MIGRATIONS: DANCING BODIES ACROSS MEDIA

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Although in public common sense and institutional circuits a notion prevails that dance only fulfils its nature as a live art form, several practitioners have been exploring remarkable and creative endeavours that defy that understanding. Furthermore, stop animation, data processing and motion capture technologies enable choreography to expand beyond the human body, challenging the reasoning that dance must have a corporeal manifestation. While theoretical discussions define dance as a system that combines various elements, they also emphasize the role of the performer to represent the discipline. Looking at early experiences that have transferred theatre performance to the cinema and new media dances that encourage sensual human-computer interactions, this article reviews how choreographers resolve the challenges of migration and keep the body as a central medium to articulate artistic knowledge and identity.

1. INTRODUCTION

The subject here addressed is part of a larger enquiry regarding how essential characteristics of dance performance transfer or transform when the artworks are instantiated, as medium specific practices, in cyberspace;[1] this article focuses discussion on the body and the dance performer. I depart from the principle that unlike migration in computer science, where data is expected to transfer incorrupt, the migration of art forms to a new medium where the artistic proposal becomes public requires adaptation. Thus in addition to transfer of established conventions, the transformation of components, structure, narrative and craft is inevitable and affects the identity of the work and the discipline.

Literature in media studies provides key sources to analyze processes through which the physical may turn into the digital, and to comprehend how media have evolved, namely with responsive electronic systems. With the term "remediation" Bolter and Grusin (1999) have examined how older media refashion into newer ones[2] and their framework suggests looking at mediation historically. Manovich's scrutiny of "the principles of new media" - numerical representation, modularity, automation, variability and cultural transcoding (2001) - enables bridging computational processes and cultural forms that have aesthetic value and aspire poetic transactions with potential audiences.

For the arts that come from a tradition of live performance, new media are a large challenge since the technological conditions considerably affect how the works are made and displayed. As deLahunta explains, this is a complex equation for dance, which has prevented further explorations:

> *Computer related technologies have not attained the level of integration within the field of dance as with other art forms for the obvious reason that as a material the body in motion does not lend itself to digitisation. (deLahunta 2002, 66)*

Migration to the digital destabilises disciplinary fields and conventions that drive practice development and related theoretical outcomes; in this paper I will look at the assumption that the human body is both source and display for dance in order to verify how this relationship

1 Cyberspace is here used to refer to the navigable space enabled by computer devices, which can render in interactive 2D and 3D environments or web page hyperlinked configurations.

2 The notion of "remediation" has been applied to study digital resolutions of performance such as virtual theatre (Giannachi 2004) and hyperdance (Bench 2006).

remains axiomatic for the identity of dance. In a culture where, as Hayles points out, "information has lost its body" (1999, 4), is the body still an essential medium of dance? Can the expert dance-led practice counterpoint the above statement? I propose examining variations in the way dancing bodies migrate across media and will highlight the importance of anthropomorphic form for representation, identification and interaction. This undertaking engages with innovative practices and reviews how the terms body, dance and medium are engaged in academic discourse.

2.VARIATIONS OF THE MEDIUM

Medium is a word frequently used to refer to a material substance like the paper, the paint, the screen, or the instrument. The term is also meaningful of an agency or a way of doing something; for example learning through movement differs from learning through verbal language, and choreography may be considered a spatial design of motion rather than an arrangement of dance steps. Another conceptualization is that of medium as a territory that carries specific conventions regarding processes, references and modes of exhibition; a novel, for example, can variably be articulated in the form of a book, a film, a TV soap opera, a theatre play or a videogame.

If the body is both the source and display of content in dance, how are the words medium and media integrated in its conceptualization? In Sparshott's philosophical discussion about dance, considering the body as a medium is reductive and misleading. In dance, he remarks:

One does not "use" oneself, and if one truly used one's body one would do so not as a wholly embodied being but as a spiritual or cerebral entity to whom the body was extraneous (Sparshott 1995, 5).

This material sense of the term medium as an intermediary substance is manifested in Langer's assertion that the human body is animated to dance by "virtual powers" as a driving force (Langer 1983). Langer's understanding resonates with McLuhan's famous notion of "media as extensions" (1994). Just like the body is for Langer a medium for the content of dance, the content of speech is for McLuhan "an actual process of thought, which is in itself non-verbal" (1994, 8); the body is there-

fore a vehicle that externalizes information that pre-exists to physical manifestation, which can express in different ways, McLuhan says, such as writing.

Principal procedures in the dance medium are constituent elements such as movement and choreography, which underline the determinant aspect of agency for practitioners to develop a distinctive style and disciplinary approach. Drawing on a definition of digital dance Rubidge claimed that choreographic concepts should be dominant organizing principles in these works, which did not have to feature "images or representations of the human or anthropomorphic body" (Rubidge 1999, 43). While Rubidge intends to emphasize the notion of dance as a medium with specialized agency, she nonetheless accommodates the possibility of disembodiment, which is implicit in Hayles's perception of cyberculture and McLuhan's conceptualization of media.

Other definitions of the nature of dance stress the importance of articulating components, regarding it as a "multistranded" medium (Preston-Dunlop and Sanchez-Colberg 2002), or as a system (Thomas 1995; Melrose 2009), which integrates other theatrical elements, visual or aural (Copeland and Cohen 1983). In these discourses a territorial notion of medium is implicit and, according to McFee (1992), what characterizes the dance medium is a suitable group of elements, conventions and procedures in dance that best suit its nature and are integral to its understanding.

3. FROM THEATRE TO THE CINEMA

Dance generates from inanimate materials and screen presentations are not new phenomena, but the techniques used in earlier demands for older screen media gain renewed significance because they indicate what is really new in endeavours that engage computers and dance. Moreover, scholar discussion of the impacts of mediation follows the use of video and computer technology in contemporary dance (Dodds 2001; Dixon 2007); these recent frameworks are better equipped to understand what had been achieved with older media.

The puppet ballets of Alexander Shiryaev (1906-1909),[3] remarkably illustrate how different components can be articulated when dance migrates from the live theatre experience to the cinema. In his films the constituent elements of dance are all engaged in a production that

Fig. 1 Alexander Shiryaev Puppet dance (1906-1909)

3 Shiryaev's films were rediscovered in 1995 and compiled recently; see Bocharov's documentary *A Belated Premiére* (2003).

resembles the proscenium stage performance. Shiryaev literally replicates the theatre frame within the camera frame (figure 1), and reproduces the narratives of classical Russian dance; he distributes cast roles to animated puppets, and respects the design of costumes, stage spacing and choreographic phrases, timed with music, which were used in the stage productions when he was a leading dancer in the Maryinsky Ballet.

By using the screen as a new medium for creation and presentation Shiryaev "remediates" dance performance in relation to the stage. His innovative practice gives form to Bolter and Grusin's conceptual notion introduced a century later to explain the conversion of older media into newer ones. This is accomplished because a medium-specific process is developed; in order to 'stage' a ballet Shiryaev uses stop motion to animate various puppets, which are probably the first cases of virtual dancers on screen. Despite the interruptions in movement fluidity, which is a consequence of the technique involved, these puppets can 'materialize', due to their anthropomorphic form a complex choreographic score, achieving an exemplary migration of the dancing body to the screen.

Shiryaev's puppet dances have an unequivocal disciplinary position, attained by a process that literally transfers to the cinema the theatrical conventions of dance of his time, enabling the art form to appear out of the then ruling institutional frame.[4] A century later, choreographers with other technologies, stylistic languages and thematic concerns had similar challenges ahead.

Fig. 2 Cie. Mulleras, *Mini@tures* (1998)

4 Shiryaev wanted to film the ballets with real dancers in the theatre, but the Maryinsky's directors did not fund nor give him permission to do so.

4.FROM VIDEO TO THE WEBPAGE

Cie Mulleras is a pioneering group that made dance compositions for networked cyberspace. With *mini@tures* (1998/2001) the artists explored the limits of video editing, film compression, computer screen size and Internet signal, to create works for world-wide exposure and access. The available technologies conducted this practice research towards the idea of miniatures in dance; at the time there was no ADSL connection and the films had to be short and light to travel with enough speed and resolution so that the movement fluid quality was not compromised by technical constraints. In addition, the will to transmit the specificity of a corporeal and time based art has influenced the choice of the body as a core thematic concern, represented with different scales that identify the virtual performers (see figure 2). The *mini@tures* project developed across a period of three years and throughout that timeframe the short films gradually moved the virtual dancers' performance from a non-space towards natural and architectural landscapes.

For Didier Mulleras the body image must be present if his work is to maintain roots in his professional field. Because many of the Internet users that become members of his audience never saw contemporary dance before, to include a performer that articulates movement was crucial for his work to be watched and defined as dance in the World Wide Web. Defying the notion that digital dance may not need anthropomorphic representations, Cie. Mulleras migrates dance to cyberspace maintaining the human performer as a featuring agent, which distinguishes the artwork from other dances, other arts and other human activities. This position mirrors theoretical understandings about the nature of dance that were constructed on the basis of a live performance art, in which the body in motion is indispensable for something to be dance, to happen as dance.

Helen Thomas, for example, justifies a sociological approach in dance studies because she sees that it is through the "medium of the body" that dance reflects on its socio-cultural context; in these terms, the dance artwork cannot be seen without the dancer, since "the body is the primary instrument and means of expression and representation in dance" (Thomas 1995, 6). On a comprehensive study about dance and film, Sherril Dodds (2001) compares the features and limits of the "screen body" and the "live body" to explain differences between the territories of stage and broadcast TV; on screen, the body

can appear fragmented and multiplied, the scale of figure and speed of movement may be changed, and the variation of point of view provides awareness to the spectator's body. Although I have cited McFee earlier as someone that understood the medium as a territory, his philosophical argumentation acknowledges that "the medium, the body in motion, is involved as soon as anything recognizable as dance exists" (McFee 1992, 222). Extending this position, from the "choreological perspective" of Preston-Dunlop and Sanchez Colberg, an embodied performing art requires having a "performer as a mediator" that interprets and personalizes the choreographic score (2002, 61).

5.FROM DANCE TO ANIMATION

We can find examples that dispense the human body and stress the relevance of agency for the medium. Such works may still be regarded as dance, since camera movement and editing rhythm are ruled by what Rubidge calls a "choreographic sensibility" (1999, p.43). Music plays, in this respect, an important element to convey the sense of movement intentional organization as it can be perceived in the case of *Blinkity Blank* (1955), an animation by Norman McLaren; in this short experimental film the association and sequencing of drawings and sounds appear to be choreographically organized. Choreography clearly disputes leadership with the body as a medium of dance in the short film *Birds* (David Hinton, 2000), where the performers were real birds and no humans featured in the work. International appraisal and prestigious awards have legitimated its status as a dance film (choreographer Yolande Snaith was also a collaborator); such acclaim supports the argument that dance can be expressed without the human body. However, the institutional framework was essential for this film to be treated as a dance artwork, and the same is true for McLaren's animation.

Fig.3 William Forsythe, *Synchronous Objects for One Flat Thing, reproduced* (2009)[5]
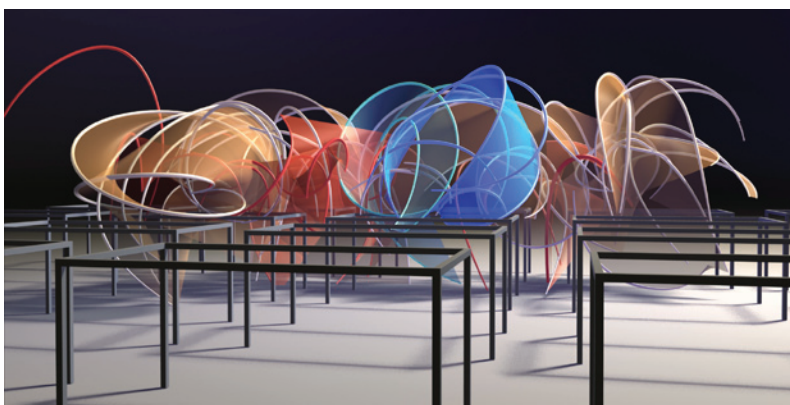
5 Credit: Synchronous Objects Project, The Ohio State University and The Forsythe Company

The above cases prove what Rubidge's theoretical statement sustains: animation and montage techniques allow extending choreographic action to abstract drawings, objects and non-human bodies. This possibility increases when digital technologies are used as it can be observed in the moving electronic drawings (in figure 3) of William Forsythe's *Synchronous Objects for One Flat Thing*, reproduced (2009), that are published online. These films have no intention to stand as artworks; Forsythe wants to use the computer system and worldwide access to disclose the complexity of "choreographic thinking", which is at stake in live theatrical performances (Forsythe 2009).

Like in Birds and *Blinkiti Blank*, the uninformed spectator would hardly identify this electronic reproduction of *Synchronous Objects* as the result of a dance performance, due to its high level of abstraction. However, and despite diverting from the theoretical frameworks introduced above, in this case the body retains an essential generative position. These animated graphics notably indicate another migratory movement of dancing bodies, which differs from the approaches of Shiryaev and Mulleras. Although anthropomorphic form is not on show, the living body is the original source of a specialized and deliberate agency, which produces choreographic visualizations otherwise impossible to attain. This dancing data, it can be argued, ensures for dance a particular place within the emerging aesthetics of new media art.

6. FROM LIVE PERFORMANCE TO MULTIPLE MEDIA

In 2011 whilst investigating the semantic implications of the different uses of the word medium, I saw a performance in Lisbon called *The body is the medium of dance (& other parts)* from Brazilian choreographer Vanilton Lakka (2007). The piece has various independent versions, which can be accessed separately: the live stage performance, a vocal description available by telephone, a flip book and a web-page puzzle game with photographs that can be sequenced to produce a customized dance. On his website Lakka explains that the increasingly present digital reality inspired him to explore choreography in multiple media in order to enable different experiences of a dance work for the audience. Thus this is an appealing case to exemplify how the dancing body can migrate to multiple media.

The performance was striking and powerful for its dynamic and eloquent contemporary composition of urban dance and improvisation, where corporeal energy had a protagonist impact. The experiments with live interactivity were also a knowledgeable way of recreating, in a live version, the functioning of computer networks and hyperlink structures: occasionally some spectators were invited to participate onstage, either by verbally instructing the dancers, manipulating objects, or moving connected to others by a web of strings.

Lakka's proposition of the body as medium was particularly effective, in my view, with the flip-book he handed out at the start of the show (figure 4). With manual animation an actual movement phrase was activated from a group of still images: represented with chalk drawings, a little dancer performed a poetic and stylized dance that united body, movement and choreography, which happened on the palm of the spectator's hand.[6] If the body image was to be replaced by that of a cube, the form, the meaning and the context would change entirely; another kind of experience, eventually not that of a dance transaction, would be created.

While demonstrating the importance of the body's representation for disciplinary identity, Lakka's flip-book also brings forward the issue of audience/user agency. Although an elementary manual animation technique, this latent artistic construction requires, like in much of new media art, an external physical engagement to become actual and originate a "dance performance".[7]

The notion of dance, as a performing art that is majorly instantiated in the theatre, is conventionally based on a contemplative position of the spectator. Interactive practices that appear with new media art expect, on the other hand, the status of an active agent to who ever the artworks establish a relationship with. Manovich argues that interactivity requires specification because "Once an object is represented in a computer, it automatically becomes interactive" (2001, 55); for Dixon such applications in performance must break decisively "from the hegemonic single-track delivery of mass media, particularly television, a generally one-way transmission-reception form" (2007, pp. 561).

Fig. 4 Vanilton Lakka, flip-book distributed at the performance (2007)

6 Visitor or user are terms frequently used when the audience is involved in interactive transactions; I have kept the word spectator because the flip book was distributed in the theatre.

7 I have argued before about the usability of the term performance in relation to dance artworks that are instantiated in media extraneous to the physical body (Varanda 2012).

7. FROM THE DANCER TO THE USER

The French company n+n corsino has been exploring the possibilities of motion capture technology since the late 1990s. For Norbert Corsino body and choreography are essential signs of authorship, which clarify their professional practice as both dance and art;[8] thus in order to make films and interactive installations, the Corsinos specialized in creating virtual performers that are unique 3D dancers, animated with digitized real choreography, which are spatially organized in virtual environments.

This company conciliates all the aims and processes of "remediation" identified with the previous authors and successfully migrates the dancing body resolving the problems of digitization afore mentioned by deLahunta. Although entirely digital, the Corsino's pieces involve the elements that form the dance medium in its multi-stranded systemic nature, stressed by the theorists; performer, choreography, space, time, costumes, sound and dramaturgy are articulated in a coherent statement that pre-exists public transaction.

Furthermore, the artists have enquired about the possibilities of embodied interactivity and in some works encourage sensual relationships between audiences, machines and the 'worlds' they represent, prompting a sense of navigation inside the digital space. Inspired by touch-screen technologies, they recently made a piece that brings the dancing body to the tools of everyday life.

Soi Moi – Self as Me (2010), is a portable installation for I-phone G3 that explores the modalities allowed by the device, exposing several short dance sequences to tactile manipulation that changes the sounds, visual effects and spaces surrounding the virtual dancer (figure 5); for the choreographers the dancing body expands the tool and brings poetry to the utility, which augments the user's self and body awareness. Despite this being a rather more complex process, kinetic stimulus produced by a dancing body enables a somatic experience in the intimacy of one's hand as it happened with the example of Lakka's flip book.

Approaches to human-computer interaction informed by disciplines stemming from a tradition of embodied practice, such as contemporary dance and somatics, have been a major concern of Schiphorst, who has investigated about computer interactive design focused on human experience (Schiphorst 2008). With artistic practice she

Fig. 5 n+n corsino *Soi Moi*, *Self as Me*

8 The statements of Mulleras and Corsino were collected in interviews in July 2010 in France.

has explored the importance of body movement and touch as a first person experience integrating computer technologies.[9] On her theoretical developments Schiphort follows Shusterman's proposition that a "somatic turn" is required to find in the body a defence against the rapidly changing society of information and oppressive media advertising; a solution to critique uniform body constructions "would be to privilege the experiential forms of somaesthetics" (Shusterman 2000, 151) because they improve the pleasure in bodily experience in the relation with the surrounding world.

8.CONCLUSION

The practices addressed in this article demonstrate that media technologies - old and new - may unsettle patent relationships between the human body and the dance artwork; it may therefore be incorrect to say that the body is the medium of dance, as Lakka assumed. However evidence was also given that we cannot underestimate the status of the body in motion as a primary element and regard its function for the medium of dance to migrate between different media; thus we can support that the dancing body brings specific disciplinary enquiries and solutions that are relevant to consider in the culture of ubiquitous technology.

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9 As in Schiphort's installations *BodyMaps*, *artifacts of Touch* (1996) or *Soft(n)* (2007).

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