. Deep feelings can become fixed in our body tissues, remaining there until they are unlocked by physical expression, movement or vocalization. After these feelings are expressed — whether experientially through movement, or outwardly through verbalization to others — people often feel a greater sense of camaraderie, joy and lightness, which is reflected in their dance.

The teacher’s responsibility is to provide a safe environment for this exploration. However, the teacher must also convey the message that the class is an educational setting, not a therapy group, and maintain this boundary. When psychological issues regarding a person’s past or present arise, it is wise to have a dance therapist to refer them to.

Each discipline benefits from an understanding of the other. Medicine provides excellent diagnostic information. Physical therapy unfolds a wide gamut of manual techniques and kinesiological principles that many dancers need to be aware of in their work. Somatic movement therapy brings knowledge of physical illness and wellness and how to embody avenues for cellular healing. Together they make a strong team. A dance class that integrates as much of what is current from science, somatics and psychology becomes an active vehicle for meeting dance’s most basic purposes: eliciting the satisfaction of outwardly expressing that which lives within, that which words cannot always explain; activating bodily resources in such a way as to increase one’s life force; working with the body fully enough to have a good night’s sleep; sharing with others in rhythmic harmonies and common feelings; and playing.

Intensified group bonding, increased interpersonal interaction, and rediscovery of personal experience inform dance, bringing it alive and imparting “real” meaning to technical prowess. It is inspiring that a process which improves dance technique also leads to a keener awareness of
the richness of human experience, and that from this
awareness also follows the re-emergence of the sacred aspect
of dance. The re-discovery of the sacred aspect of life on earth
has been a valuable contribution to our world in the 1980's and
1990's. With this incentive it becomes truly joyous to be
dancing into the twenty-first century!

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Notes

1 See Kinesiology for Dance, Vol. 10, #1, Sept. 1987, for an extensive bibliography of books on Dance Science.

2 The author has an M.A. in Exercise Physiology (Columbia University), is a certified Laban Movement Analyst and Certified Teacher of BMC, also holding certifications in Massage Therapy (AMTA) and Holistic Health Education (Eugene and Eva Graf). She worked in behavioral optometry as an intern with Richard Kavner. She has taught for eight years on the Certification faculties of the School for Body-Mind Centering and the Laban Institute of Movement Studies. She has been on the faculty of the graduate dance therapy departments of New York University (1984-1988) and Antioch New England Graduate School (1989-1992) and various other dance department faculties. She co-led dance therapy workshops with Ute Lang. She is currently serving president of the Laban Institute of Movement Studies. Besides teaching, she loves to choreograph and perform.

3 This caretaking rhythm has broad implications in a culture that has been predominantly based on masculine values. The male or female mover who recognizes the basic human need to nurture rediscovers traditionally "feminine" qualities, which have been profoundly undervalued. This increases their understanding and integration of the Yin polarity – the unconscious, intuitive feminine wisdom – increasing respect for the arts, which necessarily arise out of these creative depths. This enhanced sensitivity also supports the spiritual aspect of dance, while dancers often experience a sense of rapture even in a traditional technique class. Contemplation of the spiritual aspect of the creative process has usually been neglected. Body-Mind Dancing gives movers the chance to rediscover and commune with the divine seed of their inner creative process (using certain quiet rhythms).

4 A partial list of universities teaching holistic movement: University of Washington; University of Texas, Austin; St. Olaf College; Hampshire College; Antioch New England Graduate School; Connecticut College; Hope College.

5 Note that there is an error of terminology in Bartenieff's article, as she describes different neurological body part organizations by synonyms: ipsilateral and homolateral. In BMC, the term "homologous" is used to describe movements initiated and performed with bilateral symmetry.

6 Other articles could easily be written on topics such as body/mind approaches to injury prevention, improved protocols for balancing anaerobic and cardiovascular endurance training in dance, and the physiological ramifications of a low percentage of body fat (refer to Bainbridge Cohen, in Contact Quarterly, Spring/Summer 1984, and Fix in Kinesiology for Dance).

7 "Real" meaning is used here in the sense of W. H. Auden's use of real in describing the plight of the modern day poet, as compared to those of the past. "The real means 'sacred' or 'numinous.'" A real person was not a personality but someone playing a sacred role, apart from which he or she might be nobody (Moore, 1967, p. 8). "Real in this sense includes the spiritual as well as the material.

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