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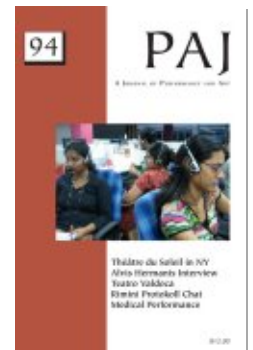
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## **The Ghost in the Machine: Merce Cunningham and Bill T. Jones**

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# THE GHOST IN THE MACHINE

## Merce Cunningham and Bill T. Jones

Ann Dils

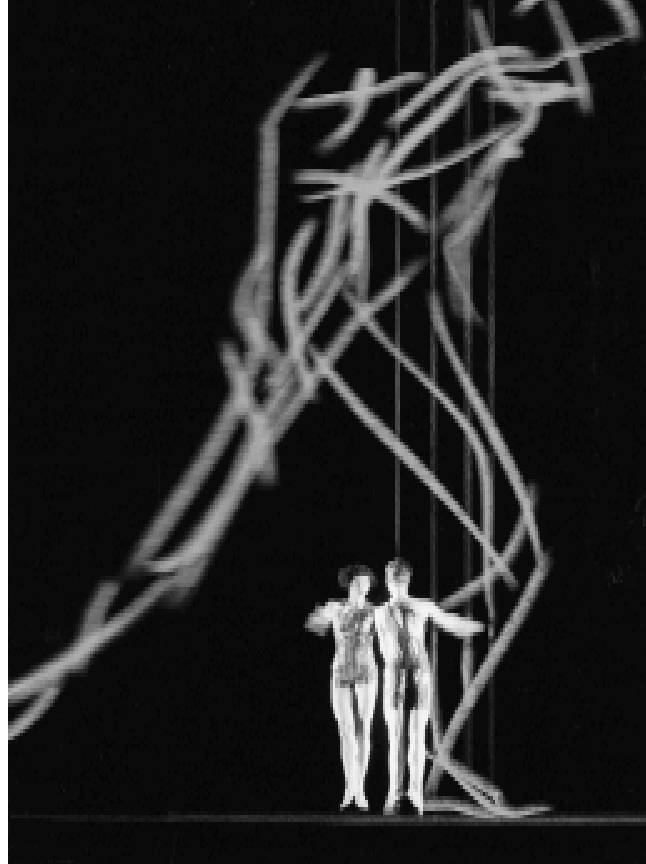
What is it that we value in a human image? One priority—evidenced by the work of home videographers—is to create a sense of nearness to loved ones and events by capturing as much information about people and their actions as possible. Other image-makers, particularly portraitists, hope to draw in the viewer, allowing her to flesh out an image with her own associations and imagination. To do this, portraitists pare away human attributes and environment to arrive at a representation of something essential, something telling about a person. I'm used to seeing spare images of human faces and bodies in sketches and black and white photographs. But what possibilities exist for portraits in which people are identified only by motion? Motion capture and animation technologies make it possible to create portraits of people that consist primarily of human motion, replacing identifiable bodies with more generic forms. Do these images work as portraits? What is the impact of leaving the body behind?

Paul Kaiser and Shelley Eshkar of the multimedia studio Riverbed explore this possibility as they collaborate with choreographers. In *Biped*, a 1999 work by Merce Cunningham, Kaiser and Eshkar create a virtual environment for a community of dancers, an environment that includes elegant, ephemeral virtual dancers performing movement derived from Cunningham dancers. In the 1999 new media video *Ghostcatching*, Kaiser and Eshkar use Bill T. Jones's recorded actions to animate abstract dancers in an 8½ minute virtual dance, a portrait of Jones as performer. Kaiser and Eshkar capture something essential about dancers and dancing in these motional portraits. This is especially true in *Biped*, where the virtual dancers complete a process of abstraction already at work in Cunningham's choreography. But, Kaiser and Eshkar's portraits also produce a realization of absence, a sense of loss that helps me appreciate the fullness of human motion and the importance of physicality to our lives. This is especially clear in *Ghostcatching*, as Bill T. Jones's often fierce movement is performed by gutless animated line drawings. Aspects of dance that seem fundamental become "ghosts in the machine" in these works, lost in the motion capture and animation processes.<sup>1</sup> These works also help me realize what it will mean to be human in the twenty-first century, as individuals and communities shape and are shaped by an environment that is increasingly a complicated network of the natural, the socio/cultural, and the technological.

At the opening of *Biped*, I wonder if the technical brilliance of digital projections could possibly match the technical brilliance of Cunningham's dancers. They begin the work performing solos, each dancer perfectly thin in an iridescent, asymmetrically-cut leotard, each perfectly in control, placed, turned out, extended, each perfectly urbane and purposeful.<sup>2</sup> As the work proceeds, digital projections by Kaiser and Eshkar and Aaron Copp's lighting immerse the dancers in a shifting world of image and light. Vertical poles or descending bars of light appear. The floor changes from light to dark. Dots and lines float randomly or combine to wheel across the space. Most spectacular are the huge virtual dancers that briefly circle or flit across the stage. Some of the virtual dancers seem to be made from colorful, firmly drawn lines, while others are barely suggested by wispy strokes. Spare, elongated, and articulate of joint, they evoke the movement sensibilities of their progenitors. Gavin Bryars's poignant music, a mix of string instruments and electronic sound, provides an aural environment.

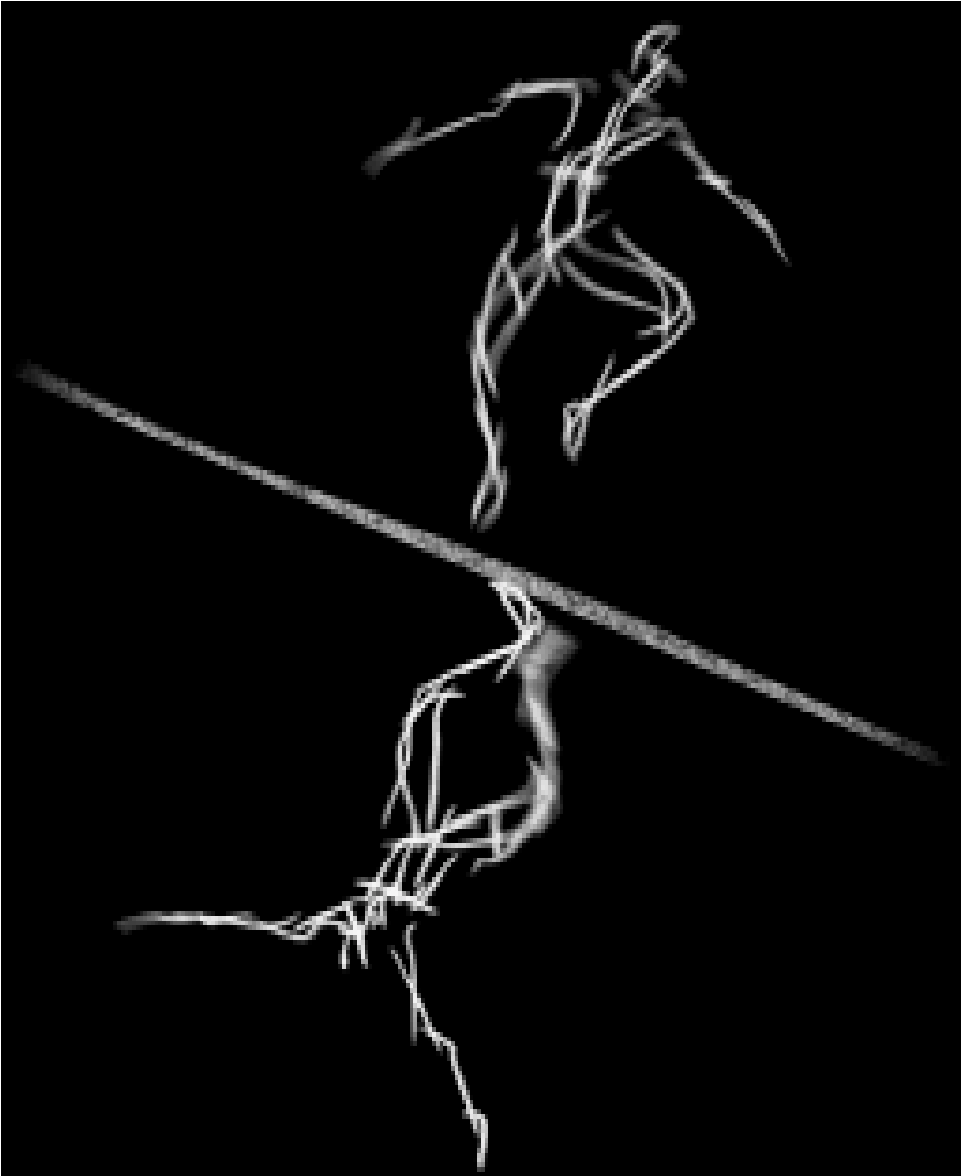
Within this world, the fourteen material dancers calmly proceed, as my sense of them shifts. Sometimes I see the dancers as abstractions, as lines moving in space. As virtual bars slide down a scrim in front of the dancers, I see their bodies in segments, the lines of arms and heads moving separately from legs. More often, I see the dancers as a polite but very human community. Bounded by scrims that stretch across the front and, seemingly, the rear of the stage, the dancers go about their lives. Sometimes dancers cut individual paths across the space. At other times, they join in unison dancing or dance as couples, arms linked overhead in a modified social dance.

At some point in the fifty minutes of dancing, I realize that the dancers enter and exit from a black void at the rear of the stage. This bounded world has been an illusion. There is only one scrim, at the front of the stage; the images are carefully designed to suggest movement in three-dimensional space. Finally seeing illusion as allusion, I realize the virtual dancers as something more than decor. In the real world, dancers never completely become abstractions—never exist as just motion or just line—because they can't shed skin color and sexual characteristics, nor the thousand of nuances of body, face, and motion that suggest personality. Slipping into the void suggested at the back of the *Biped* stage—is this also the void crossed in the motion capture process or the transformational void of the Internet?—dancers rid themselves (mostly) of these human characteristics and their attendant social and cultural baggage. Through the images and environment they create, Kaiser and Eshkar finalize a transformation that Cunningham begins in his choreography: the human body as biped, as stripped down to moving, two-legged being. The messages of *Biped* are mixed, however. This environment rich with digital marvels changes my perceptions of human beings and helps me realize the possibilities of bodies transformed by technology. But the virtual dancers, as portraits of the Cunningham dancers, only serve to echo the perfection already achieved by the human dancers. Too, within this expanding world of technological wonder and possibility, the material body remains central to forming human relationships and community.



Production images from  
Merce Cunningham's  
*Biped*. Photos: Courtesy  
Stephanie Berger.





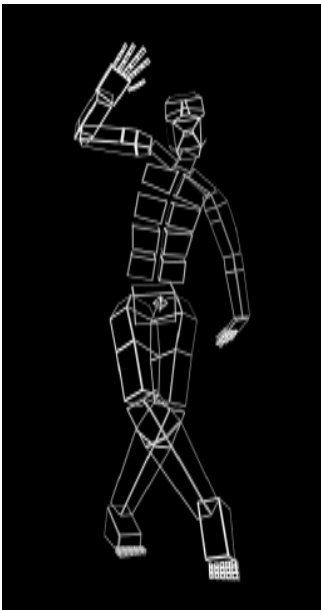
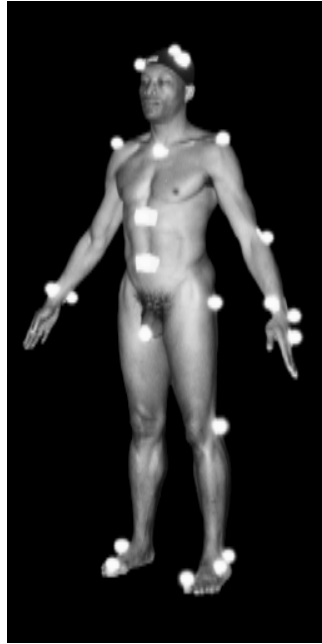
Still from *Biped* projection. Photo: Courtesy Paul Kaiser and Shelley Eshkar.

In *Biped*, the virtual dancers exist alongside their progenitors. In *Ghostcatching*, at least as I experienced it at Cooper Union in January 1999, the relationship between Bill T. Jones and the virtual dancers was made clear through an introductory exhibit.<sup>3</sup> The exhibition's designers seemed determined that *Ghostcatching* be viewed with Bill T. Jones and his role in the work firmly in mind. In six giant images positioned outside the gallery where the digital projection was shown, Jones moved from flesh and blood to cartograph. First was an image of Jones improvising at Cooper Union. Next were images of the motion capture and animation processes that showed Jones transforming from self to dots that represent movement patterns to a biped figure that provides the scaffolding for the animated figure (and was the source of Cunningham's title). Next was an image of the animated ghost. A video of Jones improvising in the Cooper Union gallery and huge stills of *Ghostcatching* figures completed the exhibition, dramatizing and connecting the beginning and end points of the process. While the ghosts didn't look like Bill T. Jones, the lobby display bound Jones and the ghosts together and provided a ready mental reference to Jones and his movement that I relied on in viewing the video.

Jones's movement might have been made to inhabit very different kinds of bodies, slight bodies, stout bodies, or womanly bodies. But none of this occurs. The ghosts don't look like Jones, but they look male. They all have broad shoulders and are rendered to emphasize muscle. The figures are just solid enough to encase the movement but not fully formed enough to suggest separate beings. As I hope to see the parent in the child or the theme in the variation, I look to see Jones in the images.

Associations with Jones are reinforced in the choreography of *Ghostcatching*. From the beginning, the ghosts are envisioned as growing out of each other, rather than being unrelated beings that happen to occupy the same space. As the projection begins, a light blue figure made of straight lines stands encased in a rectangular blue box. The figure moves through an alphabet of postures—a lunge forward, a lean to the side with arm raised—while reciting corresponding letters, A through F. In "Steps," his article for the *Ghostcatching* exhibition catalog, Paul Kaiser calls this straight blue man an "ancestral figure," some basic self who spawns all the other figures.<sup>4</sup> An elegant figure made of swirling light blue and white lines emerges from the blue one and mirrors his progenitor, then leaps away. More figures appear, orange, red, blue, yellow, and purple men made from lines that are brief or languid, straight or spiraling. When the figures share the space they overlap, making the virtual atmosphere dense with boomeranging energy. Sound keeps Jones present. He hums, breathes, and delivers snatches of monologue, "I want you to look here in the trunk. I've got cornbread in here . . ." The sound of footsteps keeps him present and adds weight, force, and a sense of direction to the movement. In the end, seven versions of the ancestral figure, linked together with straight lines, endlessly push and pull at each other as they open and close their own limbs.

*Ghostcatching* may be a story about a man who ends up being yoked to his offspring or who is a composite of many selves, but the piece is most convincingly a moving



Six steps (left to right; top to bottom) in the transformation of Bill T. Jones in *Ghostcatching: Improvising*; Wearing motion-capture markers; Markers optically recorded and converted to digital 3D files; Motion-capture files applied to kinematic model of the body; “Hand-drawn” lines modeled as mathematical curves; Sampled charcoal strokes applied and rendered as final drawn body. Photos: Courtesy Paul Kaiser and Shelley Eshkar.

portrait of Jones. The differences between the ghosts seem like changes in mood or character, in the way that Jones might transform with time and experience or while performing. Paul Kaiser remarks that he and Eshkar saw Jones creating characters through his improvisations—a sculptor, a dog, an athlete—and that Jones picked up on these observations and used them to push the dancing they recorded.<sup>5</sup> I didn't particularly see these characters in *Ghostcatching*, instead I saw variations in movement—a proud walk, an athletic chin-up on an invisible bar, a sinuous rippling of the arms, a quick dive to the floor, an undulation of the spine—that reminded me of Jones's range as a performer.

Jones is known for getting audiences to think by confronting them with self-confession, nudity, and explicit language, but *Ghostcatching* is gentle and visually pleasing. The approach is mild, avoiding any shock and indignation. Considering what *might* have happened in this dance, the work is playful, restrained, and polite. One of the curiosities of *Ghostcatching* is not part of the video, but a lobby image of Jones preparing for the motion capture process. Jones is pictured naked with motion capture sensors taped to his body—the exhibition catalogue says there were twenty-four sensors taped to Jones's body—including his penis. *Ghostcatching* began as a project that involved animating some 1983 images of Jones, naked and body painted by Keith Haring, by Tseng Kwong Chi, hence his nakedness in the motion capture studio.<sup>6</sup> Prompted by an article in *The Village Voice* in which Austin Bunn quips that the marker is on Jones's penis to “keep at least the gender . . . er . . . straight,” I went back through every image I could find of *Ghostcatching* to see if the marked penis was ever apparent.<sup>7</sup> One or two images include what *might* be a penis, but is probably a vapor trail left by an arm gesture. As the project became disentangled from the earlier photographs, Kaiser, Eshkar, and Jones may have struggled with what to do with that part of the movement information available for their piece. Appropriate? Inappropriate? This part of the captured motion is clearly not a feature of the finished work, but the lobby image suggests that *Ghostcatching* might have had quite a different look.

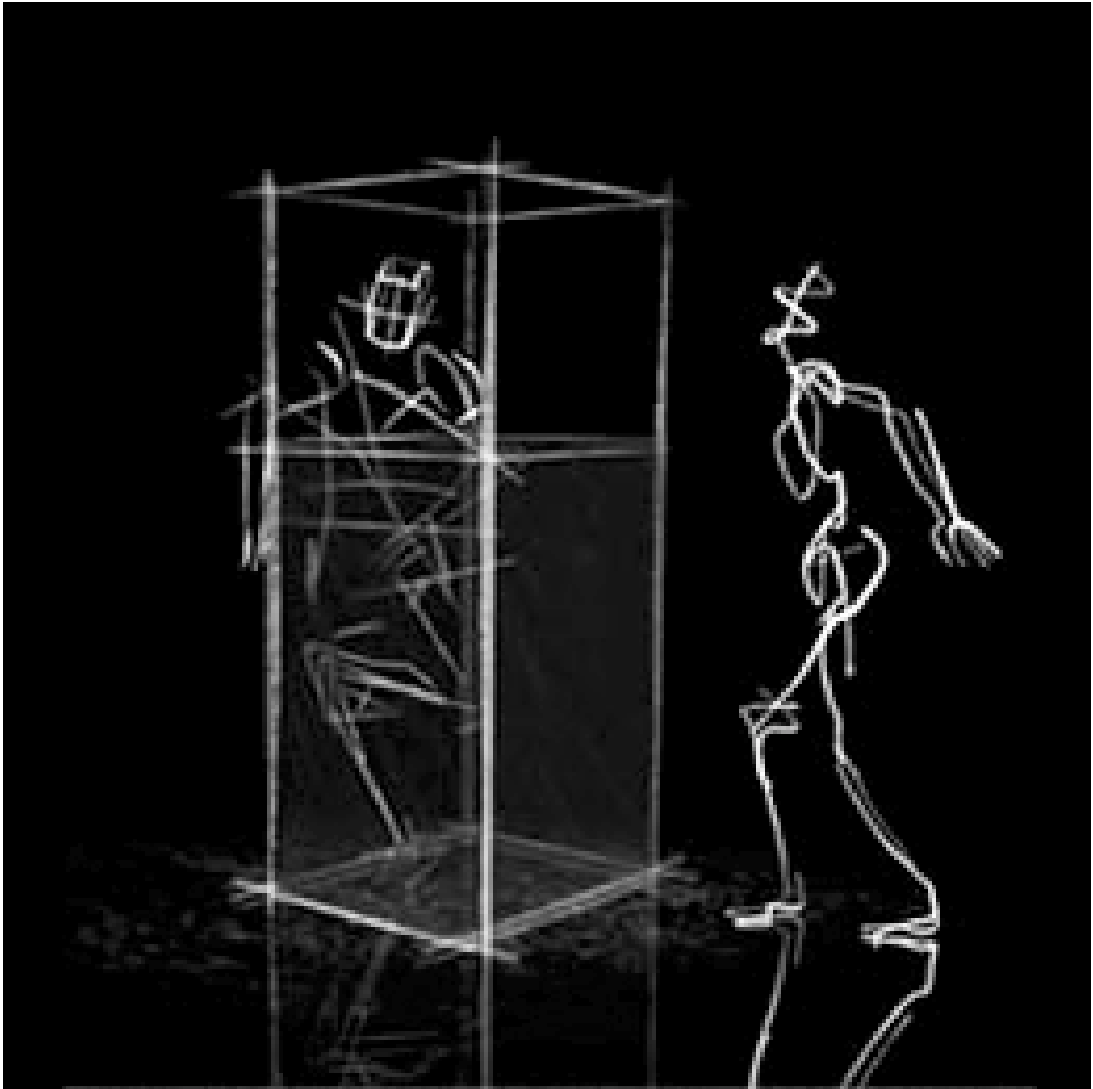
Allowing spectators to see Jones in a non-confrontational work, and without his well-known face and the cultural moorings of race and sexuality that mix into his public image, provides a sense of intimacy. Seeing *Ghostcatching* is a bit like being invited into the home of a very formal colleague, the outward manifestations of the person's identity fall away and something less public, more vulnerable, and closer to personality than identity becomes apparent. *Ghostcatching* is about a person, rather than a personality. The mildness of *Ghostcatching* is inviting and I form a personal relationship with the work, expanding upon the dance's images with the stuff at the back of my brain. Images from the lobby display, sense perceptions of remembered movement, flashes of dance photographs, moments from live dances, ideas about the nature of performance and about how we derive meaning from motion run through my head. Shutting back and forth between virtual and more true-to-life representations and my own memories of Jones creates a sympathetic response that I experience as a sense of nearness, an intimacy.

At the same time, the loss of Jones's race and sex contributes to a void in the work and, ultimately, the sense of loss I feel as a viewer. As the materiality of Jones's body is lost, I lose the sensuality of his motion. There's no sweat in *Ghostcatching*. In his discussion of the motion-capture process, Paul Kaiser mentions that they had trouble keeping the sensors attached to Jones's body. He did at least one of the motion capture sessions naked and, as Jones moved and sweated, the sensors kept popping off.<sup>8</sup> Indeed Jones eludes being captured through this technology in several ways.

Motion capture is miraculous in that it provides a three-dimensional picture of motion. The media artists heighten this, as their line drawings allow the viewer to see through the ghosts to realize three dimensions at once. In that way, motion-captured dance is more satisfying than dance that is flattened by videotape. But motion capture only records movement in space and time, omitting any direct indication of flow (the relative tension or relaxation of muscles) or changes of weight (our relationship to gravity). In a live mover, flow would show up on the surface of the body, as the dancer tensed or eased muscles. Weight changes show up in the thousands of accommodations movers make in their muscles and skeletons as they drop into or overcome the force of gravity or interact with other people or objects. Motion capture sensors record the motion of a finite number of points, not really the whole body, so some of the pliancy and articulateness of the body is lost.

In the Cunningham images, the motion capture process—with its accentuation of joints and lines—seems to distill qualities important to the dancers' motions. But in the images of Jones, the result is movement that's a little pale, a little less than full. Kaiser and Eshkar fill in some of the missing movement through their skills as media artists, making movement seem more brittle by creating a figure of straight lines in a cool blue color, for example. I also enrich the movement through inference. When a figure is supported on all fours, I read tension in the upper body. When a figure moves quickly from standing into a low crouch, legs bent, pelvis slightly rocked under, I understand the drop in weight that usually accompanies that action in real life. While the outlines of the movement are evident in *Ghostcatching*, and beautifully enhanced by the media artists, I'm aware that some of the energy of the movement is supplied by my own memory.

I also miss Jones's animus, his animating purpose as a performer. In sorting through the layers of information I get when I look at a dancer—cultural imprints and performances, technical facility, the role portrayed or choreography to be fulfilled—I realize that I see the individual most when I am surprised, when dancers take control of the performance. This occurs often when Jones improvises, when he does something that exceeds or varies from what I know of his dancing or of bodily capability. Although I know the movement in *Ghostcatching* is based on improvisation, it remains the same with every viewing of the film. The movement is no longer developing, emerging.



Bill T. Jones's *Ghostcatching*. Photo: Courtesy Paul Kaiser and Shelley Eshkar.

Jones's new evening-length solo dance *The Breathing Show*, includes an improvisational section entitled "The Ghost in the Machine." In diary excerpts included in the Sunday, February 13, 2000, *New York Times* Arts and Leisure section, Jones discusses the work, also calling it "Ghostcatching," and his love of improvisation:

Improvisation catches me at my most animal, most un-self-conscious and most bold. There are difficult and peculiar co-ordinations I pull off because they are spontaneous and free of concern for effect or technique. These are the most inventive and the most difficult to recapture. Here is my truest contribution to contemporary dance.<sup>9</sup>

Is Jones telling us that he—his living, improvisational, sweating, responsive self—is the ghost of *Ghostcatching*?

What is it that we value in human images? I appreciate Kaiser and Eshkar's images of Cunningham dancers as ways of celebrating the bodily perfection and abstract purity the dancers achieve. In *Ghostcatching*, Kaiser and Eshkar's images of Bill T. Jones help me appreciate Jones's range of motion, the complexity of human bodies, and the losses that occur when motion is isolated and re-embodied. Without bodily information such as skin color and sexual characteristics, meaning is depleted. The most important message of *Ghostcatching*, however, is in the loss of Jones's animus, and by implication, the loss of our own engaged physicalities as we interact with and through technology.

## NOTES

1. Toni Morrison used the phrase "ghost in the machine" to describe aspects of African culture that are important to American culture yet go unexamined and uncelebrated in her *Playing in the Dark: Whiteness and the Literary Imagination*. Cambridge, Mass.: Harvard University Press, 1992. I use the phrase here with an altered meaning, as I believe Bill T. Jones does when he uses the phrase as the title for an improvisational section of his 2000 evening-length solo work, *The Breathing Show*.

2. *Biped*, 1999. Choreography: Merce Cunningham. Music: Gavin Bryars. Design: Paul Kaiser, Shelley Eshkar. Costumes: Suzanne Gallo. I saw *Biped* live in New York in 1999 and more recently studied a videotape of the dance as performed in Caen, France, during December 2000. *Biped* images are available at <<http://www.riverbed.com>> (August 15, 2001).

3. *Ghostcatching*, 1999, exhibition and digital video. Digital video collaboration by Bill T. Jones, Shelley Eshkar, and Paul Kaiser. The Cooper Union School of Art, Arthur A Houghton Jr. Gallery, New York City. January 6–February 13, 1999. *Ghostcatching* images and further information are available at <<http://www.riverbed.com>> (August 15, 2001).

4. Paul Kaiser. "Steps," *Ghostcatching* [exhibition catalog], ed. Ann Holcomb. New York: The Cooper Union School of Art, 1999. 47.

5. *Ibid.*, 45–46.

6. Ibid., 39–40.

7. Austin Bunn. “Machine Age,” *The Village Voice* vol. XLIV, no. 1.

8. Kaiser, “Steps,” 39–40.

9. Bill T. Jones. “Hopes and Doubts During the Gestation of a Dance,” *The New York Times* (Sunday, February 13, 2000), 1, 32.

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