

On Choreographic Space

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The concept of choreographic space is open-ended. In terms of practice, the notion of choreographic space often refers simply to the spaces within which choreography takes place (theatre spaces, urban, or even domestic spaces, the 'natural' space of rural landscape). It can also reference the dynamic spatiotemporal space that is generated by the activity of dancers as they perform a choreographic work, the interplay between performers actively shaping the space in which they move by creating a dynamic network of interweaving vectors, tensions and transient forms which is perceived by both performers and audiences. Although other spatial phenomena could be called on in an exploration of choreographic space, in the interests of clarity this paper will focus on these two forms of choreographic space .

Choreographers have been interrogating the notion of choreographic space through their practice since the 1950s, when Cunningham first began to decentralise theatrical space through his reconfiguration of the stage space. Abandoning the frontal focus of theatrical space in his stage performances, he also left the theatre to use public spaces for performances in his 'events'. Later, in works such as Lucinda Childs' *Street Dance* (1964) and Trisha Brown's *Man Walking Down the Side of a Building* (1970) and *Roof Pieces* (1971), choreographers from Judson Church Dance Theater, implicitly following the principles propounded by the Situationists¹, mounted an even greater challenge to the primacy of the theatrical space in choreographic practice. These challenges continued throughout the 1980s and '90s, and into the twenty-first century, with choreographers who specialise in site-specific dance taking their choreographic practices out into public, or at the very least non-theatre, spaces².

Further challenges to the notion of choreographic space have been advanced by videodance works, which continued Maya Deren's early experiments with choreography and film and

¹ The Situationists formulated the principles of the 'dérive', which entailed "drop[ping] their usual motives for movement and action... and let[ting] themselves be drawn by the attractions of the terrain and the encounters they find there..." (Knabb(1995). Judson Church choreographers adopted this strategy in their site-specific work.

² For example, Rosemary Butcher's *North East Passage* 1976 and *D1, D2, 3D* 1989-90; Rosemary Lee's *Moments Shorelines* 1987, *Haughmond Dances* 1990 and *The Banquet Dances* 1999; La Ribot's *Dip me in Water* 1997 and *Piezas Distinguidas* 2000; Stephan Koplowitz' s *Kohler Korper [Coal Bodies]* 1999 and *A Walk between Two Worlds* 2005; Siobhan Davies's *13 Different Keys* 1999; Seven Sisters' *Salome* 1999 and *DoubleTake* 2000; Willi Dorner's *Bodies in Urban Spaces* 2007.

extended the location of choreographic space to include the 'virtual' space of the television screen³. Similarly, installation artists who worked with digital media, video and film created installation works using single and multiple projection screens. These, often inadvertently, generated potentially choreographic environments through the interplay between the content that was displayed on the screens, the spatiotemporal interconnections between the screens and the interplay between the motion of performers or spectators as they interacted with the works⁴. When dance artists embarked on this last pathway in the mid-1990s, particularly those who used interactive technologies⁵, the choreographic nature of the environments were no longer inadvertent, but deliberate. Many of these digitally augmented audiovisual installation spaces, particularly *Passing Phases (1994-99)*, *trajets (2007)* and *Sensuous Geographies (2003)*, all multiuser installations, became choreographic spaces in their own right, for they not only established a three-dimensional 'felt' sense of space that drew attention to the embodied experience of the participant (Birringer 1998), but also created the conditions for the generation of informal choreographic events from those who engaged with the installations, and thus a specifically choreographic space.

As a result of these practices, I would suggest that the notion of choreographic space is ripe for debate. Although to some extent analysed formally in the mid-twentieth century (Laban, 1966, Preston Dunlop 1981⁶), the implications of the notion of space as being choreographic, with all that that implies, was not theorised in depth in dance studies until the beginning of the twenty-first century, when dance scholars such as Valerie Briginshaw (2001) and André Lepecki (2006) grasped this somewhat neglected nettle. The depth of their analyses, which were permeated with a strong political sensibility, was made possible by the work of the theorists and philosophers (and before them scientists) who had been engaged in a re-visioning of the concept of space for several decades. They were followed later by geographers such as Doreen Massey (2005) and Nigel Thrift (2004), who drew on the discussions on space that had been initiated by thinkers such as Gilles Deleuze and Félix Guattari (1987), Michel de Certeau (1984) and Henri Lefebvre (1991). These understandings of space have proved to be very productive in the exploration undertaken in this paper.

³ For example, Liz Aggiss *Motion Control*, 2000, *Anarchic Variations*, 2002; Rosemary Butcher, *Undercurrent*, 2001, *The Return*, 2005; David Hinton, *Dead Dreams of Monochrome Men* [with DV8] (1989), *Birds* (with Yolande Snaithe, 2000;

⁴ Bill Viola *Catherine's Room* (2001); Julian Isaacs *Ten Thousand Waves* (2010); Sam Taylor Wood, *Killing Time* (1994)

⁵ [Kozel/Woolford (Contours 1999), Igloo (Winterspace 2001), my own *Passing Phases (1994-99)* and *Sensuous Geographies (2003)*⁵, Sandiland (Remote Dancing 2004), Woolford (Will o' the Wisp 2005), Kozel/Schiller (*trajets* 2007), Ole Kristensen (Body Navigation 2008)]

⁶ Preston-Dunlop(1981) Nature of the embodiment of choreutic units in contemporary choreography unpublished PhD, Laban Centre.

Theoretically, the notion of choreographic space incorporates a number of the understandings space that have been developing across disciplines since the beginning of the twentieth century. However, common-sense understandings of space conceive of it as being external to us and having stable contours. We implicitly consider it to be something that surrounds us, something that is fixed, measurable. Crucially there is a tendency to take the position that we perceive space optically, its extent determined by the constraints of our visual perception. It is this that has been challenged by the writers and thinkers above. However, common-sense notions of space such as these have been challenged through the development of the concept of space-time in physics, of Riemannian geometry and topological space in mathematics, the introduction of notions of smooth/striated space and intensive and extensive space by Deleuze and Guattari (1987), and by new understandings concerning the multi-modal nature of all modes of perception, from the visual to the haptic.

Common-sense understandings of space identify what is increasingly termed as 'extensive' space⁷, and is this notion of space that has held sway for millennia. The conceptions of space developed in mathematics, science and philosophy during the twentieth century, however, have opened the way to a new understanding of space, one that conceives of space as transient, dynamic, fluid, its contours malleable, its presence felt (Manning 2007). This space is in flux, in process. It is a relational space, characterised not by consistency and stability, but by the interplay between a multiplicity of vectors, directions, elements and shifting volumes and textures. Multidimensional rather than metrical, topological rather than topographical, this kind of space is referred to in this paper as 'intensive', or dynamic space. Experienced haptically⁸, kinaesthetically, proprioceptively rather than optically, in contrast to extensive space it does not operate through visual points of reference, but through the shifting qualities and potentials, or zones of intensity, that emerge as one moves, acts, experiences⁹. These new notions of space are particularly valuable in developing an understanding of choreographic space that extends beyond the material spaces in which we dance into the 'virtual' spaces generated by choreographic events that are woven into those spaces in any movement event (formal or informal).

It is notable that what might be called 'choreographic' events are not always generated by choreographers and dancers. They can also be generated unintentionally by the collective motion of people in a street, by the patterns of motion generated by entities such as trains as

⁷ Often referred to as Euclidean space.

⁸ JJ Gibson (1966) argues that haptic perception entails somatosensory and proprioception, Paul Rodaway (1994:55), suggests that "each space and place discerned, or mapped, haptically is in this sense our space and because of the reciprocal nature of touch we come to belong to that space."

⁹ For Manuel DeLanda (2005:50) zones of intensity that characterise intensive space are "marked by critical points of temperature, pressure, gravity, density, tension, connectivity points defining abrupt transitions in the state of the creatures inhabiting those zones."

they roll into and out of railway stations, aeroplanes or birds flying in formation, or soldiers marching in the parade ground¹⁰. These collective behaviours unwittingly create ‘choreographic’ events. Indeed, the term ‘choreography’ has been appropriated by writers and thinkers from a number of disciplines from geography to science¹¹. As choreographic events however, the examples given by geographers and scientists are more about the unintentional collective spatiotemporal configuration of individual entities moving within an environment than they are about the deliberate composition and organisation of movements and/or movement images which is conventionally understood as ‘choreography’ in dance¹². Thus the movement that takes place within social spaces such as railway termini, piazzas, football stadia can be seen as generating informal choreographies. In terms of the new conceptions of space these choreographies change the spaces. As such, new spaces are *produced* by the activity for, as de Certeau (1984:112) argues, “space is composed of intersections of mobile elements...actuated by the ensemble of movements deployed within it” and only “exists when one takes into consideration vectors of direction, velocities and line variables”. The latter, along with the assemblage of movements that are generated by the intersections between individuals and movements, imbue the space with a qualitative, and thus affective, dimension.

Lefebvre both echoes and extends this notion by drawing attention to the social character of the activity that generates, or is generated by, the particularity of public spaces. He argues that “every social process is the outcome of a process with many aspects and contributing currents, signifying and non-signifying, perceived and directly experienced, practical and theoretical” (Lefebvre 1991:p110). This simultaneously produces intensive spaces and generates variable perceptions of extensive spaces, perceptions that, by virtue of the play of vectors and spatiotemporal tensions, are permeated with affect. Thus the space that is produced by this movement is not the materiality of the space (although the perceived and experienced relations between material features may seem to alter as a result of the affective dimensions of the experience) but the tenor of the space. Crucially, this kind of affective space is produced by *all* types of movement taking place within the material space. The tenor of the space as experienced, thus might change at different times of day (as the light changes with the movement of the sun), or times of the year, or in accord to the amount, type, kind or purpose of

¹⁰ The video work *Guards* (2004) by Frances Alys and the screendance work *Tattoo* (2001) by Miranda Pennell exploit the choreographic potential of the activity of massed groups of soldiers.

¹¹ For example, A. Pred (1977) wrote a paper entitled “The Choreography of Existence: some comments on Hägerstrand’s time-geography and its effectiveness” (*Economic Geography* 53: 207-21), an editorial in the *Guardian* (9th August 2010) entitled “Environmental research: Nature’s choreography talks of “the intricate dance performed by earth, air, fire and water in the service of life”, a paper entitled “Chromosome Choreography: The Meiotic Ballet” (2003), written by scientists Scott Page and R. Scott Hawley, argues that the action of homologs which “pair with each other, recombine, and then segregate from each other ... [and] orient to a single pole at metaphase” results in an “elegant chromosome dance” (p. 785).

¹² This includes realtime composition (improvisation) in dance

the activity taking place within the space¹³. This is coupled with the individual experiences of the space that is generated by personal histories, prior experience, memories, associations and socio-cultural perspectives to create a (temporary) but a highly personalised affective space (Massey, 2005). However, this generated space, as Massey and Leena Haamegren note in their papers, is not only personal, but also has far-reaching political implications, which underlie all choreographic activity¹⁴.

However, if, as Lefebvre and de Certeau suggest, the everyday flows of movement in a space generate a very particular relational, dynamic space then we are also moving towards a notion of choreographic space that embodies the thinking of such writers as Gilles Deleuze and Félix Guattari (1987), Brian Massumi (2002) and Manuel de Landa (2005). Indeed, these theorists contribute substantially to the understanding of the nature of choreographic space that is explored in this paper.

In the choreographic spaces produced by the interactive installation works mentioned above the spatiotemporal interplay between participants, and between participants and the elements that comprised the installation environments, echo the social and spatial interplay that takes place in public spaces. That interplay creates spatiotemporal vectors of energy and tensions between participants and between participants and the material features and dimensions of the space within which they move. However, what is of even more interest to me in the context of this paper is that these installations can simultaneously be experienced intensively and extensively¹⁵. Lefebvre (1991:94) notes that human beings in general, in any space, do not relate to space as a picture, rather “they know that they *have* a space, and that they *are* in this space”. That is, in public spaces, domestic space, work spaces, we situate ourselves in a space as *active* participants, rather than simply contemplate the space as something to be viewed. This is equally true of participants in immersive installations and audience members in site-specific works. Nevertheless, even when active participants, and experiencing the space intensively, we are simultaneously aware of space as something outside of ourselves.

¹³ For example, the activities in the football stadia of Rwanda during the genocide produced very different spaces to those football stadia before the Rwandan civil war.

¹⁴ Although these are inevitably implicated in the choreographic space discussed here, they take a back seat in this paper. It is worth noting that the Situationists (Debord, 1955), and theorists such as Michael Mehaffy (2010) and Nikos Salingaros (2010) argue that the form of constructed spaces, that is material or built space, is ideologically and politically driven, and leads to the generation of particular forms of intensive space, which are imbued with ideological positions, and that these subtly direct human behaviour within a public space. “[C]ities have a psychogeographical relief, with constant currents, fixed points and vortexes which strongly discourage entry into or exit from certain zones” (Knabb, 1995)

¹⁵ This was experienced vicariously by those who were viewing the activity of those engaging with the installations, in part because, even though at that moment observing the activity of those in the ‘interactive’ space, they were part of the community that the installation had generated.

On the other hand, even when watching a dance work on a stage, as we perceive the streams of energy that are generated by the motion of its inhabitants, with their interrelations and their changing spatiotemporal rhythms and velocities flowing this way and that, the experienced texture (the intensivity) of the space changes. As we perceive, if neuroscientist Vittorio Gallese (2005) is correct, we may vicariously experience the sensations of the rhythms and velocities as they “in all their multiplicity interpenetrate one another...forever crossing and recrossing, superimposing themselves on each other” (Lefebvre, 1991, p.205). These interweaving rhythms and velocities create an experiential dynamic, choreographic space, and with it a new dynamics of the ‘fixed’ material space. The newly perceived material space that results from choreographic activity does not, indeed could not, exist prior to that activity, for material space presents “a pulsed array of possibilities to be pursued” (Gins & Arakawa 2002:42), an array that the choreographers grasp and transform into a newly formed experiential, or intensive, space.

Susanne Langer’s descriptions of space, formulated directly in relation to choreographic events (Langer 1953) are illuminating in this context, introducing new dimensions to, yet resonating with those forwarded by Lefebvre and de Certeau in their discussions of everyday space, and Deleuze and Guattari’s discussions of intensive space. Langer acknowledges the vectorial nature of choreographic space, but identifies that space as a space of virtual powers or forces, that is as an intensive space. She argues explicitly that

the relations between the [dancers] is more than a spatial one, it is a relation of forces; the forces that they exercise, that seem to be as physical as those which orient the compass needle toward its pole, really do not exist physically. (Langer 1953:175/6)

Dancers, she suggests, do not merely create physical movements, they create virtual gestures, which extend beyond the materiality of their bodies. The virtual gestures become an extended actualisation of the intricate interplay of the trajectories and tensions that permeate the interrelations between dancers and the space within and through which they dance¹⁶. Indeed, she suggests, this virtual movement permeates one’s perception of the activity of a dancing group or ensemble “...one does not see people running around; one sees the dance driving this way, drawn that way, gathering there – fleeing, resting, rising and so forth...” (Langer 1953:175). She goes on to argue that the prototype of the ‘forces’ that generate this dynamic choreographic space is not the ‘field of forces’ associated with physics, but “the *subjective experience* of volition and free agency” (Langer 1953:175 *my emphasis*). Specifically she argues that

the sense of vital power, even of the power to receive impressions, apprehend the environment and meet its changes, is our most immediate self-consciousness...the play of

¹⁶ This was addressed by Valerie Preston Dunlop in the development of what she calls CHUMM analysis, (Choreutic Units and their Manner of Materialisation) in which both the actual and virtual spatial forms of choreography are addressed. Preston Dunlop (1981) *The Nature of the Embodiment of Choreutic Units in Choreography*, unpublished PhD Thesis, U.M.I. 1981.

felt energies as different from any system of physical forces as psychological time is from the space of geometry.” (Langer 1953:176).

In immersive installation works and choreographic works that take place in public spaces, because the ‘viewers’ are enveloped by both the material and the choreographic space, they find themselves both viewing the material space, and experiencing the space of active forces of which Langer speaks. This dual experience of space was particularly evident in *Sensuous Geographies*, in which both those actively engaging with the interactive interface of the installation, and those who were standing around the active space looking in, were embedded within the choreographic space. As both viewers and participants (each of these roles could be assumed at different times in this installation) they were part of the visual environment, and immersed in the dynamics and sonic trajectories of the soundworld created by the active participants. The *participants*, because their sight was obscured, were encouraged to experience the space kinaesthetically, or haptically. When *viewing*, however, the environment was experienced both intensively and extensively, the latter not merely in terms of the perceiving the structure of the digital/material environment but also in terms of the perceived spatiotemporal interplays between environment and participants, and participant and participant. In *trajets* as the participants moved the screens that made up the environment turned in response, thus creating a relational space between participants and material elements of the installation by materially altering (indeed choreographing) the shape of the installation environment itself. The participants thus both perceived visually and experienced kinaesthetically the space that they were creating.

It is this interlacing of the material and dynamic, of the bounded and vectorial, the intensive and extensive in a choreographic space that is of interest to me in this paper. Over the last two decades the oppositions implied by the formulation of binary distinctions between material and dynamic, bounded and vectorial, intensive and extensive space have been challenged. Rather than being considered mutually exclusive, it is acknowledged that they overlap, interweave, co-exist. For example, Lefebvre, in the quotation above notes that space is both “perceived and directly experienced”. Deleuze and Guattari (1987) noted that intensive, or smooth space is always interrupted by temporary crystallisations of the flows of intensive forces that create the relations between its multiple lines of direction, and between its qualitative textures¹⁷. Correspondingly, as we know when viewing a dance performance, even when experienced optically, the material space in which the dance takes place is imbued by the movement of the dance with inherently variable qualitative dimensions and textures that can undermine its

¹⁷ The notion of ‘temporary’ can encompass many temporal scales, as Doreen Massey points out in her paper, even mountains continue the movement that was started during the geological events that led to their creation, albeit moving *extremely* slowly.

apparently stable identity. Indeed, if, as Paul Rodaway (1994:55) argues, space is mapped haptically as well as visually, it is of necessity in/extensive, that is, simultaneously intensive and extensive.

Manuel de Landa (2005) approaches this merging of the intensive and extensive from a different, more radical direction, suggesting that the qualitative dimension of intensive space is implicated in the very *production* of extensive space, for it is “in this processual zone [that we] can witness the birth of extensity and its identity forming frontiers” (de Landa 2005: 83). Perhaps, then, the two concepts (extensive space and intensive space), rather than being seen as different in kind, should be seen as implying different modes of perceiving (or experiencing) space¹⁸.

Yet, even Elizabeth Grosz (2001), renowned for her formulation of the notion of the ‘space of the in between’, identifies intensive and extensive space two oppositional forms of experience. She suggests that to perceive, and evaluate, from the outside is to deny the experiential. In doing so she implies a binary distinction between intensive and extensive space. This is particularly evident when she argues that, on the one hand that one can never fully occupy the outside, extensive space, “for it is always other, different, at a distance from where one is” (Grosz 2001:xv), and on the other that to inhabit intensive space is to be at the mercy of “the immediacy of immersion that affords no distance” (Grosz 2001:xv), unable to distance oneself from the ‘sensation’ of space. I would argue that being immersed in a space does not necessarily entail being unaware of the material space one occupies, nor that to perceive extensive space necessarily denies the experiential, inasmuch as, as post-Gibsonian theories of perception argue (Nöe 2004, Thompson 2008), any perception, even visual perception, constitutes a composite of several perceptual modes, including the haptic. Thus the optical perception of extensive space can be simultaneously somatic, experiential, particularly when what is perceived entails motion, actual or virtual.

Nevertheless, Grosz (of course) acknowledges the difficulties inherent in making a distinction between the two modes of experiencing space, and takes steps to resolve the conundrum of the apparent gap between being immersed in a space (and thus in a subjective *state*) and being an ‘objective’ observer of a space/event. She does this by positing a further space, one that is neither inside nor outside, neither intensive nor extensive, one that lies between the two. This she calls the ‘space of the in-between’. The ‘space of the in between’, she argues, is ‘space of open-ness and of undoing’ (Grosz 2001: 93). It is a space that ‘disrupts the operations’ of ‘inside’ and ‘outside’ (Grosz 2001: 93). Rather than being a space of fixed identities, the space of the in

¹⁸ See Gibson’s distinction between exteroceptive and interoceptive (or distanced and intimate) senses and the incorporation of the haptic sense, in which he include the somatosensory and proprioception into the notion of perception. Gibson, J.J. (1966).

between is a space of becoming, a space of transformation. This notwithstanding, the space of the in between constitutes a *third* space, albeit one with unstable, permeable margins (and thus not margins at all).

Massumi (2002) avoids the dilemma confronted by Grosz by resolving the conundrum in different way. Rather than positing another space, he argues that the different forms of space, the vectorial/bounded, intensive/extensive, smooth/striated are *coextensive*. Thus Euclidean and non-Euclidean space, material space and dynamic space co-exist, interweave, are present in the same experience of a space. The built space within which movement takes place does not, as Doreen Massey notes in her paper, change its shape or dimensions physically (or if it does not in a way that is perceptually discernible). However, it does change in terms of the form it takes in our perceptual experience¹⁹. As viewers, even though viewing optically from 'outside', we *experience* the ebb and flow, the expansion and contraction of the dynamic space created by the performers/participants as they move. Further, by virtue of the dynamic spaces that are being generated within the material space, the perceived spatial characteristics of the environment are modulated perceptually. Thus, as the solo dancer, trio, duet or ensemble of dancers moves this way and that in the space of the performance, or extends and contracts as the spatial relations between dancers change. The spatiotemporal vectors that characterised the dynamics of the material space before the movement began dissolve and are re-formed, as first one then another feature of the material space is linked now with one feature then with another, or gets closer or further away by virtue of the motion of the perceiver, or is foregrounded then backgrounded as the relations between the mobile and 'static' features of the space change²⁰. This alters the perceived dimensions of the space, giving rise to a different experience of the environment that the perceiver is occupying.

Conversely, even when immersing oneself in a space, one is always aware at some level, of the environment in which one is immersed. As participants/performers, even whilst immersed in the haptic/kinaesthetic experience of the intensive space we generate in and through our movement/activity, we are simultaneously able to discern (albeit not always consciously) the boundaries of the space in which we move and its material features, which include other participants/performers and the audience. In this way, we are able "apprehend the environment and *meet its changes* [in] our most immediate self-consciousness" (Langer (1953:176) *my emphasis*). All this, I suggest, can give rise in the audience to a vicarious *experience* of the intensive space generated by the performers. Thus, as performers and participants in installation environments and in choreographic works that take place in urban or natural spaces, we

¹⁹ It is the latter that site-specific choreography seeks to change by generating within a material space, a dynamic choreographic space that redirects attention and thus perception of the extensive space.

²⁰ Such a 'performance' can be formal or informal, intentional or unwitting

experience the installation space and/or the space in which the performance takes place coextensively.

During my research for this paper I have found it interesting to note the difference in tenor of the descriptions of dynamic space offered by Langer in 1953, and those of Lefebvre and de Certeau some twenty to thirty years later. Although writing from the perspective of the viewer, Langer writes as if from the 'inside'²¹. Lefebvre and de Certeau, conversely, although clearly sympathetic to the intensities and dynamics generated in the everyday spaces they describe, and make an attempt to immerse themselves within them, write of those intensities as if experiencing them extensively. Langer's perspective is perhaps of significance when considering the possibility that even the audience, which is the position that Langer writes from, can feel the difference in qualities in the zones of intensity that are generated by a particular choreographic space, even one that they are not immersed in intensively²². This implies that we can experience the sensation of actions vicariously through generating an embodied simulation in our neuronal systems from an optical experience of the movement of others. Neuroscientists emphasise that the greater our prior experience of and/or familiarity with the observed actions, the deeper the strength of the embodied simulation. I would suggest that as dancers, indeed even as non-dancers, when taking the role of audience, we are able to embody to a great or lesser degree, the intensities of the interplay of forces that we perceive on the stage, particularly those experienced when engaging in ensemble or group activity²³.

The psychophysical, or intensive, facets of the movement of individuals (either alone or as part of an ensemble) are central to the generation of choreographic space. It is this that generates what we might call a 'felt' space, the space of being and of feeling, and of becoming. As such it becomes implicated in the extensive (material) space in which any choreographic event, formal or informal, takes place. Nevertheless, as Doreen Massey notes in her paper, these spaces, although malleable in certain senses, they do have stability and substance²⁴. Further, as Mehaffy (2010) and Salingaros (2010) argue, the design of the material spaces that we engage with can affect the detail of *how* we see (and/or feel) when we see what we see, *and* our behaviour within the space. It is the interplay between the mutual influences of movement and the material

²¹ "It is the feeling of power, and the play of such felt energies..." (Langer 1953: 176)

"...a realm of "powers", wherein purely imaginary beings from whom the vital force emanates shape a whole world of dynamic forms ..." (Langer 1953:184)

²² That this is possible is evidenced in the work of neuroscientists such as Patrick Haggard (University College London) and his colleagues, who have been investigating the activity of Mirror Neuron systems specifically in relation to dance (Calvo-Merino et al. 2005).

²³ Neuroscientists have observed that although the strength of the experience of embodiment differs as it is affected by familiarity with the patterns of movement being perceived, there is a neuronal response even amongst those with less experience.

²⁴ I am indebted to Doreen Massey for the many insights I gained from my conversations and discussions with her during the course of the conference.

environment on the generation of a choreographic space that gives support to the notion that choreographic space is an in/extensive space, one that incorporates both the dynamic and the stable, but shifts the perceived contours and textures of the material space through the activity that constitutes the dynamic space.

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