This paper draws on some of my earlier explorations of the relationship between dance and still photography (see Reason 2004 and 2006), along with material from interviews with British dance photographer Chris Nash. It is not intended to be a comprehensive account of this area, but rather to develop some initial thoughts on questions of implied motion and kinesthetic empathy.

Outside of actual performances we most often ‘see’ dance in still photographs – on leaflets, posters, websites and other advertising materials, but also in archival materials, books and occasionally galleries. There is something slightly ironic about this, hence the quotation marks around ‘see’, for while the fundamental nature of dance is movement, still photography inevitably presents dance without motion. In what sense a photograph reproduces, represents or allows us to see dance has as a result been much discussed in the light of this essential and spectacularly obvious tension between stillness and movement.

Between these two points the desires and limitations of dance photography meet. From one perspective we expect the camera to reproduce dance faithfully, revealing to us what Susan Sontag describes as ‘a piece of the world’ (Sontag 1979, 93). Yet at the same time the inherent stillness of the medium limits the extent of that reproduction. This has been the key and recurring challenge confronting dance photography:

Dance is the movement of bodies through space and time. Dance is fluidity and continuity. Dance connects, dance unfolds. Dance envelops us; it enters through the eye and ear. Photography imprisons in two dimensions. Photography flattens and shrinks. Photography tells the ear nothing. It fragments time and fractures space. Yet movement is the goal …. Elizabeth McCausland voiced the paradox when she called for ‘an image which thought it cannot move and never can hope to move, yet will seem about to move.’ (Ewing 1987, 27-28)

Ewing’s description of dance here clearly evokes the kinaesthetic, both in terms of the observation of movement (bodies in space and time; fluidity; unfolding) and in terms of the whole embodied response to the movement (connecting; enveloping; entering through the eye and ear). In this Ewing echoes Ann Daly’s description of dance as a kinaesthetic art ‘whose apperception is grounded not just in the eye but in the entire body’ (Daly 2002).

The ‘Watching Dance’ project concerns itself primarily with responses to dance in performance. However, this question of ‘seeing’ dance in still photographs presents an intriguing side-avenue in an investigation into kinesthetic empathy. How does kinesthetic empathy, which is concerned with perceptions of and responses to movement, play out in the context of seeing the representation of dance movement in a still image?
With dance photography, therefore, one of our recurring interests is in how the image captures and yet translates the movement of dance and also, perhaps, in the ability of the still photograph to communicate with us in a kinesthetic manner. Unsurprisingly, some commentators, such as the critic Edwin Denby, perceive a failure to achieve this goal, complaining ‘You don’t see the change in the movement, so you don’t see the rhythm, which makes dancing. The picture represent a dance, but it doesn’t give the emotion that dancing gives you as you watch it’ (Denby 1986, 89).

Denby’s description matches the large amount of stale, flat and uninvigorating dance photography that does exist. It is also true that Denby’s description matches the literal condition of all photography – the images never change, never move and never literally reproduce movement. However, I suspect that most people with an interest in dance or in photography have found that there are some images that do speak to them in a more sympathetic and dynamic manner, images which obviously do not move but which perhaps seem about to move.

This potential to read more into an image is something that has been described as vital to all successfully photography, no matter what the subject. John Berger and Jean Mohr, for example, write in *Another Way of Telling* that, ‘An instant photographed can only acquire meaning insofar as the viewer can read into it a duration extending beyond itself. When we find a photograph meaningful we are lending it a past and a future’ (Berger and Mohr 1982, 89). In the generality of photography this past or future might be all manner of things: such as narrative, or a change in emotion, the passing of time, or, of course, movement.

In other words photography cannot reproduce movement (impossible in the still image) but instead freezes a moment within movement. Yet if the communication of movement is the goal, the photographic image must seem about to move and it is this that many commentators have described as the central power of the most effective dance photography.

One photographer who has been described as successful in this is Chris Nash, whose work Peter Ride suggests has the ability to ‘beguile and draw in the viewer’. The skills here, Ride continues, is in making the image suggest more, ‘to give a full story, not just a moment of fact’ (Nash 1993). As a result the viewer’s imagination takes over from the figures locked on the page and reads in emotion, meaning and movement.

Nash himself is certainly interested in the representation of movement within his still images. He discusses in interview the three basic factors involved: light, movement and the way the camera records it.

Those are the two basic controls you’ve got on the camera: the aperture to control the light and the shutter speed to control the movement. So that seemed to be absolutely what photography is all about, is movement and light. I don’t see it as a sort of contrary kind of thing; I see them as being absolutely perfect for each other. (Personal interview, London May 2004)
This is something present in the very first dance photograph taken by Nash (Helen, Laban Studios, 1977, reproduced above) of which he writes:

It seemed natural to go into a studio and make some photographs, although I had no idea of what the results would be. I remember taking a tripod because I was interested to see the effects of long shutter speeds on movement. I took a couple of rolls of film and there was one shot (this one) that intrigued me. The neg was very dense (over exposed) but the image slowly revealed itself in the darkroom.

It had a soft, floaty feeling to it, full of air and light. Helen had been transformed into something bird-like and wonderful. And it was that transformation and combination of ingredients that got me – light, movement, someone transformed by dance, the ability of the camera to reveal what the eye cannot see, and to transform what it sees. (Personal interview, London May 2004)
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While Nash may be interested in viewers reading movement into his photograph, the key point is that this is not a process that takes place through reference to the original dance or the original movement – indeed, by its nature this original movement is absent from the still image. Instead this is a process that takes places through the revelatory *and* transformative impact of the camera, which does not reproduced the world but reveals it in a new and distinctly photographic manner.

For Nash the key relationship is between the viewer’s imagination and this photographic transformation:

> I think when I’m watching dance it’s a trigger for your imagination. So your imagination is working in tandem with the performance and you’re filling in a lot of things. That’s what I see the photographs as doing as well, in that they are working in collaboration with people’s imaginations. (Personal interview, London May 2004)

So rather than photography recording or capturing movement in a direct or literal sense, it is the transformational and interventionist nature of photography that is central. If the photograph of Helen was a very early work, another more recent photograph shows a more radical but still I’d argue essentially photographic kind of transformation. This is Nash’s image for Lea Anderson’s *The Featherstonehaughs Draw on the Sketchbooks of Egon Schiele* (1999), reproduced below. There is a jerky, awkward physicality to the image, drawing our attention in deeper and for longer as we find an echo or residue of movement in the stillness. Close inspection, however, also poses a number of problems for the viewer: what happens to the dancer’s right leg as it passes behind his left knee? What is his relationship with the ground? And, if this image suggests movement, in exactly which direction would he be moving?

Nash’s narration of the production processes behind the image answer some of these questions:

> The visual influence in the photograph is fairly straightforward, with the use of Photoshop to produce the writhing edges and figurative distortions that typify Schiele’s work. However, I wanted to also replicate the way that his full length figures are evidently posed, often lying down, yet still appear to be twisting and writhing – a factor that had drawn Lea to the subject matter in the first place.

> To do this I elected to pose the dancers (rather than try to capture a particular movement) in a way that suggested movement. We used chairs for the dancers to balance on (subsequently taken away in Photoshop), enabling apparently gravity-defying positions. (Cited in Reason 2006)

While the photograph of Helen revealed itself to Nash in the darkroom, this use of the computer, and the openness about it, is typical of Nash’s current work, which frequently uses montage, the rotation of the frame, digital manipulation and other graphic interventions made on the computer to achieve particular ends. The ambition, therefore, is not to reproduce movement – which is impossible in the still image – but instead to communicate something of the dynamism, emotion and meaning of movement through the particularities of the photographic medium. If movement occurs, in other words, it takes place in the viewer’s imagination.
What is interesting is that such perceptions, located in critical and aesthetic theory, have more recently been paralleled by findings within neuroscience and psychological research. For example, Zoe Kourtzi and Nancy Kanwisher used fMRI imaging to explore how the viewing of different static images – some containing implied motion, some not – impacted on the part of the visual cortex involved in the processing of visual motion. Their results suggest that the ‘cortical areas involved in the analysis of physical stimulus motion can also be engaged automatically by static images that merely imply motion’ (Kourtzi and Kanwisher 2000, 52). In other words the same regions of the brain involved in processing the watching of actual movement are engaged when processing motion that is only implied in a still photograph.

While this research wasn’t conducted specifically into dance photographs it did use photographs of athletes, which are fairly closely related, and it is reasonable to assume that similar results would be obtained in response to images of dance. This is
a connection that Ivar Hagendoorn makes in his discussion of the nature of perception of dance and choreography, which cites the Kourtzi and Kanwisher paper, and where he writes ‘While many dance photos could also have been posed, some “capture” the dance. They extend the movement frozen by the camera forward in time’ (2004, 84).

Clearly the ability to perceive and process implied motion has benefits when interacting with our dynamic lived environment. Hagendoorn describes this as the reading of ‘apparent motion’, such when a car passes under a bridge, one dancer momentarily moves out of view behind another, or a football is obscured by a crowd of bodies. ‘In principle,’ writes Hagendoorn, ‘almost anything can happen while we are unable to see the object, but in practice most objects continue along their track and we are able to accurately predict where and when it will reappear’ (2004, 86). In other words in such scenarios we imaginatively construct the motion that we do not actually see. Something similar is clearly going on with dance photography – here almost anything could have happened after the shutter closed, but from the information contained within the image the viewer supplies an imagination of what probably or possibly happened.

While these observations are extremely useful there seem to me, however, to be some limitations to this argument when applied to dance photography – and particularly in the light of the work of Chris Nash just discussed – that perhaps also when extended may point to some continuing uncertainties about the experience of kinesthetic empathy.

Firstly, I would like to return to the question of quality in dance photography, of the matter that – as observed by Denby, Ewing and others – some seem to ‘work’ successfully while others are flat, stale, uninteresting. Generally it was proposed that a successful dance photograph is one that communicates something of the movement and kinetic sensibility of dance. Hagendoorn also enters into this evaluative mode, writing that ‘a good dance photo “captures” the dance’ (84) and similarly defining ‘good’ in terms of the communication of movement in the mind of the viewer. The implication of the research by Kourtzi and Kanwisher, in as far as I see it however, is that all photographs containing implied motion stimulate the visual cortex, with no discussion of the relative aesthetic qualities of the photographs. As all photographs of dancers contain implied motion we might from this presume that all would engage the visual cortex in the same manner. This might occur to greater or lesser extents, but as far as I am aware such particular research does not exist.

Secondly, Hagendoorn’s evaluation of dance photographs seems to rest not only on their possession of implied motion but equally on their authenticity in reproducing a truthful vision of something that actually happened. It is telling that Hagendoorn dismisses in passing images that are posed and in contrast praises certain photographs in terms of their ‘capturing’ dance – later he writes, ‘the photographer clicked at the right moment’ [my emphasis]. Such emphasis of photographic authenticity has a long tradition, both within dance photography and the medium more generally. Hagendoorn’s evocation of a ‘right’ moment, for example, has connections with Henri Cartier-Bresson’s thesis that by capturing the ‘decisive moment’ of an event, or action or scene a still photograph can be representative of the missing whole. Such photographs can indeed be remarkable, possessing a visual mode most familiar in photojournalism, where there is a clear invitation to trust and accept the photographic
image. As Colin Jacobson puts it, as reportage photography has the ability ‘to cut through the complex, fluid, contradictory nature of the world and strike a moment of truth’ (Jacobson and Haworth-Booth, 1994: 32). As viewers we often invest such images with what Barbara Savedoff describes as a powerful ‘aura of objectivity’ (Savedoff 2000: 49) in which the photographic image becomes a kind of transparency through which we unproblematically see a piece of the world.

Yet this ability is hugely compromised. We all know photography does not reproduce the world in any simple sense and we can all think of examples of photographic manipulation, editing, construction and fakery. Indeed, in terms of dance photography the difficulties of working during live performances – which include, but are not limited, to low lighting, dirty stages, confused backdrops, not knowing what will happen next and nothing being repeated – mean that much dance photography is in various ways re-staged or posed for the camera. American photographer Lois Greenfield, for example, works almost exclusively in the studio, creating dances for the camera that would be meaningless outside the studio (Greenfield 1992, 1998). In such instances the ‘right’ moment has been constructed for the camera and according to what and how the camera represents the world. Nash’s photography clearly takes such actions even further, producing carefully crafted (or manipulated) envisionings of things that never happened exactly like that in life. In other words they are not authentic, not captured from life, not transparencies but they do not lose any of their ability to communicate some kind of ‘truth’ about dance movement for all that. (For a fascinating and very readable account of the representation of time and movement in visual art, including photography, see Alexander Sturgis’ *Telling Time* 2000.

This seems key here because the perception of movement that is being discussed in photography is not of actual movement – even though it may engage the same visual cortex – but of imagined movement. In which case, does it matter if our imagining of what happens next is real or fictional? The reading of a past and a future to the movement implied in the photograph is imagined and in terms of our responses (both neural and aesthetic) it matters little whether we imagine something like or unlike what actually happened. Indeed, what actually happened could be considered irrelevant, as instead the ‘truth’ of the movement or of the dance can be considered to reside in its perceived or lived experience. It is this subjective, transformational truth – rather than that of an objective transparency – that Nash is seeking to communicate.

In a more recent conversation with Chris Nash I also asked him about his own understanding of kinesthetic empathy in terms of watching dance and photographing dance. He replied that:

> When I’m watching dance and when I’m thinking about making an image, at one level I realise that if you’re going to get a picture that successfully (whatever that means) portrays movement then you have to get a moment where your viewer is going to know, or think that they know, what’s about to happen or what’s just happened so that you continue the story past that moment.

(Personal interview, London June 2008)

So far Nash describes that ability to read ‘apparent motion’ outlined by Hagendoorn and discussed earlier. However, Nash continues:
But actually when I’m watching dance I’m not wanting to move. I’m not thinking about the actual physical feeling of moving, what I’m thinking about is why they are moving? Why are they doing what they’re doing? What are they thinking? What are they feeling? What is the effect on the other people in the room? And it is those that to me are much more important.

So again my response is my emotional or intellectual response to what they are doing. And that is what I think about when I think about people looking at my pictures. What are going to be their emotional and intellectual responses to what that person is doing and why they’re doing what they’re doing. … those are the things that are important to me. (Personal interview, London June 2008)

For Nash, therefore, the power of experience is located not just in being able to successfully ‘read’ the physical manifestation of the movement, but in the emotional meaning of the movement. And I would suggest that it is this that both dance and a photograph of dance need to communicate in order to work successfully (whatever that means).

Here it is worth thinking a bit more explicitly about the relationship between the perception (if real) or imagination (if implied) of movement and kinesthetic empathy. The two are of course connected yet in thinking around responses to still photographs of dance I am beginning to feel they are not identical. The perception and reading of movement (again whether real or implied) is clearly kinesthetic, and my understanding of the research of Kourtzi and Kanwisher, Ivar Hagendoorn and others clearly connects it to our ability to cognitively complete or imagine apparent motion. Yet this does not adequately answer the more nebulous, evaluative and even subjective question of why some dance images successfully ‘work’ on our imaginations and some do not – nor indeed why some dances successfully ‘work’ and some do not.

There are an almost endless number of ways of beginning to answer this question, but the interest here is on the concept of kinesthetic empathy. In a narrow understanding of kinesthetic empathy all dance photographs and all dances would ‘work’ as all would spark within us our ability to read the implied motion and complete the narrative of movement beyond the frame of the photograph. The narrowness of this understanding seems to be located around its unsatisfactory relationship with the word ‘empathy’. Empathy in the phrase ‘kinesthetic empathy’ is as important as the word kinesthetic. It is not about just the movement but the connection, the emotion, about what it means and feels like to us. We can observe and interpret the kinesthetic, but that does not necessarily mean we have any deeper or more lasting imaginative connection to it.

It is for this reason I wonder if we do not need to differentiate in some manner between different kinds of kinesthetic relationships when watching the movement of others or indeed when looking at photographs of movement. I would, for example, tentatively suggest that it is possible for kinesthetic awareness or competency (that is the ability to read movement) to exist without the deep connections of feeling and engagement that would seem to be implied in the phrase kinesthetic empathy.
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Bibliography