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Fleshing Out: Intermedial Bodies and Dancers-in-Code

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Abstract

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I. Introduction

As highlighted at the 2013 *Sadler's Sampled* festival at Sadler's Wells theatre in London with works by choreographers Russell Maliphant and Wayne McGregor, dancers are routinely placed within an intermedial environment, performing alongside virtual scenery, digital animation, and their own projected doubles. Contemporary dance is a key platform for staging the posthuman condition, which entails as Rosi Braidotti (2013: 123) describes, the "rather complex symbiotic relationship [that] has emerged in our cyber-universe: a sort of mutual dependence between the flesh and the machine". In the work of dance companies such as Troika Ranch and Chunkymove, and in the work of the media company OpenEndedGroup and their collaborations with choreographers such as Merce Cunningham and Wayne McGregor, dancers are themselves able to effect and trigger the projection of digital scenery. Contemporary dance remediates, reconceptualises, and potentially redefines the body through technologies of 3D projection and motion capture.

This article utilises the lens of new media theory to examine representations of the posthuman body in contemporary dance, exploring the dynamics of the intermedial system and the complex interchange between the dancer and their mediated environment. It firstly outlines the areas of media theory upon which later discussion will be based, looking particularly at Mark Hansen's notion of the 'body-in-code', which is then explored in two case studies of contemporary dance, Wayne McGregor/*Random Dance's UnDance* (2011) and Klaus Obermaier's *The Rite of Spring* (2007/11). These case studies utilise onstage media in significantly different ways, though it will be argued that both manifest the body-in-code and present the human body as culturally and physically enmeshed with media technologies. An understanding of the body's intermediality avoids reinforcing the opposition of disembodied information and material corporeality, and positions the body as entangled within a web of media and material elements. Rosi Braidotti (2013: 89) explains, "The posthuman predicament is such as to force a displacement of the lines of demarcation between structural differences, or ontological categories, for instance between the organic and the inorganic, the born and the manufactured, flesh and metal, electronic circuits and organic nervous systems". McGregor and Obermaier's work manifest this posthuman predicament, as the dancers are part of an intermedial system that engages media and materiality in an emergent dialogue that blurs the lines

of demarcation between body and environment, human and technics, embodiment and technology.

II. Significance of Research

Nearly ten years ago, Philip Auslander (2005) suggested, “as digital media currently possess greater cultural presence than live bodies they become the framing elements of any performance that incorporates both. The live elements will be perceived through that frame—they will be seen in terms of the video or digital media, not the other way around” (www.performanceparadigm.net). Dancer Anny Mokotow (2008) extends this argument: “contemporary modes of making performance, like the use of multi-media and cross-disciplinary practice, has displaced the primacy of the body as meaning maker in dance performance” (www.ausdance.org.au). This article deploys theoretical concepts from new media discourse to elucidate both the cultural-historical and phenomenological inter-relation of bodies and technologies in innovative dance practice. A decade after Auslander’s statement, the intermedial performance environment as manifest in contemporary dance does not dominate, disembody, distract from, or displace the primacy of the body, but stages the complex relations between dancer and media as the body is extended, mediatized and potentially, rematerialized.

In McGregor and Obermaier’s work, bodies and technology are presented as both inherently and directly intertwined, inherently via processes of cultural-historical co-evolution (technogenesis) and directly through interaction and intermediation. As Anna Munster (2006: 178) asserts, “The challenge for new media art and theory in both making and thinking with digital technologies is to move beyond the twin premises of disembodiment and extension in space that continue to qualify both information and corporeality”. The concepts of intermediality, intermediation and of the intermediate body move beyond the assumption that media disembody and allow instead for the manifestation of what Mark Hansen (2006) has called ‘embodied disembodiment’ involving the extension of human embodiment by technologies of disembodiment that are incorporated into the body schema.

III. Research Context

The focus on the body in media theory has developed via a trajectory moving from McLuhan's understanding of media as extensions of man, to an acceptance of post-humanism and Katherine Hayles' (1999) proclamation that materiality has become infiltrated by informational pattern. Sarah Bay Cheng (2012: 64) explains: "Within the diverse field of media and cultural theory, it is difficult to identify a more ubiquitously studied subject than the sometimes abstract, sometimes concrete notion of what is often identified as the body". Recently there has been a focus within new media studies not on the incompatibility of different media or on the authority of one media over another, but on the essential interdependence of media technologies and human embodiment. New media theory as championed by theorists such as Mark Hansen, does not position the body as passively dominated by technology but suggests that the two are conditionally related. Hansen (2006: 5) asserts: "Bluntly put, the new mixed reality paradigm foregrounds the constitutive or ontological role of the body in giving birth to the world. For today's researchers and artists, virtual reality serves to highlight the body's function as, to quote phenomenologist Maurice Merleau-Ponty, an 'immediately given invariant', a 'primary access to the world', the 'vehicle of being in the world'."

Embodiment is recognised by theorists such as Mark Hansen and Anna Munster amongst other informatics and new media philosophers as a necessary and empowering dynamic in the relationship between human and machine. Attention is increasingly being focused not on the authenticity of virtual representation but on the processes of bodily engagement that are produced through interaction with the technical processes and products of the digital media. As portended by McLuhan (in Kalay et al., 2008: 234), the age of information technologies is moving "out of the age of the visual into the age of the aural and tactile." The haptic and affective dimension of media technology is now well recognized, and the dynamic interplay of our bodily engagement with media interfaces is the informing analytical paradigm for a number of theorists who utilise a Bergsonian or Deleuzian understanding of affect to inform their approach to new media studies.

In his *New Philosophy for New Media* (2004), Mark Hansen redefines the digital image

and details its impact upon all areas of human existence. He approaches new media through a lens of affect and explores the modes of perception that develop in experiences of virtuality. Hansen examines new media in relation to Henri Bergson's understanding of the embodied nature of perception, declaring that, regardless of how recent critics have interpreted Bergson's theories, "Bergson remains first and foremost a theorist of embodied perception: with his central concepts of affection and memory – both of which are said to render perception constitutively impure – Bergson correlates perception with the concrete life of the body" (2004: 3). He makes a case for the fundamental role of embodiment in framing the generation of images out of information and gives an account of digital art as a catalyst for bodily affectivity. Photographic, cinematic, or video images only develop meaning as shapes formed from otherwise incomprehensible informational code through the framing power of the body; the body renders the image.

Hansen's concern with the phenomenological aspects of media technologies is furthered in his book *Bodies in Code* (2006) in which he argues for the recognition of a shift into a 'mixed reality' paradigm in contemporary culture that is defined by "its eschewal of representationalism and embrace of a functionalist perspective rooted in perceptuomotor activity" (2006: 3). Hansen takes as his point of departure Merleau Ponty's ontology of the flesh and the absolute authority of the phenomenal body as our primary access to the world (both the 'real' and 'virtual' world): "The body forms an ultimate background, an absolute here, in relation to which all perceptual experience must be oriented" (2006: 5). Such a mixed reality, suggests Hansen (2006: 7), affords an opportunity to reevaluate the role accorded the body within our philosophical frameworks. He argues both that the body is central to virtual interfaces and that technologies profoundly affect our sense of what it means to be embodied subjects in the world.

To address physical encounters with digital technologies, Hansen (2006) examines the relationship between the 'motile' body and the 'representational' body, arguing it is motor activity and not 'representational verisimilitude' (2006: 5) that holds the key to understanding the interaction of the body and virtual reality. Looking at both the separation and interconnection of the visual and the haptic, Hansen distinguishes between 'body image' as representational (perceiving the body externally), and 'body schema' which comes

from one's internal sense of being in the world. In his discussion of Monika Fleischmann and Wolfgang Strauss's mixed-reality works *Rigid Waves* and *Liquid Views*, Hansen (2006: 20) suggests that the use of virtual reality technologies stages "a disconnection of the (fundamentally motile) body schema from the (fundamentally visual) body image". It is the technical mediation of the body schema that Hansen labels the 'body-in-code'. The body-in-code is not a purely informational body or a digitally disembodied everyday body: it is "a body submitted to *and constituted by* an unavoidable and empowering technical deterritorialisation—a body whose embodiment is realised, *and can only be realised*, in conjunction with technics" (2006: 20). The body schema, our internal sense of the body in space, connects the body with media technologies and virtualities in a dynamic process of exchange. Hansen (2006: 135) reminds us: "As immanent to the world, the body is penetrated by the world in a fluid interchange. This interchange... is why Merleau-Ponty's final work is concerned with the problem of thinking the indifferenciation, the *indivision*, between body and world."

To describe this kind of fluid interchange between body and media, it is valuable to consider the notion of 'intermediation' as discussed in new media discourse, and articulated by Katherine Hayles in her book *My Mother Was A Computer: Digital Subjects and Literary Texts* (2005) and in her article *Intermediation: The Pursuit of a Vision* (2007). Hayles (2005: 7) describes intermediation as "complex transactions between bodies and texts as well as between different forms of media" and refers to the manifestation of intermediation as the "entanglement of the bodies of texts and digital subjects". Intermediation "denotes mediating interfaces connecting humans with the intelligent machines that are our collaborators in making, storing, and transmitting informational processes and objects" (2005: 33). Like Hansen, Hayles emphasises the correlation of the body and technology insisting that media are neither objects to be dominated nor subjects that dominate. In understanding the dynamic interactions of humans and technology, the challenge, as Hayles (2005: 243) sees it, "is to refuse to inscribe these interactions in structures of domination and instead to seek out understandings that recognise and enact the complex mutuality of the interactions."

In her more recent *How We Think: Digital Media and Contemporary Technogenesis* (2012),

Hayles examines both the direct and essential interweaving of human embodiment and technology, and the impact on and shaping of one by the other. Hayles (2012: 123) argues for the coevolution of humans and technics, suggesting, "Contemporary technogenesis implies continuous reciprocal causality between human bodies and technics." She uses telephony as a case study to evidence the connections between biological change, innovations in technology, and socio-economic development, exploring how the telegraph made "new configurations of bodies and messages" possible (2012: 147). In her exploration of the various ways in which bodies and information intertwine and interpenetrate, Hayles (2012: 3) emphasizes that "our interactions with digital media are embodied, and they have bodily effects at the physical level." Embodiment, she argues (2012: 17), takes the form of 'extended cognition' in which human agency is enmeshed within technological networks that extend into the environment: cognition "extends beyond the body's boundaries in ways that challenge our ability to say where or even if cognitive networks end." She examines not just the psychological but physical impact of technology on our neural circuitry as digital media become more pervasive and we see further integration of humans and intelligent machines.

The intermediation of bodies and technology as outlined by Hayles, may be recognised as suggesting the manifestation of an 'intermediate' or even an 'intermedial' body; a body that is opened out to the world and interpenetrated by media modalities, existing in the overlap of flesh, code, and environment (both mediatized and material). To explain the status of the body within a multimedia stage environment, Sarah Bay Cheng (2012) identifies what she describes as the 'mediated body' as perceived media theory, the 'immediate body' as perceived via performance studies (ontologically 'live') and what she labels the 'intermediate body' which "suggest a new status between wholly mediated representations and immediate live bodies" (2012: 68). She suggests (2012: 64) that the intermediate body "engages media theory within the space of live interaction and, most importantly, physical vulnerability." This body is both immediately live and mediated, and may be further articulated in terms of intermediality'. Lars Ellestrom (2010: 37) describes intermediality as "a complex set of relations between media that are always more or less multimodal." The 'inter' of intermediality can imply a mutual reciprocity, with two or more media coming together in collaboration. It can be both a creative and ana-

lytic approach based on the perception that media boundaries are porous or that they can be transgressed, and recognizing the potential for interaction and exchange between the live and the mediated, without presupposing the authenticity or authority of either.

Like Ellestrom, Hayles (2005: 7) also uses the term 'complex' in order to describe the transactions between humans, texts, and technology; to understand the interplay of elements in intermedial performance works, it can be envisaged in terms of complexity, and as a dynamic, complex system. The 'complex set of relations' between media can be understood as an emergent, non-linear system; perceiving intermediality as a system dismantles a number of the binaries endorsed by Western dualism such as live/mediated, body/mind, active/passive. The intermedial performance system makes prominent the inseparable and interrelational aspects within performance that produce emergent dynamics. Live and mediated components are integrated non-hierarchically, so that effects of pattern and performance transcend media boundaries. An understanding of intermediality as a dynamic and complex system in process, emphasizes the inherent interconnectivity of intermediality, and avoids issues of dualism and hierarchy in the perception of live and mediated, organic and inorganic elements.

Sabine Huschka (2010: 62) suggests that choreography can be described as a type of intermediality, an intermediality that "thinks through interlacing body images, sensual spaces of experience, movement codes, spoken or written story fragments, and embodied memories." This, she says, is what she means by the term 'intermediality', which she considers "to include but also be in excess of the technological interface" (2010: 62). While choreography can be viewed as an intermedial strategy, it can also be utilised to emphasise the intrinsic intermediality of body that exists as a network of immediate and mediated elements; the intermedial body manifests across this entanglement of medial modalities and materiality.

The following case studies explore the presentation of intermedial bodies and the representation of our posthuman condition as bodies-in-code in contemporary dance. Using two examples, loosely representing both the 'content-driven' and 'materials-driven' camps as outlined by Mark Coniglio (2011), the second half of this chapter explores how the in-

terpenetration of live and mediated elements within intermedial dance exemplifies both the impact of technology on embodiment and conversely, the reliance of informational technologies on the materiality of the human body. Wayne McGregor/Random Dance's *UnDance* and Klaus Obermaier's *Le Sacre du Printemps* explore the very ontology of dance, the material body, in its relationship to media, both triggering the functions of these technologies and simultaneously becoming remediated by them. The first production offers an illustration of the co-evolution of humans and media technologies, emphasizing both the framing function of the body towards media and the role of technology in conceptualizing bodies. The second remediates the dancing body in various layers, using stereo cameras, a complex computer system and projection to stage a body that is simultaneously live and mediated, present and absent, real and virtual.

IV. Case Study 1: Wayne McGregor/Random Dance's *UnDance* (2011)

UnDance, which premiered in London in 2011 and was restaged at Sadler's Wells in 2013, is a collaboration between three internationally recognised British arts practitioners: choreographer Wayne McGregor, composer Mark-Anthony Turnage, and artist Mark Wallinger. Multi award winning choreographer Wayne McGregor is Artistic Director of Wayne McGregor/Random Dance, founded in 1992 and the resident company at Sadler's Wells. The initial stimulus for the *UnDance* choreography and the music came from a "set of 'instructions' that Mark Wallinger gave to Wayne McGregor at the start of *UnDance* (www.randomdance.org). Inspired by the stop-motion photography of Eadweard Muybridge, and by the American sculptor Richard Serra's list of verbs ('to roll, to crease, to fold, to store, to blend') that he published in the 60s, Wallinger pieced together a stimulus text further shaped by a philosophy of deconstruction. Ten Wayne McGregor/Random Dance performers dance in front of a large gridded projection screen that shows 3D imagery of the same dancers performing similar choreography, similar but different, so that the live and projected appear to echo, mirror, repeat and reverse. Wallinger's set design also includes two large photographs flanking the stage at either end depicting the United Nations logo across barbed wire, the large letters UN encapsulating the main aesthetic strategy of 'UNdoing'. The relationship between music and

dance is explicit, not entirely integrated, but concordant and complementary, and occasionally counterpointed. Turnage's jazzy score has clear sections and lends overall shape to the choreography, punctuated by vibrant rhythm and sustained woodwind melody.

Unlike earlier Random Dance productions that extend the body using robotic prosthesis or motion capture, the focus of *UnDance* is unmistakably analogue, unpacking the relationship of the body and the image, and deconstructing action into its component gestures. The use of 3D projection and the exploration of Muybridge's photography clearly emphasise the mutual reciprocity of the body and technology. Wearing nude coloured leotards and t-shirts, the dancers bring to life Muybridge's photographic studies in which the movement of human subjects is dissected through a series of images. Beginning in 1884, Muybridge produced two volumes of photographic studies of human movement depicting men, women, and children performing both athletic and mundane activities. His subjects, often nude, were positioned in front of an anthropometric grid, a common feature of Victorian ethnographic photography. Grids helped boost the truth-value of the photograph; in *UnDance* the grid behind frames the dancers. The grid emphasises the authenticity of the material body; it 'stages' the body in front of it, presenting it for objective consideration.

UnDance opens with the ten dancers standing in a line at the back of the stage in front of the gridded screen; the visual allusion to Muybridge's studies is apparent from the outset. At various times throughout the performance, the grid is projected on the floor; the dancers' bodies are clinically framed and staged by the grid as specimens for measurement and analysis. We are presented with imagery of the way technology has enabled us to deconstruct movement, dismember the body, to zoom in and zoom out of, to freeze and magnify, and the dancers reinterpret bodily gesture in light of its history of mediation, emphasizing the co-evolution of technology and the body. The work illustrates the interdependence of embodiment and technology as conditionally related and potentially indivisible, offering a vision of what Hayles (2012: 10) calls 'technogenesis': "the idea that humans and technics have coevolved together". This suggests a form of cultural intermediality, which is fundamental to the developing discourse of posthumanism.

The gestural vocabulary is established early as the dancers suddenly drop to the floor, crawl, kneel, and roll. McGregor developed a compendium of verb-based movement sequences based on Serra's list; these 'studies' or 'scenarios' are reminiscent of Meyerhold's etudes and exercises in biomechanics; movement is deconstructed, unraveled into its component parts. McGregor's dancer's dissect, unpick, rewind, and extend Muybridge's photographic studies. McGregor (2012, www.ted.com) claims that he is "obsessed with the technology of the body"; like Muybridge, McGregor plays with patterns through time, perspective and points of view. The audience is presented with an exploration of the way in which photographic media can 'capture' the live body and its impact on our sense of being, but also of the primacy of the material body in interpreting and comprehending these media images. In one sequence the dancers run in a closely knit circle, creating an effect similar not only to that of chronophotography but also of the zoetrope, the spinning drum containing stop-motion stills that was one of the foundations of Muybridge's own zoopraxiscope. This image of a media technology formed of bodies visually illustrates the perception that it is only through the body we can make sense of media, and that it is human embodiment that enables media functionality.

The effects of stop-motion are further enhanced through the use of projected 3D video imagery behind the live dancers: the audience's attention flits between the dancers and their projected doubles. The virtual dancers replicate the choreography of the live, but with slight inconsistencies; at times the live and virtual mirror, repeat, and reverse the other. In other instances, the choreography is simply different; audience members look for these moments of rupture, of incongruity. At the beginning the dancers lag behind their projected doubles, while in other instances, the live dancers finish their sequence ahead of the projected chorus, which then takes centre stage. It is a dance of leading and lagging between the live and mediated. McGregor (in Dixon 2007: 243) describes how he "places the concepts of the body, time and space into fresh dimensions and pushes dancers to amazing new limits...[of] articulation, questioning and exploring ideas about technology of the human body." Body, time and space become modalities in McGregor's work that operate intermedially and without asserting the dominance either of the virtual or the material.

The dancers are enmeshed in virtual scenography, a digitalised landscape that they are both discrete from and entwined within. The balance and interplay of the various modalities shifts continually and the audience's attention oscillates between close focus on individuals and a wider perspective that enables one to see the resonances and patterns across the whole intermedial system. McGregor (in Tonucci, www.digicult.it/news) describes his approach to the relation of elements onstage:

These things are all equal for me and my job is to emphasise their main differences placed. I love the fact that sometimes these crossovers sometimes provide tension, sometimes they skim over to another, sometimes they go foreground. If I'm thinking like building my language, then I'm thinking choreographically: for example, now I want the filmed structure forward, I want the music structure underneath and I want the dance past over it. So I think as of all the elements are 'bodies' that I work with.

The dancer's bodies are entangled in a system with other elements or 'bodies' that together create emergent effects. There are pulses of energy that ripple through the system, across film, light, flesh, and sound. Individual bodies dancing with other bodies become more than the sum of their parts, both singular entities and one of many related entities that together compose a dynamic intermediality. Bodies and technologies are both 'in process'; McGregor (in Tonucci, www.digicult.it/news) explains, "I'm always interested in technologies in process" and he suggests that the body is the most technological element available to him.

While *UnDance* illustrates the ability of technology to deconstruct and undo the body, to both infiltrate and disembody, it is the agency of material body in interpreting and processing media imagery that is foreground. Labored breath and sweat stains on the floor become significant reminders of the material fleshiness of the dancer's body that defines it within a virtualised environment. The body is revealed as 'penetrated by the world in a fluid interchange'; as re-imagined in light of the technologies it frames, but not as threatened or disappearing. Rather, in this mediatised context the body is made more visible, more materially present, via the magnifying glass of mediation. This work shifts focus away from the image as disembodied and informational and onto the ongoing interchange between media technologies and bodies, indicating both the way in

which information technologies have affected the body schema and continue to force a rethinking of our relationship to the world, and also of the reliance of these technologies on the existence and action of the bodies that frame them.

V. Case Study 2: Klaus Obermaier's Rites (2007/2011)

Like Wayne McGregor, Austrian media artist, composer, choreographer and director Klaus Obermaier uses technology onstage to reframe the body and explore its boundaries in a mediated context. For over two decades Obermaier has created technology-driven work across the arts that defies classification and discipline boundaries. Obermaier explicitly focuses on the interaction of the material and the virtual, and "the fading dividing line between real and virtual, fact and fake, that takes us to the limits of our existence" (www.exile.at). His production of Stravinsky's *Le Sacre du Printemps*, was performed at the Royal Festival Hall in London in 2007, reworked in Birmingham in 2011, and has continued to tour internationally since including Mexico in 2013 and China in 2015. Obermaier uses interactive technologies and virtual scenography to delineate connections between the material and the virtual, positioning the body as the active agent through which reality and virtuality interact. The orchestra is positioned centre stage while at the side of the stage, the lone dancer, Julia Mach, performs on a separate black-box platform. Her real-time image is projected via live feed onto an enormous screen above the orchestra and her digital double appears within a virtual image-scape. The virtual objects and environment are actually created live by Mach in real time using motion-triggered software and projected using stereoscopic 3D technology. The audience don 3D glasses that transform the screen into an immersive virtual reality; the dancer is able to reach out and practically stroke the spectators' cheeks before pixelating into oblivion.

The spectacular media elements worked to illuminate the work as much as illustrate it: Obermaier (2013: 250) insists, "My work is not simply visualisation. It is a totally different thing!" He explains, "I am able to *think* in new technologies - in the same way that I can think in music and instruments as a composer, or as a stage designer thinks the

performance space ... That allows me to plan and combine the many different mediums I use in a very efficient way and straight forward way" (2007, www.siouxwire.co.uk). It is significant that the component elements (the dancer, the orchestra, the music, the computer graphics) are clearly identifiable alongside each other, so that the audience are not merely hypnotised by the 3D spectacle on the screen but are continually aware of the composition and combination of elements. The music inevitably dominates this balance, for it is the only component inflexible and unresponsive to the other elements; the dancer and the projected imagery, respond interactively with the music. Obermaier (www.exile.at) explains: "By means of microphones the orchestra is integrated in the interactive process. Musical motifs, individual voices and instruments influence the form, movement and complexity of both the 3D projections of the virtual space and those of the dancer. Music is no longer only starting point, it is the consummation of the choreography."

Mach's virtual extension is surrounded by shapes, symbols and whirling ribbons, and in a number of scenes, it stands on a diagnostic grid that moves beneath it: an unstable stage for the unstable, intermedial body. Obermaier (www.exile.at) explains, "The aesthetics reaches from the rune-like characters of the Glagolitsa, the oldest known Slavic alphabet, up to 'Matrix'-like spaces, whose surfaces are visualised by the same binary or hexadecimal code, by which they are generated in real time." The body is presented within a swirling current of code and language. At points, the lens zooms in on individual limbs and Mach's body is virtually deconstructed into sections, into various component parts, that are then reconstituted into bizarre humanoid mash-ups. This seems like an extreme representation of the posthuman, of the fate of the human body as reconstructed and reformed by technologies of remediation; this is a posthuman without material foundations or limitations; a phantasmagoric simulation only. Yet Obermaier does not simply present dazzling and disembodied images but reveals their generation; there is a high degree of emphasis on the construction of the imagery and its existence as an effect of human action. As such, there is a focus in the work on process over product, and the dynamic development of intermediation. Mach controls the imagery, and there is a sense of playfulness both in Mach's dancing through technology and in the nature of the imagery itself. We clearly see the media react to Mach's movements

when, as she paints the air with her arms, marks and patterns are traced in the virtual environment. As Mach initiates the tracking and projection system, we see the literal realization of the framing function of the human body as explained by Hansen. Despite the surveillance of the dancer's body by the tracking system, the piece works to emphasise the physical body in its relation to the virtual as the interface via which intermedial strategies can manifest.

The interactive technologies function as a result of the dancer's initiative; virtual imagery is the effect of the dancer's effort and manifests the intensity of her physical exertion. Rather than positioning the body as somehow colonised or challenged by media technologies, this work illustrates the potential incorporation of technology into the body schema; the body colonises the technology. Merleau-Ponty (1962: 126) describes various everyday situations whereby non-bodily objects are incorporated into the body schema: "A woman may, without any calculation, keep a safe distance between the feather in her hat and things which might break it off. She feels where the feather is just as we feel where our hand is. If I am in the habit of driving a car, I enter a narrow opening and see that I can 'get through' without comparing the width of the opening with that of the wings." The non-bodily prosthesis has become an extension of the body and is incorporated into the body schema. There is a particular moment in the work that illustrates Mach's extension of schema; as she stands and slowly extends her arms, and we see this movement also performed by the avatar, the avatar's arms seem to grow, wobble, blur and stretch beyond what is recognizably human. Mach plays with this virtual extension, moving her arms in such a way as to test and trouble bodily boundaries; she shows awareness of her arms as existing beyond the end of her fingertips.

The dancer's extension in space is enhanced via its 3-D mediation, and this mediation does not eradicate embodiment but extends it. Hansen (2006: 94) suggests, "we can no longer constrain embodiment to the body, can no longer contain it within the (organic) skin." Mach's extension of embodiment further highlights her body-in-code as "a body submitted to *and constituted by* an unavoidable and empowering technical deterritorialisation" (Hansen 2000: 20): the dancer's body schema is extended, mediatised, and made visible as virtual imagery. Yet the imagery exists both as the manifestation of the danc-

er's extended body schema and as active in its own right. In his discussion of intermediality, Robin Nelson (2010) champions a 'both and' (rather than 'either or') position as characterizing contemporary performance culture, arguing that experience may be both actual and virtual, that bodies may be both present and absent. In Obermaier's *Le Sacre du Printemps*, the avatar is both an extension of the dancer's body, and a separate informational entity. The audience is presented with a manifestation of what Hansen (2006: 92) calls 'embodied disembodiment'; the images are "material extensions of the viewer's [dancer's] embodied agency that, while remaining correlated with the latter, nonetheless function autonomously from it." 'Embodied disembodiment' does not suggest that the body has been dematerialised by digital technologies, but that human embodiment has been extended by technologies of disembodiment that are incorporated into the body schema. The work presents an illustration of how the body-in-code is both dematerialised and disembodied, and rematerialised and extended, through interaction with technology.

VI. Conclusion

The dancing body is enmeshed within a system of media operations and material elements that combine to create a complex set of relations and emergent effects. The productions discussed above explore the conditional relation of human embodiment and media technologies; McGregor and Obermaier's work "actively dissolves (in order to reconstitute anew) the differentiation according to which embodiment and disembodiment have been set into opposition in our culture and in Western thinking generally" (Hansen, 2006: 92). Their productions emphasise the intrinsic intermediality of the body, both in terms of its cultural-historical interrelation with technology (as in McGregor's work) and its capacity to extend through technology (as in Obermaier's).

Such works utilise intermedial strategies to create new perceptions of reality, materiality and corporeality. In the intermedial performance system, Obermaier (www.exile.at) suggests, "unusual perspectives overlay one another and multiply themselves, and enable a completely new perception of the body and its sequences of movements...The human body is once more the interface between reality and virtuality." Both productions decon-

struct and reconstruct movement, and reveal the body-in-code as always in process; as the mediatisation of body schema blurs the demarcation of body and world, the body is revealed as fundamentally mutable and intermedial. While potentially extended, interpenetrated and reflected by media technologies, the body of the dancer has far from disappeared like a disembodied ghost in the media machine. Rather, the interaction of dancer and digital technology illustrates the intrinsic intermediality of the human body and the conditional relation of embodiment and technology.

References

- Philip Auslander (2005). 'After Liveness: an E-Interview'. *Performance Paradigm: A Journal of Performance and Contemporary Culture*, 1(March 2005).
- Sarah Bay-Cheng (2012). 'Intermediate Bodies: Media Theory in Theatre' in M. Alrutz, J. Listengarten and M. Wood (eds.) *Playing with Theory in Theatre Practice*. Basingstoke: Palgrave Macmillan.
- Rosi Braidotti (2013). *The Posthuman*, Cambridge: Polity Press.
- Mark Coniglio (2011). 'Materials v Content in Digitally Mediated Performance' in S. Broadhurst and J. Machon (eds.) *Performance and Technology: Practices in Virtual Embodiment and Interactivity*. Basingstoke: Palgrave Macmillan, pp. 78-85.
- Steve Dixon (2007). *Digital Performance: A History of New Media in Theatre, Dance, Performance Art, and Installation*. Cambridge, MA: The MIT Press.
- Lars Ellestrom (ed.) (2010). *Media Borders, Multimodality and Intermediality*. Basingstoke: Palgrave Macmillan.
- Mark Hansen (2004). *New Philosophy for New Media*. London and Cambridge, MA: The MIT Press.
- Mark Hansen (2006). *Bodies in Code: Interfaces with Digital Media*. London and New York: Routledge.
- N. Katherine Hayles (1999). *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics*. Chicago: University of Chicago Press.
- N. Katherine Hayles (2005). *My Mother Was A Computer: Digital Subjects and Literary Texts*. Chicago and London: University of Chicago Press.

- N. Katherine Hayles (2007). 'Intermediation: The Pursuit of a Vision'. *New Literary History*, 38(1), 99-125.
- N. Katherine Hayles (2012). *How We Think: Digital Media and Contemporary Technogenesis*. Chicago and London: University of Chicago Press.
- Sabine Huschka (2010). 'Media-Bodies: Choreography as Intermedial Thinking Through in the Work of William Forsythe'. *Dance Research Journal*, 42(1) (Summer 2010), 61-72.
- Yehuda Kalay, Thomas Kvan and Janice Affleck (eds.) (2008). *New Media and Cultural Heritage*. Oxon and New York: Routledge.
- M. Merleau-Ponty (1962). *Phenomenology of Perception*. (trans. Colin Smith) London: Routledge.
- Wayne McGregor (2012). *Wayne McGregor: A Choreographer's Creative Process in Real Time*. Lecture for TED, available (http://www.ted.com/talks/wayne_mcgregor_a_choreographer_s_creative_process_in_real_time.html?quote=1865), accessed September 10th 2013.
- Anny Mokotow (2008). 'Signposting Bodies: Rethinking Intentions', *Dance Dialogues: Conversations across cultures, artforms and practices*, available at (<http://ausdance.org.au/articles/details/signposting-bodies-rethinking-intentions>) accessed September 10th 2013.
- Anna Munster (2006). *Materialising New Media: Embodiment in Information Aesthetics*. New Hampshire: Dartmouth College Press.
- Robin Nelson (2010). 'Prospective Mapping' in S. Bay-Cheng, C. Kattenbelt, A. Lavender, and R. Nelson (eds.) *Mapping Intermediality in Performance*. Amsterdam: Amsterdam University Press, pp. 12-23.
- Klaus Obermaier, *Le Sacre du Printemps*, Description available at (<http://www.ex-ile.at/sacre/project.html>), accessed August 20th 2013.
- Klaus Obermaier (2013). 'My work is not simply visualization. It's a totally different thing!'. *Ekphrasis*, 2, 250-262.
- Klaus Obermaier (2007). *Interview: Klaus Obermaier*. (<http://siouxwire-annex.blogspot.co.uk/2007/06/interview-klaus-obermaier.html>), accessed September 28th 2014.
- Random Dance, *UNDANCE*, Description available at (http://www.randomdance.org/productions/wayne_mcgregor_current/undance), accessed August 19th 2013.
- Giulia Tonnucci 'Lexicon for Dancing: An Interview with McGregor on 'Carbon Life'', *Digicult: Digital Art, Design and Culture*. (<http://www.digicult.it/news/lexicon-for-dancing-an-interview-to-wayne-mcgregor-on-carbon-life/>), accessed September 20th 2014.

Abstract

Fleshing Out: Intermedial Bodies and Dancers-in-Code

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Drawing on new media theory, particularly Mark Hansen's notion of the 'body-in-code', this article explores the nature of the performing body as intrinsically intermedial. Wayne McGregor/Random Dance's *Undance* and Klaus Obermaier's *Rites* explore the very ontology of dance, the material body, in its relationship to the media technologies; bodies and technology are presented as both inherently and directly intertwined, inherently via processes of cultural-historical co-evolution and directly through interaction and intermediation. Rather than suggesting the disappearance or undoing of the body, these works reposition the human body as active in the framing and function of new media technologies.

Keywords : intermediality, technology, Wayne McGregor, Klaus Obermaier, embodiment

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