Shared Visual Space: Dance Film in Performance
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This paper discusses a trilogy of media/dance works that take three different approaches to constructing the relationship between live contemporary dance performance and projected imagery derived from dance. These works investigate how choreography for stage can be connected to (and disconnected from) choreography for the screen.

In NightDriving, a semi-transparent projection scrim filling the width and height of the stage brings real and virtual dancers into the same field of view. The resulting shared visual space contains two kinds of representation: a “here and now” embodiment of the dance through the live performers, and projected dance film imagery of virtual figures in counterpoint to the live dancers. This shared visual space is contrasted with two related works. In Looking Back, a solo dancer on stage relates to a dance film duet projected on a screen behind her. Ascension was conceived exclusively as a “screen experience”, a dance film not accompanied by live dance.

The development process for these works integrated dance and choreography with projected digital media, developing practices for embodied technology in performance. These works use projected dance film material to transform perceptions of theatrical space through dimension, scale and juxtaposition of visual elements, unifying choreographic and cinematic vocabularies.

Introduction

NightDriving, Looking Back and Ascension, all produced in 2003, are hybrid media/dance works that combine live performance of contemporary dance with projected imagery derived from dance. NightDriving and Looking Back can be classified as “dance film in performance”. They were developed with the intention of connecting choreography for stage with choreography for camera. Ascension is a “dance film for the screen” that repurposes filmed choreography used in the previous two works to create a screen experience independent of the performance experience it is derived from.

Considering these three works, this paper discusses how the emerging hybrid medium of digital dance film integrates and responds to two more established media: dance performance and film.

NightDriving

Working in collaboration with choreographer Lisa Naugle, composer Alan Terriciano and lighting designer Lonnie Alcaraz, I was director/animator for NightDriving® (2003), a media/dance work based on The Night Driver, a story by Italo Calvino, in which a man and a woman make continual attempts to communicate with one another, but never actually connect.

Imagistic digital animations derived from dance are projected on a large semi-transparent scrim stretching across the front of the stage. The scrim is made from silver sharkstooth material, which provides an excellent surface for video projection. Dancers behind the scrim, clearly visible when they are lit, appear to vanish when the stage lights are dimmed. In addition to enabling erasure of dance and erasure of animation, this configuration provides various options for combining of dance and projected imagery in a shared visual space.

Upstage of the scrim, the stage is divided into four performance areas, consisting of three platforms and the floor area between them. The projections on the downstage scrim create a virtual fifth performance area.

The NightDriving projections integrate pre-processed animation sequences (played from DVD) with live video of dancers captured from four infrared surveillance cameras hung above the stage. The choreography flows back and forth between the dancers on stage, the video animations and the surveillance camera images.
Figure 1. NightDriving Technical Sketch

The piece opens in darkness, lit only by the glow of surveillance images of the dancers on the upstage platforms, gradually becoming brighter as the stage lights fade up. The principal male and female dancers have brief solos on the downstage platforms, intercepted by animated beams, like headlights, flashing across the scrim. This introduces the fundamental visual landscape, highlighting the notion of energy being exchanged back and forth across a distance.

The next section of the work begins with two duets featuring two principal dancers. In each duet the “virtual” self of one dancer, in the form of an animated digital projection, is paired with the “real” self of the other. These animations were created from dance that was choreographed for the camera, then digitally manipulated.

The duets develop into a quartet for all four selves. The projected virtual selves start out the same size as the real selves. Gradually the virtual selves grow and fill more of the scrim, drawing the audience into a shared environment bridging real and virtual dance. These multiple representations are used theatrically to create a place of transformation and illusion. By juxtaposing the selves, we raise questions of identity, illusion and authenticity, challenging perception, asking whether what we see is a real person or a simulation.

As the piece progresses, more dancers enter the stage, and the pools of light move and multiply to create multiple areas of focus: two dancers are on each of the downstage platforms and four dancers are on the upstage platform. The projected visuals alternate between two kinds of representation: the “here and now” view from overhead surveillance cameras, and pre-processed, imagistic animations played from DVD, introducing virtual figures in counterpoint to the live dancers.

The combined view of real and projected dancers in a shared visual space creates a sense of immersion. The size and apparent position of the projected virtual dancers evolves in relation to the live dancers. At the beginning of the piece, the virtual and live dancers are the same size, and the virtual images appear almost lifelike. By the end of the
piece, the virtual dancers become large, fragmented, obviously “unreal”, but still clearly connected to the live dance.

Making the projected imagery for NightDriving began in the rehearsal studio, as choreographer Lisa Naugle initially developed the movement for the stage. Then, considering the dynamics of virtual selves related to “real” selves, we taped preliminary versions of the dance film sequences with the two principal dancers, Patrizia Hermijnard and Donald Laney, and I made animation previsualizations from this source material. Rehearsing with these early versions of the video selves helped refine the choreography. Part of the rehearsal process was helping the principal dancers get used to the idea of doing a duet with the video representation of the other person.

After about eight weeks of rehearsal and development of the choreography, we did a video shoot with the principal dancers to capture the source material for the animations. We conducted the shoot in a theatre, using a blue background to make it easier to remove the backgrounds later as part of the process of generating the animations. Using two cameras, we shot numerous takes of the video selves, with multiple angles and numerous costume changes for each sequence. Taking these video sequences as source material, I employed a variety of digital animation techniques to create the projected imagery.

As “dance film in performance”, NightDriving connects choreography for stage with choreography for camera, exploring interactions, in space and in time, between dancers and projected imagery. Notions of illusion, erasure and transformation are inherent in the nature of theatrical performance, and this work seeks to foreground these concepts while challenging perceptions of theatrical space through dimension, scale and juxtaposition of visual elements.

**Looking Back**

Looking Back (2003) is a media/dance work integrating live choreography with dance film. I was director/animotor, again collaborating with choreographer Lisa Naugle and composer Alan Terricchio. A solo dancer on stage relates to a dance film duet projected on a screen behind her. This work explores repetition, recurring memories and the notion of being “boxed in”, through a gradual development of echoed material in the projected video, juxtaposed with the energies of the solo dancer, reaching forward, breaking boundaries.

In Looking Back, the live solo dancer is onstage for about six minutes out of the total eight minutes. When she is offstage, the dance film imagery is the focus of attention. The choreography for the dance film duet is based on memories stimulated by photographs given to the dancers during rehearsals, and choreography for the live and videotaped dancers was developed through an improvisational process.

We envisioned this work as a combination of living memory (embodied by the onstage performer) and recalled memory (projected on the video screen). Dancer and dance film, integrated in performance, trace and construct memory in space and in time.

**Ascension**

Ascension (2003) is a dance film conceived as a “screen experience”, standing alone, not accompanied by live dance. It considers possibilities of transcending boundaries through movement, responding to issues of fragmentation, connection and making meaning across space and time. As the film begins, a thin line begins to pulsate, responding to the dynamics of the music. Smoke drifts across the screen, and two dancers emerge. Their movement, at first naturalistic, gradually transforms into imagistic shapes and sequences.

In creating projected imagery for pieces such as NightDriving and Looking Back, I typically work in close collaboration with choreographer and composer, evolving video and animation concepts in parallel with development of dance and soundscape. For Ascension I used a different process, because the choreography and music were finished before I began work on the film.

In the blue-screen video shoot for NightDriving, choreographer Lisa Naugle and I had captured a range of solos and duets, including some material we did not use that highlighted interaction and communication between two dancers, Patrizia Hermijnard and Donald Laney. I was inspired by the passion and emotional depth in the choreography, and by the dancers’ strong performances. The electro-acoustic score for Ascension, by composer Ron Mazurek, was significantly different from the NightDriving music. I decided to repurpose this blue-screen footage as source material for Ascension, using editing and animation techniques to create a completely different work.
Working initially in Final Cut Pro, I sequenced and layered the original footage, making duets from solos, and combining duets to make quartets. Then I brought these sequences into After Effects for compositing and effects processing. To emphasize certain aspects of the movement, I manipulated time, slowing and echoing the video material, and applying color treatments.

I also created a layered series of abstract visuals using words and short phrases as sculptural elements, sharing visual space with the dance imagery. These words are also heard as vocal samples. The piece begins and ends with a waveform-style visualization of the music, highlighting the connection between visuals and sound.

Degrees of Remediation

In their work on remediation, Bolter and Grusin describe how a new medium becomes established by incorporating and refashioning earlier media. They claim that new digital media technologies “can best be understood through the ways in which they honor, rival, and revise linear-perspective painting, photography, film, television, and print. No medium today, and certainly no single media event, seems to do its cultural work in isolation from other media, any more than it works in isolation from other social and economic forces. What is new about new media comes from the particular ways in which they refashion older media and the ways in which older media refashion themselves to answer the challenges of new media.”

In that context, it may be useful to consider how the hybrid medium of digital dance film remediates both film and dance performance, and in particular we can examine the relative “degrees of remediation” exhibited by NightDriving, Looking Back and Ascension.

In Looking Back, the dance is positioned in front of the projection screen, and except for this juxtaposition, there is little critique or commentary flowing between the live dance and the projected imagery. The new medium (digital dance film) justifies itself by relationship to the older medium (live dance) and defines itself in terms of the older medium’s character and aesthetic. This is a relatively low degree of remediation.

In Ascension, the digital medium subsumes both dance and film, while still marking the presence of the older media. We see dance on the screen, but it is highly processed and obviously artificial. The camera and editing choices, the stylized nature of the digital animation, and the electro-acoustic soundscape all contribute to the perception that there is a new medium at work, while at the same time clearly acknowledging the presence of the older media in the mix. This is a somewhat higher degree of remediation.

In NightDriving, the new medium of digital dance film attempts to completely absorb the older media (film and dance performance). This work exhibits the highest degree of remediation among these three examples. The careful construction of digital illusion and the emphasis on creating a shared visual space, as well as the other media/dance techniques described earlier in this paper, all seek to minimize discontinuities between old and new media. In the words of Bolter and Grusin, “this form of aggressive remediation does create an apparently seamless space. It conceals its relationship to earlier media in the name of transparency.” But it is a consequence of remediation that the older media do not disappear in the mix. The new medium still depends on the older ones.

Conclusion

NightDriving, Looking Back and Ascension share an aspiration to expand the perceptual experience of dancers and audience, making connections between dance and technology across various dimensions of space and time. The development process integrated dance and choreography with projected digital media for all three works, considering how media technology practices can evolve to support the dancemaking process. The projected dance film material becomes a site for exploration of embodied technology in performance, an instrument for transforming perceptions of theatrical space, and a medium for uniting choreographic and cinematic vocabularies.

http://www.embodied.net/nightdriving

http://www.embodied.net/looking-back

http://www.embodied.net/ascension