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Performance, Movement, and Kinesthesia

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This article examines the role of the performer in both the creation and presentation of choreography. It explores various critical points of view on this topic. It questions those theoreticians who negate the role of the dancer in their discussions of the meaning of dance. Kinesthesia and kinesthetic empathy are examined. The neurophysiology literature and its impact on dance aesthetics literature are explored in discussing the role of kinesthesia in both communicating and comprehending a work of choreography. This article asserts the necessity and value of discussing the dancer in evaluations of dance work.

Although all dance critics and researchers agree that the art of dance involves movement, it is curious that some of the main writings in dance aesthetics pay little attention to this topic. Further, there is considerable disagreement about the role of the performer, the moving object in a dance, and in what manner the performer contributes to the creation and communication of the work. The focus of this article is to explore the nature of the performer's role, with an emphasis on the dancer's movement intentions and qualities, and on the question of how the spectator perceives the dance and its meaning. The concept of kinesthetic empathy is examined from the perspective of neurophysiology and its impact on dance aesthetics.

In her introduction to *The Shapes of Change*, Marcia Siegel states that the book could not have been written without the dancers who "create the choreographers' visions for us" (1979, p. xviii). This observation about dance does not have a corollary in other art forms. The tools of the choreographer are active human beings, not passive objects, and as such they bring a myriad of skills, ideas, personality traits, moods, and biases to both the creative process and the performance event. In his book *On Dance*, Murray Louis states that the quality of a choreography is highly dependent on how the dancer performs it, and that it requires performance intelligence, which refers to "knowing what the

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performer's responsibilities are. Phrasing, texture, music, motional musicality, quality, dynamics, whip, bite, release, emotional flavor, and the whole gamut of sensory responses are the things professionals must learn and provide on their own'' (1992, p. 124).

Yet it is not unusual to find dance writings that deny any important impact on the work or its interpretation due to the dancer. Susanne Langer distinguishes between the materials and the elements of art, stating that the primary illusion of each art form is a created essence separate from the actual materials; in the case of dance, the dancers and the movement (1957, p. 39). In her view, artistic perception is a kind of understanding that relies on finding the vital import in a work, dependent on its primary illusion. This view fundamentally eliminates any need to examine the actual movement or performance of a piece in order to discuss its meaning. The ''virtual powers'' in a dance work can be understood separate from the movement sequences. The essence of a work is conceptualized by the choreographer and grasped by the audience regardless of the specific performers. In Langer's theory, the less one notices the components of a work, the more successful the work of art.

In the same vein, Graham McFee states that what makes a particular sequence of movement dance is ''the context of performance and, relatedly, the description under which the action is intended'' (1992, p. 54). He includes the concepts used in criticism and appreciation of the activities as ways of determining whether or not it is a dance. At no point does he suggest that the quality of the dancer's movement influences one's decision to describe something as dance. It is interesting to note how McFee reinforces the insignificance of dancers, overlooking them in a definition of the Republic of Dance, which consists of choreographers, producers, dance-theater owners, dance critics, and dance theorists, but never dancers!

In contrast, Siegel writes descriptions of dances rich in movement detail, and often emphasizes the role of the performer. When she discusses Doris Humphrey's *New Dance*, she states, ''But how unusual it was in those days to imagine that the body's own momentum could be fashioned into dance patterns. . . . This acknowledgment of the body's relationship to the ground was one of the things that made the early modern dancers seem so much more human'' (1979, p. 83). For Siegel, the interplay of humanist themes and the dancer's use of weight and momentum are crucial in the development of early modern works. To analyze the intent of Humphrey's work, Siegel must make reference to the movement quality of her dancers.

At times Siegel is so moved by a dancer's performance and quality in a piece that her discussion focuses exclusively on that aspect. Consider Siegel's description of a section of Twyla Tharp's *As Time Goes By*:

> This continuous adagio is one of Tharp's most remarkable inventions, an achievement due in large part to Larry Grenier, who created the role . . . Grenier was indulgent in space, letting his motion slide easily into its own fluctuating rhythms. Instead of trying to hit a multitude of tiny positions,

> he let the movement course through his body and limbs, taking him into big spirals and curves. The force of a gesture seemed to recede gradually as he stretched into soft sinuous lunges or sank in elastic pliés, or allowed the last bit of energy to float out through his fingertips or his head, even as a new surge of motion was being generated somewhere else in his body. (1979, pp. 356-357)

What is striking about this passage is that Siegel does not oblige the reader to concentrate on an intended meaning of the dance, what Langer would call "the primary illusion," or on the formal construction of the work. What seizes full import is Grenier's dancing, suggesting that this is, in fact, the essence of the adagio. His quality of movement is Siegel's focus, and one senses that this solo would never have come into existence without him. One cannot help wondering if it would be the same solo danced by a performer without this rich and luscious movement quality Siegel describes, even if each step were precisely recalled. From this passage, and similar ones by Siegel, it seems that the movement qualities and interpretation of the performer, the intended meaning of the work, and the form of the dance may all share equally in communicating to the audience.

Siegel is not unique in referring to the importance of the dancer in both the creation and execution of dance works. Stuart Hodes embraces this view of Martha Graham, recalling that in the 1950s she presented works choreographed by the company members in her Broadway season. He claims that people who are surprised by this fact are ignorant of "Graham's creative process, which always placed her dancers in a central role" (1989, p. 15).

Of Balanchine's work, Deborah Jowitt says, "Even though company style and choreography alter subtly over the years, Balanchine ballets still resonate with the image of the ballerinas who created the leading roles in them" (1988, p. 266). Again, one wonders how many of the pieces would fail to exist had not those particular dancers been available to Balanchine during that creative period for him.

If it is true, as many writers recognize, that the performer is significant in the creation, expression, and understanding of the dance work, then what are the aspects of the dancer that make this contribution? In examining the rehearsal process, Hodes asks a range of questions concerning the dancer's role in the creation of a piece: "Does a work undergo fundamental changes as it is created? . . . What creative role do the individual dancers play? How are individual virtuosity, dancers' 'tricks,' acrobatics, dramatic strengths, and so on, employed?" (1989, p. 12).

McFee acknowledges that the dancer's technique is a precondition of the choreographic style, and is therefore necessary in making dances decipherable or understandable. However, this view does little more than present the dancer as an excellent tool, and McFee states that there is nothing creative in the act of interpretation. In his discussion, various interpretations merely signify different examples or tokens of the same work, and either succeed or fail to represent the piece correctly. The meanings of dances are most easily located in discussions

of the dance, according to McFee, rather than in the interpretation of a particular group of dancers.

Carole Hamby takes a much broader view of the role of the performer in the expression and subsequent understanding of a dance. She maintains that in order to relay the meaning of the dance, the dancer must have "appreciation of the design of the work in its space-time-movement dimensions" (1984, p. 41). To achieve this end, the dancer relies on both cognitive and perceptual skills. Cognition and perception demand far more than training in technique, or even understanding the process of moving in an aesthetic sense. They imply awareness, knowledge, and decision-making in the act of learning and performing a dance.

While nondancers may think that all choreographers give every step, every count, every thought, and every image to the dancers in rehearsal, those who dance realize that in many situations there is considerable interplay between the choreographer's ideas and the dancers' translation of those ideas into the resultant choreography. The same steps can be danced in a variety of ways, depending not only on the dancer's technique but also on the dancer's attention or focus. Performers bring their own perspectives and visual images to the process, and this necessarily has profound influence on the outcome.

Hamby argues further that kinesthetic empathy is a necessary factor in audience understanding of dances. She maintains that the dancer must have a kinesthetic experience with the work in order to manifest its design and intent. In her words, "the kinaesthetically experienced dance form is for the dancer what the visually perceived dance form is for the spectator" (1984, p. 44). Hamby is not claiming that the audience has a kinesthetic experience, but rather that the *dancer* must, in order for the work to be decipherable. Yet other writers have implied that audiences do have kinesthetic experiences when they watch dance. In describing how the spectator feels while watching Graham's *Primitive Mysteries*, Siegel states, "*Primitive Mysteries* is not an enjoyable dance. . . . It is a terse, severely disciplined dance, not a kinesthetic joyride" (1979, p. 50). Jowitt makes the following observations about Trisha Brown's *Falling Duet*:

> The faller might daringly reverse directions in mid-lunge, causing the catcher to race around, dive to the floor, and at the last minute, cushion the impact. The audience—gasping, laughing, crying out—experienced a kinesthetic excitement different from, but no less potent than that roused by a male ballet dancer doing his Sunday-best leap. (1988, p. 328)

At this point it is necessary to discuss what seems to be a lack of agreement, if not outright confusion, about just what kinesthetic sense or empathy is. The college edition of *Webster's New World Dictionary* defines kinesthesia, coming from the Greek roots "to move + perception," as "the sensation of position, movement, tension, etc. of parts of the body, perceived through nerve end organs in muscles, tendons, and joints." Research in neural physiology has served to broaden this definition of kinesthesia.

In *Principles of Neural Science*, Martin and Jessell describe the "two submodalities of limb proprioception: the sense of stationary position of the limbs (*limb position sense*) and the sense of limb movement (*kinesthesia*)" (1991, p. 347). While it was believed for years that limb proprioception did not depend on messages from the periphery of the body, more recent research has demonstrated three vital peripheral components that signal both stationary position and speed and direction of limb movement to the brain. These are (a) receptors located in the joints that specify joint angles, (b) receptors called muscle spindles that transmit information about length of muscles and changes in degree of stretch, and (c) cutaneous receptors that signal information from the skin surface about degrees of pressure and contact with surfaces. If any one of these three types of receptors fails to function, performance in movement tasks deteriorates.

Additionally, James Kelly describes the vestibular system, with sense organs located in the inner ear. This system plays an important role in maintaining balance and posture, by providing "continuous information about the position and motion of all body parts, including the head and eyes" (1991, p. 500). Input about head movement and position is one of the main functions of the vestibular system. It is important to recognize that limb proprioception, vestibular input, and vision all play a role in one's sense of position and motion in space, and the body's relationship to the environment.

In *Principles of Neural Science*, Claude Ghez reports on the research of Lewis Nashner, who has studied responses to disturbances of balance in a variety of conditions (1991, p. 597). Experiments by Nashner have demonstrated that if the body is receiving inappropriate information from the muscle spindle receptors, then the part of the brain called the cerebellum will choose to disregard that information and respond to the vestibular inputs instead.

What does this complex neural analysis really mean? If a choreographer asked a dancer to run down a sloping ramp, the stretch receptors in the anterior ankle would signal that the body was falling backward, when just the opposite is true! The system would initially try to compensate by contracting muscles that would cause the body to fall further forward. The cerebellum would receive this information as well as the vestibular information that the head and body were upright, even though the anterior ankles were stretched, and thus the response would be altered to maintain balance. Since limb proprioception (including information from joints, muscles, and skin), vestibular information, and vision all play a role in motion and balance, it follows that dancers and dance writers should consider all three of these elements as part of the kinesthetic sense. The word *sense* is not used loosely here, but acknowledges that sensory receptors and modalities are involved in all three of these systems, and higher levels of the nervous system are needed to process the information and determine appropriate responses.

How do dance writers define kinesthesia, and how do the various definitions reflect a view of the performer's role and audience response? Many use the term with no definition at all, assuming it common knowledge, while others deny its existence entirely! McFee denies the existence of a kinesthetic sense, and further

claims that if there *were* a kinesthetic sense, it would contribute nothing to the understanding of dances. He argues that "knowing where the bits of one's body parts are" does not constitute a projective modality, such as sight and hearing (1992, p. 267).

McFee believes it is through projective modalities, which contain a temporal dimension, that one gains appreciation and understanding of dances. Further, a kinesthetic sense cannot contribute to the dancer's understanding of the dance, thereby communicating more clearly to the audience, because what the dancer feels is irrelevant to the meaning of the dance. He concludes his discussion of kinesthesia by claiming that "focus on the performer is not appropriate to an art form such as dance" (1992, p. 273). However, McFee's definition of a kinesthetic sense only attends to the static component of limb proprioception. Thus he would deny any temporal dimension to kinesthesia, which is temporal if one includes such notions as changes in limb position, acceleration and deceleration, and the full spectrum of one's constantly shifting relationship to the environment.

More important, the kinesthetic experience of movement for the dancer is part of what is projected, just as form and line, design in space, and musical phrasing are. Certainly vision and hearing are the spectator's modes for absorbing this kinesthetic information. However, it is the spectator's experience and knowledge of motional sensation that assists in perceiving or interpreting that information, and this is what is meant by kinesthetic empathy. When Siegel refers to a kinesthetic joy ride or Jowitt describes kinesthetic excitement, they do not mean that the audience is experiencing movement at that instant in time, but rather that memory traces of previous motional events are called up and contribute to the total understanding of the dance.

In his article "Invitation: To Dance," Larry Warren discusses the 1921 work of Dr. Edward J. Kempf, a psychologist who documented changes in the postural states of muscles in response to viewing both animate and inanimate shapes (1985, p. 15). Warren claims that this response is due to an extension of the autonomic nervous system, which he calls the movement sense. Further, he states,

> The value of this information to viewing dance becomes clearer when we realize that in addition to perceiving objects and movement, we experience, as well, the actions they may elicit, and the feelings that go with these actions—our emotions. In the emotional connotations of that response to movement we may find an important intuitive basis for our enjoyment and appreciation of dance. (1985, p. 15)

Like Warren, John Martin brought a full knowledge and appreciation of kinesthesia to his arguments. Although his book *The Dance in Theory* was originally published in 1939, his knowledge of neurophysiology is impressive. He states that there is a sixth sense, the movement sense, which concerns itself with the world contained within the body itself. Further, this sense has sense organs in the tissue of muscles and joints, which register changes of posture and

shift of weight, and in the semicircular canals of the ears, which deal with balance. Martin claims that the eye can open pathways to neuromuscular experiences that are associated with previous body experience, what has been identified here as memory traces. He also describes an association between the area of the brain where movement sense organs send signals, and the part of the nervous system where emotion is generated. Actually, there are connections in the brain between higher order sensory areas, which process the information from the various sensory receptors, and the limbic area, which deals with emotion and memory (Kupfermann, 1991, p. 826). Martin describes the communication bridge between dancer and audience:

> We shall cease to be mere spectators and become participants in the movement that is presented to us, and though to all outward appearances we shall be sitting quietly in our chairs, we shall nevertheless be dancing synthetically with all our musculature. Naturally these motor responses are registered by our motor-sense receptors, and awaken appropriate emotional associations akin to those which have animated the dancer in the first place. It is the dancer's whole function to lead us into imitating his actions with our faculty for inner mimicry in order that we may experience his feelings. (1965, p. 23)

In addition to the references by Siegel, Jowitt, and Hamby, other writers from a variety of critical perspectives rely on kinesthesia to explain some aspect of either expressing or understanding dances. Judith Alter states, in her comparison of R.G. Collingwood and John Martin, that kinesthetic empathy is the combination of emotional sympathy and "inner mimicry," and that it is the common term used to discuss how audiences receive dance communication (1979, p. 32). Jan Fetters expands the legitimate interpretive senses of sight and sound to include the tactile and kinesthetic qualities of the body. She claims that all of these senses comprise the "aesthetic, sensuous appeal of the body to the performer" (1980, p. 9) and this complete experience brings about a unification of the body as seen externally and as lived subjectively.

Deidre Sklar makes a strong case for the ability of the dance writer to attain a deeper understanding of the work by exploring it in motion. In describing her approach to the ethnographic study of a dance ritual in the village of Tortugas, she says,

> At the same time that I observed movement visually, however, I also "felt with" people moving kinesthetically. . . . Empathetic kinesthetic perception often provided clues not just to the sensations of particular movements, but to the whole complex of concepts, values, affects, and action that comprise the Tortugas fiesta. (1991, p. 7)

It was only through this kinesthetic experience of the dance that Sklar came to appreciate the full meaning and intent of the work. McFee makes no mistake

when he says that dance aesthetics "is haunted" with the topic of a kinesthetic sense. This is so because many writers firmly embrace its importance in the process of the performer learning, expressing, and communicating the meaning of the work, and in the subsequent process of the audience receiving and deciphering the work. To deny the existence of a kinesthetic sense is tantamount to denying that dance is fundamentally about the body in motion. Certainly the audience sees, hears, and comprehends many rich and compelling ideas and feelings in a dance work, but it is undeniable that the spectator is primarily viewing a performer in motion. Whether it is the dancer's kinesthetic sense, or the audience's kinesthetic empathy, it is the perception of that motion—its form, its qualities, its expression, its intent—that communicates the essence of the work of art to the viewer.

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