

**“GETTING IT INTO THE BODY”:
UNDERSTANDING SKILL ACQUISITION THROUGH MERLEAU-PONTY
AND THE EMBODIED PRACTICE OF DANCE**

Abstract

This paper responds to calls across the sociological, philosophical and psychological dimensions of Sports Studies to attend to the promise of phenomenology as an approach to understanding the complexities and nuances of embodied athletic experience. The work of the philosopher Maurice Merleau-Ponty is drawn upon to elucidate expertise through a non-dualist framework for understanding skill acquisition and bodily knowledge in sport and movement cultures. In particular, I explore how theoretical concepts *about practice* might actually play out *in practice* by bringing the notions of tacit practical knowledge and the sedimentation of habit which Merleau-Ponty emphasises in his theorisation of the corporeal schema into conversation with qualitative data from in-depth interviews with dance practitioners. The paper engages with dancers’ accounts of learning, remembering and performing patterns of movement and, in particular, with the dancers’ notions of having or getting a movement ‘in/into the body’, exploring resonances between these experiences and Merleau-Ponty’s conceptualisation of the habit-body and of incorporating behaviours into the corporeal schema.

Introduction

The importance of understanding skill and skilled movements in philosophical terms has been recognised in the field of Sports Studies since the 1970s (for example, Wertz 1978), with much new work emerging in the 2000s (for example, Brevik 2007, Moe 2005, Hopsicker 2009, Torres 2000). Our understanding of skill acquisition and bodily expertise still remains underdeveloped, however, leading to calls for further engagement with these themes in relation to the lived experiences of athletes and with reference to specific sports (Larsen 2016). This paper responds to this call, contributing to our understanding of bodily knowledge, skill and expertise through a qualitative empirical study of the experiences of professional contemporary dance practitioners.

The dominant theoretical model for research in the field of (motor) skill learning and performance in Sports Studies is the Information Processing approach. This perspective holds that learning about our environment proceeds through the conversion of information received from the senses into mental representations which can then be processed at the cognitive level. Within this framework, the human mind is essentially understood to function in the manner of a computer and it is considered that we learn and perform motor skills through the assimilation and execution of a series of rules or specific commands. At high levels of expertise our interaction with our environment is more sophisticated as the rules on which we act are more complex and are also internalised to a point where the information processing takes places at the subconscious level, yet the basic assumption that information from the

environment is converted into mental representations and processed in relation to rules remains (Moe 2004, 2005).

In contrast to this stands the phenomenological model of skill acquisition associated with the work of Dreyfus, which posits a form of intuition in the lived experience of expertise that cannot be reduced to rule-following (Dreyfus and Dreyfus 1986).

Dreyfus's work is phenomenological in that it seeks to elucidate the nature of subjective experience and thus the structure of consciousness. Its focus, therefore, unlike those working in the Information Processing paradigm, is not on how we might clarify the working of the human mind through analogy with a high functioning computer, but rather how we might recognise and account for those subjective aspects of human experience such as intuition that cannot be replicated in a (infinitely sophisticated) computer programme (Dreyfus and Dreyfus 1986, Dreyfus 1992, Moe 2005).

While Dreyfus (1992, 2002) does consider rule-following to be a feature of novice experience, he argues that the expert responds directly to the environment through activation of tacit embodied knowledge rather than relying on the processing of information in the form of mental representations:

... [A]t first we must slowly, awkwardly and consciously follow the rules. But there comes a time when we finally can perform automatically. At this point we do not seem to be simply dropping these same rigid rules into unconsciousness; rather we seem to have

picked up the muscular gestalt, which gives our behaviour a flexibility and smoothness. (Dreyfus 1992, p.248-249)

It is argued that Dreyfus's phenomenology of skill acquisition is valuable for understanding the experiences of elite dancers as they develop expertise in new movement repertoires. There are, however, limitations to the Dreyfus model, and it has been noted that despite this approach drawing on the work of Merleau-Ponty's phenomenology of embodiment, the learner in the Dreyfus model remains curiously disembodied and reliant on cognitive processing in all stages of skill acquisition except where expertise is fully achieved (Bailey and Pickard 2010).

In contrast to this, this study therefore returns to the work of Merleau-Ponty (2002) in order to further elucidate the embodied dimensions of skill acquisition and expertise through a phenomenological framework. As I will discuss in more depth in the following section of the article, Merleau-Ponty's (2002) work develops an understanding of human being which does not adhere to the traditional Cartesian distinction between mind and body, but rather roots subjectivity in our bodily being (Crossley 2001). This allows for the development of a more thoroughly embodied perspective on the development of practical expertise than we find in the work of Dreyfus.

In particular, the paper focuses on Merleau-Ponty's (2002) non-dualist understanding of human being in terms of the corporeal schema and the habit-body (see following section for further detail), relating these concepts to empirical data on the embodied

practice of dance, and thus exploring how these theoretical concepts *about practice* actually play out *in practice*. In doing so, it seeks to further contribute to a philosophical understanding of skill acquisition from the phenomenological perspective through a detailed empirical exploration of the lived experience of learning new movements, styles and techniques within the field of professional dance.

The paper thus responds to calls to attend to the promise of phenomenology as an approach to understanding the complexities and nuances of lived embodied athletic experience (Kerry and Armour 2000, Allen-Collinson 2009, Hockey and Allen-Collinson 2007, Hogeveen 2011, Nesti, 2011, Aggerholm and Larsen 2017, Ravn and Hoffding 2017) and contributes to a growing body of work within Sports Studies which one anonymous reviewer of this article suggests we might usefully refer to as ‘empirical phenomenology’¹ (Martinkova and Parry 2011). Examples of such work include the contributions of Susanne Ravn and collaborators in their writing on dancer’s embodied experience and on sporting embodiment more generally (see, for example, He & Ravn 2017, Ravn & Christensen 2014, Ravn & Hansen 2013, Ravn & Hoffding 2017, Thorndahl & Ravn 2016), as well as an extensive body of work by Jacquelyn Allen-Collinson and collaborators exploring the lived experience of a variety of sports from distance running to scuba diving (see, for example, Allen-Collinson and Hockey 2010, Allen-Collinson and Leledaki 2015, Allen-Collinson

¹ The description of empirical research as phenomenological is often contested (Allen-Collinson 2009, 2016), with many working in the area within Sport Studies cautioning against a propensity to label qualitative research as phenomenological in cases where merely it has certain methodological similarities with the phenomenological process at the practical or empirical level (for example a focus on subjective experience, or an application of methods of bracketing and reduction at the level of data analysis) yet no engagement with phenomenology as a multi-stranded philosophical tradition (see, for example, Martinkova & Parry 2011). The term ‘empirical phenomenology’ is used here to refer to studies that explore qualitative data through a lens – methodological and/or analytical – which is theoretically underpinned by a thorough engagement with a particular articulation of phenomenological philosophy, for example the work of Merleau-Ponty. It thus serves to distinguish such studies from those which do not have an empirical dimension.

and Owton 2014). A number of these studies highlight the rich possibilities for developing our understanding of sporting bodies and practices through engagement with the work of Merleau-Ponty in particular, due to his emphasis on the embodied nature of phenomenological subjectivity. Indeed his ideas have been brought to bear in the analysis of phenomena as diverse as the somatic spirituality of the yoga practitioner (Morley 2001, 2008) and the embodied spatial awareness of the soccer player (Hughson and Inglis 2000, 2002).

In this paper, it is the experience of contemporary dance which is explored in relation to Merleau-Ponty's (2002) philosophical conceptualisation of embodied expertise. Dance is chosen because of its status as a practice which is both embodied and creative, both athletic and expressive, meaning that a consideration of dance involves a questioning of the boundaries between what we might think of as the physical and the mental dimensions of human existence (Desmond 2003, p.2, Thomas 2003, p.78). This lends it particularly well to being brought into conversation with Merleau-Ponty's (2002) non-dualist conceptualisation of embodied subjectivity (Purser 2008).

Beyond Dualism: Introducing the Corporeal Schema

Following Heidegger (1996) in the rejection of the idea of the (purely mental) Cartesian subject, Merleau-Ponty (2002) situates us as beings in the world, constituted by the links we have with that world, and uses the concept of the corporeal schema to explore this practical grasp that we have of our environment. Thus prior to the reflective Cartesian statement ‘I think therefore I am’, there is our orientation towards the world sensed through the corporeal schema, our pre-reflective sense of ‘I can’:

...a practical *cogito* which structures not only our relationship to the world, but also the ways in which we think about it. (Burkitt 1999, p.74)

The corporeal schema develops as a result of the physical interaction that we have with the world as we learn to navigate around objects in our environment and is thus related to our proprioceptive capacities. As an overall sense of self, the corporeal schema

... unifies and co-ordinates postural, tactile, kinaesthetic, and visual sensations so that these are experienced as the sensations of a subject in a single space. (Grosz 1994, p.83)

It should, however, be noted that the body schema does not exactly map the topography of the physical body and can, for example, include aspects such as phantom limbs which are not physically present, and extensions of the physical body

such as the blind man's stick, or indeed the driver's car or the typist's keyboard (Crossley, 2001; Shilling, 2003).² In addition to this, the corporeal schema is developed through social interaction and is in part derived from the image we have of other people's bodies and through their reactions to our bodies.³

For Merleau-Ponty (2002) the corporeal schema entails a pre-reflective sense or grasp of our environment, relative to our bodies. That is, that our primary mode awareness is a tacit sense of the body's possibilities for active engagement with the world around us – the tacit *cogito*: 'I can'. Thus we can navigate our environment without consciously reflecting on how to do so through a pre-reflective awareness of self, which may also encompass a pre-reflective grasp on the immediate environment such as the car we are driving or the tennis racket we are wielding. Conscious reflection on what we are doing is, of course, possible, but for Merleau-Ponty this pre-reflective embodied knowledge, also known as knowledge-how or know-how (Crossley 2001, 52), does not require propositional knowledge or knowledge-that which is 'represented in a series of propositions or sentences in the mind of the thinking subject' (Edwards 1998, 51).

The concept of the corporeal schema is particularly interesting for debates about skilled movement because it suggests a way of understanding intentional action in human behaviour without subscribing to either the intellectualist picture (underpinning the Information Processing model) which posits that intentional movement is always precipitated by reflective thought processes or the behaviourist

² The incorporation of body auxiliaries into the corporeal schema has been productively explored within Sport Studies in, for example, Thorndhal and Ravn's (2016) work on elite rope skipping, and Hockey and Allen-Collinson's (2007) reflections on athletes' 'haptic relationships' to clothing and equipment.

³ For more on this topic in relation to dance see: Purser 2011

picture which reduces movement without conscious thought to an unintentional response to environmental stimuli (Merleau-Ponty 1963, 2002, Crossley 2001, Reuter, 1999). This means that we can potentially use Merleau-Ponty's philosophical concepts to look beyond the mind-body and subject-object dualism that is so pervasive in Western thought and culture to consider a non-dualist framework that can account for phenomena such as embodied intuition or tacit practical knowledge (Crossley 2001, Leder 1990, Grosz 1994, Williams and Bendelow 1998).

Methods

Dance as Empirical Focus

As Martinkova and Parry (2011) argue, phenomenology is a philosophical exercise, not an empirical discipline (see also Ravn and Hansen 2013). This does not, however, mean that phenomenological analysis of a particular aspect of human experience cannot benefit from engagement with empirical data (Thorndal and Ravn 2016). Indeed I would suggest that if we are truly to go beyond dualism in our understanding of human behaviour and human being, then we must not only theorise embodiment adequately in philosophical terms, but also engage empirically with the lived experience of embodied practice.

Dance is not alone in blurring the boundaries of traditional understandings of what constitutes mental or physical, with everyday actions such as tying shoe laces or driving a car able to reveal to us the phenomenon of tacit practical bodily knowledge (Edwards 1998, p.51). The embodied practice of dance is, however, a particularly interesting area for the exploration of non-dualist understandings of pre-reflective body-subjectivity because of the phenomenological foregrounding of the body (Klemola 1991). As Block and Kissell argue:

The analysis of movement, and particularly dance, helps us to see in an extraordinarily effective way the meaning of embodiment ... It provides a uniquely powerful insight into what it means for us to be 'body-subjects' – body-knowers and body-expressers – wholly human. (Block and Kissell 2001, p.5)

Furthermore professional dance training and practice call for very high levels of awareness of, and indeed the capacity for reflection on, what are primarily pre-reflective or tacit embodied phenomena such as practical knowledge or somatic modes of attention (Csordas 1993). Attending to dancers' accounts of their lived experience thus offers the researcher a perspective on embodied existence that is far more in-depth and sustained than is available from the glimpses we get through our own everyday lives where our bodies and practical knowledge are not generally foregrounded in our conscious experience (Leder 1990).

Data Collection

The following discussion draws on qualitative interview data from semi-structured in-depth interviews that were conducted by the author with sixteen professional⁴ dancers from UK contemporary dance repertory companies as part of a larger ethnographic study. A convenience sample was recruited from two different dance companies, one where I was able to interview all the dancers in the company (twelve) and one where I was able to interview a small number of dancers (four) whose availability was dictated by the rehearsal schedule. Interviews lasted between 45 and 75 minutes and were conducted in office space at the dancers' place of work during natural breaks that occurred when a particular dancer was not needed to rehearse a particular sequence.

⁴ My use of professional dancers for this study was based on an understanding of these participants as potentially having 'a heightened embodied awareness' (He and Ravn 2017, p.4) because of their status as 'body experts' (Legrand and Ravn 2009, pp.393-394): a group whose training and daily somatic practice involves focusing on their bodily experiences (see also Ravn and Hoffding 2017).

The sample was mixed in terms of gender (eight male: eight female), and the age range (approximately eighteen to forty-five years old) was as extensive as could be hoped for in a profession where pre-professional training can last up to twenty years and many retire in their thirties. The sample was also mixed in terms of ethnicity, comprising eight white British and four black or minority ethnic British dancers, as well as a Scandinavian, a South American and two dancers from African countries, one of whom was black, the other white. I had spent time as a researcher-observer with each of the companies before this phase of the research and was thus known, at least by sight, to my participants, helping with the establishment of rapport at the start of the interviews. Ethical clearance was sought from my home institution (university) prior to any contact with participants, and full informed consent procedures were implemented with each participant before interviews began.

Following Standal and Engelsrud's (2013) distinction between phenomenology as philosophy and phenomenology as methodological orientation, this study can be described as based in phenomenological philosophy but as employing qualitative methods of data generation. Thus although my approach was 'characterised by an attitude of sensitivity towards the experiences of the research participants' (Standal and Engelsrud 2013, p. 162), I did not follow a phenomenological methodology in the generation of data. Rather I have used the method of qualitative research interviewing in order to generate empirical data which takes the form of 'rich, in-depth, detailed descriptions of participants' own concrete, lived experiences' (Allen-Collinson 2016, p. 16). This data can then, in turn, be used to 'strengthen and further develop [philosophical] phenomenological concepts and descriptions' (Thorndal and Ravn 2016, p.5) while at the same time Merleau-Ponty's phenomenological concepts can be

‘put to work’ (Gallagher and Zahavi 2008, Ravn and Christensen 2014) ‘in providing conceptual clarification of the phenomena of participants’ lifeworlds’ (Allen-Collinson 2016, p.15).

The aim of my interviews was broadly to engage dancers in conversation about the experience of dance and being a dancer. I presented myself as inexperienced in dance, an interested outsider who was keen to hear their insider perspective on their practice. During the interviews I questioned dancers about some of the more mundane aspects of dance, including the processes they went through when learning a new choreography and what it meant to say that they had successfully learnt it. Such questions were intended to tap into dancers’ reflections on the pre-reflective or taken-for-granted aspects of their embodied practice, and to encourage further reflection on any areas that their previous training and practice had not already led them to reflect on.⁵

Data Analysis

The analysis presented in this paper is focussed on ideas or concepts that arose in the data from my interviews – those around ‘getting’ movements ‘into the body’; and those around movements being embodied differently by different dancers – that I have brought into conversation with Merleau-Ponty’s (2002) philosophical theorisation of the corporeal schema and body subjectivity. I employed a qualitative thematic approach to the analysis of the empirical data which attended to the themes emerging in the data itself (see, for example, Bryman 2016, chapter 24). Thus although my approach to the data was sensitised by my engagement with phenomenological

⁵ As Allen-Collinson (2016, p. 17) notes, the participants in an empirical phenomenology study of this sort essentially act as ‘co-researchers’ in that they ‘provide the expert accounts of their own experiences and lifeworlds’.

philosophy, my interaction with the data was not characterised by a rigid phenomenological methodological approach or by the attempt to rigidly apply Merleau-Ponty's theoretical framework.

The aim of this approach to data analysis was to remain sensitive to the expression and experiences articulated by the dancers in their own words so that this data might illuminate aspects of Merleau-Ponty's philosophy (Thorndal and Ravn, 2016, Ravn 2017), while at the same time drawing on Merleau-Ponty's philosophical concepts to illuminate aspects of dancers' experience (Standal and Engelsrud 2013, Allen-Collinson 2016).

Thus my approach to data analysis involved attending to the resonances between, for example, the dancers' concept of 'in the body' and the Merleau-Pontian (2002) conceptualisation of the corporeal schema, without seeking to straightforwardly reduce one to the other and thus collapse their potential to speak to each other. I argue that bringing Merleau-Ponty into conversation with contemporary dance in this way allows me to bring philosophy and practice together – without prioritising one over the other – to develop a richer and more nuanced perspective on embodiment and the corporeal schema than I would suggest is possible from either side of a dualist distinction between philosophy and practice or between theory and data.

Exploring the Embodied Practice of Dance in Relation to Merleau-Ponty's Concepts Habit and the Corporeal Schema

Incorporation: the sedimentation of habit or bodily knowledge in the corporeal schema

There is no 'normal' learning situation for the professional contemporary dancer working in a repertory company as each new situation has different elements. Dancers may, for example, in their daily work be learning discrete movements from a rehearsal director or choreographer; learning a new choreography or set of movements as they are created in the course of the rehearsal; learning a new style or way of moving which will enable them to improvise and create new movements or choreographies from a choreographer; learning a choreography that has already been created in some other context from a video; learning pre-choreographed movements from fellow dancers; learning to dance with and perhaps in unison with other dancers; or learning to dance a solo.

My interviewees did not, in fact, use the term 'learning' to refer to these processes, instead making use of the terms 'picking up', which generally referred to taking a movement such as that performed by a choreographer and recreating it with their own body, and 'getting it into the body', which generally referred to processes which achieved a kind of bodily knowledge of a choreography or style such that the dancers do not have to think out the movements in their heads as they perform them.

Reflecting on what it meant to her to say that she had learnt a sequence of movement Carrie, for example describes how:

Your body really knows it after a while and then to really know a choreography you don't have to think about it. [Carrie]

Knowing a choreography is thus characterised by the movements being available to the dancer at a pre-reflective level as he or she performs the sequence, without need for conscious reflective thought. Knowledge of dance is tacit and pre-reflective not only in the sense that the dancers do not need to or have time to think about the steps in a learnt choreography -

... some parts of it are very fast and unless it's in the body – once you start having to think about the next step – you're going to be behind.
[Anthony]

- but also in the sense that often they actually don't know them in a reflective sense:

I just remember points as in I remember the leg going there and then that will link with what's coming next which wouldn't directly mean the next step but just something in the next phrase. [Adam]

Here we see Dreyfus's expert in action, responding intuitively to environmental cues without having any mental representation of the rules governing their actions in their minds. Furthermore, as Adam describes, the acquired skill is embodied, meaning that that dancers must perform the dance in order to access their bodily knowledge of the sequence. For Merleau-Ponty, the embodied nature of such tacit intuitive knowledge is captured in the notion of habit:

It is knowledge in the hands, which is forthcoming only when bodily effort is made, and cannot be formulated in detachment from that effort.

(Merleau-Ponty 2002, p.166)

This bodily knowledge was frequently associated with the idea of laying down ‘muscle memory’ in the dancer’s accounts. Interestingly, however, the concept of muscle memory (Reich 1942) and my interviewees’ acknowledgement of its central role in learning dance, did not appear to remove the need for or to wholly encompass the concept of having or getting a pattern of movement ‘in the body’.

The dancers’ concept of ‘getting it into the body’ covered the narrower notion of muscle memory, but also alluded to something less mechanical which allowed variation in learnt movement. Indeed, as I will discuss further in the next sub-section, having a movement ‘in the body’ in this way gave the dancer a pre-reflective feeling or inclination about the appropriateness of a certain movement to a certain style. Again, this resonates with the phenomenological model of skill acquisition, which allows for a shift from rule-following to flexible intuitive engagement when the learner develops expertise (Dreyfus and Dreyfus 1986), rather than the Information Processing model, which suggests the expert acts in accordance with (complex but rigid) rules processed at the subconscious level (Moe, 2004).

This articulation of expertise and intuition as having a movement ‘in the body’ can be further usefully explored in relation to Merleau-Ponty’s (2002) discussion of the

process of the ‘incorporation’ of a behaviour, action or movement into the corporeal schema as a habit. Merleau-Ponty emphasises that our actions have a habitual aspect in the sense that they come into our bodily movement repertoire through repetition and practice. Previous action is sedimented, in Merleau-Ponty’s terms, into our pre-reflective corporeal schema, thus shaping our current movement possibilities and proficiencies, our tacit sense of ‘I can’.

The embodied nature of the learning process – repetition and practice to the point of sedimentation – is thus also highlighted in Merleau-Ponty’s (2002) account. This serves as a useful corrective to the Dreyfus model (Dreyfus and Dreyfus 1986, Dreyfus 1992) which emphasises the cognitive rule-following dimension for the learner at the point before expertise and mastery have been developed, and has therefore been accused of disembodiment of the learning process (Bailey and Pickard 2010). Indeed in the lived experience my interviewees, it was emphasised that the dancers not only must perform the dance to produce the correct context to evoke their bodily knowledge of the sequence, but they also needed to physically perform the sequence, rather than be exposed to a series of instructions or isolated movements, in order to acquire the skill:

I think I would have to do it, and really get it into the body... you can watch it as many times as you like but it’s completely different when you’re doing it, it’s such a physical thing and the only way you can really do it is to actually physically go and keep doing it and keep doing it and that’s basically the only way it’s going to get it into the body. [Anthony]

Dancers also emphasised that learning a movement, or rather getting that movement ‘into the body’, was characterised by a moment at which one suddenly had a grasp or mastery of the movement as a whole:

You’ll be doing it and all of a sudden you’ll just go “oh right – this is how they do it” and then you’ve got it. [Michaela]

This again resonates with Merleau-Ponty’s description of incorporation into the corporeal schema and its occurrence not as a series of separate propositions, but as a whole or *Gestalt* (Merleau-Ponty, 2002). A sense of movement memory as a (temporal) *Gestalt* is also suggested in the work of dance(r) phenomenologist Maxine Sheets-Johnstone with the idea that:

kinaesthetic memory is structured along the lines of ‘kinaesthetic melodies’ and *familiar* ‘kinaesthetic melodies’ are inscribed in kinaesthetic memory. (Sheets-Johnstone 2009, p. 261).

The habitual and pre-reflective aspects of expertise – here understood as the incorporation of particular ways of moving into the dancer’s corporeal schema – are also illuminated in discussion of how difficult dancers find it to ‘take correction’ on a movement sequence that is already ‘in the body’. For example, in describing her frustration when choreographers changed their minds about a sequence of movements, Michaela speaks of having to change a particular element of a movement

pattern that she had worked hard to ‘get in the body’ as ‘*just throwing it all away*’ [Michaela]. Habits of movement in the corporeal schema do not, then, take the form of a series of steps or set of rules which can be disaggregated, but rather of an overall spatial and temporal movement pattern or ‘kinaesthetic melody’ (Sheets-Johnstone 2009) .

The idea that a certain pattern of movement is absorbed into our pre-reflective bodily orientation to the world is further illustrated here in Jamie’s comment about how, even after taking correction, he still wanted to move in the original way:

It was one of the initial phrases that he got us to change and then go back to the initial phrase again and there was lots of the same – similar – movement, but because we had changed it you kept wanting to go into the original. [Jamie]

The notion of ‘wanting’ to follow the learnt pattern or movement habit was further explained by Jamie in terms of bodily memory:

The problem ... is muscle memory – you know what you’re doing and then you think it’s going into something else. [Jamie]

It is interesting that this description is phrased in terms of wanting, knowing and thinking – activities which would traditionally be considered to be based in the mind rather than the body. Yet the dancer’s evocation of embodied muscle memory as ‘the problem’ and his clear frustration at the difficulties of changing a pattern of

movement once it is 'in the body' reveal that 'wanting to go into the original' is not a mental desire – quite the opposite, he is consciously trying to follow the new directions given by the choreographer – but a pre-reflective bodily phenomenon which guides his movement despite his efforts to change it. To 'know what you are doing' in this case is thus an example of pre-reflective know-how or tacit practical bodily knowledge and to 'think it's going into something else' is a bodily understanding of the situation based on this. Thus knowledge and memory of movement for dancers cannot be thought of in traditional terms as a purely mental or intellectual capacity, nor is it experienced as a mere physical reflex, indeed it is described in terms of thought, knowledge and desire. Rather it is habit, in Merleau-Ponty's non-dualist sense of the word, a skill *incorporated* into the body which shapes our subjective experience of the situations presented to us in the world.

In Steven's description of the difficulties of taking correction, he, like Jamie, invokes a notion of a tension between the new direction being given and the patterns of movement already set in the body:

Sometimes you have to put like a little tag, like a little mental tag where you have to go – “OK it's this, not what you were doing before” and that's kind of how rehearsals work like when you rehearse someone will give you a correction and I'll almost put like a little flag or mental checkpoint in my mind which is a very intellectual thing rather than a sensory thing – it's like I'm going to put the sensation and before I have to recreate that sensation I have a checkpoint in my mind to go “OK it's this, not that” while I'm moving. [Steven]

The Dreyfus model of skill acquisition (Dreyfus and Dreyfus 1986, Dreyfus 1992) suggests that once a certain level of expertise or mastery has been reached practitioners will respond to situations intuitively rather than having to consciously analyse or process the environmental cues in relation to learnt rules. Yet the model does allow that the expert's intuitive grasp of his or her environment can experience interruptions when problems or challenges occur and need to be overcome (Eriksen 2010, p.76). In Steven's account of taking correction we can see that his intuitive 'sensory' grasp of his dancing environment and how he should best respond to it is challenged by a change to the movement sequence being imposed by the choreographer or rehearsal director. At this point, Steven describes how he interrupts his pre-reflective 'sensory' memory of the movement sequence in order to engage in a cognitive, rule-based – 'intellectual' in his words – process where he has to consciously reflect on his movements before or as he performs them in order to implement the correction.

Thus although Steven is reverting to processing situational cues according to a new rule – *'it's this not that'* – he emphasises how different this is from his normal 'sensory' mode of awareness when he dances. This, again, supports the Dreyfus phenomenological model (Dreyfus and Dreyfus 1986, Dreyfus 1992) in its definition of the expert or master as someone who does not routinely enact skilled behaviour by analysing situations in accordance with rules at either the conscious or the subconscious level, but rather generally works in an intuitive mode with the capacity to switch to a more conscious analytical mode when a problem emerges.

This distinction between different modes of awareness in dance is also described in the work of Sheets-Johnstone in terms of a differentiation between two separate ways in which the dancing body-subject may be ‘thinking’ (or knowing or remembering) with regards to dance movements:

thinking *in* movement and thoughts *of* movement are two quite different experiences though ... in the experience of dance itself, the one thought now preempts the other or the two now exist concurrently (1981, p. 401).

For Sheets-Johnstone (1981), then, these two modes of thinking are experientially distinct, just as we saw in Steven’s differentiation between ‘intellectual’ and ‘sensory’ modes of awareness. Yet it is important to note that there is an ongoing interplay between these modes in the actual lived experience of dance. Indeed Steven emphasises that he has to be ‘intellectually’ aware of the correction at the same point at which sensory memory of that particular part of the movement sequence comes into play, and, of course, that all this happens ‘while [he is] moving’. His ‘intellectual’ engagement with the changed movement sequence is not, therefore, static or disembodied, but part of the embodied practice of adjusting the movement habit *in situ* so as to build up a new ‘sensory’ memory.

Intuition: Bodily knowledge and thinking in movement

The phenomenological perspective (Dreyfus and Dreyfus 1986, Merleau-Ponty 2002, Sheets-Johnstone 1981) suggests that it is, of course, possible to have thoughts about movement and to consciously reflect on or process environmental cues. Yet, the strength of the Phenomenological model of skill acquisition (in contrast with the

Information Processing model) it is that it allows that there also exists another level of awareness, which in Steven's terms is a 'sensory' feel for dance movements rather than an 'intellectual' understanding of how to behave. As the dancer masters a new movement sequence then, they shift towards a flexible, intuitive grasp of situation and thus towards a point where their thinking is *in* movement more than it is *about* movement.

As noted above, it was apparent from the dancers' comments that there is some leeway to adapt those movement patterns which have been incorporated into the corporeal schema. Indeed once a pattern of movement is 'in the body' it becomes possible for the dancer to adapt the movement or improvise in the same style without the need for conscious reflection on the nature of the style and the types of movements it encompasses. Such adaptability or flexibility is a key facet of intuitive expertise when the challenges presented by the environment are not too far outwith the realms of normal (Dreyfus 1992, Eriksen 2010).⁶

This is another aspect of the phenomenological model of skill acquisition (Dreyfus and Dreyfus 1986, Dreyfus 1992) that is illuminated by a return to Merleau-Ponty's concept of habit. For Merleau-Ponty (2002), pre-reflective habitual dimensions of action are, in fact, dialectically related to our ongoing activities so that they are shaped *by* action as much as they are shaping *of* it. Dancers' establishment of pre-reflective knowledge of new movements or styles of movement when they learn dance – 'getting it into the body' – can thus be understood as habit formation in the Merleau-Pontian sense of the dynamic acquisition of adaptable competencies.

⁶ Unlike in the cases discussed above where taking correction called (interrupted) the dancer out of pre-reflective intuitive mode into deliberate action.

Previous ways of moving are shaped or changed in accordance with the dancers' exposure to new types of behaviour and their ongoing repetition of behaviours means that the habits of movements 'in the body' are continually evolving.

Thus one dancer described how being able to pick up movements quickly from a choreographer becomes easier over time as he incorporated more of the teacher's patterns of movement into his corporeal schema and thus developed a feel for the style that allowed him to understand how new movements might arise and how they would be connected to each other:

The more you work with somebody, the easier that becomes because you understand their style, you can almost second guess what it is they're going to be doing next. [Daniel]

'Getting a movement into the body' or corporeal schema thus included something more than the pattern of the steps so that the dancer has a practical sense of the movement which allows them to anticipate or 'second guess' what will come next while they are in the process of working with a choreographer. This practical sense is also experienced by dancers as an inclination about whether something is wrong or right – whether the movement they have improvised or recalled is in the appropriate style or not, for example – but this judgement does not necessarily correspond with a conscious awareness or reflective process, rather it is available at a pre-reflective level, becoming apparent as a tacit sense of appropriateness and ability to adapt as the movement is actually being performed. This practical intuition which allows dancers

to improvise in a certain style which they have incorporated ‘into the body’ is, in Sheets-Johnstone’s (1981) terms, a process of pre-reflective ‘thinking *in* movement’.

Inter-corporeality⁷: learning the habits of another body-subject

The final sections of analysis in this paper further expand a phenomenological perspective on skill acquisition through a deeper engagement with dancers’ experiences of their expertise as situated in the lived moving body. I focus first on how contemporary dancers experience movements not as abstract mental forms or ideas, but as situated and embodied (incorporated) in particular dancing bodies. The final sub-section then explores the ways in which expert dancers experience the possibilities for and potentialities of their dancing bodies in terms of the accumulation or layering of those habits which are constitutive of the corporeal schema.

As noted above, habit is necessarily perspectival in that it is situated in and accessed through the individual dancer’s body and cannot be conceptualised in abstraction from the position and interaction of that particular body in the world. Thus while it is possible to transfer certain aspects of bodily knowledge between bodies, the knowledge, or rather the practice or movement that that knowledge entails does not have a form other than its manifestation in bodily action. Skilled movement is thus not something that takes form in *a* dancer’s body, it is something that takes form in *this particular* dancer’s body. This movement can then be taken on by another dancer who must go through a learning process in order to get the movement ‘into the body’ or corporeal schema which involves adapting it to their body. Thus as Louisa explains

⁷ Please see [author reference](#) for a fuller discussion of Merleau-Ponty’s notion of intercorporeality in relation to dance.

in relation to learning a choreography that has been developed or made with other dancers:

If it's made on somebody else and they have a whole history of why they made those movements - you kind of get it second hand and I think it takes... longer to sit in your body. [Louisa]

It has been seen above that new actions or behaviours such as working with a different choreographer can shape the actions and habits of a dancer allowing them to pick up new choreographies or styles and incorporate them into the corporeal schema so that they become second nature to perform. It should not, however, be assumed that the transmission of these habits of movement between dancers involves the perpetual reproduction of some kind of 'original' form of the movement across different dancing bodies. The embodied nature of dance and the transfer of practical knowledge mean that the learning of movements in dance is a process of learning a bodily way of being or bodily attitude towards the world from another dancer.

In learning a movement, the dancer is therefore required to directly engage with and perhaps take on aspects of another dancer's embodiment. This can add another layer of difficulty to the problem of picking up movement from another moving body, particularly where the dancer experiences their own body as in some way significantly different from that on which the movement was made. This is illustrated in the following quote from a male dancer discussing the Graham technique, created by Martha Graham:

... especially for a lot of guys, especially Graham because it was created by a women, maybe a lot of males don't really appreciate it or understand it, because it is very, quite feminine, because obviously the feminine body is quite different to the male so it's going to be open to certain exercises a bit different. [Anthony]

The dancers thus placed a great deal of importance on the actual process of how a movement had been made. Choreographers do not generally produce movements in the abstract – this is particularly true in contemporary dance where the style and range of movements is far less defined than, for example, classical ballet and thus cannot be evoked in the classical vocabulary of *pirouette*, *arabesque*, *pas de chat*, etc– but create movements while they are working with particular dancers in particular companies. It was understood, then, that these movements would reflect something of the dancer, or the body, the movement had been created ‘on’.

The majority of my interviewees stated a strong preference for having the choreographer come to the company and make the work on their bodies, as they generally felt that trying to get movements created on other dancers into their bodies was a difficult, time-consuming and often boring exercise which rarely produced results of a quality comparable to works produced *in situ*. This is seen in the following quote from Suzi who describes one of the reasons she prefers to have the choreographer come to the company to create a piece:

When the choreographer comes in and we're starting from afresh then you can put your own ideas and then have the movement [fitted] to your

body rather than trying to pick it up from someone else's movement because they've obviously made it up previously so it sometimes may be awkward, especially if you're working with partners and they're different heights and stuff like that. [Suzi]

'I can': the habit-body experienced as our potential for engagement with the world

It is also important not to consider a dancer's body a *tabula rasa* when it comes to learning new movements. Rather we all already experience the world from the positionality that Merleau-Ponty (2002) refers to as the lived-body or habit-body. For each dancer some new movement habits are harder to incorporate than others, as one dancer expressed:

There will be some things that you just can't get, you know, maybe because of how your body is. [Adam]

Importantly, this is not an issue about having achieved particular level of skill development. Indeed most of the dancers' understandings of the different natural facilities for movement of different bodies were not necessarily linked to notions of being better or worse at executing pre-defined movements, but rather to ideas about how movements were necessarily different on different people's bodies. Thus one dancer described how:

... different people's bodies ... will want to do something slightly different, again because maybe that feels better or maybe they have a clearer pathway to a certain area of the body which they'll accentuate, or the

accent will be in a slightly different place depending on their own interpretation of the form. [Steven]

It was not, however, considered that a dancer's individual style of movement could be wholly explained by (innate) physical aspects as body shape and flexibility. Carrie, for example, evokes a notion that some styles of movement are more 'naturally suited' to her as a classically trained dancer than others:

... because I'm mainly classically trained – so I've done a lot of ballet – the lyrical graceful stuff is more suited to me than some styles of contemporary ... I'm more natural with the flowing stuff than with the staccato stuff. [Carrie]

Her dancing body is experienced by her as a 'classically trained' dancing body and thus as a body with certain 'natural' tendencies (towards flowing graceful movement, for example). As Merleau-Ponty (2002, p.167) suggests, then, 'habit has its abode in neither in thought nor in the objective body, but in the body as mediator of the world'. Carrie's classical training has been incorporated into her corporeal schema and affects how she experiences dance –in terms of whether something is suited to or natural for her or not – and how she experiences her habit-body in action.

Merleau-Ponty's concepts of habit and the corporeal schema allow not only that movements carry the histories of their (re)production with them as I have described above, but also that the history of the body is manifest in the way that new movements are perceived, learned and carried out. Thomas comments that 'the

individual styles and techniques of modern dance choreographers [e.g. the Graham or Cunningham techniques] do not necessarily look right on ballet dancers, whose bodies are so deeply marked by their training' (Thomas 2003, p.112). This appears to resonate with a trend for those of my interviewees who were classically trained to experience their dancing bodies as classical trained bodies. Daniel, for example, describes his experience of an aspect of contemporary dance – lowering his centre of gravity – which he believes his classical training leads him to experience as problematic:

... because I trained in ballet I find it quite hard to let go of my body – ballet's quite a rigid technique, it has quite a lot of line in it, it has quite a lot of clarity in it, but sometimes it's hard to drop the weight. [Daniel]

Daniel therefore describes his own style as a dancer as 'baggage' that he has accumulated over the course of his past experiences of different movement patterns and styles, sedimented movement habits that he carries with him in the form of bodily competencies and potentialities:

I think it's all of the things you've had along the way ... every new work that we do you pick up new skills and new ideas and when you move onto another choreographer you take all that sort of baggage with you ... so it's everything you've had along the way. [Daniel]

Personal style is, however, not something that is learned in the sense of being formulaically produced according to the main tenets or rules acquired through a training programme. Merleau-Ponty's understanding of our being-in-the-world in terms of body-subjectivity is significant here as it points to the ways in which our intuitive pre-reflective bodily orientation towards the world is more than simply the product of procedural physical training. As Tara says of a dancer's movement style:

I think it's personal to the individual – like say if two people came from the same college who had the same training – they could be completely different styles – it's not something that's trained or anything, it's just something that comes from you, without you thinking about it, it'll come through. [Tara]

In Michaela's account of her own particular style or bodily way of being, we see that both personality and athletic experience are understood as coming together to produce her sense of 'me' and of her 'individual presence' as a dancing body-subject:

I think mine comes from my actual personality and what I've done in the past – not necessarily dance – but I think with all the net-ball training and gymnastics and athletics and all that kind of thing plus other things that have gone on in my life as well – that's all become part of me and that's contributed to the way that I have my own individual presence on stage. [Michaela]

Dancer's bodies were thus understood to have particular facilities or bodily preferences for particular types of movement that could not simply be explained in terms of physical capacity or training. In the following quotation Rhianna explores her relationship to two different contemporary dance techniques: Graham technique and Cunningham technique:

I used to, oh God – I used to be awful at Graham [technique], ...but that's because of the lack of flexibility. But yeah, I think certain people suit certain, but also I think it's habit that makes, that sort of sets that, habit of what you do. There's also, I mean naturally some people move faster and some move slower and some prefer like, like I think Cunningham [technique] is quite sort of unnatural, I think it's sort of quite robotic and really funny co-ordination and ... I have to really concentrate on the co-ordination of those, whereas Graham I really understand the co-ordination in that, I really feel it in my body, I feel that easy – the patterns and the way things fit together - ... but then I've done more Graham than Cunningham, I don't know, yeah, I think certain people just – different types of action. ... I find actual probably executing the movements in Cunningham easier but I prefer Graham now. [Rhianna]

Rhianna's preference for Graham technique is articulated not as finding it easier than Cunningham technique, but as a better 'understanding' of 'the patterns and the way things fit together'. This fits with Merleau-Ponty's conceptualisation of habit in terms not of automated response to environmental stimuli, but of bodily understanding: 'it is the body which "understands" in the acquisition of habit' (2002, p.167). And it is

this understanding, the fact that Graham technique ‘makes sense’ to Rhianna at the bodily level that figures it as an intuitive skill within Rhianna’s movement repertoire. In contrast to the ‘unnatural’ feel of Cunningham technique and the associated need for concentration, then, when Rhianna practices Graham technique she does so in the mode of intuitive expertise from Dreyfus’ skill acquisition model. As Merleau-Ponty suggests: ‘To understand [a movement] is to experience the harmony between what we aim for and what is given’ (2002, p.167)

Conclusion

The work of this paper has been to contribute to existing critical development of the phenomenological model of skill acquisition in sport and physical cultures (see, for example, Breivik 2007, Breivik 2013, Breivik 2014, Moe 2004) by bringing a sustained empirical engagement with the situated lived experience of dancing embodiment into conversation with the non-dualist phenomenological philosophy of Merleau-Ponty.⁸ In particular the notion of body-subjectivity based in the corporeal schema as a sense of (self- and other/world-) awareness has been significant for exploring how traditionally mental capacities such as ‘knowing’, ‘wanting’, ‘thinking’, ‘remembering’ and ‘understanding’ are evoked in the dancers’ accounts of their practice as phenomena which are embodied and not always foregrounded in (or indeed available to) reflective consciousness. Attending to these somatic modes of attention without assuming they are underpinned by some form of mental representation but without reducing them to automated stimulus response has thus allowed me to go beyond discussing what dancers think *about* dance, to engage with the complexity of thinking *in or through* the embodied practice of dance for these practitioners.

Moreover, in Merleau-Ponty’s notions of habit and the habit-body, we avoid the assumption made within both the information processing and the Dreyfus skill acquisition models that each new skill-learning experience follows a trajectory from no skill to fully skilled (Bailey and Pickard 2010, Larsen 2016, Standal and

⁸ Both the empirical dimension to this research and the use of Merleau-Ponty’s philosophy of embodied subjectivity, have allowed a more in-depth and more embodied understanding of dance learning and expertise than is typically available through skill acquisition models generally drawn on in Sports Studies (Bailey and Pickard 2010).

Aggerholm 2016). Rather Merleau-Ponty's conceptualisation allows us to engage with dancers' experiences of their bodies as always already habit-bodies endowed with somatic awareness and somatic knowledge which are adapted and augmented as we continue our interaction with the world around us.

Habit, as conceptualised by Merleau-Ponty is not strictly delimited, routinized and constraining, rather it is continually evolving to open up our possibilities for engagement with the world around us – 'habit expresses our power of dilating our being-in-the-world, or changing our existence' (Merleau-Ponty 2002, p.166) – and it is through an in-depth empirical and philosophical exploration of habit and bodily expertise such as the one developed in this paper that we might open up new possibilities for a non-dualist understanding of athletic embodiment.

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