LECTURERS' EXPERIENCES OF COMPUTERS IN EVERYDAY ACADEMIC PRACTICE

A phenomenological study

Submitted by

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CERTIFICATE OF AUTHORSHIP/ORIGINALITY

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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ABSTRACT

Although higher education teaching and learning practices have undergone many transformations through computers and their related technologies, the human dimension in lecturers' everyday work at the digital interface has yet to attract attention. This thesis investigates lecturers' experiences of computers in everyday academic practice through phenomenology and an understanding of practice shaped by Michel de Certeau's *The Practice of Everyday Life* (1984). Five lecturers working in the field of Physical Education in Australia participated in the research, each doing two in-depth interviews in which their experiences of a typical day in the academic office were explored through rich descriptions.

A modified phenomenological approach to researching lived experience was adopted to structure the research design and data explication process. The lecturers' descriptions of their experiences brought to light a primary production of routine and taken-for-granted practices, which lecturers intentionally carry out at the computer. Routine practices involved 'checking email' and 'communicating through email'; taken-for-granted practices involved processes of 'tweaking and reworking', 'searching and sifting', and 'bringing things together' at the computer. All of the lecturers experienced these everyday practices through different temporal and spatial dimensions, which also constituted the two main variant themes of the phenomenon.

Phenomenological analysis allowed the identification of the importance of the 'lived body' and the essence of the phenomenon, whereby the 'lived body' operated at a concealed level in the lecturers' relations with their computers. At times, the descriptions revealed that bodily awareness was in the background of the lecturers' experiences of computers and in harmony with the practices where it was unfelt. However, with the passage of time, awareness of the body moved into the foreground of their consciousness in two ways: first, in the feelings of 'restriction' which surfaced at the desk while they were working on their

computers, and second, in the 'painful corporeal reminders' they became aware of later in the day. Both of these embodied experiences could be seen as a concealed secondary production entailing a practice of 'balance'. In this practice, numerous small tactics were used by the lecturers to restructure their interactions with their computers.

The findings of this investigation revealed not only a primary production in which the same everyday academic practices were being produced in many different ways, but also a concealed secondary production of tactics - a *poïesis* - involving a deep bodily-based human agency that played out in the lecturers' experiences of their computers. Through the secondary production, the centrality of the 'lived body' in the lecturers' experiences came to the foreground, revealing yet another dimension of academic labour at the digital interface.

CHAPTER ONE: INTRODUCTION

The background to this study

When I started work as a tertiary lecturer two and a half decades ago, computers were not an integral part of academic practice. Since that time, however, computers have not only become prominent in the academic workplace, but are now taken for granted in academic practice. After reflecting on my past experience as an academic, and drawing a comparison with my present experience, I began to think more deeply about (a) how my academic work has changed as a result of the ubiquitous computer; and, (b) about what it means to be a lecturer in contemporary higher education.

This investigation also began at a time when I started to think more deeply about the turmoil in higher education and universities. There was a steady flow of writings that described how both were undergoing major changes. Of particular interest to me were those written by Barnett (2004, 2005, 2011) who questioned how 'the university' and the kind of education it offers might be understood today? He observed that higher education was changing rapidly from an elite system into a mass system, alongside other large changes that were taking place across the world. Higher education faced formidable challenges that were being driven by: "globalisation; the revolution brought by the arrival of digital technologies; the interpretation of higher education with the wider host society; agendas of participation, access and equal opportunities; marketisation of higher education, with institutions identifying their knowledge services for potential customers; competition; the development of systematic and nationwide state sponsored quality evaluation mechanism" (Barnett, 2004, p.63).

Barnett (2004) noted that globalisation and the arrival of digital technologies not only had an immediate impact on the epistemological base of universities which now catered for the 'knowledge economy', but also on academics who had to operate differently in that endeavour. According to Barnett (2000), universities

market "knowledge wares in forms of academic capitalism; in the process its knowledge becomes performative in character and loses its power to enlighten" (p.409). Consequently, academic practices were changing as universities were being run as businesses and taking on "the agendas, the values, and the operating principles of the wider society" (Barnett, 2004, p. 66). Furthermore, the kind of knowledge that was being produced in contemporary universities needed to be questioned (Barnett, 2004). He emphasises that the changing face of academia gave rise to serious questions about the purposes of higher education; in turn, the changes in academic practices and lecturers' self-understandings need to be considered (Barnett, 2004).

Other aspects which Barnett (2004, 2005, 2011) brought to light were: (1) universities were no longer the sites of intellectual and elite productions, as understood in a traditional sense of liberal education; (2) academics were operating in a modern world which was uncertain and super complex; and, (3) a crucial issue in higher education was not one of knowledge alone, but of the kind of *being* (in the sense of continental European philosophy) that was embodied in students as they acquired discipline knowledge through a curricula which was supposed to represent certain transforming values and dispositions associated with the discipline. For example, students learn 'to become' teachers, doctors and health care workers through knowledge and practices which are particular to those professions. Barnett (2004, 2005, 2011) highlighted the deep relationship between knowing (epistemological) and becoming (ontological), and argued that this relationship warranted serious consideration in contemporary higher education where so many changes were taking place.

During this investigation, Barnett's (2000, 2005, 2009, 2011) appreciation of the relationship between knowledge and people's 'being' resonated with many of my thoughts regarding lecturers, computers and the changing nature of their pedagogical practices. Without doubt, computers were having a huge impact on my pedagogical practices and general academic work. Computers not only challenged my role as a lecturer, but were also changing the way in which I taught

and presented my specialized knowledge areas that focused on educational psychology, and subjects involving learning and teaching for graduate teachers specializing in health and physical education. Consequently, I thought more deeply about my relations with the computer, and about the kind of transformation that was occurring as I interacted with it, since it was clearly playing a major part in the 'technologisation' of my knowledge and teaching practices. Over time, I came to realize that here was a hidden world of academic 'being' and knowledge-based practice, playing out between lecturers and their computers. It was an area yet to be explored.

As I worked mainly with lecturers who specialised in disciplines of health, physical education and dance, I naturally began to wonder about their relations with computers, and what an investigation of this nature might reveal. It needs to be noted that the lecturers in this study worked in contexts that privileged healthy, moving bodies. I was interested in how these lecturers were experiencing their everyday academic practice, particularly since computers had begun to play an integral role in the delivery of their knowledge. Not only did I begin to wonder about how their discipline knowledge with its focus on the corporeal body was changing, but how they experienced computers in their world of academia.

This thesis reflects an emergent genre of research that Green and Hopwood (2015) identify as philosophical-empirical inquiry. The thesis is situated at the intersection of three distinctive literatures: (1) the field of higher education; (2), socio-cultural studies which encompass psychology, sociology and philosophy of technology; and, (3) practice theory literature. While considerable research has been undertaken on education and computer technology in the field of higher education, very little has focused on lecturers' experiences of working with computers, particularly from a subjective perspective which highlights the human side of working with computers.

At the start of the study I came across a large body of literature that dealt with the changing nature of academic context, i.e. changing practices and technologies.

Focus was on how academics' work was changing or needed to change to keep up with a transforming higher education sector, how traditional teaching and learning practices were being challenged or augmented by digital technologies, and how students were adapting to new learning technologies. A social deterministic understanding of technology in which computers are seen as the product of human agency and as tools to be used by students and lecturers to achieve specific outcomes shapes many of the views expressed. These views contrasted with those of Ihde (1993), who argued that computers are non-neutral artefacts because they extend a person's understanding and experience of the world through the ways in which they are used and incorporated within practices.

Another area that stood apart in the higher education literature was evident in two different sections of research that involve academics and teaching. The first originated in the field of phenomenography and dealt with lecturers' conceptions of practice. The second originated in a social field that focused on the beliefs and attitudes of academics. Although computers and their related technologies may have featured in many of the discussions, none of these effectively explored lecturers' actual experiences or their relations with computers in everyday practice. However, one noticeable exception recognised the impact of Information Communication Technologies (ICT) on academics. McShane's research (2004, 2005, 2006) explored academics' subjective experiences of blended learning and their changing teaching self-conception as they combine online and face-to-face teaching.

Also, most compelling for me in the higher education literature, were the deep philosophical critiques (Dall'Alba & Barnacle, 2005, 2007) that were raising issues previously identified by Heidegger. Heidegger had questioned the ways in which education was becoming instrumentalised and technologised in contemporary universities. Dall'Alba & Barnacle (2005, 2007) were also questioning the effectiveness of contemporary education with its rapid instrumentalisation and technologisation in facilitating and sustaining authentic ontological processes in education. These authors, like Barnett (2004, 2005),

promote an 'ontological turn' in tertiary education, while still recognizing the importance of epistemology. They argue that ontological perspectives need to be considered as an alternative approach in addressing some of the key problems in higher education. Conventional education, with its narrow focus on epistemology, overlooks the ontological dimension of 'being' and 'becoming' which occurs as students embody discipline knowledge and the values associated with specific professions e.g., nurses and teachers (Dall'Alba & Barnacle, 2005, 2007). While much of the focus was on students' ontological experience and how this was changing, the impact of computer technologies on lecturers' 'being' and 'becoming' was much less of an issue.

Outside of the field of higher education, I found socio-cultural literature penned by psychology, sociology and philosophy of technology scholars in which people's relations with computers and modern technologies are critiqued. Many of these writers also theorize or philosophize - drawing upon their disciplinary orientations - about the co-construction that is taking place between humans and computers. This literature tends towards promoting a 'technological deterministic view' that suggests that artefacts, like computers, develop out of an on-going relationship with people. Both are undergoing transformation in the process, as well as the cultures in which they are located. When I looked further into this body of literature, none of the writers actually dealt with people's lived experiences of computers, despite the fact that people's relations with these technologies were foregrounded and questioned in the debates.

In addition to the literature that came from the field of higher education or critiqued human computer relations, I explored a third area that was located in practice theory. In the practice literature, clearly people's lived experience of computers was a neglected dimension, particularly academics' experiences in everyday practice. Although many of the theorists' explored practices that are routinely carried out in a general sense, they tend to favour an observational approach that bypasses the subjective experience of practices as they are lived in an everyday sense. This meant that the teaching, academic and general work

experience related to computers remained invisible, despite the fact that (a) lecturers were integral workers; and, (b) digital technologies were bringing so many changes to their general work modes.

What was noteworthy about the academic context in which I worked was the fact that most of its lecturers had specialized in areas that privileged bodily movement and healthy bodies. They taught physical education, dance, health and wellbeing; these were specialist areas involving healthy, moving bodies that were at odds with the sedentary work demanded by the computer, and the technologisation that it was bringing about in their practices. As a lecturer, with a dual background of Developmental Psychology and Adult Learning, I was naturally drawn to this paradox within their practices. Furthermore, despite the fact that academics from a broader context were generally spending more time working at their computers, little attention had been given to the subjective experience that underpins all the computer-based work they do. This seemed to be an area that like many areas of everyday experience had not been the subject of research.

Before the commencement of the actual investigation, and at a time when I was asking myself why it was important to investigate lecturers' subjective experiences of computers, I found myself revisiting early psychologists who had defended subjective experience and human psychological phenomena in research. Some of the points that William James made seemed to provide further justification for the kind of research I wanted to do. James (1890; 1902) acknowledged that there are always two parts to people's experiences, an objective and a subjective aspect. Although he conceded that the former had received more attention in experimental research, he also claimed that the latter should never be overlooked, however insignificant it may appear to be. According to James:

> …the inner state is our very experience itself; its reality and that of our experience are one. A conscious field *plus* its object as felt or thought of *plus* an attitude towards the object *plus* a sense of the self to whom the

object belongs – such a concrete lot of personal experience, may be a small bit but it is a solid bit as long as it lasts… (1902, p. 489).

Despite the fact that he always argued the scientific point of view was a legitimate point of view that should be pushed to its limit, he felt that it was not the only point of view. James (1902) wrote:

> …I believe it to be shallow, and I can now state my reason in comparatively few words. That reason is that, so long as we deal with the cosmic and the general we deal only with the symbols of reality, but as soon as we deal with private and personal phenomena as such, we deal with realities in the completest sense of the term (p.488-489).

Consequently I began to think about the question I needed to ask which would allow me to arrive at knowledge about the mental world of academics and their subjective experiences of computers in everyday academic practice. There was thus an educational as well as a psychological component to my interest in this area of research. Additionally, both of these areas were rooted in my personal history as an academic. Van Manen (1997) affirms that in phenomenological research, the question grows out of an intense interest in a particular problem or topic that fascinates the researcher. Even Moustakis (1994) notes: "The researcher's excitement and curiosity inspires the research. Personal history brings the core of the problem into focus" (p.105). He also points out that there are definite characteristics to a phenomenogical question:

> (1) It seeks to reveal more fully the meanings and essences of human experience;
> (2) It seeks to uncover qualitative rather than quantitative factors in behaviour and experience;
> (3) It engages the total self of the research participant, and sustains personal and passionate involvement;
> (4) It does not seek to predict or to determine causal relationships;
> (5) It is illuminated through careful comprehensive descriptions, vivid and accurate renderings of experience, rather than measurements, ratings or scores (Moustakas, 1994, p.105).

Aim and Intent

This investigation involves a specific group of lecturers and their interactions with computers. The aim of the investigation is to explore lecturers' lived experiences of computers as they go about their everyday academic practice. This will be done by capturing accurate descriptions of lecturers' experiences of computers in everyday academic practice, remaining true to the descriptions so that the phenomenon may be understood from the perspectives of those involved. The intention of the descriptions is to provide deep insight into academics' subjective world at the computer interface, particularly at a time when so much is written about the changing nature of academic work.

This research neither follows a hypothesis-testing method nor does it originate in a specific problem. Rather it employs a phenomenological method, a "discovery-oriented method" which as a human science research orientation follows a different logic compared with other methods (Giorgi, 2008, p.42). Phenomenology does not first posit a theoretical understanding of a problem that is initially speculative before being tested against actual empirical instances of a phenomenon (Giorgi, 2008). Giorgi (2008) confirms that phenomenology begins with raw data that requires concrete descriptions of specific experiences from the perspective of everyday life (Giorgi, 2008). Obtaining rich description is an integral part of this research process. The analysis of the descriptions takes place within certain parameters involving: (1) a disciplinary attitude which is that of academics in higher education; (2) a scientific phenomenological reduction process; and, (3) with an interpretive sensitivity to the phenomenon being investigated.

Thus, the aim of this research is to gain a deep understanding of lecturers' experiences of computers in everyday academic practice, through using a phenomenological approach. This involves capturing and analysing rich descriptions of lecturers' experiences of computers in everyday academic practice, remaining true to the descriptions so that the phenomenon may be understood

from the perspectives of the lecturers involved. Little is known about how lecturers are adapting to the changes that computer technologies have brought to their practices; even less is known about the implications of these changes for academics and the disciplines they work in.

The questions that shaped the research

Below I present the main question of the study followed by two sub-questions:

(1) How do lecturers experience computers in everyday academic practice? The following two subsidiary questions developed naturally from the main question as the study took shape:

(1) What might a rich description of their experiences disclose if it were sought from everyday practices which focused on ordinary activities at the computer in a typical day?; and

(2) How is the relationship between the lecturers and their computers experienced in a context that privileges the moving body?

The main question accentuates two aspects relevant for this study: (1) the use of a specific methodological orientation (phenomenology) which elicits the experiences lived by the participants through rich description; (2) an interpretation of practice which emphasises the everyday-ness of academic work at the computer. Thus, the main question points to an orientation that uses description of lived experience in a systematic and comprehensive way. In addition, it points to a perspective of practice that is located in the realm of everyday life. There is also a dialectic between the main and subsidiary questions, allowing for other hidden horizontal features to be interpreted within the description. Consequently, there are many layers in the way that description is used in this study to explore the questions. For that reason it is important that a detailed description is captured of the lecturers' experiences as they are 'lived' on a typical day in everyday practice that focuses on ordinary activities at the computer.

Why employ phenomenology to research lecturers' experiences of computers?

My initial 'wondering' about academics and computers engendered the choice of phenomenology in this study, and by the way in which I was experiencing my teaching preparation at the computer. Barnacle draws attention to the fact that phenomenology begins with a sense of wonder; that is not just the researcher asking the question of "I wonder why…?", but rather "opening up to the unknown, and in a sense, therefore, to the question in the hope that it will come listening for the question" (2001, p. 3).

The starting point for this investigation began in a private higher educational institution that specialised in physical education and sport. There I shared a very large office with several other lecturers (Appendix 7: Photograph 2: The far section of the office). My own desk area (Appendix 7: Photograph 1: My desk in the office), with its contents and disorganisation, spoke to me of the shift that was occurring between my traditional ways of teaching and the digital world of the computer. Consequently, I often found myself wondering about this shift and what other lecturers' subjective inner-world experience of working with computers looked like.

My focus on lecturers' experiences of their computers in everyday academic practice led to a phenomenological investigation that adopted a human science approach as opposed to a natural science approach. First, whereas natural sciences focus on explaining the world, human sciences strive to understand the world and how it is experienced (Dilthey, 1976 cited in Van Manen, 1997, p.3). Second, while my interest in human practice suggested a focus on people's actual experiences, phenomenology focuses on experience as it is lived by them in their pre-reflective consciousness (Giorgi, 1970). Thirdly, if I am to access this world, people will have to describe it to me using concrete descriptions; phenomenology, a textually orientated method, uses rich language descriptions of experience (Van Manen, 1997). Thus, my wondering about lecturers and computers generated a

requirement to understand their experiences in a more profound way, and the meaning they made of them by employing a human science method like phenomenology.

Phenomenology not only focuses on things experienced, but also questions how things are experienced. A 'discovery-orientated' and 'inductive method', it allows the researcher creative flexibility in the ways that data can be interpreted to produce meaning (Hycner, 1985; Van Manen, 1997; Giorgi, 2008). However, because the data explication method needs to be handled in a specific way, the researcher does not have free creative licence when employing it. In order to find a balance between "free imaginative variation" (Giorgi, 1997, p. 6) and the researcher's "artistic judgment" (Hycner, 1985, p.288), phenomenology follows a rigorous process that entails bounding the phenomenon, stripping away any prior assumptions held by the researcher, and working down into the essence through its traditions of 'bracketing' and 'reduction'.

For the purposes of this thesis, phenomenology and its rich philosophical background shaped the methodological framework. Its philosophical ideas are intertwined with the practice of the phenomenological method and the interpretation of experience. Furthermore, a phenomenological orientation, with its focus on experience as lived through consciousness and intentionality, life-world themes of time, space, body, relations, and essence was deemed suitable for an investigation that sought to look deeply into the way in which the participants interacted with computers in everyday academic practice. Particularly worth mentioning is the fact that the five lecturers who participated in this investigation specialized in disciplines which promote moving and healthy bodies in their practices. In their life-worlds, they were used to experiencing their bodies in a particular way. As I was aware that this contrasted with the sedentary nature of labour at the computer, I chose a particular phenomenology for the investigation that would accommodate both activities.

In this investigation's application of phenomenology, I was mindful of the way in which I would deal with 'description' and 'interpretation', particularly since there are several variations of phenomenology, and different views on handling these issues. The nature and context of my investigation, which focuses on an environment that privileges the moving body through its emphasis on physical education, pointed to Merleau-Ponty's (1962) phenomenology of embodiment. His phenomenology promotes a unique understanding of the body in experience, and its ability to respond to its environment using a deep bodily intelligence.

In my application of the practice of phenomenology in this investigation, I used the concrete steps of Giorgi's (1985 b, 2008) descriptive method that builds on Merleau-Ponty's phenomenology. In Giorgi's (2008a, 2008b, 2009) stages of research, referred to as the Duquesne Phenomenological Research Method or the Descriptive Phenomenological Method, descriptions are taken through various stages of data explication to arrive at the variant and invariant structures (themes) in the phenomenon. For the reader's knowledge, Giorgi tends to refer to 'themes' in the data as 'structures', and in this thesis I often use the two terms alongside each other, as structures/themes. Through Giorgi's method, the variant and invariant structure/themes were uncovered as the data was taken through various stages, and then afterwards, brought together into a composite textual description across Chapters 5 & 6. This meant that a rigorous process of data analysis underpinned the textual structure.

Van Manen's (1997) contribution in the data analysis of this investigation came from his hermeneutical-interpretive approach in phenomenology. After Giorgi's Descriptive Phenomenological Method had reached data saturation, Van Manen's approach allowed me to interpret other horizons at a hidden level that involved Certeau's concepts of everyday practice and Merleau-Ponty's body-subject in the descriptions. Thus, both Giorgi's emphasis on 'description' and Van Manen's application of 'interpretation' were acknowledged and taken into account in this investigation's application of phenomenology.

Interpreting practice in this study

At the start of the study, it was important to specify my understanding of the term 'everyday academic practice' and the way in which practice should be understood within the main question: 'How do lecturers' experience computers in everyday academic practice?' If I wanted to explore lecturers' experiences of computers, the best way to proceed would be to focus on how they experienced their everyday practices at the computer. Although different traditions may be used in the study of practice (Kemmis & McTaggart, 2000; Schatzki, Cetina & von Savigny, 2001), this investigation required an understanding of practice that focused on ordinary everyday computer practices that were being carried out by lecturers in academic offices and how these practices were being experienced.

At the start of the study, I photographed some of the activities that take place in the academic office (Appendix 8: Photograph 3: Chatting in the office; Photograph 4: Capturing the fleeting moment). Each workstation seemed to have an 'atmosphere' or 'climate' of its own, which marked the working styles of the lecturers at their computers (Appendix 8: Photograph 5: At the desk). When pondering these images, I could sense an ephemeral world of ordinary practice, in the same way that 19th Century Japanese woodcuts (Ukiyo-e) captured the fleeting lived experience of people going about common practices that were part of their everyday lived reality. Therefore, in an attempt to justify my interest in this ordinary world, I drew on Michel de Certeau's *The Practice of Everyday Life* (1984) with its particular concepts on everyday life in which ordinary practices are always being reworked in countless ways. The term 'practice of everyday life', an English translation of the French title *L'Invention du quotidian* (1984), refers to the constant invention and creativity of everyday life that takes place in the background as people pursue their mundane everyday practices. In this thesis, I refer to Michel de Certeau simply as Certeau, in line with Buchanan's (1992, 2000) usage of his surname wherein the 'de' is omitted (not as De Certeau, a form frequently used in literature).

What is new in this study is my use of Certeau's (1984) philosophy of practice (see Chapter 2) as a lens to view lecturers' everyday computer practices. My employment of this approach allowed me to consider the experiences that lecturers' everyday practices at the computer evoke. In my discussion of the findings (Chapter 7), I delineate how Certeau's (1984) philosophy opened the way for a deep interpretation of the lecturers' everyday practices, which were analyzed on the basis of production and hidden secondary production.

Certeau's concept of a main production can be seen in people's ordinary practices, for example, walking through the city, map-reading, story-telling, cooking or travelling. He was more interested in their modes of operation and the constant way they were re-structuring or reinventing the activity itself as they went about it, rather than in the people as individuals. Moreover, Certeau (1984) posited that this constant reinvention of ordinary activities resulted not only in the main production in which the activity was being carried out in an accepted way, but also an invisible secondary production, known only to the user. He referred to this invisible production as a *poïesis* and a hidden dimension in people's practices; it was a natural part of behaviour resulting in known practices being manipulated in concealed and clever ways. He argued that by studying the main production with its ordinary operations, the invisible secondary production, the *poïesis,* could be brought to light to reveal the true relations people had with the practice they were carrying out.

For the purpose of this thesis I use the *poïesis* in the same way that Certeau used it. The etymology of the term can be traced back in a philosophical discourse to the Greek term *techne.* Its meaning was not just associated with craftsmanship, but extended to a meaning linked with production and creativity. Certeau (1984) claimed that *poïesis* (the secondary production which was hidden in the main production) had to be looked for in places where it could not be seen, since it did not easily show itself through the products in the practice. Furthermore, its main characteristic was its lack of visibility, which made it difficult to identify and describe. According to Certeau (1984), *poïesis* had to be looked for in the

invisible and creative ways in which people go about utilising the cultural products and activities within their respective societies.

Like Certeau, Heidegger (1977) was interested in the concept of the *poïesis*, but viewed it from a different angle. Heidegger (1977) also appreciated the original meaning of the word *techne*. However, he argued that it involved not just the practices of instrumentality, how to use a tool, but also a deep inner creativity, i.e., a *poïesis* that existed in people's relations with technology. By emphasizing the distinction between modern and older forms of technology, Heidegger was showing how human involvement and activities associated with them were changing. In the former, the focus is on the instrumental side, while the latter entails craft/skills and creativity in the doing of the work associated with an activity. Therefore, the life experience associated with the original meaning of *techne* involved not just the expertise or craft in carrying out certain practices, but also a creative dimension - a *poïesis* - which, Heidegger argued, was diminishing as technologies become more sophisticated. Heidegger (1977), the instrumental side of technology seduced people because they sought to get things done more quickly and better, which was not necessarily always the outcome. He was concerned that the creative dimension with its *poïesis* was under threat in people's relations with technology.

Certeau (1984) had a particular way of thinking about everyday practice, sometimes referred to as 'a logic of practice' (Buchanan, 1992) that I found compatible with the phenomenological orientation of this study and its questions that seek to arrive at an essence through concrete descriptions. While Certeau's logic of practice has several features compatible with phenomenology, this comparison is rarely explored in the literature. Like phenomenology, he relied on rich description to reveal people's behaviour as they went about their ordinary everyday practices. He was not interested in people as individuals; but he sought to uncover an operational logic that was hidden within their behaviour as they went about their ordinary everyday activities (Buchanan, 1992). His focus on bringing to light the hidden dimension in everyday practice paralleled

phenomenology's search for an essence through the invariant structure or theme of a phenomenon. Both of these approaches reveal what is usually not easily seen or understood in practice. Phenomenology arrives at the essence of an experience by investigating how people experience a phenomenon. Certeau looked behind people's behaviour during the practices to find their hidden tactics, which is not unlike arriving at an essence in their behaviour. By applying Certeau's logic of practice as a lens through which to explore the phenomenological descriptions of this investigation, it was possible to bring to light hidden dimensions of academic practice that could be linked to lecturers' relations with computers.

Outline of the chapters

In Chapter 1, I detail the background to this study. I outline how I became interested in studying the life-world at the desk in the academic office, particularly lecturers' human experience of working with computers. The aim, intent and the questions in this investigation are articulated. As well, I explain my choice of phenomenology and my interpretation of its practice.

In Chapter 2, I review the relevant literature for an investigation that seeks to explore the lived experiences of lecturers with computers. Although I found a paucity of literature in my area of investigation, three bodies of literature that formed an intersection for this investigation were located. In the first section, the focus is upon how computers and digital technologies are framed in the field of higher education; next, I elucidate existing studies which in my opinion can be linked to academics' subjective experiences of computers; then, I explore authors who argue for an ontological turn for higher education. The second section deals with literature that explores relations between humans and computers in two ways: first, from a socio-cultural perspective and second, from a philosophy of technology perspective. In the third section, focus is upon practice and practice theory. I seek to show that there is a perspective of practice which privileges ordinary everyday practices as a legitimate area of research.

In Chapter 3, I examine the phenomenological orientation that I selected for the investigation. In the first section I describe what phenomenology is, its early history, and why I deemed it relevant for this investigation. The focus in the second section is on the philosophical foundations of phenomenology. I explore the key concepts of its founder Husserl (1970 a), and how Merleau-Ponty (1962) extended these concepts to arrive at a conceptualisation of the body-subject that was deeply connected with its environment. The main philosophic assumptions and tenets that characterize phenomenology today are discussed in the third section of the chapter.

Chapter 4 carefully delineates the research design and data explication processes which were guided by Giorgi's (2008) stages of research and Van Manen's (1997) hermeneutic interpretation of researching lived experience. Verification of the design and research process was confirmed in other literature. The chapter describes the data gathering method employed for selection of the sample. As well, it details ethical considerations, the interviews and the interview process, transcription, and the various stages in the data explication process.

Chapter 5 is the first of two chapters in which the research findings are revealed. The five participants in the study are described in turn, along with their experiences of computers in everyday practice on a typical day: the start of the day at work; working at the desk during the day; and, leaving work at the end of the day. Although their experiences showed that they were all working in accordance with same everyday practices, each lecturer's experience was marked by different understandings of lived time and lived space, conceptions that were uncovered as variant themes in the descriptions.

 In Chapter 6, the embodied experiences behind everyday practices are described using the theme of the lived body, which is intertwined with everyday practices. In the first section of the chapter, the physical sense of the body was 'unfelt' in the lecturers' pre-reflective awareness as they went about their practices. These are categorized as routine and taken-for-granted practices. The second section of

the chapter focuses on descriptions in which the body as 'felt' moves into the foreground of the lecturer's awareness, particularly as time progresses. I showed that this could be seen in two ways: first, in the lecturers' experiences of feelings of bodily 'restriction'; and, second, when their experiences of computers became embodied through painful 'corporeal reminders' at the end of the working day. In addition to explication of routine and taken-for-granted practices, the chapter also highlights a concealed practice involving 'balance', a process during which the lecturers employ micro-tactics at the desk and, after leaving work, to restructure their felt embodied experience of everyday practice at the computer.

In Chapter 7, the final chapter of this thesis, I will discuss what I have learned about lecturers' experiences of computers, how that relates to the literature, and if my findings are relevant to a broader understanding of academic practice in general. In brief, the findings are elucidated through a composite diagram that captures the phenomenology of academic computer practice as an interrelated field of consciousness. In this field the lived body as conceptualised in Merleau-Ponty's (1962) phenomenology plays an integral part in the meaning that the lecturers made of their experiences of computers. Certeau's (1984) concepts of everyday practice are utilized to analyse the main production and the concealed secondary production of tactics. I discuss how said tactics were used by the lecturers to restructure their experiences of computers, and how the 'lived body' played a role in this production.

CHAPTER TWO: LITERATURE REVIEW

Introduction

My study is structured around the core research question: 'How do lecturers experience computers in everyday academic practice?' From the beginning of the study, this question pointed to research that required a rich description of lecturers' lived experiences of everyday academic practices related to computers. This research is thus situated at the intersection of three areas of literature: (1) higher education and technology; (2) human-computer relations people; and, (3) practice and practice theory. Each area is significant for an investigation that seeks to explore the above question by pursuing a phenomenological orientation that privileges rich descriptions of lecturers' experiences of computers in everyday academic practice.

My review of the above three literatures is organized as follows. First, I will analyze Selwyn's (2012) evaluation of academic research into education and computer-related technologies. Then, I will broadly describe some of the main themes or areas evident in the higher education literature, and how academics' practices linked to computers and their related technologies are framed. The first of these themes deals with the degree to which academics' work is changing. A second theme in the literature explores how new technological tools are challenging traditional methods of teaching and learning. The field of phenomenography, which deals with lecturers' conceptions of practice, may be taken as a third theme. Academics' beliefs, attitudes and thinking about their practices emerge as a fourth theme in the higher education literature. Then, I will examine studies that explore the subjective world of lecturers, specifically those conducted by McShane (2004, 2005, 2006), who investigates the subjective experiences of lecturers linked to ICT (Information Communication Technologies). Although its focus is mainly on academic identity and online teaching, this literature has provided a stepping-stone for my research. Thereafter,

I highlight a debate which foregrounds ontology for teaching and learning in higher education, as opposed to epistemological concerns (Barnett, 2004, 2005; Dall'Alba & Barnacle, 2005, 2007). My review of higher education literature reveals that while educational studies have sought mainly to support computers and digital technologies in the teaching and learning process, enquiry into academics' experiences of computers (and their digital technologies) has been relegated to a peripheral debate.

The second section of this review focuses on people's relations with computers, a sphere I consider from two broad perspectives. First, I will examine literature that explores people's relations with computers from a socio-cultural perspective. Then, people's relations with modern technologies, e.g., computers, will be discussed; here, I have drawn upon certain philosophers who have adopted a philosophy of technology approach to analysing technology. While both of these perspectives emphasize the fact that people who work with computers develop specific forms of relations with them, I will argue that the two perspectives provided little evidence of peoples' actual lived relations with computers. Unarguably, lecturers may spend many hours of the day in partnership with a machine that plays an important role in their practice; but little is known about the human experience, i.e., relations with computers. Therefore, any attempt to find out more about these relations, of necessity, requires investigation of lecturers' practices as well.

The third section of this review focuses on practice and practice theory. Emphasis is upon the lived experience of everyday practice. The diverse range of understandings of practice in the literature includes at least five ways in which practice can be interpreted (Kemmis & McTaggart, 2000). But, close scrutiny revealed that they are not quite suited to this study's intersection of higher education, computer relations and everyday practice. I have opted to argue for another perspective that of Certeau in his work titled *The Practice of Everyday Life* (Certeau, 1984). I consider that this perspective provides a particular understanding of practice that fits better with this study's focus on the ordinary

world of lecturers' experiences of computers in the academic office. I show how Certeau's logic of practice, with its two modes of production, can be used as a lens to consider everyday academic practices in another light. Certeau's (1984) main concern was with people's behaviour and the tactical operations they employed as they pursued a particular practice. The ways in which people navigate their spatial environment were also of interest to him. Although his focus was not specifically on embodied action as such, he recognized the invisible embodied production taking place in people's minds during activities such as reading and/or story-telling. Therefore, I deemed it necessary to include in this section literature that acknowledges that there is an embodied dimension to practices.

Section 1: The field of higher education

How are lecturers and computers framed in higher education?

Examination of the literature on higher education revealed a substantial body of research into the importance of computer technology in education. Research in higher education, particularly in the field of computer technology, tends to be framed in a particular way. Selwyn's (2012) recent review of research in education and technology not only highlights the limitations of the extant research in this area, but also suggests that a new tradition of research needs to be fostered in this field. Selwyn's review is noteworthy given (a) that it summarises research into education and technology from a critical perspective; and (b) it also identifies several weaknesses in the extant education and technology research.

According to Selwyn (2012) the approaches adopted should aim to develop "richer understandings of the 'social' contexts within which education and technology are located" (p.10). This requires questions that are more challenging, and research methods that are more expansive and imaginative. Selwyn (2012) stresses the limited nature of the questions asked, given the assumption that

"technology works" (p. 7). Further limitations were noted in the many theories promoted by the learning sciences, e.g., behaviourism, Piaget and Vygotsky, and their followers; many are combined in an illogical manner and with other theories in an attempt to study technology enhanced learning. Furthermore, Selwyn (2012) claims additional limitations in methodology are evident because much of the research is largely of an instrumental nature. Another point that Selwyn (2012) makes is the need for academic research into education and technology to move into the "state-of-the-actual" in practice so that the realities of technology "*in situ"* may be seen (p. 10).

Selwyn's critique targets literature written by educators who are working with modern technologies in different higher education sectors. Much of this literature emanates from the role and expectations of educators who are being encouraged in higher education to embed modern technologies into the programs they deliver. Thus, literature in this area is of a particular type of discussion which tends to represent a vested interest in the academic world; in many cases the focus is upon learning technologies and the role of computer technology in facilitating and improving the students' learning. Moreover, many of the discussions are located in a social deterministic understanding of technology (see Chapter 1). There is a general assumption that computer technology enhances the teaching and learning process, and that its shortcomings can be fixed.

Within the literature on lecturers' work in higher education, there is a broad theme on the changing nature of academic work, and how academics have to respond to this change as computer technologies usher in a new culture in higher education (see for example, Trowler 1998; Coaldrake & Steadman, 1999; Weller, 2011). Weller (2011) highlights the shifts that are taking place in academics' practices as a result of the integration of new technologies. He explores these shifts and questions their implications for higher education and everyday scholarly activities, which he claims, while still traditional in one sense, have changed considerably due to 'digital scholarship'. Weller (2011) draws on his own experience of writing an academic book to describe the deep change in his way of doing things. He

argues that while there is continuation of a tradition of pursuing the academic practice of book writing, nowadays it is a changed process due to the input of complementary material which can be gathered from blogs, videos and posted online discussions in the digital world. According to Weller (2011), academics are now working in two spaces, one traditional, and the other digital. These changes have implications for the production of academic texts; they also impact on all aspects of academic work related to research, teaching and the sharing of knowledge. In addition, other shifts occurring in academic processes today are attributed to the quantity of digital content, the roles of social networks, and the types of information sources that academics utilize (Weller, 2011). Although Weller (2011) provides a very good description of the tension incurred when working between the two spaces, it is an introspective view of academic experience arising from his personal experience of book writing. Overall, it is a broad discussion of shifting processes and the way in which academics are now located between two spaces. As is the case with other authors cited above, Weller's work does not explore lecturers' actual first-hand experience at the digital interface.

Other authors writing on higher education focus upon how traditional methods of teaching and learning are being augmented or replaced by new computer technologies (see for example, Dang & Robertson, 2010; Gosper, McNeill, Woo & Green, 2010). The literature in this area, which often focuses on students and their engagement with technology, usually tends more towards revealing a positive experience for students. How academics are taking up this challenge is relegated to the fringe of the discussion. In Dang and Robertson's (2010) study which deals with the integration of a Moodle site into a course, 247 Vietnamese students' responses to the new technology and their participation in it were monitored. The authors' findings revealed that students' responses ranged from neutral to very positive. The three patterns of student online participation that emerged showed that lecturers need to match the process of ICT integration with students' individual learning styles and behaviour. Although teachers' general perceptions of ICT and their use of technological environments were also

examined at the same time, their reactions to and experience of the new technologies are not detailed in the study, by extension showing the degree of entrenchment of focus on the students and their engagement in higher education.

Despite all of the literature delineating how traditional methods of teaching and learning are being transformed through ICT, the actual human experience of lecturers still seems relegated to the periphery of the discussion, despite the fact that they are the main operators directing students' learning on a daily basis. Discussions are mostly driven by the assumptions that technology works for students, and that academics will automatically deal with the challenge and adapt their teaching work at the digital interface to meet the changes. The background experience that contributed to the lecturers' teaching and learning labour at the computer is not really recognised as an area of human work that is underpinned by human experience. How the transformations are being experienced in everyday practice in higher education has not fully been investigated from subjective perspectives. For this reason, there is a paucity of literature on the subject.

Conceptions of practice are a third area in higher education literature that also involves academics and teaching. But, it stands apart because it is located in the field of phenomenography as well (Laurillard, 1997; Trigwell, Prosser and Waterhouse, 1999; Richardson, 2010). While some of the studies in this area tend to focus on students and their conceptions of learning (Ramsden, 1979; Richardson, 2010; Prosser and Trigwell, 1997), there are also studies that have drawn teachers into the equation (Richardson, 2005). However, latter studies focus on the multiple ways in which a phenomenon is conceived. For example, Trigwell, Prosser, Martin and Ramsden (2005), high light the different ways in which teachers conceptualize change in the subject matter they have taught, and the relationship between their experience of change in the subject matter and their teaching. Richardson (2005) claims that studies in the area of phenomenography have not only revealed the relationships between students' approaches to learning, conceptions of learning, and their perceptions, but also teachers approaches to teaching and their perceptions of the teaching environment. However, these

studies do not include people's experience as it is lived. Despite the fact that studies in this area draw on the subjective experiences of their participants in order to arrive at a hierarchical structure of phenomenographic relations, they do not try to uncover an essence or universal aspect in teachers' or students' experiences of learning. Rather, their emphasis is on conceptions and perceptions of learning in students and teaching in lecturers with the result that this literature cannot provide answers to the questions in this study. Studies in general fail to explore lecturers' actual experiences of computers in everyday academic practice, a topic this study aims to address.

A fourth area or theme in the higher education literature describes academics' beliefs and attitudes (Boddy, 1997; Bashir, 1998; Hativa & Goodyear, 2002; McShane, 2002; Raturi & Boulton-Lewis, 2014). The studies in this area express interest in what shapes beliefs and attitudes, and what they are, the intention being of improving certain aspects of education. For example, Raturi and Boulton-Lewis (2014) investigate the educational experiences shaping the teaching and learning beliefs held by sixty-three novice teachers in higher education. Their data is based on the participants' essay writing, and, narrative analysis was used to arrive at their conclusions. Actual lived original experience is not addressed. Even in this area of literature, assumptions vis-à-vis academics' work at the digital technology interface have not been investigated through the lenses of academics' actual subjective experiences, a process that would reveal Selwyn's (2010) "state-of-the-actual" (p.10).

A small and still emerging theme is beginning to develop on lecturers' subjective world of technology, evident in certain studies. McShane's (2004, 2005, 2006) investigations feature among the first such studies which reveal several aspects of academics' subjective experience as ICT transforms their teaching. McShane's (2004) longitudinal qualitative semi-ethnographic collective case study investigates five university lecturers' changing teaching self-concepts as they made the move from face-to-face teaching to online teaching. This study demonstrates how the rich and insightful subjective views of academics can be

explored to reveal a state-of-the-actual as it plays out in practice. In doing so, it showcases the lecturers' inner-world understanding of their practices. The lecturers' experiences of the integration of the two modes of teaching indicate the degree to which their awareness of teaching has shifted and developed. This, in turn, has fostered an inner self-monitoring ability within them. What is also evident here is the deep inner-world change evolving in lecturers as they interact with technologies.

A second study by McShane (2005) focuses on understanding a particular academic's preference for traditional face-to-face instruction by investigating her/his experiences of blended teaching. Although a single case, it provides rare insight into one lecturer's new way of academic 'being' and 'existence', a result of the blended teaching and learning environments in which he/she is operating. It also reaffirmed in general the lecturers' embodied preference for teaching over virtual or 'ethereal' online pedagogy by bringing the risks to light. This inner world landscape of academic existence could not have been captured through surveys or questionnaires.

A third study by McShane (2006) investigates how academics are adapting to online delivery modes. This study explores the teaching experiences of twelve university lecturers in two Australian universities who either taught online, or were moving towards teaching online. McShane's study reveals "academics' insights and experiences about their changing teacher identities in the context of being, or becoming a facilitator of online student learning" (McShane, 2006 p. x). For the purpose of her study, data was collected through semi-structured interviews, online teaching artefacts and email communication. It was based upon three lecturer identities or metaphors represented by the performer, carer and creative director. The findings reveal that these identities did not experience the transition to blended learning smoothly. Moreover, the online environment diminished their effectiveness with their students in terms of performing, caring and directing.

Although McShane's research draws on lecturers' subjective experiences, focus is essentially upon how academics experience the challenges of ICT within their teaching roles and self-concepts. Her research, rather than dealing with lecturers' experiences of computers in an ephemeral world of everyday practice, explores the experiences of lecturers as their academic identities and teaching self-concepts are being transformed through online teaching and learning practices. However, McShane's (2006) research does show the existence of an inner world of academic being that is not only changing, but has far-reaching implications for teaching values and academic practices. Thus, there is a need to delve further into the human experience which underpins the transitions that lecturers are undergoing and to research their situation from another angle. My investigation augments McShane's (2004, 2005, 2006) research by exploring lecturers' experiences of computers in everyday academic practice.

McShane's (2006) transformations in academic identity have also been acknowledged by Sappey and Relf (2010), who continue to debate digital technology education and its impact on traditional academic roles and practice. They note that the implementation of new educational technologies has resulted in the human dimension being overlooked in the academic workplace and that the significant impact of ICT on teaching has yet to be recognized. Importantly, they argue, the impact of technology on academic work and its integration into teaching labour is seldom critically considered. It is often assumed that the implementation of technology will result in lightening lecturers' workloads (Sappey & Relf, 2010). They also question the seminal debate between Clark (1983, 1994, 2001, cited in Sappey & Relf, 2010, p.1) and Kozma (1991, 1994, cited in Sappey & Relf, 2010, p.1) in which technology integration with teaching is viewed as a 'delivery truck' or as 'groceries' that are transported by said truck. In the former, unchanged educational content is delivered, while in the latter content is changed through different technologies. Sappey and Relf's (2010) debate highlights the territory beyond the metaphors of the 'groceries' that are transported by 'delivery trucks'. In effect, their focus is upon the driver of the truck - the academic teacher - whose role has expanded considerably to involve

creativity, development and delivery in the digital learning environment. The two authors seek to ensure that the academic teacher's evolving role as the truck-driver - and the labour involved - is acknowledged in scholarly debate and in learning and teaching models. Academics should not be treated as invisible workers (Sappey & Relf, 2010).

Sappey and Relf (2010) also observe the paucity of literature in this area. Only a few concerned voices, including those of McShane (2006) and Laurillard (2007), argue that the academic experience of the digital environment needs to be scrutinized further in light of its evolving role. Sappey and Relf (2010) support their concerns using a perspective that draws on a metaphor in which lecturers are 'truck-drivers' crucial to the delivery system. Their argument is located in a critical discussion of the impact of digital technology education on traditional academic roles and workloads. Discussions such as this need to be taken further through explicit research which shows lecturers' real world experience of digital education as they are unfolding. If one really wants to understand the interface between lecturers and digital education more deeply, and what it means to them to be 'delivery truck-drivers' in an academic sense, there is a need to explore their actual subjective experiences of computers in everyday practice.

Several other studies are showing an interest in explaining the inner worlds of academics or students, albeit from a cognitive perspective (Dreher, 1997; Markauskaite & Goodyear, 2009; Beebe, Vonderwall & Boboc, 2010). Markauskaite and Goodyear's (2009) focus is upon lecturers' cognitive processes as they pursue the designing of work and the creating of new learning tasks. Their research explores the ways in which different mental resources are required and brought together in lecturers' cognition as they make decisions vis-à-vis teaching and designing of course work that involves ICT. They specifically explore certain pedagogical forms involving lecturers' activities that center on explanation and visual representation. What is of concern to them is how such activities relate back to the lecturers' inner-world cognitive frames and the conceptual integration that takes place in their cognition. Moreover, as Markauskaite & Goodyear (2009)

observe, the lecturer's learning occurs simultaneously as his/her cognitive processes evolve, a fact highlighted by Markauskaite and Goodyear (2009). The inner-world of academic cognition as an area of exploration is also addressed in a study by Beebe, Vonderwall and Boboc (2010) that draws upon a phenomenological approach to investigate the perspectives of seven higher education academics that were transferring assessment practices to online environments. However, all attention is upon the factors at play within the design and transference of assessment to an online context. The lecturers' actual lived experiences of computers seem not considered relevant.

There are some views that focus on the embodiment of knowledge and what people become through authentic education in higher education. These writers (Barnett, 2004, 2005; Dall'Alba & Barnacle, 2005, 2007) express their concerns from an ontological understanding of the educational process and do not strive to replace higher education's focus on epistemology, but rather augment it in a different way. They argue that ontological perspectives have not been recognised in debates as an alternative approach to deal with key problems in higher education. Consequently, Dall'Alba & Barnacle (2005; 2007) question the focus on what students acquire through education, by foregrounding the question of who they become in the process. They claim that ontology has been sidelined in conventional approaches to higher education programmes where the focus has always been upon epistemological dimensions. According to Dall'Alba & Barnacle (2005; 2007) this narrow focus on the intellect should be replaced with approaches that recognise the integration of knowing, acting and being, and what one becomes through educational processes.

Dall'Alba & Barnacle's (2007) views are influenced by three on-going critiques that are continuing to receive attention on the idea and role of the university in the higher education literature. Some of the critiques raise issues previously identified by Heidegger, who questioned the way in which education is increasingly instrumentalised and technologized in contemporary universities (Thomson, 2001, cited in Dall'Alba & Barnacle, 2007). A second critique, highlighted by Dall'Alba

& Barnacle (2007), is evident in literature focusing upon the transfer and acquisition of knowledge and skills in university programs (e.g. Bourdieu, 1977; Schön 1983; Lave, 1993; Dall'Alba & Barnacle, 2005, cited in Dall'Alba & Barnacle, 2007). These authors question the conventional notion of knowledge and knowledge transfer, particularly when knowledge is decontextualized from the practices in which it is situated. In a third critique, renewed attention is being given to the embodiment of body-technology relations (Heidegger, 1993/1978; Ihde, 2002; Dall'Alba, 2005). The feminist writers such as Grosz (1995) and O'Loughlin (1995) also fall under this critique.

Dall'Alba & Barnacle (2007) claim that ontological shifts, which take place in learning in higher education programmes, should be given more consideration. Despite the fact that some attention has been given to the embodiment of knowledge as it relates to children and teenagers in schools (see, for example Bresler, 2004 cited in Dall'Alba & Barnacle, 2007), little attention has been given the embodiment of knowledge in higher education and what people become through education. "The focus on the intellect in conventional higher education programmes overlooks the key role of the lived body and, more specifically, the embodiment of knowledge or knowing" (Dall'Alba & Barnacle, 2007, p. 681). They argue for a new conceptualisation of learning that recognizes that knowing and being are interdependent, and should be conceived through a Heidegger-ian perspective. In their opinion, the complex interrelationship between formal knowledge and the informal kind of knowing that is to be found in Heidegger's being-in-the-world (Dasein) could invigorate conventional views of learning and knowledge in higher education.

Broadly, Dall'Alba & Barnacle's perspectives are located in deep critiques which originate in concerns for educational approaches in higher education which do not "engage the whole person: what they know, how they act, and who they are" (2007, p.698). Their arguments (2005; 2007) reveal important connections between ontology and epistemology, and how being and knowing are intertwined during the process of learning. In their discussion on embodied knowing and

embodiment in online environments (Dall'Alba & Barnacle, 2005), they adopt a phenomenological perspective in efforts to evaluate and understand the role of ICT'S in learning. They argue that human-technology relations in online learning environments need to be examined through "a frame of performativity" (Dall'Alba & Barnacle, 2005, p. 740) to understand how technologies become extensions of people, changing their ways of being-in-the-world. While Dall'Alba and Barnacle (2007) do mention that ontological shifts could be occurring in university teachers as they become more technologized, their focus is on embodied learning in online environments and how the learner's sense of self shifts during the experience.

Currently, there is limited knowledge of lecturers' subjective experiences of computers as they pursue their everyday academic practice. The tendency in higher education has been to focus on how technology enhances teaching and learning. Knowledge accruing from 'original' or direct experiences of technology remains scarce. This research, with its phenomenological orientation, draws upon experiences that are located in 'first order' knowledge. To date, studies of academics and their relations with computers appear rarely in the field of higher education literature. Laurillard (1993) alludes to knowledge that comes from direct experience of the world as 'first order' knowledge, as opposed to 'second order' knowledge which is produced through the articulation of other people's interpretations of the world. Although substantial debate surrounds technology-enhanced teaching and learning, academic practice from a 'first order' knowledge perspective of the experience related to computers goes largely unaddressed in the vast field of higher education literature. Despite the fact that there has been a substantial shift in the work of teaching academics, little attention is given to examining how lecturers' experience the impact of digital technology in academic practice through a perspective of 'first order' knowledge. The fact that there is an assumption in higher education that digital technologies "offer 'win-win' to institutions and students alike, and that the academic is neutral in the process" (Sappey & Relf, 2010, p. 1) contributes to the paucity of knowledge about the subjective experiences of academics.

Conclusion to Section 1: The field of higher education

Computers, and the digital technologies that go with them, have been studied from many perspectives in higher education. In the literature, there is a general assumption that technology enhances learning; thus, there is enthusiastic focus on students' learning through technology. However, there is little understanding of user experiences from the perspectives of lecturers in this area. Examination of contemporary higher education literature reveals that few questions are asked about the ontological dimension of working with computers in an academic context. There has been much discussion and reporting on the integration of computer-related technologies into teaching and learning, and how students benefit from these processes. Less interest has been shown in the everyday experience of lecturers who are involved in facilitating this digital world in education. It has only been acknowledged in a limited way, despite the fact that they are key players in the process.

While there is general recognition of what academics use computers for, little is known about teaching academics' day-to-day experiences of working in a digital academic environment. It variously involves 24/7 email communication, personalized support for students, new contexts for discussion (forums, chat rooms and blogs) and constant reworking of existing teaching resources to keep up with new knowledge. Although many studies have explored educational technologies linked to computers, and by extension to learning and assessment, few have ventured into the subjective, inner world experiences of lecturers' work in this area. McShane's (2006) investigation, which is partially semi-ethnographic, concentrates on lecturers adapting to online teaching, how it affects them and how they see their role being transformed as a result of ICT. Despite McShane's contribution, lecturers' experiences of computers in everyday academic practice remain an under-researched area of inquiry. The few other studies dealing with academic experiences tend to focus on a particular type of experience that is embedded in an empirical perspective and not in phenomenological inquiry that focuses on lived subjective experience.

Section 2: Perspectives on human-computer relations in society

In the previous section, I suggest there is a general assumption in higher education that technology enhances learning, and that there has been enthusiastic and positive focus on research into students' learning through technology. I further suggest that although lecturers work with students on a daily basis, little is known of the former's actual experience of work at the digital interface. This, despite the fact that today computers are found everywhere in educational settings, taken-for-granted and generally accepted as part of technological progress which will bring about greater efficiency (Selwyn, 2013). However, there are writers from outside of the field of higher education, from different disciplines, who show concern about human-computer relations and their impact on society and culture. Furthermore, these writers are widely cited in debate surrounding the influence of computers and other technologies on society. Their observations have prompted more critical thinking about people's relations with the artefacts they create. Their concerns regarding people's relations with computers and technology can be discussed through two areas of literature: the first area focuses on socio-cultural literature, which deals with the ways in which computers are changing, shaping and re-making culture; the second describes literature in which modern technologies and their impact on society have become foregrounded in the philosophy of technology approach.

The socio-cultural literature

The impact of computers and modern technologies has been the topic of debate in literature marked by socio-cultural views (Boyer, 1996; Greenfield, 2003; Haraway, 1985; Strathern, 2000/01; Turkle, 1997, 1984, 2011). Writers in this tradition come from various disciplines, e.g., psychology, urban history, post-modern feminism and biology, anthropology and science. Although their primary focuses are elsewhere, they all question computers and their influence on society and culture from a personal understanding which reveals different concerns

regarding the impact of computers, and the ability of the computer to transform cultures and society itself. By expressing their different views, they challenge the taken-for-granted nature of people's relations with computers. They argue that although computers are ubiquitous in the social world, they have implications not just for the user, but also for culture and society in general.

Among the above writers' views, one deals with communication that occurs in a virtual environment (Strathern, 2001/01). According to Strathern (2000/01), virtual domains are de-contextualised and dis-embedded contexts that have come to represent real contexts. Furthermore, what they really represent is at odds with actual social and human dimensions that are to be found in real contexts. Strathern argues to the effect that the conceptual relationships and connections that link virtual data with the living relations that people have with each other, should be questioned and not just taken-for-granted. In particular, the communicative side of computers needs to be considered beyond their internal efficacy, which is the side that is usually acknowledged in the workplace (Strathern, 2000/01). Strathern expresses concern about the ways in which virtual communication discounts the fact social relations are embedded in the physicality of bodies that operate in a concrete world (Strathern, 2000/01). Her concerns could be extended to academics' experiences of teaching, which today often incorporate blended teaching. While some activities are carried out in an online environment that supposedly replicates the real world, others still occur in a face-to-face learning environment.

There are even earlier claims in the socio-cultural literature questioning the nature of modern workplaces and their potential to promote feelings of isolation and alienation in workers who feel increasingly cut off from the real world. The concern here is that workers' relations are linked to computers rather than to real people in a concrete environment (Boyer, 1996). Feelings of isolation and alienation may well result as parts of lecturers' academic life-worlds relocate into blended and online teaching environments. Indeed, higher education literature (Sappy & Relf, 2010) notes a tendency to view lecturers as invisible workers.

Turkle (1984, 1997) explores children and adolescents' relations with computers. She describes the ways in which computers are creating a different culture, and changing people in the process. She points out that before the advent of computers, people enjoyed close relationships with other people, a closeness that has gradually been eroded and replaced by partnerships with personalized computers and technological artifacts. Turkle (1984) argues that people's relations with computers need to be questioned more carefully, and not just approached from a viewpoint recognizing the practical benefits of computers.

According to Turkle (1984), there is a need to realize the complex relationship between people and the artifacts they create, and with which they engage. In particular, Turkle (1984) poses a question which needs to be asked by society - but is not asked - about people's engagement with the instrumental side of computers: "That question is not what will the computer be like in the future, but instead, what will we be like? What kind of people are we becoming?" (p. 3). Her focus is not on the instrumental nature of computers, but on the "subjective computer" (Turkle, 1984, p.3) that becomes part of the fabric of social life, and enters psychological development by affecting how people think about themselves. Consequently, people begin to identify with their computers and view them as a second self in their identity (Turkle, 1984).

Turkle has other concerns regarding our relations with computers, one of them being the blurring of boundaries between the real and the virtual world. The latter induces contradictory experiences in some people: it affects their sense of self and identity, which they experience in a different way because the boundaries between their real and concrete worlds become blurred (Turkle, 1984, 1997). In her more recent work -*Alone Together* (2011) - she argues that new technologies (including e-mail messages, Facebook posting, Skype exchanges, role-playing games, Internet bulletin boards and robots) prioritize convenience and control, while the expectations human beings have of each other are diminished. Without doubt,

there is a scarcity of studies in the academic world addressing lecturer's work and their interactions with new technological tools from a psychological dimension.

Another view in the socio-cultural literature focuses on the merging of humans and machines like computers (Haraway, 1991). Similar to the other perspectives held by the writers in this field, there is the proposition that cultural artefacts transform people and that people, in turn, transform culture through a joint co-construction. Haraway (1991) cautions that people's relations with computers result in transformations that occur at a level of unawareness. She cites the metaphor of the cyborg to illustrate how human nature can be transformed through subtle assimilation with the artefacts of a society. A cyborg, according to Haraway, is describes as "a hybrid of machine and organism, a creature of social reality as well as a creature of fiction" (Haraway, 1991, p. 149). In Haraway's view, contemporary academic life that privileges computers could well change the nature of the academic teacher. This prompts one to wonder about the implications of assimilation with computers, and how this is playing out in lecturers' experiences at the digital interface.

One final concern of the socio-cultural literature, centers on the ways in which people's cognition may undergo change as they attempt to adapt to a changing environment and culture which is technology driven (Greenfield, 2003). Within this literature is the argument that the brain is always evolving and adapting to its environment that in effect computers do impact on people's cognition. Greenfield (2003) cautions that there is a need to reflect on the effect of people having fewer experiences of real world environments. She expresses her concern, stating that concrete experiences are being replaced by virtual experiences that take place in a disembodied world (Greenfield, 2003). According to Greenfield, it is not enough to simply accept the changes which computers have brought into people's lives: research needs to advance in directions which explain how people's experiences of computers impact on them at a deep level.

Generally speaking, the literature reviewed in the above section reveals different concerns about people's relations with computers and how they are changing and shaping culture and society. Boyer (1996) claims that as lecturers are drawn into the virtual world, there is a possibility that they may lose touch with reality. To what extent this is actually happening, if at all, is unknown. If one considers lecturers from Strathern's (2000/01) perspectives, many academic practices have been moved into a de-contextualised and dis-embedded context that is meant to replace the real world contexts of their traditional practices. How this compares with the actual social and human dimensions that are situated in living relations should not be ignored (Strathern, 2000/01). Apropos of lecturers, from Turkle's (1984, 1997) perspective, a little is known about their experiences of operating in blurred boundaries as they shift between real and virtual worlds. However, McShane (2006) maintains that, in fact, there is awareness of the transformations in lecturers' academic roles and of the challenges to their identity. Haraway's (1991) research explores the process of assimilation that occurs at an unconscious level when humans have a deep relationship with an artefact. Greenfield (2003) emphasizes the need to consider if and how lecturers' cognition is unconsciously adapting to a working environment driven by computers. Although all of the above views may prompt researchers to think more deeply about people's relations with computers, none of them has been researched through actual lived experience.

Reflecting on the socio-cultural perspective

My scrutiny of the literature revealed that in the main, observation was of people's relations with computers. Researchers did not explore people's actual experience of computer practices through an investigation of consciousness. Furthermore, they drew upon naturalistic third person arguments embedded in psychology, anthropology, history, post-modern feminism, science and biology to construct a socio-cultural understanding of technology. The extant corpus of literature tends towards universal perspectives that could be interpreted as different themes of concern vis-à-vis people's relations with computers.

Furthermore, authors in this tradition appear not to have researched people's relations with computers through the lens of their actual lived experience of everyday life. Rather, they have documented perspectives mainly derived from personal interpretations and observation of the impact of computers in general.

The socio-cultural literature thus only presents part of the picture of human relations with technology. For this reason, there is a need to widen the review. I found another broad stream of social thought that originated in a philosophy of technology debate. Writers supportive of this philosophy critique new technologies, raising awareness that people's relations with them have other consequences that should not be overlooked.

The philosophy of technology literature

Philosophy of technology argues that the nature and significance of people's relations with technology should be considered more deeply from a philosophical perspective that promotes an alternative critique of technology. It argues in effect, people's relations with technology are far more complex than acknowledged (Ihde, 1993). The philosophy of technology literature advocates that relations with technology are not one-way: technology constructs human action as much as human action constructs technology. It is worth noting here that a more recent argument in the literature has been advocated shifting the technology critique which to a large extent has followed Heidegger's (1977) *'On the Question Concerning Technology',* to a humanistic phenomenologic techno-critique (Taylor, 2011).

Although philosophical reflections on technology can be traced back to the ancient Greeks, it was only in the last century and half that philosophers started to include the critique of technology and people's relations with it as an integral part of the discussion. This has resulted in a separate area of literature which focuses exclusively on a philosophy of technology critique, developed by writers e.g., Heidegger (1927/1962; 1954/1977), Borgmann (1985), Winner (1997, 1998) and

Ihde (1990). Specific themes in this literature show that technologisation always has hidden dimensions which can be interpreted in several ways: i.e., through an appreciation of concepts involving *Dasein, being-in-the-world* and *enframing* (Heidegger, 1977); as a technological *form of life* (Winner, 1977; 1986); as the *device paradigm* (Borgmann, 1985); and, as a phenomenology of *human-technology relations* (Ihde, 1990).

Much of Heidegger's philosophy revolved around his attempts to examine the question of Being, an issue that went back to early Greek philosophy. Hence his central work *Being and Time* (1927/1962) which was about the question of the meaning of Being (Dasein) which he pursued through his unique and complex views focusing on an ontological understanding of human existence. He proposed that the phenomenon of Being needed to be investigated through the way that it appears, or is hidden in contemporary life, thereby giving a phenomenological quality to his thinking at a time when Western philosophy ignored this aspect. However, he argued that phenomenology was really subservient to the ontological dimension in human existence, and that a person's being is manifest not in consciousness, but how they act through activities which are always in a situated world (Heidegger, 1927). He was interested in how people encounter the world around them, not as separate objects, but as "things of use" or equipment that is "ready-to-hand", and caught up in people's on-going activity (Cerbone, 2006, p.45).

Important to Heidegger is the self-understanding that a person has of himself/herself in their everyday existence and the ways in which their worlds show up for them. For instance, if they are an academic, the computer will be revealed for them in a deeply conditioned way, which has relevance for what they do with it (for example, preparing lecturers, writing research papers etc.), and how they understand themselves through the activities they do on it. Heidegger also claims that people's way of being is about being-in-the world, which occurs through activities (and knowledge) that are intertwined with self-understanding; this results in existence/being which is experienced in the private and subjective

world of each person. Thus, the *being-in-the-world* that Heidegger focuses on is different from the public world that people generally assume they encounter (Cerbone, 2006). For Heidegger, *being-in-the-world* is not about a spatial containment, but about a "unitary phenomenon" which is intertwined not just with a person's self-understanding, but also their knowledge and skills which in turn shapes the way in which they experience their existence and vice versa (Cerbonne, 2006, p. 50).

In addition to self-understanding, another important aspect to Heidegger's *being-in-the-world* is his conception of **care** and concern in *Dasein's* ways of being. Things, (for example, tools, objects and artefacts) show up or are revealed in people's world because they are important to them, or not, in the various ways that they are used. Heidegger believed that people encounter objects differently because they have a specific significance for them. This significance extends into his concept of *care*. Heidegger points out that *Dasein* and the notion of *care* are embedded in time, involving future, past and present structures. *Dasein*'s care-structure extends into three aspects: (1) being that is ahead-of-itself and looking to the future; (2) being that is already-in-the-world and aware of the past; and, (3) being that takes place alongside entities encountered within-the-world (present). Briefly, in the first of these, people understand themselves in terms of their possibilities and what they can become. Second, in their world they find themselves in a particular way or situation that is structured by what has happened in past experience. Heidegger's (1962) third structure here corresponds to what he calls "falling", where Dasein is always currently caught up in what it is doing (p, 41.) When a person is doing something, they are deeply embedded in their current activity which is always conditioned by what they understand about themselves, as well as what they understand of their past.

Another idea that is important for this literature review (and builds up on Dasein), involves Heidegger's account of technical rationality and his concept of *enframing*. This comes from his essay titled *'The Question concerning Technology'* (1977). Heidegger described the technologisation of human being

(Dasein) and nature through the concept of *enframing, which* he took from early Greek philosophy. "Enframing means the way of revealing which holds sway in the essence of modern technology and which is itself nothing technological" (Heidegger, 1954/1977, p.20). He was deeply aware of the way in which Dasein and nature can be changed and reduced into useful and exploitable commodities (standing-reserves) through *enframing.* According to Heidegger, *enframing* was an inherent motivational drive (or tendency) within Dasein's make-up, and responsible for driving technological development forward in a desire to control the environment. The human tendency of *enframing* drives technological development forward and encourages people to view the world as a set of raw materials or *"standing-reserve"* to be exploited (Heidegger, 1977, p. 307). The above literature not only shows that people's orientation to the world is to view it as a resource, but that there is a need to recognize technology for what it is and, in doing so, open up to its real nature. People need to be aware of how they exist with technology, and whether their relations with it even involve a *poïesis.* Heidegger (1977) argued that people need to have a free relationship with technology which will allow them to choose whether they want to be drawn in by its tendency of *enframing*, or whether they want to recapture something of the original experience of technology which was associated with creativity and expertise in the doing of an activity.

Heidegger's (1977) analysis of technology provides an alternative way of thinking about technology and what people's relations with technology ought to be like. Through his understanding of being-in-the-world he was able to reveal the broad differences in people's use of modern and older forms of technology. He claimed that older forms of technology involved not just instrumentality and skill, but also an inner creativity, a *poïesis* that was diminishing in people's practices, as technologies became more sophisticated. This is relevant for my investigation. In general it is not known how the instrumental side of computers and creativity overlap in lecturers' labour at the computer, or even what the impact of digital technology has been on their natural creativity. Although there is some knowledge of what lecturers do with computers, few studies focus on how lecturers

experience being *enframed* by computers and their related technologies. Although there is some discussion in the higher education literature about how academics' work and roles are shifting and changing as computer technologies challenge their skills, tasks and delivery (Sappey & Relf, 2010), these aspects and their implications have yet to be fully explored.

A second theme in the early philosophy of technology literature focused on technology as a *form of life* (Winner, 1977, 1986) that had the power to change human behaviour. He critically examined the nature and significance of artificial aids to human activity and how these advancements result in different ways of experiencing life. Winner (1977, 1986) viewed technology as a phenomenon, which had the ability to create new worlds that carried with them a social-political agenda as they were being developed. Similar to Heidegger (1977), Winner (1986) argued that people tended to have a "widespread and extremely narrow conception" (p.12) of technology, favouring its usefulness rather than considering its impact. He claimed technologies were imbued with their own power that reshaped human activities and the ways in which they were experienced. People tend to think that technologies (for example, robots in industrial work places, vacuum cleaners, email communication, altering human biology via genetic engineering, air flight, settlements in outer space) improve the human condition, but they actually alter very old patterns in human behaviour resulting in new ways of experiencing life and behaviour. He argued that in these new *forms of life*, people are often deskilled as they adapt to the technology, which then becomes part of them in an on-going process of co-construction. Through this constant reconstruction, new *forms of life* were arrived at over time. However, there was also a warning in this literature. People should not assume that technological development always results in progress and in improvement in the human experience of work or institutions. Human activity and institutions are changed in the process and not always for the better (Winner, 1986). People need to understand the important psychological, social and political changes that occur as technology advances (Winner, 1986). They need to question the world they are designing and whether it will promote human freedom, sociability, intelligence

and creativity (Winner, 1986). One has to look at the literature in the field of higher education and consider the changes in the past decade to realize that the implementation of computers and their digital technologies has ushered in a new technological life-world for academics that has resulted in a shift in their traditional way of working.

A third perspective in the philosophy of technology literature which needs to be considered is that of the *device paradigm* which is inherent in certain technologies of a social nature (Borgmann, 1984). Borgmann analysed the *device paradigm* and its effects using descriptions of particular contemporary life activities, which were then compared and contrasted with the ways in which these activities were carried out in the past. Of particular interest to Borgmann (1984) was how many past activities were characterised by a focal nature that brought people together; for example, the hearth that was once a central place in the home for social activities. This changed with the advent of central heating where people no longer gathered around the hearth. According to Borgmann (1984) the device paradigm shaped people's relations with each other and their social interactions with each other. It concealed a power that was able to transform traditional and focal activities without people realizing the changes that were occurring. Under the pretext of making lighter work in certain activities, the *device paradigm* replaced and excluded the human presence from particular activities, in the process changing people's relations with each other and their environment (Borgmann, 1984).

Through the *device paradigm* alluded to in this literature, another dimension to lecturers' relations with computers was brought to light. Under the guise of lightening and speeding up lecturers' work, computers became automatically accepted for the advantages they promised academic work in general. However, pursuant to Borgmann (1984), it may be that there are other unintended consequences that have yet to be detected.

The fourth perspective in the philosophy of technology literature has its roots in Ihde's (1990, 2002) phenomenology of *human technology relations*. Similar to other perspectives, Ihde (1979, 1990, 2002) also argues that people and technologies co-constitute each other. This literature, which reveals a broad and general analysis of people's relations with technology, privileges four dimensions of people's relations with technology. Ihde (1990, 2002) claims that people need to think about technology in their lives through a typology of four I-technology-world relations: (1) 'embodiment relations', wherein tools like spectacles or contact lenses become part of a person's unfelt bodily way of experiencing the world; (2) 'hermeneutic relations' wherein certain bodies of knowledge require a specialized literacy to appreciate the world to which they refer; (3) 'Alterity relations' wherein technology represents something 'other', for example, religious icons, intelligent robots and the Internet; (4) technology as unnoticed 'background relations', for example, central heating and traffic control systems (Ihde, 1990, 2002). Some of Ihde's I-technology-world relations would apply to lecturers' relations with computers. Furthermore, the extent to which existential dimensions of embodiment, hermeneutic, alterity and background relations feature in research into lecturers' lived relations with computers is part of a territory in academic work experience which is under-researched, evident when one peruses studies in higher education.

Reflecting on the philosophy of technology literature

The four themes pertinent to the philosophy of technology field include concepts involving *Dasein, being-in-the-world* and *enframing* (Heidegger, 1962, 1977); technological *forms of life* (Winner, 1977, 1986); the *device paradigm* (Borgmann, 1985); and a phenomenology of *human-technology relations* (Ihde, 1990). Although these themes originated in the works of philosopher-writers who are often positioned at the margins of research agendas, they facilitate consideration of divergent dimensions in people's relations with technology, which are frequently overlooked. As Taylor (2011) notes, they tend to be broad systemic views based on detached reflections which to date had little effect on

practice. However, adopting the critical stance of this tradition, this study provides an opportunity to consider the application of these philosophical themes in lecturers' relations with computers that could show up in their experiences.

Conclusion to Section 2: Perspectives on human-computer relations

The socio-cultural and philosophy of technology literatures explored in this section show that there has been discussion at a societal level, not just of people and computers, but also of people and new technologies. Writers, who voice concern at a societal level, caution that cultures and people are similarly prone to transformation by computers and digital technologies, transformation that harbours danger and possibilities at the same time. Both perspectives show that while people have relations with computers, there is more to these relations than is normally assumed. However, the authors do not posit said relations in the lived reality of people's experience of actual everyday practices as such. In the next section I review literature on practice theory. I argue that lecturers' relations with computers needs to be explored through their everyday practices, because it is only by looking into these practices that their relations with computers may be brought to light.

Section 3: Literature on practice and practice theory

In the second section of this review, I examine literature written by scholars from socio-cultural and philosophy of technology fields. In this literature, there is a broad understanding that there are hidden relations between people and computers that can be analysed in different ways. In a bid to extend that perspective, the third section of this review focuses on practice. This aim is to show that among the particular views of practice delineated in the literature, one could be used to investigate lecturers' experiences of computers in everyday academic practice.

The different ways in which practice can be constituted

The literature on practice theory and philosophy presents a diverse picture with many ideas and concepts in contemporary theorisations of practice (Kemmis & McTaggart, 2000; Hagar, 2012). Green (2015) describes the area as "a loose assemblage of arguments and interests centred on *practice* as a concept and primary organizing principle for the social world" (p.122). Hopwood (2012) describes it as a complex terrain of entangled ideas. While most theorists understand practices as consisting of "arrays of activity" (Schatzki, 2001, p.2), interpretations of what is implied by the word 'activity' vary, as well as ways in which relations between the activities are understood.

There is thus a diverse field in which researchers tend to follow various traditions or notions of practice, resulting in different ways in which practice can be constituted (Kemmis & McTaggart, 2000; Schatzki, Cetina, & von Savigny, 2001). In order to clarify this landscape, Kemmis and McTaggert (2000) identify five ways in which practice may be constituted:

1. Practice viewed objectively and focused on performance, events and effects linked to individual's behaviour;
2. Practice viewed objectively from a macro stance and underpinned by "patterns" of social interaction (rituals, systems);
3. Practice viewed from the subjective perspective (internal) of an individual practitioner which is intentional, shaped by meaning and values;
4. Practice that is socially shaped by discourses and the traditions that constitute the practice as it is seen from the "subjective", internal perspective of members in a community of practice; and,
5. Practice that is viewed reflexively, socially and historically with the emphasis on human agency as it changes and evolves through the above four aspects.

In the above typologies of practice, the third point could describe how practice will be treated in this investigation because it will allow focus to be upon the subjective meanings that lecturers make of their practices as they are experienced in academic work linked to the computer, but up to a point only. The limitation of this way of constituting practice lies in the fact that it does not account for the dimension of 'everyday practice' embedded in everyday life.

However, the way in which everyday practice needs to be understood in this thesis is much more complex: thus, it is not sufficiently accommodated by Kemmis and McTaggert's (2000) third way in which intentional practice (shaped by meaning and values) is constituted from the subjective perspective (internal) of an individual practitioner. Therefore, in the next section, I utilize Certeau's (1984) concepts of practice, which are embedded in the context of everyday life, as a lens through which to interpret lecturers' subjective experiences of practice. Certeau not only provides a particular perspective of everyday practice, which is intentional, and goal directed through his identification of a main production of practices, but also shows how practices are continually being restructured and reinvented through an invisible secondary production.

Certeau's conceptualisation of everyday life

Certeau's understanding of everyday life originated from a three-year project, which he initiated with two collaborators, Pierre Mayol and Luce Gard. Together they set out to investigate ordinary everyday practices in contemporary society and culture. Certeau's intention was to propose a tentative theory of practice situated in everyday life, which could be explored by others in different settings. Although the project was never completed, it succeeded in making a certain type of discussion on practice possible in which his ideas need to be considered both as a blueprint and a template for research which still needs to be undertaken (Buchanan, 2000). Certeau's propositions are often referred to as a logic of practice because they are still being treated as a tentative theory of practice (Buchanan 2000).

Certeau's (1984) interpretation of practice brought together two lines of inquiry, which were formerly treated separately (Buchanan, 2000). These involved first, the study of a social 'representation', a term Certeau used to describe products produced by society, such as books, street maps, story-telling, train stations and airports; and, second people's mode of behaviour which involved how people interacted with them, even at a cognitive level, when reading a book. People often utilized these products in ways that were not intended by their makers or the dominant structures of power, resulting in a mode of behaviour that entailed manipulation. Certeau argued that there is not only public meaning in the way that products/representations are utilized, but also private meaning that is constructed between the representation and what the user does with it:

> The presence and circulation of a representation (taught by preachers, educators, and popularizes as the key to socio-economic advancement) tell us nothing about what it is for its users. We must first analyze its manipulation by users who are not its makers. Only then can we gauge the difference or similarity between the production of the image and the secondary production hidden in the process of the utilisation (Certeau, 1984, p. xii).

Certeau used the practice of walking through the city as an example. There are planned routes and walkways that people are expected to take, but people circumvent these and find other ways of getting from one point to another, even when reading a map. They do not necessarily always follow the routes that are intended for them by the dominant structures of power that are represented by traffic controllers or town planners.

According to Certeau (1984), the public understanding that people generally have about a product/representation and how it is expected to be used can be interpreted as the main production that is practiced by the user. Alongside the main production, there is a secondary production that takes place between the user and the representation, and involves the private meaning that the user makes of the activity. The secondary production is, therefore, determined by the users and even includes their cognitive manipulations as they interact with the representation through the main production. For example, when a story is read to

someone, the meaning that the story has for the listener ultimately depends on the listener and the way in which she/he interprets it.

By applying Certeau's ideas to this study, the computer may be treated as an example of a societal product and a 'representation' that is promoted by the organisation in which the academic works. The term 'modes of behaviour' refers to the ways in which lecturers work with computers. It is assumed by management that they will be used by academics in a particular way which benefits the organisation and of which the organisation is aware. Furthermore, there is a general understanding of what a computer is and what it is supposed to be used for in an academic context. However, any exploration of lecturers' relations with computers would require first looking at the ways in which they utilize computers and thereafter looking for the hidden production. In an attempt to bring this aspect of practice into this thesis, I will now discuss Certeau's (1984) logic of practice.

Main ideas in Certeau's logic of practice

Certeau's (1984) interpretation of everyday practice using the main and secondary productions needs to be appreciated against the main terms that were central to his thinking. These included the main production and an invisible secondary production, with strategies and tactics.

- **The main production**

According to Certeau (1984), there is always a main production of activity associated with the cultural product and the way it is assumed to be used. The main production is usually goal driven and involves the actual carrying out of the practice, whether it is walking the streets of a city following a map, reading a book or cooking (Certeau, 1984). In the same way, this study assumes that computers are used by academics for particular goals in education, and that said goals involve a main production of work that academics are expected to carry out at their computers on a daily basis. To date, however, there has been limited

research into the ways in which lecturers experience the main production in everyday academic practice.

- **A secondary production with tactics**

In addition to the main production, there is an invisible secondary production that Certeau also referred to as a "*poïesis*" (1984, p. xii). However, Certeau's (1984) interpretation of *poïesis* differs from that of Heidegger (1949). As noted in the earlier section on the philosophy of technology writers, Heidegger (1949) argued using the classical understanding of *techne,* that a technology should involve not just a technical side, but also a *poïesis,* the creative dimension. In contrast, Certeau (1984 p. xi) interpreted a *poïesis* as a deep dimension in people's practices which originates in a cunning "operational logic" involving concealed tactical operations that he saw as a natural part of behaviour in everyday life. Certeau (1984) claimed that this production was "devious ... dispersed ... insinuates itself everywhere, silently and invisibly ... it does not manifest itself through its own products, but rather through its ways of using products imposed by a dominant economic order" (pp. xii-xiii).

Certeau (1984) further argued that the secondary production of tactical operations needed to be understood through the invisible micro-tactics people employ to change the situation they are in, making the activity more doable or better without altering the main production that they are carrying out at the same time. According to Certeau (1984), scrutiny of the area beneath the surface of ordinary practices will reveal people's concealed "ways of operating" (p. xi) as they interact with a product or representation. Certeau (1984) also has an appreciation of the classical Greek term "*mētis*" (p. xix) which implies a combination of hidden wisdom, cunningness and skill as practices are being carried out. Certeau (1984) extends this understanding by reaching further back in history to a deep intelligence which, in his words, reveals "an operational logic whose models may go as far back as the age-old ruses of fishes and insects that disguise or transform themselves in order to survive, and which has been concealed by the form of rationality currently dominant in Western culture" (p. xi).

Certeau's (1984) secondary production also showcases his own interpretation of power. It is about a power that allows ordinary people to transform the ways in which they interact with a product/ representation so that they can become the producers of their own lives. The secondary production is much more than just about ordinary people practicing concealed tactical operations in their interactions with products/representations: it is about their ability to exercise an inner freedom and creativity as they go about the formalized aspects of the practice. This allows them to appropriate personal spaces for themselves that are unknown to the dominant order, which is only interested in promoting the main production or representation (Certeau, 1984). Buchanan (2000) notes how Certeau's tactics are used by people at a micro-level to cope or get-by in situations that are structured by larger organisations.

At one level, there is general recognition of the main formalized production of practices that lecturers carry out at their computers as part of their academic labour. And it is acknowledged that computers are used to facilitate academics' work and have become integral to academic functioning. However, Certeau's ideas regarding the secondary production of practices provide an alternative perspective that could be used to explore the concealed dimensions within lecturers' work at their computers. Therefore, in order to know what is going on in their practices, it is necessary to research their secondary production.

- **Strategies**

Certeau (1984) used the concept of 'strategies' to describe how institutions or dominant structures of power try to organize how a societal product or regulation is to be utilized on a daily basis. For example, and returning to Certeau's example of the practice of walking through a city, although certain routes and streets are laid out by the dominant structure's city planners and managers, who expect people to move in a certain way, their strategies are often thwarted by people's individual practices. Certeau (1984) observed, people have an inherent tendency to circumvent strategies promoted by dominant structures of power that are trying

to organize how things should be managed and used (Certeau, 1984). For example, drivers of cars are frequently confronted by formalized strategies put in place by a dominant structure, e.g., the sign-posting of roads by a transport authority to regulate how people should drive, but these regulations are not always followed.

- **Bricolage**

Certeau (1984) was also interested in the concept of *bricolage*, which has been used in various fields ranging from philosophy, social psychology, education, music, and critical theory. *Bricolage* requires a person to come up with innovative and original ideas or tactics on the spur of the moment; it involves producing or creating something from whatever happens to be available at the time. Certeau claimed that ordinary people are always 'making do' as they operate in situations where they have to negotiate strategies which have been put in place by those in power. They improvise through their own logic, while still co-operating and doing what is expected of them with the result they are constantly manipulating their practices by utilizing small ruses or tricks. "As unrecognized producers, poets of their own acts, silent discoverers of their own paths in the jungle of functional rationality, consumers produce through their signifying practices... "indirect" or "errant trajectories" obeying their own logic" (p. xviii). Little is known about this aspect in lecturers' practices; the focus has usually been on the epistemological dimension of academic work, while their ontological experience has not really been researched.

Significance of Certeau's understanding of practice for this investigation

Certeau's (1984) concepts of practice will be used as a lens through which to interpret everyday practice in this study. His logic promotes a unique focus on people's everyday practices, which are usually taken-for-granted due to their ordinary nature. The main question in this study places a emphasis on lecturers' subjective experiences of 'everyday practice'. This requires an interpretation of practice that will privilege ordinary practices carried out on a daily basis at the computer. By first looking into the main production in this investigation, there is a possibility that the concealed secondary production will be found, revealing lecturers' true relations with their computers.

Limits of Certeau

The main and secondary production that Certeau (1984) used to analyse everyday practices only went so far then stopped at the tactical operations of people as they go about their everyday practices. However, I want to emphasize that there are aspects of his interpretation of practice, which reveal that he was also interested in people's inner-world unconscious activity. This became evident when he noted that as people go about the practice of reading something - or even looking at a television advertisement - an unseen inner-world activity involving mind wandering takes place (Certeau, 1984). Thus, there is up to a point, an embodied dimension to his ideas, particularly if one looks at the "art" of reading (Certeau, 1984, p. xxi –xxii). However, there is literature on embodied practice, which can bring a hitherto unexplored dimension to Certeau's interpretation of practice. This is a key factor in this study because it is based in a context where the body is the main medium for the lecturers' practices. And, because they give meaning to their world through their bodies, it is necessary to bring that dimension into Certeau's conceptualisation of practice.

Embodiment and practice

This literature comes from several areas and promotes an understanding of practice from an embodied perspective. Among these perspectives one finds (a) culture, which is embodied in the way that people move and comport their bodies (Cohen & Leung, 2009); (b) embodied cognition, which incorporates neuroscience, psychology and phenomenology in a scientific understanding (Gallagher, 2000); and, (c) the social construction of the body through the senses (Howes, 2003). However, particularly relevant to this investigation is the area of literature, which highlights the centrality of the body in experience (O'Loughlin, 1995; Damasio, 2006; Dreyfus, 2006; Shotter, 2006, 2011; Schatzki, 1996 a; Green & Hopwood, 2015). These theorists not only consider practices from a deep bodily dimension, but also promote a perspective that acknowledges the unity of mind and body in practices, and the body as the point where cognition and activity come together.

Despite the fact that the theorists in this area of literature come from different disciplinary backgrounds, they promote a conceptualisation of the body in practice that has much in common with Merleau-Ponty's (1962) phenomenology. His phenomenology explains embodiment as occurring through an intelligent body-subject, which is deeply connected to its environment by a complex body-schema in experience (a subject I discuss further in Chapter 3). Although the theorists in this area all build upon Merleau-Ponty's (1962) body-subject, their focus on embodiment reveals different perspectives on the body which show: first, the body's deep sense of place and space as a body-subject (O'Loughlin, 1995); second, as a minded-body which has the ability to act as a ground reference for cognition (Damasio, 2006); third, its ability to store skills as body schemas during experience (Dreyfus, 2006); and fourth, the way in which it responds through felt bodily responses to its environment (Shotter, 2011). It needs to be noted that researchers in the field of physical education recognize that more attention needs to be paid to the social dimensions of the body in fields related to physical education (see, for example, Armour, 1999). However, they have tended to favour

the conceptual tools of Bourdieu as a means through which to conduct their research analyses of the body (Light & Kirk, 2001), despite the fact that there have been discussions in the past that encourage phenomenology when researching areas linked to physical education (Smith, 1992).

The first way in which embodied practice can be described is through Merleau-Ponty's (1962) body-subject with its special ability to sense 'place' (O'Loughlin, 1995). Although O'Loughlin's (1995) focus is mainly on the gendered body, she draws attention to the ways in which people's embodied subjectivity is integrated with their "immersion" (p.1) in the place in which they live. She claims that the body responds to the place in which it finds itself through a bodily understanding, which is embedded deep in its life forces. There is a need to explore people's first-hand bodily involvements with the place in which the body finds itself to be, and its connection with the other dimensions of living that it experiences before one can understand the evolving co-construction between body and place in a deep way (O'Loughlin, 1995). People need to look at the way in which different environments have constructed the body, particularly if they want to understand their bodily relations with the wider world and whether they are in balance and harmony with said world (O'Loughlin, 1995). Furthermore, "as teachers, educational theorists and the like, we need to direct our attention to the realities of bodies in discursively constituted settings" (O'Loughlin, 1995, p.1). From O'Loughlin's perspective, one needs to consider the settings academics are working in, and how these are taken up in an embodied way.

Damasio's (2001) conception of 'the minded-body', whereby the body acts as a ground reference for the mind, is a second way in which embodiment may be understood in practice. Damasio subscribes to a unification that incorporates body, know-how, skills and tacit understanding. In this unity, the body is a ground reference for the mind, with people's experiences being felt and taken up by the body. Damasio (2006) does not claim that the mind is in the body, but rather that the body "contributes a content that is part and parcel of the workings of the normal mind" (p. 227). For example, when people find themselves in a room,

their cognitive understanding of its space and its various objects in terms of size and distance always relate back to the body's anatomy and the patterns of movement that can be negotiated in that room. Similar to Merleau-Ponty (1962), Damasio (2006) also asserts that the body always plays a role in consciousness and provides a natural reference for what is being experienced in the environment. However, little is known of lecturers embodied experiences as they work at their computers.

The notion of skilled action, which leads to skilled bodily practices - body schemas - is a third view of embodiment in practice (Dreyfus, 2006). Dreyfus (2006) argues that the body responds through an innate intelligence that allows it to take on skills that are stored as body schemas, not as representations in the mind. Body schemas, once taken up by the body, allow people to respond to the situations in which they find themselves. Dreyfus argues that body schemas are made up of a range of sensory-motor movements that automatically define specific movements and support intentional activity. Through schemas, skilled bodily practices are taken up by the body, which responds to an internal integrated understanding involving intelligent behaviour, learning and skilful action (Dreyfus, 2006). According to Dreyfus (2006), the deep connection between the body and environment is reflected in a natural body schema, and the way in which the body utilizes those skills that have become part of its body schema. This confirms the existence of a complex process of co-construction that occurs between the body and its environment during the acquisition of skills (Dreyfus, 2006). Likewise, academics do not have neutral bodies. They have body schemas that may be challenged by the sedentary nature of computer work. Once again, I emphasize the paucity of studies looking into this aspect of their experience.

The fourth way in which embodied practice may be considered is through deeply felt bodily responses which are taken up by the body during its experience of an environment (Shotter, 2011). Shotter (2011) asserts that there is a more "immediate and unreflective, bodily way of relating to our surroundings than the ways that become conspicuous to us in our more cognitive reflections" (p. 439).

He argues that people come to know of their surroundings through recurrent patterns of movement which are experienced as felt bodily changes that make up their image schema (or corporeal concepts). In this way, they are orientated towards the world in a bodily way (Shotter, 2011).

Shotter (2011) argues that a felt embodied way of relating to the environment as a new realm of inquiry should be developed, not just for psychological research, but also in order to understand people's everyday practices and the role of bodily awareness in their actions and relations. He proposes:

> 1st person explorations, from the inside, of the felt discriminative awareness we make use of, not in solving intellectual problems, but in resolving difficulties of orientation or relationship we face in both our everyday lives and in our professional practices – practical difficulties of a kind that still lack extensive examination (Shotter, 2011, p. 439).

In the light of the above it becomes increasingly clear that academics are working and teaching in environments that are no longer based in the concrete world. They are also experiencing their bodies differently as their practices change. How lecturers' felt bodily responses come into play as they interact with computers in everyday practice has not really been considered, despite all the transformations occurring in their traditional ways of teaching.

Schatzki's account of the body should also be considered when dealing with embodied practice, given his importance in the recent 'practice turn' in contemporary theory (Greene & Hopwood, 2015). In an introductory chapter by Schatzki and Natter (1996), embodied practice is interpreted in two ways: (1) through the social, resulting in the socioculturated body which is shaped by the incarnation of sociocultural practices/phenomena and their transforming effects; and, (2) through the political, resulting in the socio-political body, shaped by social and political formations and institutions. According to Schatzki (1996a), people are constituted in and through their practices with the body playing a role in the process. For Schatzki (1996a), bodies are deeply interrelated with their

social practices; they express and manifest their practices as 'expressive bodies' or 'manifesting bodies' because they reveal the mind as well. Furthermore, bodies can also be 'signifying bodies' and 'instrumental bodies' in that they communicate and perform their practices through particular meaningful actions that uphold and support the practices (Schatzki, 1996a). From a Schatzkian perspective, bodies and practices are deeply intertwined; there can be no practices without bodies, and without practices, meaningful activity ceases to exist (Greene & Hopwood, 2015).

Recently, the relationship between practice and the body has also been strengthened by Green and Hopwood's (2015) argument that professional education is currently best served by re-assessing the role and significance of corporeality in and for professional practice, learning and education. The authors claim that professional education has experienced "an ever-increasing emphasis on 'mind' at the expense of 'body' ...this has been clearly so in the case of fields such as teaching and nursing" (Green & Hopwood, 2015, p.15). They note that the movement towards 'virtual' forms of professional education was cited by Lyotard (1984) as part of the postmodernising developments in technology and culture (Green & Hopwood, 2015).

Green and Hopwood's (2015) focus is on corporeality, or rhetorically, "corpor-reality" (p. 16), which they understand specifically in terms of the embodied nature of professional life. Important for these writers "are professional worlds, a professional reality, above all else predicated upon and constituted in and by corporeal co-existence, the orchestrated work of bodies – professional bodies" (Green and Hopwood, 2015, p.16). Hence, their mapping out of this topic through a tri-partite framework for conceiving corporeality (the practicing body) in professional practice which encompasses :(1) the body as metaphor; (2) the body as background; and, (3) the body as resource.

Many of the views expressed by Green and Hopwood (2015), and those of other writers cited by them (e.g., Schatzki & Natter, 1996; Farnell & Varela, 2008; Shotter, 2011; Reckwitz, 2002, 2012; Schatzki, 2012) challenge a Cartesian

mind/body dualism with stimulating suggestions for how the body/practice nexus might be conceptualized or researched. They challenge historic views where mind over body is privileged and they reveal a desire to return to the body as a central ground for understanding practices. These recent developments are described by Kinsell (2015) as " a new field of thought that attends to the place and possibilities of 'the body' and 'embodied perspectives' for advancing understanding of professional practice" (p.245).

Despite a growing corpus of scholarly attention in this area, Green and Hopwood (2015) note that unanswered questions about the body, what constitutes a body and why the body matters, all point to the need for a new revision of the body in professional practice. Although there has been an expanding interest in the embodied nature of professional practice, learning and education, corporeality is still an area that requires further investigation and appreciation, particularly in the light of the movement towards virtual forms of education (Green & Hopwood, 2015).

Conclusion to Section 3: Ways of and approaches to studying practice

A review of the literature has shown that there are various ways in which practice may be viewed. Of particular relevance to this investigation is 'everyday practice' as used by Certeau's logic of practice. Certeau proposed a tentative theory of practice that focused on ordinary activities of everyday life. He focused on cultural products/representations that were intended to be used in specific ways but were often circumvented. Ordinary people, the consumers of these products, reinvent the way in which they are used through tactics, so that they become the producers of their own lives and at the same time, consumers of their cultural world. In the sphere of consumption, they become involved in a main production, which can usually be seen from the outside, while a secondary production also takes place, albeit at an invisible level.

Certeau highlighted the importance of understanding the lecturers' relations with computers by explaining academic practices that are located in the everyday world. Although something is known about the kind of practices that lecturers engage with at their computers, it is not known if lecturers' everyday practices extend into an invisible secondary production which takes place in tandem with the main production, and what dimension the body plays in this production.

Conclusion of the literature review

In this literature review, I have explored three areas of literature relevant to my investigation. In Section 1, focus was on literature relevant to the field of higher education. I began by broadly describing the ways in which academics' practices are framed in the higher education literature: this required examination of recent reviews of education and technology research. Several specific areas or themes in higher education literature were identified. I discussed past studies that show that there is an inner-world dimension, which needs to be recognized in lecturers' practices. I showed that inquiries into academic experiences have tended to focus on educational studies that have sought to support the usage of computers and digital technologies in the teaching and learning process. I also argued that academics' subjective experiences of computers remain an under explored area of research in academic inquiry, despite the fact that lecturers spend so much time working at their computers and use them to mediate so many of their practices.

In Section 2 described perspectives on human-computer relations through two areas of literature: first, literature adopting a socio-cultural perspective; and, second, literature arising from a philosophy of technology perspective. The authors in these areas are generally concerned with people's relations with their computers, and in how society and culture are being changed by computers and new technologies. I demonstrated the different ways in which socio-cultural and philosophical perspectives view human-computer relations and how none of these perspectives focuses on people's actual lived relations with computers. This chapter has demonstrated that in order to explore lecturers' lived relations with

computers, a phenomenological approach was needed to research their practices at the computer, for only through a phenomenological description of their experiences will their relations with computers become evident.

In Section 3, which dealt with literature on practices and practice theory, I showed that there is a diverse range of understandings and definitions of practice in the literature. However, not one of these was deemed suitable to this study's intersection of higher education, people's relations with computers or everyday practice. I therefore argued for another perspective, i.e., Certeau's *The Practice of Everyday Life* (1984), which would align with this study's emphasis on lecturers' ordinary experiences of computers. I have described how Certeau's logic of practice with its two modes of production could be used as a lens through which to interpret lecturers' everyday practices linked to computers and to elucidate their relations with computers to light. An argument was proposed, stressing the particular importance to practitioners of physical education of embodied practice. In an attempt to bring this hitherto unexplored dimension to Certeau's interpretation of practice, this thesis will acknowledge the place of the body in everyday practices. This is discussed further in the next chapter through the framework of phenomenology.

CHAPTER THREE: METHODOLOGY

Introduction

In this chapter, I describe the framework of phenomenology that acknowledges the place of the body in practice needed to underpin my study of lecturers' experiences of computers in everyday academic practice. Phenomenology developed through a philosophical movement that brought with it a particular way of thinking about people and the world (Van Manen, 1997; Glendinning, 2007); and there are different approaches to phenomenology (Van Manen, 1997; Barnacle, 2001). In the first section of this chapter, I will describe what phenomenology is, briefly touching on its early history. Then I will discuss its relevance to this investigation. In the second section, in which focus is on phenomenology's philosophical foundations that I explore through the key concepts of its founder Husserl (1970 a), I look at consciousness as a form of being, the return to the life-world, and the 'things themselves'. As well, I explore how Merleau-Ponty (1962) extended his ideas to arrive at a body-subject that was deeply connected with its environment. In the third section, I detail the main philosophic assumptions and tenets that characterize phenomenology today. Section 4 deals with the problems and issues one encounters when doing phenomenological research.

Section 1: Describing phenomenology and its relevance to this investigation

What is phenomenology ?

Phenomenology, a qualitative research method, is intertwined with a rich philosophical history and background. Because of its close links with philosophy, phenomenology is often described as a movement in philosophy which represents "a radical, anti-traditional style of philosophizing" (Moran, 2000, p. 4) which aims to arrive at the truth by studying phenomena as they appear during experience in consciousness. However, it is one among many other qualitative

methodologies, e.g., such as ethnography, heuristic inquiry, ethnomethodology, symbolic interactionism, and ecological psychology that are grounded in the empirical world (Patton, 1990). Bogden and Biklen (1992) note that qualitative research investigates people and their context holistically, but through different methodological orientations. Cohen, Manion and Morrison (2007) emphasize the need for the researcher to be mindful of the differences within the various qualitative orientations, and of whether the methodology she/he has chosen is suited to answer the thesis questions. Importantly, Giorgi (1997) identifies three criteria that are necessary for a qualitative method to qualify as phenomenology in a Husserlian sense: (1) phenomenology needs to have thick description; (2) A criterion is the phenomenological reduction which is an integral part of its methodology; and, (3) phenomenology entails a search for essences by bringing to light the most invariant meanings of the phenomenon. All three of these aspects were deemed suited to this investigation.

When developing an understanding of phenomenology, one first needs to appreciate its etymology. "The word phenomenon comes from the Greek word *phaenesthai*, to flare up, to show itself, to appear" (Moustakas, 1994, p. 26). Heidegger (1977) claimed that to study a phenomenon meant to shine a bright light upon it so that it could be seen in a totally new way. Cerbonne (2006) describes phenomenology as "the study of phenomena" (p.3) that are taken-for-granted in everyday life. Barnacle (2001) claims that any kinds of phenomena may be taken as phenomenology's subject matter. Phenomenology, therefore, addresses a wide range of subjects: for example, the meaning of things one experiences in a life-world, e.g., the significance of objects, events, tools, time and relationships (Barnacle, 2001). These are studied through phenomenology's particular treatment of experience as it shows up in a person's pre-reflective consciousness. When the nature of the experience is revealed through themes, an essence that is general to the experience comes to light (Birch, 1989; Cerbone, 2006).

Through its historical and philosophical background, phenomenology has evolved over time into many versions that deal with the structure of various types of experience (Seamon, 2000; Barnacle 2001; Van Manen, 2002; Willis, 2004). As Moran (2000) observes although phenomenology has many aspects that are particular to its history, nature and practice, it never developed a specific system or set of dogmas, and was not shaped by scientific hypotheses. In contrast to the natural sciences, phenomenology deliberately avoids hypotheses and focuses exactly on how experience is given to a person's consciousness and what shows up in said consciousness or lies behind it (Moran, 2000).

The early history of phenomenology

In the Dictionary of Philosophy (Mautner, 1996), phenomenology is described as having two dimensions, i.e., "… the philosophical method and movement that had its origin in the work of Edward Husserl (1859-1938)" (p. 421). The historical aspect of phenomenology may be traced back to the first half of the 20th century, when the movement was promoted by Husserl (1970a), considered the 'father of phenomenology'. Many of his ideas were taken up by other philosophers, including Heidegger (1962), Merleau-Ponty (1962), Sartre (1995), among others. Thus, phenomenology began with Husserl in the 1890s and developed over the years into the study of people in their respective life-worlds. It occupied a central position in European philosophy throughout the 20th century, promoting a perspective that contrasted sharply with the dominantly behavioural and analytically natural science approaches that were evolving in America and North America (Cerbone, 2006; Glendinning, 2007; Moran, 2000; Van Manen, 1997). It is worth noting that although Husserl is referred to as the father of phenomenology, some of the themes that were to become its philosophical foundations had already been foreshadowed in the work of Brentano, who exercised early influence on Husserl (Moran, 2000). Before exploring these philosophical foundations further through Husserl, I will briefly outline how phenomenology and its 'spirit' align with the questions in this investigation.

How does phenomenology align with this investigation?

Phenomenology aligns with an investigation into the experiences of lecturers and their computers in everyday practice in several important ways. Van Manen (1997) refers to it as a methodology that is located within the empirical realm of everyday lived experience using a descriptive method (see Chapter 4) of human science. Through this method, the hidden dimensions in people's lived experience are revealed. As noted by Crotty (1998), phenomenology specifically aims to arrive at a deep understanding of lived experience.

My core research question appears below, followed by two sub-questions:

(1) 'How do lecturers experience computers in everyday academic practice?' This question aligned with the nature of phenomenology that is a human science method investigation how things appear to a person's consciousness. Phenomenology's investigation of consciousness has been defended vigorously throughout its historical development (See Giorgi, 1970, 1985b, 1997 and Van Manen, 1997). Giorgi (2009) maintains that the natural sciences with their experimental approach cannot reach this inner world of subjective experience because they exclude the "experiencer" (p.4) and what is given to a person in consciousness in the experience.

In addition, the two subsidiary questions,

(1) 'What might a rich description of the lecturers' experiences disclose if it were sought from everyday practice which focused on ordinary activities at the computer, as they are lived' in a typical day?' and

(2) 'How is the relationship between lecturers and computers experienced in a context that privileges the 'moving' body?'

point to Merleau-Ponty's (1962) variant of phenomenology in which the body plays a pivotal role in experience. Merleau-Ponty's phenomenology promotes a style of thinking about the world, and a particular understanding of the body in experience as a complex body-schema. These two aspects harmonised with the questions and the lecturers who were orientated to the world in a bodily manner.

Furthermore, phenomenology allows for a particular kind of understanding to emerge from the questions as they are lived and experienced. Spinelli (1989) notes that this understanding is different from the kind of understanding that is sought in the natural sciences with their experimental approach. Phenomenology aims to understand "anything at all that can be experienced through the consciousness one has of whatever is "given" from the perspective of the conscious person undergoing the experience" (Giorgi, 2009 p.4).

In addition, there is also a relationship between the main question and phenomenology being the appropriate framework. Van Manen (1997) refers to this relationship as a "dialectic" (p. 2) between the questions, what it seeks to answer and phenomenology. He further observes that the choice of methodology should "not only be driven by the dialectic, but should be in harmony with the researcher's own deep interest in the field of study" (Van Manen, 1997, p.2). Barnacle (2001) emphasizes that phenomenology always begins with wonder, which leads to "opening up to the unknown listening for the question"(p.3) as one seeks the meaning and understanding of something. Thus, from Van Manen's (1997) and Barnacle's (2001) perspectives it became clear to me that the main and subsidiary questions implicitly recommended phenomenology as a framework for this study. The questions required a descriptive framework that would allow me a comprehensive understanding of the lecturers' experiences of computers in everyday academic practice. Having discussed my reasons for choosing phenomenology, in the next section focus is upon Husserl and Merleau-Ponty's contributions to phenomenology.

Section 2: The philosophical foundations of phenomenology

Husserl's transcendental phenomenology

One of the main contributions of phenomenology has been its commitment to recognizing that there is a subjective view to experience that is an essential part of a full understanding of knowledge (Moran, 2000; Glendinning, 2007). Phenomenology always includes consciousness an aspect that, Husserl argues was excluded from the natural sciences that failed to recognise it as the source of all knowledge (Moran, 2000). In this section I will briefly contextualize (1) how Husserl's (1970a, 1970b, 1983) influenced phenomenology; and, (2) his presence, which still lingers on in present day phenomenological practice.

Husserl began his investigation into phenomenology through Brentano's lectures and their emphasis on the medieval notion of intentionality and consciousness, which became central features of phenomenology (Cerbone, 2006). Husserl (1970a) promoted phenomenology as a science of the study of the transcendental ego with its structures of consciousness (explained further in this discussion on Husserl) and with its own distinctive method. He saw phenomenology, with its own distinctive method for transcendental investigation, guided by the quest to ascertain how it was possible for a person's consciousness to make contact with the world and things in an endless stream of conscious experience (Husserl, 1970b, 1983; Cerbone, 2006; Glendinning, 2007; Moran, 2000). Hence, the nomenclature transcendental phenomenology was given to his particular form of phenomenology.

Husserl's (1970a, 1970b) claim that the essential structure of experience could not be understood from a naturalistic perspective underpinned his stance on anti-naturalism. He (1970a, 1970b) argued that consciousness was at the root of all experience, that it was intertwined with temporality, and that cerebral structures

exist in consciousness beneath the changing flux of human experience and awareness (Husserl, 1983). These cerebral structures were located in a region of consciousness which he referred to as the transcendental ego, a level separate from the specific experiences and thoughts of the everyday ego of which a person, is consciously aware (Husserl, 1983; Spinelli, 1989). Furthermore, these cerebral structures could be reached through a process of reflection, involving reduction (I address this later in the chapter). According to Husserl, one would then be able to see things as they really are because through reduction, the inner subjective world of consciousness could be reached to arrive at the transcendental ego and its meaning of experience in consciousness (Husserl, 1983; Cerbone, 2006).

Husserl (1983) later advocated phenomenological analysis, from the transcendental ego and consciousness to the pre-reflective life-world of everyday experience, as the grounds for the study of the natural sciences. There are claims in the literature that many of Husserl's philosophic understandings and themes became part of the tradition of thinking that underpins the movement of phenomenology and influences phenomenological practice through the following dimensions:

- the intentionality of consciousness in experience;
- the subjectivity of experience through meanings and senses that are personal and always return to the body as the zero point of orientation;
- temporality as a fundamental structure of conscious experience;
- the second reduction, which is often referred to in literature as the "eidetic reduction" that reveals the essence of the experience; and,
- his conceptualisation of the phenomenal body as lived and corporeal

(Embree, 1986; Glendinning, 2007).

Although later phenomenologists critiqued Husserl's themes internally, they are still treated as a "shifting inheritance" (Glendinning, 2007, p. 29), which has been refined and reworked in the history of phenomenology. When Husserl eventually moved away from his kind of phenomenology based on transcendental ego and

consciousness to focus on the pre-reflective life-world of everyday experience, his phenomenology was taken up and developed further by Heidegger (1962), Merleau-Ponty (1962) and others (see, for example, Sartre (1936) Arendt (1946), Derrida (1967), Gadamer (1977) and Levinas (1988), cited in Moran, 2000). Consequently, his ideas are still relevant today to the understanding and practice of phenomenology. The ways in which later philosophers, in particular Merleau-Ponty (1962), built on Husserl's ideas, influenced my appreciation in this investigation, particularly when it came to my actual 'practice' of phenomenology (see Chapter 4).

Both Heidegger (1962) and Merleau-Ponty (1962) questioned Husserl's reduction and transcendental structures, claiming that they relied on pure reflection and cerebral structures rather than on actual human experience locate within the world of everyday life (Schmidt, 1985, cited in Seamon, 2000). By developing Husserl's transcendental phenomenology further, they arrived at a perspective from which human beings were seen as deeply connected to their environments and experience (Seamon, 2000). This relationship between people and their environments is evident in Heidegger's (1962) 'Dasein' and 'being-in-the-world', and in Merleau-Ponty's (1962) 'Body-Subject' (Cerbone, 2006: Glendinning, 2007; Moran, 2000; Seamon, 2000). I will now discuss Merleau-Ponty's concept of the body-subject, and the deep relationship it has with its environment.

Merleau-Ponty's phenomenology of embodiment

Although Merleau-Ponty questioned several aspects of Husserl's transcendental phenomenology, he maintained "a strong sense of the presence of Husserl in his own, constantly evolving thought" (Moran, 2000, p.407) as he developed his concept of the body-subject. Basing his studies on Husserl's 'Ideas II', Merleau-Ponty (1962) promoted his own concept of the body-subject in his work titled the *Phenomenology of Perception* (1962) wherein he argued that experience is not only construed through perception, but also through the body which is imbued with a body-schema. Moreover, Merleau-Ponty (1962) argued that Husserl's

belief in the body which operates from the zero point of orientation, needed to be taken further in a manner that would show the centrality of the body in human experience and how it is constituted through its experience.

Merleau-Ponty argued that Husserl's stance did not recognise the deep way in which the lived body of phenomenology responds to its experience through a body-schema. For example, he claimed that "The Body is in the first place, the medium of all perception; it is the organ of perception and is necessarily involved in all perception" (Ideas II, p.18, cited in Cerbone, 2006 p.100). According to Merleau-Ponty, Husserl's understanding of the body as the 'medium' and 'organ' of perception needs to be understood on two levels. According to Merleau-Ponty (1962), a person always responds to their experience in an environment through their senses of vision, hearing and touch, but their response is of a bodily nature. All experience of physical things also resonates with the body where it is automatically translated into a bodily-based understanding, even when the body is bracketed from the actual experience

Consequently, Merleau-Ponty (1962) placed the lived body of phenomenology at the centre of human experience. He saw it operating as an intelligent body drawing on a body-schema which not only comes with bodily perception, but also with the ability to be in a dialectical relationship with its environment during experience (Morris, 2000). Merleau-Ponty's body-subject in experience is involved in a complex dialectical relationship between consciousness, its lived and corporeal dimensions, and the place in which it operates (Moran, 2000). Therefore, in his interpretation of phenomenology the body has a deep intelligence of its own which allows it to read and respond to the environment at a pre-reflective level of consciousness or awareness.

Thus, Merleau-Ponty's (1962) phenomenology included several ideas drawn from Husserl, which have been restructured into a more sophisticated understanding of the lived body in experience and the concealed dialectical relationship it has with an environment. This complex relationship can be analysed through the following

three dimensions: consciousness and intentionality; the lived and corporeal body; and, the roles of the place and space in which the body undergoes its experience. Merleau-Ponty particular interpretations of these dimensions have shaped phenomenological thinking. They also reveal the kind of world in which Merleau-Ponty's body-subject operates.

The first dimension to be discussed here focuses on Merleau-Ponty's (1962) particular view of consciousness and intentionality, and how these dimensions are intertwined with the body. Consciousness does not direct intentional bodily movement, but is instead directed by the body's own deep connections with its world, knowing what it can do, and how it is experiencing that world (Merleau-Ponty, 1962). Consequently, the lived body operates through a deep level of bodily awareness, which extends into consciousness. Merleau-Ponty argues that at this level of awareness in experience, the body responds to its environment through an intentionality of concealed lines which come from its life-forces and allow it to reach out in a natural way, facilitating a deep connection with its environment without having to fall back on consciousness. For example, a person can automatically sense the atmosphere of the environment he/she is in, through the body's own innate way of 'reading' or responding to a place and whether it offers an experience of depression, danger or happiness. Merleau-Ponty (1962) extended Husserl's ideas to show that the lived body operates through a complex intentionality with its environment. According to Morris (2008), this intentionality can also be understood as a motor-based intentionality which originates in each person's personal body schema which has developed over time to fit into and respond to the world that it experiences.

A second way in which Merleau-Ponty (1962) took Husserl's phenomenology further was through his re-interpretation of the body as 'lived' and 'corporeal'. Husserl's (1983) perspective of the body as having these dimensions played a part in influencing Merleau-Ponty's conceptualisation (1962) of the body-subject (Cerbone, 2006). Husserl referred to two bodies in experience: (1) the body as '*Leib*', meaning a lived body which is the experienced body or body as lived; and,

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(2) the body as '*Korper*', meaning "corpse" as in a physical object (Cerbone, 2006, p. 100). Moran (2000) notes how this difference "between the body as physical object (*Korper*) and the body as animate being (*Leib*)" (p.407) was carried over into Merleau-Ponty's phenomenology. Consequently, in Merleau-Ponty's body-subject, the lived and the corporeal body are dialectically intertwined, with the corporeal body appearing whenever the 'lived body' loses harmony with its life-world as a result of its experience. For example, sometimes a person can experience the doing of an activity in an effortless way and not be aware that he/she is bodily located during the activity. However, with the passage of time, tiredness or boredom can set in with the result that the sense of the lived body as unfelt shifts into the foreground of awareness through a corporeally felt feeling. I explore this shifting bodily awareness in later chapters dealing with lecturers' interactions with computers. I also want to stress here that the relevance of Merleau-Ponty's unique understanding of the body in experience has been revisited in medical, cognitive and psychotherapy research (Leder, 1990; Fuchs, 2005; Gallagher & Zahavi, 2008).

A third dimension in which Merleau-Ponty (1962) contributed to phenomenology may be found in his conceptualisations of place and space, which he interpreted through bodily-based perceptions. In Husserl's (1983) phenomenology, the self was recognised as a 'zero point of orientation' in experience. This means that seeing and experiencing of things from a particular angle is mediated by the body as a reference point. For example, the objects in a room are far from or close to a person in a bodily sense, a zero point of orientation that is integrated with an understanding of space. This bodily-based spatial understanding was extensively investigated by Merleau-Ponty (1962), resulting in his deep appreciation of the concealed power of place to structure a person's bodily experience of space. It also confirmed for him that experience was embodied in particular ways by the body. He carried out specific experiments to show the role of the body as a reference point in its experience of things in the place in which it finds itself. Furthermore, he was able to show that as the body responds to a place through the

spatial experience it offers, it is able to 'read' that experience at a pre-reflective level of awareness (Merleau-Ponty, 1962).

Merleau-Ponty, who challenged the traditional view of space, maintained that there is a distinction between the lived space of phenomenology and the objective space of geometry and science (Dreyfus, 1991; Robinson, 2012). Traditionally, space has been conceptualized in terms of a physical or geometrical shape that contains the objects that are experienced in them (Dreyfus, 1991; Robinson, 2012). Merleau-Ponty shows that all experience of a place is really an experience of its lived space, which resonates deep down, with the life forces of the body (Relph, 1973; Cloke, Philo & Sadler, 1991; Casey, 1994, 1997; O'Loughlin, 1995; Soja, 1996). Furthermore, it is not just about the body responding to a space as such, but also that the place in which the body finds itself offers it an experience of space which is interwoven with time, as that experience unfolds. Consequently, his phenomenology has engendered a sophisticated understanding of space which is permeated with each person's own experience of time. Robinson (2012) notes that while traditional understandings of time are linear, phenomenological understandings involve a complex and powerful temporality that shapes practices in a deep way. This can result in some practices being marked by rhythmic variations, which are brought about as a result of different spatio-temporal settings unique to them (Robinson, 2012).

In sum, Merleau-Ponty (1962) argues that phenomenology should be practiced as a style and manner of thinking, and that the experienced world is accessible only through a phenomenological method, which emphasises direct description of experience rather than explanation or analysis. Merleau-Ponty (1962) describes phenomenology as a transcendental philosophy of essences, which allows things to be seen as they really are in their existence, and in people's experience of that existence. Through these essences one can make direct contact with a world "which is already there" (Merleau-Ponty 1962, p. vii) before reflection, and see it for what it is. His phenomenology has resulted in a particular style of thinking shaped by a unique conceptualisation of the body and embodiment during

experience; hence, its appropriateness for an investigation of lecturers' experiences of computers in everyday academic practice. In the next section, I elaborate upon the main structures associated with the philosophic thinking that accompanies phenomenology.

Section 3: Constructs of phenomenology's style of thinking

In this section, I delineate the central tenets and assumptions that are part of the tradition of philosophical thinking in phenomenology and bring a style of thinking to its practice. Giorgi (2007) asserts that its philosophic background has given rise to a tradition of thinking that has continually been refined and clarified over the years by different phenomenologists. Furthermore, this tradition of thinking is now ingrained in phenomenology's practice as important research constructs and themes (Berndtsson, Claesson, Friberg & Öhlén, 2007; Giorgi, 2007). I have accommodated these ways of thinking in this investigation and discuss them here as a bridge to Chapter 4. In the first part, I discuss the philosophic assumptions of phenomenology. Then, the main tenets of phenomenology will be elucidated.

Philosophic assumptions

Among the key assumptions that underpin phenomenological thought today (Berndtsson, Claesson, Friberg & Öhlén, 2007) are particular interpretations of lived experience and lived meaning, and consciousness and intentionality. They have interdependent connections with each other, which have been vigorously debated by phenomenologists over the years and need to be appreciated when thinking phenomenologically.

Lived experience and lived meaning

Lived experience is central to phenomenology. Without it there would be no phenomenon. It is lived by a person and becomes embedded in his/her pre-

reflective awareness where it is integrated with the existentials of time, space and the relations he/she has with others. Phenomenology's focus on understands a person's lived experience as it occurs on a pre-reflective level of subjective awareness in an immediate sense, before the person has time to reflect on it (Dilthey, 1987).

Van Manen (1997) defines lived meaning as "the way that a person experiences and understands his or her world as real and meaningful" (Van Manen, 1997 p.183). I will suggest there is a subtle difference between lived experience and lived meaning. People give lived meaning to their experiences. In this investigation, I sought not only how a group of lecturers, who specialized in physical education which appears to privilege the moving body, experience computers in their everyday academic practice, but also to elicit the meaning they gave to their experiences. These aspects became central to my investigation given the juxtaposition of the phenomenon between the moving body and computers that promoted sedentary work. I was interested to determine what meaning the lecturers gave to their experience.

Consciousness and pre-reflective consciousness/awareness

In phenomenology, it is understood that human beings access their world of lived experience through consciousness (Glendinning, 2007). Merleau-Ponty (1962) claimed that it was through consciousness at a pre-reflective level of awareness that people were able to make contact with their inner selves as beings and the world they were experiencing. Van Manen (1997) notes that it is through consciousness that a person is related to the world; consciousness he claims is always transitory and brings to light one's lived experience that is already over and happened at a pre-reflective level of conscious awareness. Giorgi (1997) argues that those things that present themselves in the lived world, become part of the consciousness of a person, first at a level of pre-reflective awareness, and thereafter, reflected on and spoken about retrospectively by the person. In phenomenology, exploring a given phenomenon in a life-world is to explore it

first as it is presented to the consciousness of a person through his/her pre-reflective consciousness/awareness of the lived experience.

Pre-reflective consciousness is not only an integral part of consciousness, but it is usually experienced at a level of non-reflective awareness where a person does things automatically in everyday life, like arriving home after having driven there and not remembering much about the journey or how one got there (Gallagher & Zahavi, 2008). The experience one has is given not as an objective experience, but a subjective experience that is lived by the driver at a pre-reflective level of consciousness that is neither seen, nor heard, nor thought about.

Gurwitsch (1964) claims that phenomena are located in consciousness and are interrelated with other aspects in the field. Drawing on William James's (1890) notion of the fringes of consciousness, and Merleau-Ponty's recognition of subjective consciousness in experience, Gurwitsch (1964) extended phenomenology's unique understanding of consciousness further by showing that there are three phenomenal areas which make up the field of consciousness. These are: (1) the theme which is at the centre of the person's focus or awareness; (2) the thematic field which is all the data relevant to the theme; and, (3) the margin which encompasses that data which is at the sidelines of a person's awareness and not always clearly relevant to the theme (Gurwitsch, 1964). Brown (1991) argues for phenomenological descriptions to be informed by "the continuum of relationships in the field of consciousness" (p.2). The field of consciousness, which played a central role in this investigation and was used to analyze the phenomenon through a state of consciousness that was, in fact, being revealed in the lecturers' descriptions of their experiences. In this investigation, the data revealed the degree to which the lecturers' experiences were situated in a complex interrelated field in which a shifting bodily awareness was not only a main theme in their pre-reflective awareness, but also interwoven with the themes of time and space (see Chapter 7).

Intentionality

In addition to consciousness and pre-reflective consciousness/awareness, intentionality is always recognized in phenomenology and in a relationship with it. It is closely linked to consciousness because consciousness is always of or about something through intentionality (Van Manen, 1997). Although Husserl argued that the basic structure of consciousness is intentionality, Merleau-Ponty (1962) contributed to a further understanding of this by revealing that a person's orientation to intentionality is not always a conscious act. It happens automatically because people are involved in a world which is always there for them, in place, with the result that people's intentionality at times becomes available to them only upon reflection afterwards (Merleau-Ponty, 1962). Unawareness of intentionality in everyday human activity is also noted by Van Manen (1997), who points out that people are not deliberately conscious of being in the world and how they change things and adapt within the flow of their experience. Their actions are often automatic responses and thus unconscious. It is through this unconscious intentionality that a person is really connected to his/her life-world at a pre-reflective level of awareness (Van Manen, 1997). However, there are times when people can be aware of their intentionality and how it motivates their responses (Van Manen, 1997). Phenomenology as a method focuses on people's unconscious intentionality because it shows their real connection with their life-world. In this thesis, the lecturers' unconscious intentionality was particularly evident in the secondary production.

Tenets of phenomenology

There are several tenets (beliefs or principles) that are integral parts of phenomenology. They involve life-world, essence, bracketing and reduction, and textual description. They are also an integral part of phenomenological thinking. I will now describe each of these in turn.

Life-world

The life-world is "both the source and the object of phenomenological research" and where a person's lived experience is located (Van Manen 1997, p.53). The notion of the life-world (*Lebenswelt*) is derived from Husserl's (1970a) last work in which he described the life-world as an everyday taken-for-granted aspect of natural life which forms a central part of experience. Prior to this, he had thought of it as the world of experience (*Erfahrungswelt*). He later proposed that a life-world consists of "the world of immediate experience", as "already there" and "pre-given" because it is experienced in a primordial way, which is part of natural life (Husserl, 1970a, pp.103-106). Husserl (1970a) appreciated the difference between a theoretical attitude towards life (which originated with the Greeks and resulted in understandings based on theorizing and science), and a natural pre-theoretical attitude towards life (which is experienced before critical reflection sets in). Van Manen (1997) emphasizes the fact that Husserl saw human experience unfolding within an out-of-sight, ordinary life-world, which is taken-for-granted and exists before people contemplate their experiences in it. This study set out to capture that world as it happens in experience.

The life-world in phenomenology can also be analysed using four existential themes, which Merleau-Ponty (1962) viewed as fundamental structures underpinning the life-world. There are four fundamental existentials: temporality; spatiality; body and relationality (Van Manen, 1997). In phenomenology, they are seen as existential dimensions through which all human beings experience the world, albeit in different lived ways (Van Manen, 1997). According to Van Manen (1997), existential themes clarify lived experience in the life-world, and guide the researcher's reflection. They are ontological concepts involving the nature of being through four modes of experiencing the life-world in everyday situations (Van Manen, 2002; Berndtsson, Claesson, Friberg & Öhlén, 2007). Through their ontological nature, they facilitate 'thinking phenomenologically' while doing phenomenology (Berndtsson, Claesson, Friberg & Öhlén, 2007; Giorgi, 2007). In this study the lecturers' ways of being through time, space, and

body came to light in their pre-reflective awareness as they described their experiences. Combined, they revealed the fourth ontological dimension involving relations. The integration of life-world existentials within the data explication process is detailed in Chapter 4.

Essence

Phenomenology is the study of essences (Van Manen, 1997; Giorgi, 2009). The term, which is derived from the Greek '*ousia*', refers to "the inner essential nature of a thing, the true being of a thing" (Van Manen, 1997, p.177). According to Van Manen (1997), an essence is what makes a phenomenon what it is: it refers to the essential meaning that people give to particular lived experiences in their world before they have had time to think about it. He claims that the essence of a phenomenon has been described successfully "… if the description reawakens or shows us the lived quality and significance of the experience in a fuller or deeper sense" (Van Manen, 1997, p.10). Merleau-Ponty (1962) stated that phenomenology's quest for essence means that one has to look at the world in a new way before the meaning that people make of their daily lived reality becomes evident. Going back further, Husserl (1970a) claimed that an essence is like a universal truths which can be reached through eidetic or 'pure seeing' which allows one insight into the nature of things in the life-world. Giorgi (2009), drawing on Husserl, asserts that an essence is an invariant structure/theme or "an eidetic discovery" (p. 84) which can be applied to multiple situations. However, before the essence will show itself in a phenomenon, the variant structure/themes in said phenomenon need to be explored (Giorgi, 2009). In this study, the variant structures/themes in the individual meanings which each lecturer gave to their experiences of computers (Chapter 5) was first uncovered before the essential meaning or essence which was interwoven with all the lecturers' experiences could be brought to light.

Fundamental Existential Themes

There are existential themes that clarify lived experience in lifeworld and guide the researcher's reflection in the method of phenomenology (Van Manen, 1997). Merleau-Ponty (1962) regards them as the fundamental structure underpinning the life-world. These existential themes are described as lifeworld ontological concepts because they reveal modes of being in the human lifeworld as experienced in everyday situations and relations (Van Manen 2002; Berndtsson, Claesson, Friberg & Öhlén, 2007). There are four fundamental existentials, namely, lived body, temporality, spatiality, and relationality that are treated as existential dimensions through which all human beings experience the world in different lived ways. The existentials can be used as categories to guide questions, reflections and writing during the research process (Van Manen, 1997) and through their ontological nature facilitate thinking phenomenologically while doing phenomenology (Berndtsson, Claesson, Friberg & Öhlén, 2007; Giorgi, 2007).

Bracketing and reduction

Bracketing and reduction are devices that have been developed in the method of phenomenology to assist researchers as they drill down into the essence of the phenomenon. Bracketing may be described as "the process of suspending one's various beliefs in the reality of the natural world in order to study the essential structures of the world" (Van Manen, 1997, p.175). This process involves a phase of disciplined self-reflection wherein researchers bracket or suspend the assumptions they have about the phenomenon under investigation; in other words, they put aside their 'natural attitude', which they hold in the everyday world, so that they can move into a transcendental attitude (Hein & Austin, 2001). Giorgi (2009) describes natural attitude as "the attitude that one displays in the everyday world, where most things are simply taken-for-granted" (2009, p. 87). A transcendental attitude is arrived at when, having withdrawn or suspended his/her natural attitude, one moves into an inter-subjective level to arrive at a "pure, flowing, essential consciousness" that is not influenced by existing consciousness

(Giorgi, 2009, p. 88). This allows the researcher to attend to the phenomenon as it presents itself to her/him in awareness or consciousness (Hein & Austin, 2001). Barnacle (2001, p. vi) emphasises the necessity for researchers during this period to adopt "a critical spirit" which allows them to continually question their perspectives and assumptions as they investigate the phenomenon. Geertz (1995, p.114, cited in Barnacle, 2001) describes how "our ideas, our values, our acts, even our emotions are, like our nervous system, cultural products" which become barriers to understanding a phenomenon, hence the need for bracketing. As a consequence, researchers face the challenge of suspending their natural attitude before they can move into the transcendental attitude.

In the method of phenomenology, there are several ways in which the notion of bracketing may be applied. The first is the way in which bracketing can be used is as a phenomenological device of reduction. First used by Husserl in a transcendental reduction, it was later refined by Merleau-Ponty (1962) to arrive at the world as it is 'lived'. Husserl, who saw reduction as the beginning of all genuine inquiry, returned to it often because he recognised its unnaturalness and the difficulties involved in overcoming or suspending the natural attitude (Moran, 2000). Husserl's transcendental reduction required two phases: (1) withdrawal from the natural attitude and consciousness of the everyday world to arrive at the transcendental ego (pure consciousness) through a very deep type of reflection; and (2) arriving at the essence simultaneously as it came to light in pure consciousness with the return to ordinary consciousness (Van Manen, 1997).

Merleau-Ponty (1962) agreed with Husserl's process of suspending the natural attitude in a special form of reflection as part of the reduction process. However, he differed from Husserl in that he did not see reduction "as a return to transcendental consciousness before which the world is spread out and completely transparent ..." (Merleau-Ponty, 1962, p. xi; v). Moreover, in Merleau-Ponty's reduction process, there are several sequenced phases of reduction before the researcher arrives at the essence. He opined that researchers should awaken a sense of wonder and amazement in the phenomenon. Next they must put aside

their subjective feelings, perspectives and prior assumptions, dispensing with scientific theories and attitudes towards the phenomenon. The final phase, which is known the eidetic reduction, entails seeing past the lived experience to reach the universal essence (*eidos*), which is hidden behind the lived meaning (Merleau-Ponty, 1962). In this investigation I followed Giorgi's method of bracketing that was based on Merleau-Ponty's perspectives. This process is explained in the next chapter.

Ihde (1990) outlined another way in which bracketing may be applied. It is used as a boundary that has been drawn around the phenomenon with a clear indication of what it is and what it is not (Ihde, 1990). The horizon of the phenomenon is also clearly marked by a boundary. Ihde (1990) describes the horizon in phenomenology as a boundary that marks the "limit beyond which the inquiry ceases to display its internal characteristics" (p. 112). The researcher thus attempts, as much as possible, to keep investigation of the phenomenon within a horizonal boundary.

Importantly, the processes of bracketing and reduction have developed not without criticism over the years. Although phenomenological reduction enables one to return in a deep and new way to the life-world, it also acknowledges that a complete reduction is difficult in the final analysis because there is always some trace of the researcher (Van Manen, 1997). Merleau-Ponty (1962) recognized that although phenomenologists can never really fully escape their biases, they should aim at the most complete reduction, despite the fact that there would always be some influence from the world within it. Willis (2001, 2004) claims that it is not possible to arrive at a reduction by attempting to ignore subjectivity and the socially embedded nature of human consciousness within the phenomenon. Similarly, Gadamer (1993) also acknowledges the importance of researchers realizing that they are rooted in an "historical consciousness" (p.284), which will have an impact on the reduction and the essential meaning they reach. Researchers need to be cognizant of this as they try to arrive at an essence (Gadamer, 1993).

Textual Description

Van Manen (1997) proposes that another way in which bracketing may be used by the researcher is through a textual hermeneutic interpretation, which shows the essence of a phenomenon as a linguistic construction. In this sense of bracketing, the researcher uses a process of 'textual reflection' to become sensitive to the phenomenon; and, he/she develops the description through a hermeneutic ability, revealing knowledge through interpretation so that the structures (or themes) of the lived experience show up in the interpretation (Van Manen, 1997). Van Manen (1997) defines the structures or themes of the lived experience as the constructs or forms which allow the various dimensions of the essence to be seen so that the reader can judge (a) if the essence has been uncovered; or, (b) if a new way of seeing the phenomenon has been portrayed.

Phenomenology calls for rich textual descriptions that are meant to take the reader into the heart of the phenomenon beyond what appears on the surface. Phenomenological research should demonstrate through description how the researcher went about revealing and uncovering the meaning of an experience as it shows up in an ordinary, everyday life-world (Giorgi, 1970; Van Manen, 1997). This is because description, as an outcome of phenomenology, is not only meant to reveal what is at the heart of the phenomenon, but at the same time to show that which is concealed by phenomena (Giorgi, 1970). Furthermore, a descriptive approach allows "the phenomena to speak for themselves" (Giorgi, 1970 p.150). In doing so, they reveal "something more which does not appear, which is concealed" (Giorgi, 1970, p.150).

However, there is another side to interpretation that involves the debate around hermeneutics. Van Manen (1977) writes that hermeneutics, which is about "the theory and practice of interpretation" (p.179), started as a theory of interpretation applied to the study of religious texts and how the text showed up the author's thinking. As a concept, hermeneutics was re-interpreted and widened by various writers to encompass 'understanding' within interpretation. For example, Dilthey

(1985) focused on the ways in which texts reveal the lived experience of a life-world, not only as an expression of the writer that goes beyond the cognitive dimension of the researcher, but also allowing a deeper psychological understanding of life itself. On the other hand, Heidegger's (1962) understanding was about revealing the ways in which people experience particular ways of 'being' in the world. Importantly, Gadamer (1975) who argued that it was impossible to set oneself apart from the text, further claimed that understanding always involved an interpretation, which was embedded in different traditions or "conversational relations" (cited in Van Manen, 1997, p.180).

For the purposes of this investigation, I first chose to follow Giorgi's (2008, 1970) descriptive phenomenological method, which has its roots in Husserl and Merleau-Ponty's interpretations, to find the variant and invariant structures/themes in the lecturers' experiences (see Chapter Four). When these were evident, I turned to Van Manen's (1997) hermeneutic/interpretive approach in phenomenology (derived from the Dilthey-Nohl and Utrecht Schools with their focus on textual reflection and interpretation) in order to embed the themes in a composite textual structure (see Chapter 5 & 6). Both variations incorporate the philosophic style of thinking that has been discussed in this section.

Problems and issues in doing phenomenological research

Hycner (1985) listed a number of challenges and issues that researchers could encounter, i.e., researchers' general knowledge of phenomenology, the skills that are needed for researching phenomenology, and issues of validity and reliability in the research. I will now discuss each of these areas in turn.

When I first contemplated exploring the thesis topic, I had to learn to practice an art that involved my immersion in a 'style of thinking' that entailed phenomenological thought. This particular research orientation necessitated wide

background reading and an equally wide understanding of philosophy in addition to other human science methods in general. It meant that I had to develop a wide background in phenomenological philosophy, which with time has become an on-going quest in my scholarship. I also had to draw comparisons with other social science methods, and develop an understanding of their methodological underpinnings and how they differ from phenomenology. It took some time for me to grasp the complexity which underpins Merleau-Ponty's (1962) conceptualisation of the body and its deep relationship with bodily-based consciousness, intentionality and experience. My knowledge and understanding is on-going in this area. I was also challenged - but richly rewarded - by Michel de Certeau's (1984) complex writing style, which has been described as slippery and difficult to follow (Buchanan, 2000).

Researching phenomenology requires an in-depth understanding of and expertise in a complex set of methods and applications, which have been developed through its historic traditions. I was extremely challenged by the data explication process and how to work with phenomenological data. There are few detailed descriptions of how to do phenomenological research correctly; as a result, the misunderstandings evident in many studies lead to further confusion among researchers (Giorgi, 1997). Phenomenology requires that the data explication process will allow the researcher to uncover the essence of a phenomenon as the various structures of themes come to light in descriptions of lived experience. Initially I researched several descriptions of the data explication process. But, I found a lack of clarity in some discussions of the characteristics of phenomenology, particularly bracketing and the reduction, imaginative variation, an even in aspects of interpretation. Furthermore, only much later in my investigation did I come to realize that three cases would have been sufficient to explore the variant themes in the phenomenon, before working down into the invariant theme which holds the essence.

The high standard of writing skills required to competently elucidate the description, interpretation and critical thinking which are collectively part of a

phenomenological orientation in research proved another challenge for me. Phenomenology researchers' writing has to competently reveal the phenomenon to the reader in a way that would allow the latter to connect with it. Consequently, I was continually redrafting and bringing the data together in various ways, employing a phenomenological practice known as 'creative variation' to bring the phenomenon out through my descriptions. This required creative insight and critical ability to interpret the various descriptions that had been put together during the various stages of data explication as one tried to detect and explicate the essence of the phenomenon. Van Manen (1997) writes about "the phenomenological nod" (p.27), which takes place when the reader of a rich textual description is able to nod in agreement with the way in which the essence of the lived experience has been described by the researcher. During the data explication process, I continually asked myself the following question: 'Will the readers be able to recognize my descriptions of lecturers working at their computers as shared experiences?'

The issue of interpretation in phenomenological research also challenged me. Giorgi (1985b) argued that interpretation is outside of phenomenological description, and that phenomenology's objectives are achieved by intuiting or drawing out the theme/structure of the phenomenon as it appears in consciousness. However, other researchers (Van Manen, 1997) stress the potential of a hermeneutical interpretive approach in phenomenology in order to convey the meaning of the lived experience in texts. Van Manen (1997) claims that lived experience are always intertwined with meaningful interpretation, even when it is described through language in a text that is an interpretive process in itself. A further challenge for me was the issue of how to make sense of the phenomenon so that I could arrive at an interpretive understanding that truly reflected its essence free from interference stemming from my assumptions and biases. Throughout the data explication process, an inner voice kept repeatedly telling me to: "Stick to the descriptions" and "Return to the descriptions".

Consequently, as I sifted through the various reductions in the data explication process, I continually had to work at being unbiased, while at the same time remaining sensitive and true to the meanings that emerged in the lecturers' pre-reflective awareness of their lived experience. At the same time, I had to train myself to think phenomenological as I dealt with the clusters of descriptions before arriving at a composite textural description in which to anchor the phenomenon.

Validity, reliability and replicability in phenomenological research

Cohen, Manion and Morrison (2007) describe the issues surrounding validity and reliability in research as multi-faceted. This is because there are many types of validity and different perspectives of reliability. Although different critiques of validity and reliability argue that the terms are more appropriate for positivist views of knowledge, they can also be applied to the types of knowledge that qualitative research focuses upon (Lincoln & Guba 1989; Merriam, 1998; Cohen et al., 2007). However, the ways in which they are handled will vary according to the methods employed. Any discussion of validity needs to be in harmony with the principles of the paradigm in which the researcher is working (Lincoln & Guba, 1985; Bogdan & Biklen, 1992). Cohen et al. (2007) argue that notions of authenticity and understanding are more suitable concepts for qualitative research than validity, and that many different kinds of validity in qualitative methods contribute to understanding.

There is thus a need to discuss the issue of authenticity and how it is coupled in phenomenological literature with the notion of understanding and the 'appearance' of the phenomenon in this form of research. When delineating the appearance of the phenomenon, and endeavoring to stay true to the phenomenon, the researcher struggles to maintain clarity and authenticity which reflects the lived world of the participants undergoing the experience (Van Manen, 1997; Barnacle, 2001). Barnacle (2001) claims that it is the duty of the researcher to

"employ every reasonable and appropriate measure to present the lived world of people in everyday life with clarity and authenticity" (p. vii), regardless of all the difficulties they may face in the process. The actions and measures that I took to ensure clarity and authenticity are described in detail in Chapter 4. I followed a concrete, step-by-step guide when analysing the interview data.

Concerns surrounding the replicability of findings in phenomenology need to be approached in a certain way. Giorgi (1975) acknowledged that phenomenological research into the same phenomenon could differ slightly. It is possible for researchers to write a different structure due to the fact that they could be looking at the data from a different angle. However, Hycner (1985) stresses that replicability is an important part of the research process and that it should be possible to repeat a study and arrive at the same results. He does, however, caution against a replicable method that ends up manipulating the meaning of the results and findings. I deem it important to note is that studies in phenomenology do not really focus on replicating the results of other studies, but rather on applying the same phenomenological methods to the research. In that way, replicability is accounted for (Hycner, 1985).

Criticisms and defence of phenomenology

Barnacle (2001) notes that because phenomenology is easily misunderstood, it has attracted various criticisms and justifications. Moran (2000) notes both "an internal critique (by, for example, Heidegger, Merleau-Ponty, Gadamer) as well as an external critique of phenomenology" (p.20). Several twentieth century philosophers, including Ludwig Wittgenstein, Gilbert Ryle and Daniel Dennet, claimed that much of the data of subjective awareness is too illusionary and unscientific to be the framework upon which a science of consciousness is structured (Moran, 2000). Although phenomenology is often described as a determined and rigorous method of inquiry, it is criticized for being unreliable on the grounds that it is a science of subjective awareness which is based on consciousness and therefore, unreliable (Moran, 2000). However, counter

arguments have been posed by those (e.g., Spinelli, 1989; Barnacle, 2001; Giorgi, 2009; Van Manen, 1997) who argue that one can only understand people's existence and experience of something through a phenomenological approach.

Bourdieu criticised phenomenology in his major works (1977, 1990). But, analysts argue, that despite the similarities between his view of practice and phenomenology, he failed to acknowledge said similarities (Throop & Murphy, 2002). As a result of his influence and critical commentary, the true significance and value of phenomenology has been overlooked by many researchers (see Throop and Murphy, 2002). In defence of phenomenology, Throop and Murphy (2002) challenge Bourdieu's criticisms of phenomenology, critiquing them as portraying an "overly deterministic rendering of human thought, feeling and behaviour" (p.185) that pays too much attention to external forces. According to Throop and Murphy (2002), Bourdieu's critique of phenomenology is inherently problematic since it is "primarily centred on the fact that he mischaracterizes the phenomenological endeavour, while also not properly acknowledging the ways in which his project overlaps with, and often draws directly from phenomenological perspectives" (p.185). The two authors claim that Bourdieu failed to understand phenomenology's true nature and possibilities, and to recognize the affinities his theory of practice shared with phenomenology.

Conceptions of practice in the research literature have tended to emphasise the habits and rules that make up the practices (see, for example, Bourdieu, 1977; Giddens, 1984; Schatzki, 1996). Even in the field of physical education there has been a tendency to draw upon approaches shaped by Bourdieu (1977, 1990) to investigate embodied practices rather than a phenomenological orientation. While recognizing that more attention needs to be paid to the social dimensions of the body in physical education (see, for example, Armour, 1999), practitioners have favoured the conceptual tools of Bourdieu as a means through which to conduct their analyses of the body (Light & Kirk, 2001). This, despite the fact that Smith (1992) argued some years ago for a phenomenological orientation to be used more

frequently when researching contexts where the world of physical education is involved.

Conclusion

I have deemed phenomenology an appropriate orientation for my investigation, which explores lecturers' experiences of computers in their everyday academic practice. Focus is upon phenomena as they present themselves in people's pre-reflective awareness in everyday life, through the meanings they give to their lived experiences that in turn allow the essence of the phenomenon to show itself. Advocates of phenomenology argue that researchers in this tradition must first develop an overall understanding of its history and constructs. It is with this in mind that I have invested a significant amount of time and attention in describing these aspects in order to show how they have shaped the phenomenological style of thinking that underpins this study.

CHAPTER FOUR: RESEARCH DESIGN AND PROCESSES

Introduction

This chapter describes the research design, and the process I used to investigate lecturers' experiences of computers in everyday academic practice in the workplace. The core focus of my investigation is upon phenomenology, a discovery-oriented approach that requires thick descriptions of the lived experience in the life-world of the participants. As a method, phenomenology has been employed by Giorgi (1970, 1985b, 1997) and Van Manen (1997), both of whom view phenomenology as a descriptive human science, and claim that the theoretical underpinnings of its philosophic background are intertwined with its research method and processes. My research design and processes were shaped by Giorgi's (2008a, 2008b, 2009) stages of research (also referred to as the Duquesne Phenomenological Research Method) and Van Manen's (1997) hermeneutical approach. Verification of my phenomenological research process was also sought in other literature; for example, Hycner 1985; Moustakis, 1994; Berendtsson, Claesson, Friberg & Öhlén, 2007.

The research design and process will be described in four sections. In the first section, I will elaborate on the data collection process by discussing: (a) the reasons for selecting the context of the research; (b) how the unit of analysis was constructed; (c) the participants in the study; (d) ethical considerations; and, (e) my opening up to the phenomenon via my early reflections and photographs. The interviews, and the questions asked will be discussed in the second section. In the third section, focus will be upon the data explication process and its various stages. Thereafter, the final section of the chapter will cover the stages in the data explication process.

Collecting the data

Data collection methods that were in harmony with the questions of this study and its philosophic framework were used for the purposes of the investigation. My early observations, and a series of digital photographs of the lecturers at their desks, provided a first opening up to the phenomenon. Then, five lecturers were selected to participate in the research, each doing interviews which explored their experiences of a typical day in the academic office.

Selecting the context

A private higher educational college, which specializes in physical education and movement, provided the context in which the data was collected. I deliberately chose to conduct the research within this particular institution, rather than across several institutions, for the following reasons: the institution provided a context that was special in that it focused on programs that privileged natural movement and the body in its life-world of lived experiences. I was of the opinion that there would be a variety of participants to draw from in this context given that a good number of lecturers were employed across its core disciplines, which specialized in physical education, health and dance. Having observed that computers impose limitations on physical movement, I began to wonder about the meaning that the lecturers made of their experiences of computers, particularly as they worked in a context that placed so much emphasis on the moving body.

The unit of analysis: a purposeful sample of five participants

A purposeful sampling approach (Patton, 1990) also referred to as purposive sampling (Chein, 1981, cited in Merriam, 1998) was adopted to arrive at the unit of analysis for this study. Purposeful sampling is based on the assumption that the researcher selects a sample that will give provide insight into a specific experience (Patton, 1990). A small purposefully selected sample group also has an advantage in that it allows the researcher to deliberately focus on cases which are information-rich, as opposed to working with a large randomly-selected group

where the returns would be significantly diminished, particularly when doing phenomenological research. Patton (1990, p.169) argues that information rich cases allow the researcher to learn about "issues of central importance to the purpose of the research". To this end, five participants from various domains in the field of physical education were chosen to form the sample in this study.

During the investigation, the number of participants in the sample was alluded to as a potential issue of concern, i.e., that more participants should be included in the research process. However, when I delved further into Giorgi's (2008) phenomenological method, I found that he held definite views regarding the following: that there was a general misunderstanding in the research community about the number of participants a candidate could in a doctoral thesis; what would be considered an acceptable number of participants and, that the inclusion of too many participants in a phenomenological study would diminish the validity of the findings. In the words of Giorgi (2008): "Because the interviews in which the data are collected are usually lengthy and because the analysis is laborious since many differentiated meanings need to be discovered and integrated, few subjects are used within such studies within the context of theses and dissertations…I always recommend at least three. But, of course, if one had a grant and was receiving remuneration for the time spent doing the analyses, then more than three participants could be used" (p.36). Giorgi (2008) further claims that as few as three participants could be sufficient to allow the researcher to arrive at a general way (a typical essence) of experiencing the phenomenon which is what phenomenology sets out to do. This assertion is confirmed by Hycner (1985) who states that only a limited number of people need to be interviewed when doing a phenomenological investigation because of the vast amount of data that is generated through the interviews. Giorgi (2008) also suggests that the researcher needs a minimum of three different instances of each individual's experience of the phenomenon. The five participants in my study provided instances of their experiences related to three different parts of the day: (1) arriving at work at the start of the working day in the academic office; (2)

working at the desk during the day; and, (3) preparing to leave the office at the end of the academic day.

The first interview resulted in a substantial amount of data: there were a sufficient number of variations (themes) to work with, and to discern the essence. Giorgi (2008) argues that phenomenology is not about multiple individual analyses as in a case study method, but rather about using a limited number of participants in order to come up with a single finding (Giorgi, 2008). It was also in the first interview that the lecturers' pre-reflective lived experience of computers showed up in an immediate sense in their consciousness, before they had time to reflect on their experiences, (which happened in the second interview). I discuss both interviews further in a later part in this section

In sum, a large number of participants are unsuitable for this kind of research because that will only result in interpretations that are too broad (Giorgi, 2008). Nevertheless, the researcher needs to have a 'sufficient number' of participants to allow them to discriminate between the lived experiences of the phenomenon before they are able to work down into the invariant structure of the experience where the essence can be revealed (Giorgi, 2008).

In support of this approach, Hycner (1985) claimed that "the phenomenological researcher wants to illuminate human phenomena" (p.294) rather than generalize things. A large random sample of participants would be clearly contrary to this. It was, therefore, important for me to find participants who had good teaching records and were willing to talk about their experiences. I sought to interview experienced lecturers in the core areas of dance, movement and health at the tertiary college where I was employed.

The participants in the study

I sought the voluntary participation of certain lecturers I deemed information-rich cases within the core areas of dance, movement and health. Their participation in

the study resulted from a process of social negotiation and drawing on my goodwill with the lecturers. During informal discussions with potential participants, I imparted the following information to them:

1. Broad details about the study, its aims, and what their participation in the study would involve;

2. I informed them that the investigation would follow a research process which would be guided by a set model for conducting my research in an attempt to understand and interpret lecturers' experiences of computers;

3. Some stages of the data explication process would be shared with them;

4. Participants had the right to withdraw from the study at any stage; and,

5. The content of the interviews would be treated with confidentiality and respect.

After canvassing nine lecturers as prospective information-rich cases, I left consent forms in their academic mailboxes. Initially, seven lecturers made themselves available for the investigation: each signed a consent form. (A copy of which appears in Appendix 3). However, after the first interview, two of the original participants opted not to participate further which meant that there were five participants left in the study. This situation was still in line with Giorgi's (2008) views of the number of participants that were deemed sufficient for a thesis.

Describing the participants

Apropos of the five lecturers who agreed to participate in the investigation, they were given the following pseudonyms: Kevin, Liberty, Matthew, Jane and Alice. Their ages ranged from the late twenties to the late forties; and they came from various disciplines (see Table 1).

Table 1: The participants and their areas of specialisation

Pseudonyms	Area of specialisation
Kevin	Sociology of sport and socio-cultural underpinnings of sport and physical activity
Liberty	Health and emotional well-being
Matthew	Health and physical education
Jane	Dance and yoga
Alice	Health and physical education, movement and academic management

Ethical considerations

Ethical clearance was obtained for this study (Appendix 1). To ensure the correct mode of investigation, I utilized Patton's (1990, p. 356) personal code of ethics. This is evident in the information provided to the participants (see Appendix 3). Important ethical considerations included: informed consent; confidentiality; risk management; promises and reciprocity.

I took the following steps to ensure that the study was ethical:

1. I negotiated consent with the participants before conducting the interviews;
2. I reassured the participants that I would treat the contents of their interviews with confidentiality and respect;
3. Participants were reassured that their identities would be protected through the use of pseudonyms;
4. On request, the transcribed interviews could be viewed by the participant;
5. A summary of the first interview would also be made available at the second interview for the participants perusal; and,
6. As the participants expressed an interest in the findings, I agreed that at the completion of the study they would be informed of the findings.

Recording early thoughts and observations in the data collection process

At the outset of this research, I began with the phenomenological reduction process. I compiled observations, reflections and photographs related to the phenomenon in a journal. By doing this, I had begun to bracket my early presuppositions and assumptions of the phenomenon at an early stage of the investigation. Some of the photographs, which I took to capture the life-world in the office, can be seen in Appendix 7. I discuss them further in a later part in this section. My natural observations were recorded in a notebook in which I jotted down aspects of the phenomenon that fascinated me. For example, I was often aware of the way in which my practices were shifting into my computer, which was now an integral partner in my academic practice (see Appendix 7: Photograph 1: My desk in the academic office). This was all part of my personal past knowledge of the phenomenon which needed to be bracketed.

Some of the early thoughts that I recorded stemmed from my reflections on the following:

- The idea of lecturers working in a liminal space with their computers; (Here I was often reminded of Turner's (1962) notion of liminal space as a transformative space wherein lecturers' practices were being experienced in different ways as a result of computers);
- Photographs of the Industrial Revolution showing row upon row of textile workers toiling at their weaving machines. (I found myself comparing lecturers' teaching labour at the computer with the weavers who were constantly coupled to machines in the textile mills during the Industrial era);
- 19th Century Japanese woodblock prints with their focus on ordinary activities which came to characterize the art of *Ukiyo-e* and gave birth to a style of print that specialized in capturing the floating world of everyday life (When I watched the lecturers more closely, it became evident to me that they were experiencing an ephemeral world of everyday practice - a

constant state of flux in which they were always moving from one activity
to the next at their computers);

- Photographs of bees at work on their hive cells generated thoughts in me
about the 'hive intelligence' that was being produced by the lecturers who
were being transformed into worker bees at their computers;

- My everyday observations regarding how the lecturers arranged and
rearranged their desks and computers, and the adjoining area in which they
worked.

Capturing the phenomenon through photographs

All of the participants in this study allowed me to take photographs of their desk
areas as they worked at their computers. All of the faces in the photos are masked
for privacy reasons. Some of these photographs, which I refer to intermittently
throughout this thesis, can be viewed in Appendix 7. Taken together, they became
another form of bracketing, a visual record of the lecturers' lived experience,
reflecting a moment in time in academic practice at their desks. They also
captured the office environment, wherein the phenomenon that I sought to
investigate was unfolding. During the investigation, the photographs constantly
helped to draw me back into the phenomenon as I moved between the transcripts
of the various interviews and their units and clusters of meaning. They were also
included in the interview process, where they were used as a visual tool to prompt
the lecturers' during the interviews.

At another level, the photographs revealed the 'atmosphere' of the ordinary world
of everyday practice, in the same way that 19th century Japanese woodcuts as
Ukiyo-e with their focus on the ephemeral world, captured the fleeting lived
moment of everyday life (see, for example, Appendix 7: Photograph 4: Capturing
the fleeting moment; and, Photograph 5: The life-world at the desk). The
academic work environment at the desk seemed to speak of the busy world of
lecturers and computers - the things themselves - continually unfolding in a

constant stream of experience. It was as though the photographs revealed anew the lecturers and their place in a world of everyday academic experience.

In addition to my natural observations and the digital photographs taken at the start of the study, it was proposed that I video lecturers at their desks and use "speak-aloud" protocols as additional ways of collecting data. However, I came to the realisation that these methods could be obtrusive and time-consuming for the participants. As well, the latter showed some reluctance when this method was mentioned. Furthermore, implementation may have jeopardized the goodwill that existed between the lecturers and me.

The interviews

In my bid to understand the meaning that lecturers made of their experiences of computers, I opted for qualitative conversational interviews that were compatible with a phenomenological orientation. I sought to obtain a description of the lecturers' experiences of computers as lived and understood by them in an ordinary, everyday sense. My conversational interviews, which were shaped by work of Kvale (1996), were structured to "to understand the world from the subject's point of view, to unfold the meaning of peoples' experiences, to uncover their lived world prior to scientific explanation" (Kvale, 1996, p. 1).

Using Kvale's (1996) conversational approach to interviewing as a guide, I was able to conduct interactive, in-depth, professional conversations, which were both semi-structured and informal at the same time. My interviews usually commenced acknowledgement of the photographs, which were displayed on my laptop. In this way I opened the conversation, and encouraged the participants to talk about their experiences at their desks. I wanted to draw them into the desk space that housed their computers, to invite them to tell me about their lived experiences, as they began to tell me about their lived experiences, thereby establishing a shared mood in the conversation. This meant that the sequence of the questions and wording

varied slightly in each of the interviews, and depended on the answers the participant provided as the conversation unfolded.

The purpose of the conversational interview

Each interview had a distinct purpose, in line with phenomenological nature of the investigation. My intention was to find out as much as possible about how lecturers' experienced computers in everyday academic practice. In this way I could elicit direct descriptions of their lived experience of computers. As suggested in Chapter 3, the interviews revealed their experiences of computers as lived and understood by them from the perspective of the pre-reflective experience that marks phenomenology.

I also had to keep in mind that the lecturers' reflections on their lived experiences of computers were already transformations of that experience. Van Manen (1997) cautions researchers regarding this aspect. So at the same time I was structuring a conversation during the interview, I was attempting to elicit, as far as possible, the lecturers' pre-reflective experience of computers, which was there under the surface as a given lived experience. I also structured the interviews in a manner that would facilitate the data explication process, as proposed by Kvale (1996). I elaborate upon in the next section.

The conversation was guided by a limited number of interview questions, which specifically followed the temporal and spatial dimensions of the day as an invisible scaffold or framework of the interview (Appendix 4 C: Outline of the questions for the first interview). This would privilege the existential themes in the data explication process as separate structures of experience, before any textual integration could be considered to show the essence of the phenomenon. This meant that despite their ordinariness, the questions were chosen for a particular purpose as part of a hidden scaffold in the interview. For example, following the introduction of the photographs, I asked the participants to tell me about themselves and their areas of specialisation. Thereafter, I sought

descriptions of their working areas and spaces at their desks. Then, I scrutinized their experiences of computers through a temporal dimension that explored the start of the day in the academic office. After completing the above, I focused on how they experienced working at their desks during the day. I concluded with questions that allowed them to describe the end of the working day. This meant that there was a deliberate structure embedded in the interview process, resulting in various sections of experience being brought together later through the existentials of time, space, body and relations. I saw these existential dimensions not only as a potential organizing framework for the lecturers' lived experiences, but also as an early tool of integration and analysis which would allow the different meanings of their experiences of the day to emerge.

Interview protocol

I followed the same protocol at the start of each interview. I told the participants that I would try to understand - as far as possible - their experiences of computers in everyday academic work practice through their eyes. Then, together with them, I would probe the experiences fully to reach an understanding. They would be interviewed in such a manner that would allow them to tell their stories in their own words.

I also told them that the phenomenological orientation of this study would shape the kinds of questions posed in the interview, that the interviews would follow a semi-structured conversational approach, and that they would be audio-taped and transcribed. The interview questions would broadly cover the lecturers' experiences of computers, and their interpretations of their relationships with computers. They were also welcome to talk about any new work practices that they were currently experiencing through the computer. Then, I asked the participants if they had any questions about the project. I informed them that each interview would take approximately 60 minutes.

The questions for the first interview

The interview normally began with a general description of what the study was about (detailed in the above discussion). At the beginning of each interview, I used the photographs I had taken of the participant's computer and work space as a prompt to facilitate a dialogue. I placed them on my laptop, positioning them so that they could be seen by both of us. I then asked each participant the following briefly:

- Can you tell me something about this photo of you at the desk?
- Is there anything significant about your workspace and the way that you have arranged things at your desk?
- Can you tell me about some of your thoughts as you look at these images of the computer within this space? And, about the way it is placed in the space?
- Do the items around it have special significance? Are they linked to your computer in any way?

Then, I proceeded to the main questions below (see Appendix 4 C) which guided my conversational interview of each of the participants:

1. Can you please tell me something about yourself and your area of specialisation?
2. Can you take me through a typical day as a lecturer? How does the day at the office start?
3. What do you usually do when you are not teaching?
4. Can you tell me about specific things you enjoy doing at the desk?
5. What is working at the desk like?
   - How do you feel when you sit down at the computer?
   - What thoughts go through your mind as you work there?
6. How does your day usually end?
   - What thoughts go through your mind when you get ready to leave 'your desk' at the end of the day?
7. How do you feel at the end of the day when you leave the office?

During the interview, the above questions were fleshed out with probing and prompting, which I used to keep the conversation going and maintain a connectedness between the lecturer and myself. The probes and prompts also served to elicit additional information and clarify the meaning of what was being said. For example, when a lecturer described the start of his/her day at work, I would respond with: 'Can you please tell me more about that part of your day?' which encouraged further elaboration of the descriptions. Also, when lecturers related certain experiences at the desk, I would get them to expand on their descriptions by simply asking: 'How do you feel about doing that?' At other times, when they described a specific experience, I would try to clarify it further by asking: 'What do you mean when you say you are stuck at the desk?' followed by 'Can you please tell me some more about that …?'

These probing questions played a specific role in the interview process, inasmuch as they were designed to assist in describing as precisely as possible the meaning expressed by the participant as clearly as possible (Kvale, 1996). They also stimulated the conversation. They could be used as tools to enhance my understanding of the phenomenon by keeping the conversation flowing while I was trying to make sense of what was being said. Van Manen (1997) describes phenomenological conversations as having "a hermeneutic thrust" (p. 98). In other words, they have sense-making and interpreting aspects that stimulate the conversation.

The interviews were not without issues. Each of the interviews required some negotiation on my part as well as sensitivity when facilitating the interview. Some interviews were cancelled due to unforeseen circumstances and rescheduled for another day/time. In addition, there were time constraints in the process. This meant that interviews had to be conducted interviewees' during lunch breaks, squeezed into free time between lectures during the day, or after the working day had ended. Because each participant had a different set of dynamics structuring his/her day, I had to fit in with individual arrangements.

The second interview

The second interview took place much later in the data explication process and presented me with several problems. At the start of the investigation, I was under the impression that the second interview would involve verification of the first interview by the participants. But as the investigation progressed, and I became more familiar with phenomenology's research process, I came to realize that a second interview would be treated cautiously by Giorgi (2008b).

Giorgi (2008b) points out that although the second interview is recommended as a verification process in some of the literature on phenomenological research processes (e.g., Colaissi, 1978), there are theoretical reasons for not recommending this step, particularly if one is following Merleau-Ponty's (1962) phenomenology. He argues: (1) the participants are not aware of phenomenology's complex procedures, and the so-called verification by the participants is dubious; and, (2) the purpose of the research is to understand certain phenomena by arriving at an essence embedded in a lifeworld, and not to clarify the experience that the individuals have for their own sake (Giorgi, 2008b).

Ultimately, because the participants had given me their time and energy, I still wanted to share the data with them, but not for the purposes of verification or correction. In addition, the lecturers were expecting to be interviewed a second time and I felt that it would be unethical on my part if I were to cancel that interview with them. At the start of the study, I had told them that I would be doing two interviews with each of them. Therefore, before the commencement of the second interview, I sent a transcription of the first interview to the respective lecturers. And because I was now aware of Giorgi's concerns about the second interview, I had a general conversation with each of the participants. This not only provided me with an opportunity to thank them for their input, but it also allowed me to gauge their reactions to the transcription, while being mindful of Giorgi's (2008b) warnings. None of the lecturers wanted to make any changes to the transcriptions.

Merleau-Ponty's (1962) practice of phenomenology focuses on exploring the spontaneous lifeworld that people experience through a natural attitude, and before they have time to reflect too deeply on it. This meant that from a phenomenological line of thought (shaped by Merleau-Ponty and supported by Giorgi), the data remained true to the lecturers' first primordial impressions of their interactions with computers, and was not later compromised by adding some of the objective observations that were being made by the lecturers at the second interview. When the first interview took place, the lecturers had not yet had a chance to really think about their everyday practices at the computer, or the meaning of their experiences at the desk. Their reflections at that interview revealed their experiences in an immediate, pre-reflective and non-objectifying manner.

The phenomenological data explication method employed during this investigation

The intention of this investigation was to arrive at an understanding of the meaning that lecturers' made of their experiences of computers. For the purposes of the thesis, I employed a phenomenological research design and method, which educed the variant and the invariant structure/themes of the experience; in effect elucidating the essence of the phenomenon. I followed a data explication process that was specifically structured for phenomenological inquiry and acknowledged its philosophical background and method. In the following section, I describe how I prosecuted the data explication processes.

Stages of the data explication method

There is not always consensus about the way in which the method of phenomenology is handled (Hycner, 1985; Moustaki, 1994; Caelli 2000; Welch, 2001; Giorgi, 2008). Giorgi (1997) notes that: "The articulation of the phenomenological method has also had its vicissitudes, and its application has

also been sporadic and uneven" (p. 235). He cautions that some of the variations in and combinations of the strategies employed to interpret the method are not always sound in a phenomenological sense (Giorgi, 2008b). He claims that there are "irreconcilable differences" (Giorgi, 2008b, p. 2) amongst these variations and combinations; hence, the logic vis-à-vis its theoretical underpinnings should not be overlooked if variations of the method are chosen.

To explicate the data, I drew on Giorgi's (1997, 2008) method to provide me with detailed guidelines for the phenomenological process and analysis of my interview data. The method entails distinct steps (see below):

1. At the outset, the researcher has to be responsive to the phenomenon
2. Transcription of the audio-tapes and listening to the interview to gain a the sense of the whole, and recording general impressions
3. Bracketing and the phenomenological reduction
4. Delineating units of general meaning
5. Delineating units of meaning relevant to the research question
6. Verifying the units of relevant meaning and eliminating redundancies
7. Clustering the units of relevant meaning into clusters of meaning
8. Determining categories from the units of relevant meaning
9. Writing a summary of each individual interview: returning to the participants with the summary as part of the second interview
10. Identifying the general and unique themes of all of the interviews
11. Contextualizing the themes
12. Capturing the essence of the phenomenon

As observed in Chapter 3, when undertaking phenomenological research, it is necessary for the researcher to do extensive reading on the philosophy of phenomenology and its theoretical underpinnings. Only in this way will they acquire an understanding of the how phenomenology is applied to a phenomenon. I found it necessary to do extensive reading on the philosophy of phenomenology so that that I could integrate my knowledge of its philosophical background and method within my understanding of the data explication process of the

phenomena. I will now discuss each of the stages in turn, and how my data explication process aligned with them.

Stage 1: Being responsive to the phenomenon

At the start of the process, I tried to be responsive to the phenomenon by adopting a phenomenological attitude. Keen describes this attitude or stance as "… a conscious, effortful opening of ourselves to the phenomenon as a phenomenon … in its own right, with its own meaning and structure" (Keen, 1975, p. 38 cited in Hycner, 1985, p. 280). It is also described as "an investigative posture" that facilitates the research process (Keen, 1975, p. 41). Giorgi (2009) goes even further, describing the stance in terms of achieving in oneself an unadulterated "pure, essential consciousness" (p. 88) and a flowing "transcendental consciousness" (p. 88) of the phenomenon. It is, in fact, one of the first levels of reduction. It involves breaking away from the natural attitude towards everyday life whereby things are taken for granted. It is an essential step before the interviews, so that the second phenomenological reduction can begin. It was in this phase I recorded my first impressions and reflections. Some of my early thoughts centered on the inner mental images that came to mind when I contemplated the phenomenon: worker bees clustered around a hive; textile weavers bending over their looms in old industrial factories of a bygone age; Jackson Pollock paintings which came to represent the world wide web; Brueghel's painting of The Harvesters with its near and far views; and, Japanese woodcuts (*Ukiyo-e*) and the ways in which they capture a floating and ephemeral urban world. During this stage, photographs helped me to explore my consciousness and reflections more deeply. When I reflected on them, it was as though I was beginning to reach down into the hidden life-world of the lecturers at the desk. In this process of reflection, I also felt that I was becoming much more aware of a heightened sensitivity deep within me, to the ephemeral world experienced by the lecturers were experiencing at their desks (Appendix 7: The life-world in the office).

Stage 2:Transcription of the audio-tapes

All of the interviews, including the second interview, were tape-recorded and the recordings transcribed. Upon receiving each typed transcription, I listened to the recordings, following the transcription carefully at the same time. This gave me an opportunity to make sure that pauses and silences in the conversation had not been left out, and that the characteristic expressions that were typical of each participants' idiosyncratic ways of speaking were captured in the description. I also wanted to make sure that the text revealed the vocal quality of those phrases or words that were imbued with a certain intonation. This process allowed me to immerse myself in each participant's use of language (e.g., tempo, rhythm and speech patterns) as they described their personal experiences of computers so that I became aware of any idiomatic phrases lodged in the language. This stage also provided me with another opportunity to become even more responsive to the phenomenon. In order to assure the validity of each transcription, the lecturers were provided with a summary at the second interview. This gave me an opportunity to clarify some aspects as I went through the summaries with them. At this stage I realized that the merit of attaining a sense of the whole form (gestalt) of each interview. So I re-listened to the recordings several times following the transcribed text at the same time. In this way I came to recognize the existentials of time, space and body as different dimensions within the structure of the interview. As well, I learned that they were part of the whole phenomenon that determined the discourse in each of the interviews.

Stage 3: Bracketing and phenomenological reduction

As suggested in Chapter 3, the researcher responds to the phenomenon through the reduction process that involves bracketing. Giorgi (2009) refers to three levels/phases of reduction: the stance that I adopted in Stage 1, i.e., opening up to the phenomenon, continued to accompany me as I went about a second phenomenological reduction in this phase; this second phase of reduction occurred when I bracketed my own thoughts and assumptions as the data was broken up into units of meaning and clusters of meaning. In this phase, I attempted to

bracket all knowledge that was not part of the phenomenon of lecturers' experiences of computers so that I could try to see the phenomenon for what it was through the units of meaning. This bracketed knowledge included my thoughts and feelings about how I was experiencing the computer in my own academic practice, and about the theories and literature that I had read around the phenomenon. I had to forget about blurred boundaries, cyborgs (Harraway, 1991) and everything I had read about alienated labour (Marx, 1963), Dreyfus's (1972, 1992, 2001, 2002) commentary on computers, intelligence and the dangers of the Internet, and everything else I had read about the disembodied lecturer. I also had to keep in mind that opening myself up to the phenomenon meant that I had to be ready to respond with sensitivity to it, whenever it was being presented to me. At the same time, I had to realize that the phenomenon (as it was being revealed to me or being concealed) does not necessarily show itself in its true sense at this stage. Both Hycner (1985) and Van Manen (1997) emphasize the elusive nature of the phenomenon as one tries to uncover its essence. It was only at a much later stage, during the third reduction/phase (also called the eidetic reduction), that the essence which exists behind the lived meaning of the experience, revealed itself in the data in its true sense. Giorgi (2009) frequently refers to the essence as the invariant structure (theme), and at other times as the '*eidos*'.

Giorgi (2008b) notes that it is important to realize biases have to be continually recognized in the data explication process and bracketed. However, he cautions this does not always "guarantee a bias-free attitude" (Giorgi, 2008b, p. 9). One can become bogged down in such listings. During the data explication process, each page of data was divided into three columns running down the full length of the page, with the interviews placed in the first column. The exact words of each interview occupied the first column on the left side of the page. The second column was used for meaning clarification, which I did at another stage; and, the third contained my bracketed assumptions. As I worked through each interview, I bracketed my thoughts in the third column at the right side of the page, and tried to keep them aside mentally in an effort to see the experience without any presuppositions. The three-column approach can be seen in *Table 2: Delineating*

the units of general meaning (p. 94). Van Manen (1997) cautions that reduction should not be seen as an end in itself, but as a means to an end which involves isolating one's reflections and thoughts so that one can be open to the lived experience which resides in the text of the interview. This requires the next stage of delineating units of general meaning.

Stage 4:Delineating units of general meaning

Hycner (1985) defines a unit of general meaning as "those words, phrases, non-verbal, or para-linguistic communications which express a unique and coherent meaning (irrespective of the research question) clearly differentiated from that which precedes and follows" (p. 282) Once my interviews had been transcribed and the bracketing completed, I began to delineate units of general meaning. This involved carefully going over all of the words and sentences, as well as the various expressions the participants tended to use. In this phase, I was attempting to get as close as possible to the lived meaning that resided in the transcribed text. Getting close to the lived meaning is about the researcher becoming engaged "in the reflective activity of textual labour" (Van Manen, 1997, p. 78), a process that involves re-reading and reworking the text of the interview many times over so that the units of general meaning may be pulled out of the text and recorded in a margin alongside the transcription. It is a case of trying to get as close as possible to "a crystallisation and condensation of what the participant has said" (Hycner 1985, p. 282) and still staying close to the literal data (Giorgi, 2008).

 Although there are some slight changes to the wording in the Example (*Table 2: Delineating the units of general meaning)*, the literal words have been retained to some extent to ensure that the unit of meaning is preserved. The process of fixing the lived meaning residing in the lecturers' words, i.e., what the lecturers meant exactly when responding, was not always a straightforward process. For example, in Table 2, the meaning unit 100 -"it's really an obvious reminder"- is ambiguous. It's meaning needed clarification by the lecturer, because I struggled with its interpretation. Van Manen (1997) also draws attention to the way in which a person constantly interprets meaning in conversations as he/she experiences them

in everyday life, and that it is complex at times to see the meaning of something for what it is.

Table 2: Delineating the units of general meaning

Table 2: Transcription	Units of General Meaning – the lived meaning	Bracketing my thoughts and assumptions
90. Yeah, well I mean… just getting back to what you do when you – yeah, I mean, this is more what we are talking about at the moment - (which) is thesis writing ? I guess…	90. He returns to the subject of thesis writing	90. This is a liminal space at the desk where work is always going through transformations and moving along.
91. But, in that way the computer can be really, like it can be a space where you are really creative 92 and really happy with what is going on…93 and really productive, you know what I mean…	91 – 93.The computer is a space where he is creative, happy and productive	91-93.It looks like the space at the desk can be a happy creative space where good things happen,
94. And at the same time, 95. yeah, sometimes the same day, sometimes the same hour…	94-95. Sometimes on the same day and at the same time	94-95. It seems to be a charged space that holds tension as well.
96. it can be a really frustrating space at the desk	96. he can be frustrated at the desk	96. He seems to be experiencing different emotional states as he works at the computer.
97. because nothing is happening,	97. because he is not able to write.	97. He is experiencing a lack of creativity and he finds it difficult.
98. those things are not coming together.	98. the things he should be writing about are not coming together.	98. He finds it difficult to write at times because he struggles to bring things together.
99. And that's I guess, *(pause)* that's the way that word processors and whatever are set up…	99. Word processors are set up that way. *(Researcher's note – check on this as the meaning needs to be a little clearer - what exactly does he mean here and why?)*	99. Computers can generate a feeling in him and even have some control over him.
100. it's really an obvious reminder that you aren't doing what you should or want to be doing.	100. He is reminded that he is not doing what he should be doing or wants to do at the computer	100. This is a frustrating space, where things are not coming together for him and he feels guilty.
101. because when nothing is happening, it's a blank page; it's a white document	101. He is faced with a blank page when nothing happens on the screen.	101. The computer is like a a personal 'assistant' here that reminds him when he is struggling to write – it signals to him know when things are not looking right on the screen.
102 or it's a blinking curser!	102. He sees a blinking cursor.	102. It's a cursor that reminds him that he's not doing his work properly.

Stage 5:Delineating units of relevant meaning

In the next phase, the meaningful units that were relevant to the phenomenon and the research question were selected from the units of general meaning. This is seen as the beginning of an important and critical phase in the data explication process (Hycner, 1985; Giorgi, 2008). In this phase, I considered my research question and subsidiary questions and whether what the lecturers' had said could be linked to them. All of those units of general meaning, which told me something about the questions, were noted in the side margins of my data sheets as units of relevant meaning. This included the practices they referred to and even their relations with computers after work. When delineating the units of relevant meaning within each interview, I constantly had to take the general meaning back to the research question while at the same time reflecting on its relation with the units in the other interviews.

Stage 6: Verifying units of relevant meaning and eliminating redundancies

To ensure rigour and reliability in this investigation, two supervisors who monitored my progress as I worked through the various stages of the data explication checked units of relevant meaning. They acted as impartial judges validating and checking the way in which I drew out the units of relevant meaning from the units of general meaning on a regular basis. Each unit was numbered and evaluated against the entire structure of the interview and the research question in order to determine what was relevant. This meant that the data was constantly being looked at, reviewed, and repositioned in terms of its relevance to the phenomenon. While statements that were irrelevant to the phenomenon were removed, some of the uncertain statements were still included. During this stage, I eliminated all redundant data as advocated by Giorgi (2008).

Meanings that were repeated and relevant to the research question were also retained and noted; for example, specific phrases that were repeated or certain

words in the text that characterized each of the interviews in an individual way. Van Manen (1997) claims that language is "a huge reservoir" (p. 61) in which human experience lies deposited. I noted the way in which the language in some transcriptions reflected the lecturers' life-worlds, particularly when focus was on physical action. For example, Kevin's descriptions of working at the computer were marked with words which represented sporting activities, such as 'punched', 'chipping away', 'flipped', 'cycled' and 'teed-off'. Alice often used the words 'balance' and 'constantly' in her descriptions, Liberty frequently referred to her desk area as 'my space at her desk', and Matthew and Jane each use the phrase 'stuck at the desk' on several occasions. After verifying the units of relevant meaning and eliminating all redundant descriptions, I moved onto the next stage of the data explication process which involved working on early categories and potential common themes from the units of relevant meaning.

Stages 7 & 8 : Arriving at clusters of meaning and categories

In my data explication process, these two phases overlapped at times. As a result of the way in which the interviews were structured, the units of relevant meaning frequently extended into natural clusters of meaning around particular experiences. During this stage my focus was on shifting the units of relevant meaning into general and individual categories, then re-arranging them in various ways. Giorgi (2008) claims that researchers use a process of free imaginative variation as they work with the data, bringing it together in various ways, which reveal the phenomenon, and then pulling it apart again. Free imaginative variation also requires the researcher to mentally remove some of the clusters to see how their removal changes what is presented to the researcher's consciousness (Giorgi, 2009). I found that I was automatically doing this as I processed the data. At the same time, I was constantly moving back and forth between the transcript, the units and clusters of relevant meaning, and potential categories. Hycner (1985) emphasizes that imaginative variation is an iterative experience for the researcher who needs to draw on creative insight, deep reflection and judgment. He also cautions that a major danger at this stage is the fact that the researcher's

presuppositions might interfere with what is coming to light, hence the need to have the process checked by the researcher's supervisors, although there is always the possibility that another researcher will come up with different clusters and categories (Hycner, 1985). Throughout this period, I regularly met with my supervisors. I was able to share the data explication process with them, and at the same time monitor my biases and presuppositions.

In stages 7 & 8, I concentrated on distinguishing those clusters, which showed the lecturers' experiences of the everyday practices in the data. Some of these clusters could go into categories, which showed that the lecturers were busy, checking emails, while others could go into a category that dealt with their experiences of communicating through email. In addition, there were clusters which showed that they were getting ready for the day's teaching by reworking existing lecturers or putting together new resources for specific tutorials. This data came together under a category which I have called 'working at the desk'. All clusters of meaning that showed an embodied experience of computers were brought together into a category, I refer to as the 'corporeal body'. Clusters that revealed the lecturers' relations with their home office computers after work were placed in a 'home office' category, showing their experiences at the end of their workday. Units of relevant meaning, which dealt with the start of the working day at work, were also clustered together under a separate category.

Stage 9: Writing up the summaries of each individual interview; and, returning to the participants for the second interview

During this phase of the data explication process, I wrote up my summaries of each of the interviews. They followed the basic structure of the interview, and were in effect an attempt to capture the inner-world experience of each lecturer. An example of a detailed summary of an interview can be seen in Appendix 5. My summaries were based upon the general units of meaning as well as the units of relevant meaning. Potential categories and themes were noted. In certain places of

the summary I deliberately retained specific phrases and sentences in order to stay close to the lecturers' meaning and 'presence'.

I was mindful of the distinction that came into play between the first and second interview in this investigation. The first interview allowed me to capture each lecturer's pre-reflective lived understanding of the meaning of the phenomenon. At the second interview, the summaries of the first interview were available should any of the participants wish to check their responses. However, because the participants were all time short in their academic day, they did not feel the need to do so. This meant that the immediacy of the experience that had been captured in the first interview was not altered at all. Also, during the second interview, all of the lecturers told me that they had begun to think more deeply about computers in their practice. Here I became concerned, fearing that additional comments from the second interview would now be coming from a reflective understanding of their lived meaning, not from a pre-reflective immediate understanding. Hycner (1985) cautioned against bringing in a retrospective understanding that can impact on the immediacy of phenomenological descriptions. When I looked at the transcriptions of the second set of interviews, it was very evident that many of the lecturers' comments were influenced by their reflections of the first interview; consequently, I kept the second interview apart and only returned to it when I had completed the data explication process for the first set of interviews

Stage 10: Identifying the general and unique themes in the interviews

During this stage, the researcher seeks to draw out the essences (the invariant structures/ themes), and to acknowledge the individual differences through the variant structures/ themes (Giorgi, 2007; Hycner, 1985). I began to look at themes common to all of the interviews, as well as at the individual variations. At this point, the general themes were emerging were emerging the interviews through the existentials of time, space and the body. I re-considered each lecturer's

experience through these existentials, and how I could fit them into a framework. For example, under the existential of time there was a theme of 'lived time' running along a continuum which began with descriptions which dealt with categories showing the following: the 'start of a typical day at work'; 'working at the desk during the day'; and, 'leaving work at the end of a typical day'. When brought together, I could see that these revealed a description of a whole experience that was unfolding along a continuous temporal sequence which allowed for extremes at either end (sub-themes) involving a 'before work time' and 'an after work time'. Under the existential of space, a theme of 'lived space' may be seen which also progressed along a continuum from 'home space' to 'work space' and then a return to 'home space'. Early in the day the theme of the 'lived body' could be traced in the data along a continuum of experience from which sense of the body was absent in places. But later in the day, this was not the case. Furthermore, the data showed that each of the lecturers experienced the existential of time and space in a unique way. In other words they all had different perceptions of time and space as they went about their everyday practices.

 At another level, I could see that the everyday practices which the lecturers were doing at their computers, were also integrated within the themes of 'lived time', 'lived space' and 'lived body'. I now realized that some of the everyday practices could be categorized as 'routine work', which was done by the lecturers as a fixed unvarying activity, while others involved everyday academic work which was being done regularly at the computer for teaching purposes. In this study, these latter activities are categorized as 'taken-for-granted work'. After further reflection, it became evident that the everyday practices were also integrated with the existentials; they were carried out according to a certain sequence that involved time, space and the body. Some activities were usually done at the start of the working day, while others were carried out during the day. I noted that each lecturer's individual understanding of time and space at the desk also marked them. At this point, I began to think about the possibility of a descriptive analysis or narrative that would show the whole experience of the phenomenon in everyday academic practice. It would have to first reveal the variant

structures/themes, and thereafter the invariant themes that captured the essence of the phenomenon.

Stage 11: Contextualizing the themes

Stage 11 reveals further how the data analysis profited from Giorgi's method of explicating and organizing the data. By using 'imaginative variation' in this stage, the clustered themes, sub-themes and categories were contextualized into two structured textual descriptions, captured in Chapters 5 & 6. Each of these textural descriptions is structured according to an over-arching contextual framework; together, the frameworks accommodate a whole organized description of the phenomenon. The two frameworks are outlined in Table 3: Contextualizing the themes, sub-themes and categories, and explained further thereafter.

In my investigation, the phenomenon was finally written up under the chapter headings 'Describing the everydayness of a typical day' (Chapter 5) and 'The bodily dimension in the lecturers experiences' (Chapter 6). I started to write up the variant structure by contextualizing the data in the existential themes through a narrative description of the experience that described a typical day at work. Through the description, I wanted to illuminate lecturers' experiences of a typical day at work and let said experiences speak for themselves. Thus, the aim of the first over-arching framework was to reveal the 'appearance' of the phenomenon in its variant structure. The invariant structure of the phenomenon, i.e., which was the bodily dimension was covered in the second chapter on the findings. Chapter 6 would unfold in such a way as to allow the aspects that were concealed in the phenomenon to be revealed. As shown in the next table (Table 3), the participants everyday practices extended across both chapters.

The first theme in Table 3 reveals the variant structure of the phenomenon: the second deals with the invariant structure. Under the two over-arching frameworks, the main themes - with their sub-themes and categories - not only showed up the practices, but also fitted into each other as composite segments of the phenomenon.

Table 3: Contextualizing themes, sub-themes and categories

1. Over-arching Framework Describing a typical day at work	2. Overarching Framework The bodily dimension in lecturers experiences of computers
Main Themes Lived time Lived space **Sub-themes of lived time and space** Start of the day at work Working at the desk during the day Leaving work at the end of the day **Categories** Individual lived time Individual lived space Individual relations with work and home computer	**Main Theme** Lived body (unfelt and felt) The everyday practices **Sub-themes of the lived body** The unfelt body The felt body **Categories of the lived body** The unfelt body and its tactics The restricted body and its tactics The corporeal body and the self-regulatory tactics
The everyday practices The routine practices The taken-for-granted practices The practice of balance	

Stage 12: Capturing the essence of the phenomenon

Because the data explication process in this investigation is to some degree also influenced by Van Manen's hermeneutical approach to phenomenology with its emphasis on textual interpretation, the last phase of the analysis of the data involved an intuitive-reflective process, while still remaining true to the various structures (themes) in the data which came to light in Giorgi's descriptive phenomenological method. In this phase both Certeau's (1984) concepts of everyday practice, as well, Merleau-Ponty's (1962) body-subject were used as lenses through which to interpret the data. Simultaneously, in my reflections, I also returned to Gurwitsch (1964) (discussed in Chapter 3) who argued that a

phenomenon is situated in a complex interrelated field of consciousness, and has a main theme, which acts as a unifying element during the experience. The intuitive-reflective process allowed me to arrive at the essence of the phenomenon through a composite framework, which gave form to the overall structure of the phenomenon and its interrelations with time, space and the body *(Figure 1: The phenomenology of academic computer use as an interrelated field of consciousness)*. In this investigation, and in these lecturers, the unifying theme of consciousness could be discerned in the background of the data as the lived experiencing body, occupying a central position in the phenomenon. Furthermore, through a shifting awareness of the body experienced by the lecturers, an interrelationship with time and space could be seen on multiple levels that extended into different horizons, revealing aspects of the phenomenon which went unseen before. At times, these aspects were at the margins or fringes of the lecturers' awareness; while at other times, they moved into the centre of their consciousness. It was also evident from the data that the interaction of body, time and space could be linked to academic practices.

Conclusion

This investigation followed a series of acknowledged methods and procedures that are part of the process when employing a phenomenological methodology. In this chapter, the concrete steps of the method were outlined. How they constitute the basis for the writing of the general structure is the focus of chapters to come.

CHAPTER FIVE: DESCRIBING A TYPICAL DAY IN EVERYDAY ACADEMIC PRACTICE

Introduction

The main intention of this chapter is to describe through the voices of the five lecturers their experiences of a typical working day in the academic office. It uses descriptions that have been drawn from the two interviews with the five lecturers. I have tried to use their words as far as possible to illustrate a phenomenon that has been investigated according to the phenomenological method outlined in Chapter 4. At the time of the interviews, the lecturers all worked in the same office in a private higher education provider specialising in the field of physical education. Each lecturer will be introduced in turn. Her/his description will be presented in the following sequence: first, the start of a typical day at work; second, working at the desk during the day; and, third leaving work at the end of a typical day. The discussion at the end of the chapter will focus on the individual temporal and spatial dimensions which mark the five lecturers' experiences.

Introducing Matthew

 Matthew has had a successful and varied career, not only in the field of education, but also as a professional skater competing regularly in international contests. Most days he wears a tracksuit and running shoes; and, there is usually a stopwatch dangling from his neck. He leads a busy life, having many responsibilities. In addition to teaching, which represents the academic part of his day, he also coaches as a second vocation. In the remainder of his time he attends to his four children. There are always protein bars and other energy supplements on his desk.

The start of Matthew's typical work day

On a typical day, Matthew arrives "quite early" [to use his words]. He always seems to be in a great hurry as he makes his way to his desk. He describes the start of his day at work as follows:

> *I try to get into work at about eight o'clock and I find it easier to have breakfast at work because if I have it at home then I get caught up with everything that's going on at home…so yeah, my day is quite hectic… absolutely hectic. There's never enough time.*

Matthew observes that because there is not enough time in his working day, he tries to do things quickly:

> *Everything is done on-the-run. Absolutely everything! It's all done on-the-run* [he emphasizes these words]. *So I come in…I normally have a bit of breakfast at my desk …and then while I'm doing that, the first thing I do is turn on the computer and check emails.*

As well as working quickly and doing everything "on the run", Matthew likes to do more than one task at a time:

> *Yeah … and at the same time as eating, I'm answering the emails and making a couple of phone calls that need to be made, and all the other things that need to be done.*

His day is an exceptionally busy with little time to spare:

> *Absolutely everything is done on-the-run! As you can see, I'm having my lunch here while we're talking. There's no time …there's no time to stop and eat a hot meal during the day or anything like that! It all happens with something that you can eat while you're in the middle of doing something else!*

From the above descriptions, it becomes clear that the focus of Matthew's morning is on time. Despite starting before the others each the morning, the lack of time in his day means that everything must be done in a great hurry. One of the first things he does is to switch on his computer, which indicates the importance of managing his time. He endeavours to do multiple tasks

simultaneously, eating his breakfast at the desk, checking his emails and telephone messages, and making telephone calls. Time, or the lack thereof, pressures make him do things at a quick pace, often doing tasks 'on-the-run' in order to get through everything that has to be done during his day. The hurried pace he adopts early in the morning continues throughout the rest of his day.

Matthew working at his desk

Matthew occupies a desk in a corner at the far end of a large office shared with several other lecturers. His desk and desk area have been moved and re-arranged on several occasions. At one time, the desk was positioned to create an open working space that was not only easy for him to access, but also for the students who came to consult him. At the time of the interviews, Matthew's desk (See Appendix 7. Photograph 9: Matthew's corner) and bookshelves had been moved to create his own private corner in the room:

> *This space is just right for me… I like it like this. Absolutely, it's a special space. So you see, I've got here a small space here that doesn't become invaded. At least I don't have anyone just sort of arriving here!*

It is evident from the description that Matthew has arranged his desk in a deliberate way so that it is difficult for anyone to readily access his working area. Matthew's spatial arrangements also indicate that he wants protection from unwanted visitors. Interruptions are not welcome in his corner of the room.

Matthew's desk is also arranged to accommodate a desktop computer and a laptop that he uses permanently as a second computer:

> *I'm usually here at the desk …my lap-top is usually open here next to the computer.*

There are also multiple teaching resources on his desk:

> *…and if I'm not teaching, I'm preparing things for teaching, absolutely. Yeah… I've got stacks of work things here at the desk… absolutely …*

there are piles of different types of work there… [pointing in the direction of some boxes and shelves] it's all, [a long pause] it's organised chaos, absolutely, but I'll sort of know exactly where each bit is, and where each piece is supposed to fit in…even each bit that I'll need for the day's teaching, all the nuts and bolts.

When Matthew is not teaching, he is usually at his desk, busy with preparations that are part of his role as an academic.

To the outside observer, it is difficult to see order in the casually stacked piles of files, journal articles and boxes of assignments that are strewn across Matthew's desk. But, he knows exactly where all his resources are in his corner of the room, and how they fit into his teaching for the day. As Matthew multi-tasks at the computer, [he enjoys working on two], he listens to music through his headphones:

And then …yeah, at the same time too… often I have headphones on and music playing because that allows me then to have my own space at the desk, absolutely. So, other things that are going on in the office do not interrupt me.

From the above descriptions, it is clear to see that Matthew likes to work in a private space, which he has created for himself in his corner of the room.

Throughout the day, Matthew is on the lookout for opportunities that will allow him to do more than one task at a time. After hastily checking his emails and messages, Matthew immediately starts to prepare for the teaching of the day. This usually involves two to four hours of face-to-face teaching. He prepares his lectures and tutorials and tutorials at his desk between periods of teaching:

So there's always a bit of research that you have to stay on top of, and then generally, on top of that, there's the preparing of the teaching resources, and the photocopying, and doing new lectures,

and just the usual sort of deal you know … reworking lectures and making up tutorials …all the preparation that goes with the job.

Matthew's narratives reveal that his everyday academic activities also include the research. He keeps himself up-to-date in his areas of speciality, prepares lectures and tutorials involving human movement, and also communicates with his students. Without Matthew deliberately emphasising the point, it is evident that all of his activities involve the computer. Perhaps more relevant to this thesis, is the way in which Matthew's activities are carried out. He remains focused on the problem he stressed earlier in the day, not having enough time to complete the day's tasks. As a result, he has to work at a fast pace in order to get through what has to be done as he tries to fit as much as possible into his day:

....and then again everything [referring to the activities at the desk] *is all done on the run with me trying to do as much as possible because there's just not enough time. It's a problem….I only have so much time.*

As a consequence, Matthew has developed a way of working, which involves multi-tasking in an effort to makes the most of his time at the desk. When preparing for teaching, Matthew usually works on two or three lectures and several tutorials at the same time:

Yeah, I try to do things at the same time….even if it means working on two computers at the same time. So, I'll have several things on the go at one time…I'll even have many screens going at the same time...that's the way I work at the desk. It's a bit like being a sixties keyboard player in a rock band! I'm moving from keyboard to keyboard.

Matthew multi-tasks at the computer, not just to make the most of his time, but because he finds it an enjoyable practice:

Like I find [pause] *if I just narrow in on one thing too much, then I forget the important bits. But if I let my mind work on two or three things at the same time… like doing two to three lectures in one go, then*

I'm able to think of more valuable things that can be added to each of those... I like it that way…and there's no time at home to do any of this.

Not only does Matthew enjoy working on two computers, but also describes himself as being more focused on work, which helps him to make the most of his time and cope with the problem:

I like to do lots of things while I'm doing things. That way I'm more focused then as well …and I have more time for everything I have to do here.

In the above, the tempo narratives, the tempo of Matthew's day is fast paced with no time for him to stop and rest. Clearly, from Matthew's perspective, time continues to be a big issue for him throughout his day; and, by working quickly and doing things simultaneously, he attempts to resolve his problem. Furthermore, all of the practices he works on when he is at his desk are associated with the computer. He operates two computers; this expands his ability to work on several things at the same time.

In addition to the focus on time in his narratives, there is a spatial dimension, which facilitates the tempo of Matthew's working day. He has organised his working area in the corner of the room, positioning his desk in such a way so that others access to his area of the room is difficult. It is also screened off: he has arranged his bookshelves so that they form barriers around his desk. Only he has access to the space behind his desk. This allows him to do as much work as possible in a private space, which discourages disturbances that would interrupt his multi-tasking. From his descriptions, it becomes evident that he is familiar with all the resources around his desk and how they fit into the activities he structures through his computers. The two computers also play a part in Matthew's constructed space: they help to create another barrier against the external world.

Furthermore, his practice of listening to music through headphones allows him to experience a private, sealed off world behind the desk.

Matthew leaving the academic office at the end of the day

There are two parts to Matthew's working day: the first is reserved for his day is reserved for his academic teaching role; the second takes place in his after-work time during which he does professional coaching:

> *Generally, I try to finish things up here… generally it's about four o'clock by the time I get going …and then from there my day starts again. And four days out of the five of the working week, I go and coach ice-skating and that all happens after work time when I leave here. And that again…it's my coaching time and it's all on the run.*

As with the first part of Matthew's day, the second part is also experienced in a great rush of activity that is compressed into the hours he sets aside for coaching.

Matthew describes his mix of joy and pain at the end of the day:

> *It's a rewarding feeling and enjoyable, absolutely… when you get a lot done in the day* [referring to all the work he does at the desk]. *But, at the same time, yeah…because I'm 'stuck-at- the- desk'* [said quickly and with emphasis] *for large parts of the day...because the job* [of teaching] *is now all about sitting and I even have a sore bottom from all the sitting when I leave...And you carry all of that in you when you leave.*

Matthew's narrative reveals his awareness that his teaching practices have undergone a change in character. He elaborates on this and how it affects him when he leaves the office at the end of his academic workday:

> *There's a level of decompression that I need to do at the end of the day to leave work all behind. Absolutely…I need to do that* [his decompression] *before I'm able to leave all the work at work, you know, the sitting there at the desk and the coaching as well ...before I*

can throw myself back into family life again...otherwise, I carry those
bodily reminders around in me at the end of the working day.

There is also now an embodied dimension within Matthew's experiences of computers. Although he feels rewarded for being productive at the computer, his comments describe a cost to his body through his feelings of being restricted as a result of working with computers.

Matthew's experience of the first part of the day's work (and to an extent the second part of his day as well) reveals embodied feelings of restriction. In narrative still to come, he explicates how he addresses them through his tactic of decompression (described in the next chapter), which he deliberately practices at the end of the working day after he finishes coaching. It is then that a return to family life becomes his priority. Matthew does not mention a home computer as such; but what does become evident is that he has difficulty leaving 'work at work' because the experiences of the day seem to build up in him. This prevents him from making a smooth transition from his working day of teaching to his afterhours coaching where he continues to multi-task. Neither does his transition into his home space occur easily at the end of the day.

If one considers together all of Matthew's descriptions of his typical day, it becomes evident that he experiences time and space in a way which influences his everyday practices at the computer. Time moves quickly in Matthew's world: his typical day moves at a fast tempo with no time to stop and everything done 'on-the-run'. His everyday practices at the computer show up as routine activities, which involve checking and communicating via email, and preparing lecturers and tutorials. All are done as quickly as possible because time is a problem in Matthew's day. Consequently, he multi-tasks so that he can get as much done as possible while he is at the desk. Even his relations with the computer are characterised by his practice

of multi-tasking. He works with two computers and moves between many numbers of screens in order to increase his output.

Matthew constructs his desk-space in a particular way, which allows him to experience working at the computer with minimal interruptions. His desk is placed in a corner space with just enough room for him to squeeze in behind it. This makes it difficult for anyone else to enter his space, which is further screened off by the two computers. Although he is intensely busy in that space, there is an atmosphere of fun about his relations with the computer. Despite the constant rush to get through all the work of the day, there is a celebratory air about his multi-tasking at the computer and laptop. His narratives reveal an enjoyment and excitement at being able to work between the computers and move between as many screens as possible. Simultaneously, he listens to music through his headphones, pretending to be a sixties keyboard player as he works at his computers. It should be noted, however, that it is also in the space at the desk that Matthew has his experience of restriction, of being "stuck-at-the-desk" which he feels through " bodily reminders" [to use his words], which he carries with him when he leaves his corner in the academic office.

Introducing Liberty

Liberty teaches mainly in the area of Health Studies and socio-emotional well-being. She is particularly interested in balancing the social and emotional aspects of well-being in her students and how these aspects affect their academic achievement. She encourages her students to consult with her on a regular basis, particularly if they are experiencing personal problems. In her academic practice, she likes to focus on the whole person, hence her holistic approach to students' well-being and the amount of time she sets aside for consultations with them.

The start of Liberty's typical work day

Liberty usually arrives at the office pulling a small black-wheeled suitcase behind her. It contains some of the teaching resources she brings from home for the day. In her other hand, she usually carries a large bunch of jingling keys and a take-away coffee. The start of Liberty's typical day is marked by routine activities that involve checking her email, communicating through email, attending to phone messages, and checking her task list for the day:

> *Generally it would be about a nine o'clock start, unless there are classes prior to that. Sometimes… umm...I have an eight o'clock start. But even if there's a class at nine…. I'll be here usually well before that, just to check things. I usually begin by checking my email.*

Thereafter, regularly throughout the day she will continue to check things at the computer. She does this between teaching sessions every time she returns to the desk, even when occupied with various tasks.

> *When I'm at the desk... I tend to be checking emails and also phone messages on a regular basis….and throughout the day as well, I'll be checking ....so umm, I do this on a regular basis, you know…check and check things at the computer whenever I get back to the desk and between whatever I'm doing...whether I need to respond to a student or meet with one.*

In the above narrative, Liberty's day commences with a different tone and a slower pace compared to Matthew's day. It is organised around the activity of checking her emails, which she does repeatedly throughout the day. She needs to see whether she is required to respond to the well-being of a student. In addition to checking her emails, Liberty's academic practice is focused on the task list on her desk. She describes this as the means by which she structures her activities:

> *So… umm… after checking my emails, I check my task list which is like my map for the day …I'll also then look at what's needed for the day's teaching, and if I still have to do some preparations. But, usually I've*

done all of that the day before.... but if there's preparation that's required you know, I'll continue with that. So...I'm also just busy there at the computer preparing things for the day.

One can see Liberty's narrative that at the start of her day she is busy with several ordinary activities, which are done routinely by academics. Most of these are done at the computer.

Liberty working at her desk

One side of Liberty's desk is positioned against a window that runs along the entire length of the side of the office. A rewarding aspect is the extensive view she enjoys. Liberty comments several times during the interview on the view from her desk. She explains with enthusiasm:

Yes, it's a lovely view…I love the bridge, it just inspires me so…I often look at it during the day.

There is a marked difference between Matthew and Liberty's desk areas. Liberty's desk and computer are decorated with colourful toy lizards and frogs, small troll-like creatures, and even a plastic nose is balanced on top of the computer. As well, several fairly large portrait photographs of Liberty are on each side of the computer (See Appendix 7. Photograph 8: A decorated computer). Small, ornately framed photos of her dogs are arranged around the base of her computer. Several yellow balloons are stuck to a notice board close to her chair, and a bright pink laminated card, which boldly displays her name marks what can be described as an open area, which is there for everyone to see in that section of the office:

I think colours are really important to me. I need them to…umm, you know, for the brightness and umm...wherever I am, it needs to be happy and fun, you know…my space...and it may be that [pointing to her desk and space around it] I actually use the coloured toys or whatever to inspire me.

An aura of bright colour streams from around Liberty's computer and desk area (See Appendix 7. Photograph 6: Liberty at her desk).

Liberty has a reason for making her area colourful:

So umm... this also makes it more inviting than just say, a clear desk and a computer sitting there, staring at me! It has to be inviting you know, and it also has to be inviting for the students who come to consult me.

Unlike Matthew, whose desk and surrounding area have been deliberately arranged to keep people out, Liberty's desk and work area have been arranged to open up her space and make it more inviting, not just for her, but also for the students who come to consult her.

Liberty often refers to her area of the room as "my space" and how important it is for it to be "a workable space" for her. At certain times of the year boxes of assignments lie scattered on the floor around her desk. She describes the situation:

But, in fact... umm... although it looks quite cluttered [pointing to the boxes]*, it's a workable space and therefore ...so for me, things are working here in my space ... you know, there's work in progress here at the desk ...I'm busy with things in this area.*

From time to time, she rearranges the resources at the desk, including its actual positioning to make it an even more workable area for her:

I have moved my desk around recently, you know, so that I can be even more efficient. And umm, what I found is that my work space originally had too many boxes and things everywhere ... so what I've done, is to turn the desk around, still being able to see the view outside because it's a natural view... And so therefore, I've put in another shelf to take things off the floor because I feel like... umm...when things are on the floor, there's a barrier that I have to jump over you know, before I can get to my desk and so umm... I don't feel as efficient if that is the case and I can't get to my desk that easily.

Not only has Liberty moved her desk, but she has also moved the position of the computer on the desk to one side so that it has become an open and inviting space for her students:

> *Yes… as well as moving my desk, I've actually recently put the computer to the side so that it's not the centrepiece on my desk anymore. I've moved it to the side so… umm…by moving it to one side, that means I have a more opens space between myself and the student who has come to consult with me. I've actually put a chair on the opposite side where, if I do have students or people who want to talk to me, they can actually share my work space you know. That means I can have some sort of a relationship with them, whether it's an academic relationship or a chat you know… students can sit face-to-face with me now and I don't have to look at them from behind the computer. So 'my space' is actually also becoming their space. It* [the space] *now invites others to sit and inter-relate with me. And when I need to I can still look at the view.*

As a consequence of her unique arrangement of space, Liberty experiences numerous interruptions on a typical day:

> *I have an open door policy ...so therefore students are encouraged to see me when they need me. Obviously I'll tell them, umm...that they need to be sure that they can get hold of me or to make an appointment. But if that's not possible. they can just come and see me. So therefore, my working time during the day, without sounding too negative… my working time is interrupted quite a lot as I'm trying to get through the desk-work which needs to be done each day at the computer.*

Consequently, Liberty experiences working at her computer in an interrupted way:

> *I tend to have a lot of students see me about their work ... or as I said before, other issues. So there are lots of interruptions when I'm trying to do the desk-work.*

With Liberty's working time being constantly interrupted, she needs more time at the desk for all the preparations she has to make. When Liberty is not lecturing, she is working on future teaching and learning activities for her students; and, most of this preparation is done on the computer. In between all the planning, she will continue to check her emails. She generally communicates via email. Throughout the day, she struggles to fit all of this into the time she spends at the desk:

I need more desk-time [emphasising the word] *for myself to do all the computer work... I'm not at the desk enough so ...umm...when I'm teaching a heavy load, and with all the interruptions...and all the checking... there is just not enough desk-time for me to do all the computer work that needs to be done.*

Similar to Matthew, Liberty does not have enough time for all her tasks. She constantly searches for more desk-time:

Yes...I love preparing new units of work and even reworking the old ones. But I need more time here at the desk to work through websites and gather information...it's a lot of searching and sifting. So therefore, I really need more time at the desk to get through all the computer work

Liberty manipulates time at the desk through planning and re-organised her activities:

...because of all the interruptions, I'm constantly on the lookout for desk-time to do all those things. And sometimes, you just have to make desk-time to do all the things you have to do in that day. So I'll try to make more desk-time by changing things around.

In her attempts to manage the lack of time, Liberty devotes her energies to planning:

I'd like to spend a bit more time at my desk doing more planning ...so umm... I would feel more organised in the day.

Close examination of Liberty's narrative in this section, reveals several practices linked to working at the desk with a computer. These include

preparing new units of work, tweaking and reworking material, and searching and sifting through information networks on the web. Furthermore, close perusal of her narratives reveal how important it is to Liberty to work in an area which she has designed to fit in with her personal style of academic being and her work at the computer. Liberty's desk space accommodates a computer that is highly decorated with lots of colour to create an affective mood. It also speaks of a very personal space where things have been intentionally manipulated to make her daily practices more workable for her. Even her desk has been moved and the computer shifted to one side so that it does not come between her and the students who consult her during the day. Her focus on the space at her desk extends to include the view, which also plays a part in her typical day at the desk.

Very evident in Liberty's narrative is the fact that she wants her space at the desk to communicate a welcoming message to those who come into it. This contrasts with the way in which Matthew deliberately sets out to minimise interruptions at his desk by withdrawing into a corner space that only he can access. In addition, Liberty's time at the desk is marked by numerous interruptions: hence her shortage of "desk-time" to do the everyday practices that a lecturer pursues. She constantly seeks to make or find more desk-time.

Liberty leaving the academic office at the end of the day

If, at the end of the academic work day, Liberty runs out of desk-time, she will take all the computer work that still needs to be done, home with her:

> *So therefore … when a lot of time is taken away from my desk through the interruptions, that means that the work I'd like to do at work now has to be done at home… then that means, umm... that I have to use the computer after work in my home office.*

Working on the computer at home is not Liberty's ideal solution to a lack of time at her work desk. Liberty considers computer work "heavy work" which keeps her at the desk in her home office and for this reason she does not like taking computer work home with her:

> *I don't really like to do that ...I try not to take the computer work home with me. Computer work in home time is heavy work. I would rather use that time for marking. But when you're doing it [computer work] at work, then it is different.*

Instead she tries to do all the computer work during the day, even if it means leaving late:

> *I won't leave my desk at work until I'm prepared for the next day. And umm if I'm not, then something from my desk will come home with me to make sure that it gets done. So therefore... usually before I leave I try to do the work I need to do on the computer ...and then ummm...anything else that I can do at home - like homework - will be taken to ensure that I'm prepared.*

On occasion when Liberty does take work home with her to prepare for the next day, it will usually be what she calls "light work" that does not require use of a computer:

> *Yes...I guess in terms of homework you know...there's always something to do! And knowing that if I may have reading it's usually light work ...maybe some marking which I want to hand back the next day...it's not "heavy work" which has to be done at the computer after hours.*

It is evident from her other narratives that Liberty's reference to "heavy work" (see above) in the above description is linked to a corporeal feeling of heaviness which she experiences at the end of the academic day. Liberty elaborates on this:

> *When I go home I don't want to take that feeling with me, you know...that feeling that you have been sitting there all day...because you can have that heavy feeling from just sitting at the computer all day.*

Although Liberty has a home computer, she tries not to work on it after leaving the office. She only uses the home computer when it is essential:

> *Yes, I've a home computer… and I guess in previous years… umm... as soon as I walked in, I'd turned on the computer… whereas now umm... work is work and home is home for me. And so therefore, my computer at the home office is not actually turned on anymore so much, unless it's an absolute necessity. I only take computer work home if it's a must.*

> *So really, there's no reason to turn on the computer at home, because I'm okay to detach from my desk and the academic office… and go home and refresh. You have to get away from it. I rejuvenate by taking my dogs for a walk… and having a good night's sleep!*

Unlike at home, in the academic office Liberty constantly uses the computer:

> *So umm… I guess I use the computer more at work definitely… and at work you know, the computer is on most of the time. So therefore, the computer at work is a constant 'working thing' for me. I'm always processing teaching work through it and it's working for me. But at home in the home office it's switched off most of the time.*

In the above narrative, clearly Liberty's relationship with the home computer is distinctly different from that which she has with her work computer. She does not like to take work home with her. Usually, if she takes academic work home, it is work that does not involve the computer. For example, she only uses the home computer for emergencies. At the end of the day, she makes a deliberate distinction between the work computer and the home computer. She sees the former as a constant "working thing" through which her teaching labour is facilitated, while the latter used only for emergency work.

 Overall, when one considers all of Liberty's narratives, it becomes evident that she has a different way of working at the computer and relating to it compared with Matthew. She intentionally decorates the area around her

desk with lots of colour to make it a welcoming space, as well as a personal space, which speaks of ownership and identity. Even her computer is decorated with carefully chosen mementos that are precious to her. There is further manipulation of space at her desk. This involves the deliberate positioning of her computer to create a more accessible space for students who come to consult her. She does exactly the opposite to Matthew who seeks to close off his space at the desk and does not welcome interruptions because he is trying to do as much work as possible in the time available. At the time of the interview, Liberty's computer was positioned to one side of the desk so that it did not come between her and anyone who was sitting on the other side of her desk. Matthew, in contrast, likes to be concealed behind his computers when he works.

Liberty also experiences time in a different way from Matthew's experience of time. The temporal dimension in Liberty's day is marked by constant interruptions which start early in the morning when she begins checking her emails, an activity which she repeats regularly throughout the day. Moreover, her time at the desk is interrupted constantly due to her open door policy and welcoming space. Consequently, she experiences time not only as a series of constant interruptions, but also as "desk-time" and "work-time". And because her desk-time is constantly interrupted, she does not have enough work-time to complete all the computer work she needs to do. Although both Liberty and Matthew lack sufficient time to do their computer work at their desks, they experience its shortage through different understandings of time.

Liberty's relations with her work and home office computers are clearly evident in her narratives. She views the computer at work as a "constant working tool", which she uses to process her teaching work. In the home office, it is experienced differently and associated with "heavy work". Her work becomes heavy when she is forced to use the home office computer after work hours. If she has to work at home, she prefers light work, e.g.,

reading or marking. However, she only uses the home office computer when necessary. On the other hand, Matthew - with all his commitments - (coaching and family), makes sure that he does not end up having to do computer work at home, even marking at the end of his day. Despite the differences in their experiences of computers, both alluded to an embodied feeling of heaviness at the end of the academic day, particularly when they had been busy at the computer for most of the day.

Introducing Kevin

Kevin is a part-time lecturer at two institutions. He is currently in the final phase of writing his Ph.D. thesis, something he regards as his biggest challenge at the moment. His research and teaching focuses on the social construction of curricula in health and physical education. His thesis takes up most of his spare time. He usually spends the first part of his day teaching, and then uses the second part to work on his thesis in "the home-office", as he always refers to it.

The start of Kevin's typical work day

On a typical day, Kevin usually arrives early at work, having travelled some distance from his home on the coast.

> *Usually I'm at work as much as possible well before class…to do all the things that need to be done beforehand.*

He has a specific routine that he follows upon his arrival at the office:

> *Pretty much the first thing that happens when I walk into the room …yeah, the first thing that happens, the computer goes on at about the same time the lights go on in the room.*

Immediately after this, Kevin settles down at the desk and starts checking his email:

Straight away you're checking things ...your checking email and you're making sure that there's nothing you need to know about prior to the class starting, and you're… yeah, then following on from that... you're also checking up on day-to-day happenings, or checking whatever else tends to get communicated in the institution via email.

Checking leads into another activity at the computer, which mainly focuses on communicating with others:

So yeah… and after that, you're busy communicating with all that stuff there because you're checking to see if you need to fire off a quick email or whatever else needs to be done.

From the above narratives, clearly the computer plays an integral part in the start of Kevin's day. His workday begins with routine practices; for example, checking emails and communicating via email. There is a calm and methodical rhythm within his early morning experience, which reveals one activity flowing smoothly into the next, setting a pattern that flows through the rest of his day.

Kevin working at his desk

After Kevin has finished checking his emails and communicating through email, his attention shifts to "the work of the day" as he calls it:

Following that, I'll be getting things ready here at the desk...there is a structure to my day which I stick to, so I'll start by getting my teaching materials ready for the day...and I'll also be watching the time.

Kevin works according to a planned structure. He refers to the articles and books spread out on the desk and on either side of his computer as his "teaching resources". In the office, Kevin's teaching resources for the day are not stacked away in bookshelves or filing cabinets, but carefully placed within arms' reach of his desk so that they are immediately available for use. Because Kevin is a part-time lecturer, he tends to work at desks that are available for use on a temporary basis.

In his following narratives it becomes evident that Kevin's attention has shifted from checking and communicating through email, to preparing for the work of the day. This involves engaging in other activities at the computer. He starts work on his resources for the day's teaching:

> *You're always busy here at the desk tweaking and reworking things in one way or another, doing all those little things that revolve around getting ready for class or whatever you plan to do that day.*

As the teaching day moves along, Kevin is absorbed in his work at the desk. The computer is a focal point for much of what he does:

> *It will generally be just myself sitting there working...I don't notice what's going on around me and I'm punching away on whatever I need to do...busy working on all that teaching stuff and those things around me.*

A further narrative provides more detail of how he interacts with the computer:

> *At the desk, I'll tend to have the teaching stuff and all of the other stuff pretty handy and pretty close to me, and…. yeah, it will all be there close by...even if it looks pretty messy with stuff everywhere. But, I'll know exactly where all that stuff is…. It may look a bit chaotic, like in the home office as well, but I'll know exactly where that stuff is and what to do with it.*

As he starts preparing for the days' teaching, he knows instinctively where all the resources are on his desk and on the shelves close by. He also knows how he will be using them in his academic writing:

> *For instance, here, or like in my office at home, I'll tend to know exactly where everything is on my desk or whatever... yeah, like I'll know exactly where I put a journal article in a certain pile or that the ideas I want to work with are filed in 'this stack of journal articles', or something like how it fits in ... like 'this' is the theme I want to focus on today, or here it is… this is how I'm going to bring those things together*

here at the computer. Which is what you're always doing pretty much in one way or another when you're busy with academic writing at the computer.

From the above description of Kevin's experience, it becomes clear that the computer is a meeting point between the resources he wants to use, his academic writing and his thinking.

Kevin is also aware of time passing in his day and that he has to utilize it to the maximum:

As I said before, there's a structure to my day, which I'm following, and I'll be watching the time.

There is also a complex spatial dimension to the way in which he experiences his academic writing at the computer, as evident in the next quote which relates to the thesis that he is finishing:

Following on from that, I guess I'll be cycling between all those different things… I'll be cycling backwards and forwards… between the journal articles that I've been reading and back then to the computer...then back again to the actual resources on my desk or somewhere in the room [meaning his bookshelf].

In his next narrative, Kevin reveals more insight into the space in the computer:

But the computer is really the focal point of all that stuff there…as I try to bring those things together. So there are lots of things happening there in that space… it's a creative space as well, the way things are spread out in different places and being fed back into the computer.

Kevin describes the activity of writing as an iterative process that takes place between the actual resources on the desk and the space in the computer where further creative processing occurs. For him there is a lot going on in that space. Different "things" that are an accepted part of academic work (such as writing for publication) are being brought together

with the computer as a focal creative point. His experience reveals a dynamic creative relationship between his cognition, the teaching resources and the computer.

Kevin leaving the academic office at the end of the day

After the day's teaching is over, and when all that needs to be done at the desk has been completed, Kevin prepares to leave the academic office:

When I log off …just like before, I said that the first thing you pretty much do when you come into your office in the morning, is to turn on the computer…and almost the last thing you do when you leave is to log off. And I think to myself …yeah, that's gone, you've finished with that there, you can leave that behind.

As he leaves the office, he prepares for his "other day" or "second day" which is about to start in the home office (Appendix 7: Photograph 11: Kevin in the home office):

I think to myself, you can go home now to the home office, and you can write there. I sort of feel like, I feel like I can go back to begin my other day. I can go back home and do what at the moment for me is the 'real work'…. and that's finishing the thesis. So that happens in my second day. That is my thesis time in the home office.

Kevin clarifies this further:

There are really two days to my one day. It makes it a very long day for me.

Evident in the above quote is Kevin's personal understanding of time in his day and that he experiences it as a very long day.

Kevin's narratives reveal that he uses the first part of the day for teaching, while the second part, which he generally refers to as his "second day" throughout his interviews, is used for thesis writing in the home office. The division of his working day also involves a smooth transition from one temporal and spatial dimension, which is located in the academic office with

its computer, to his home office computer where he has another temporal and spatial experience of computers.

> *The transition to the home office is quite strange you know…. You get so accustomed to having that other part of your life going on there* [referring to his thesis writing in the home office] *whether it be at night time or on weekends, it's always there.*

For Kevin, there is a qualitative difference in the work that he does in his home office:

> *That's where I really I begin the real work of the day. I see where I'm up to... I usually read over what I did the day before… my referencing program comes on... so I'm referencing as I'm writing or taking down notes.*

Kevin considers the work in his home office to be the "real work" at this point in his academic career. His use of the computer for academic work at home in a sense conflicts with the relationship he has with the computer in his work-office:

> *Yeah...It's different at home, because at home, I hardly ever turn the computer off. The computer kind of stays on all the time ...it pretty much stays on all the time.*

Although Kevin's teaching day is an important part of his day, it's the completion of his Ph.D. thesis that signals a shift in Kevin's focus on time. There the computer plays an integral part in Kevin's awareness:

> *There is always 'that feeling' that you'll get back to the computer. Yeah ...there is always 'that feeling' in you that maybe later on, that you'll get back to it and you'll just put in a few more references ...or you'll think about that paragraph that you just couldn't finish and you'll go back to it because of 'that feeling'. So you always feel that you need to get back to it.*

From the above quote it becomes evident that his thesis and the computer in the home-office are always somewhere in his thoughts.

Kevin finds it difficult to escape from the thesis. He is always drawn back to it in the home office:

> ….yeah, it sort of always sits there in the background. …even when you take a break like a quick surf or cook the evening meal…even when you're doing something else, it's bubbling away there a little bit.

As previously suggested, Kevin experiences the home office computer differently from the way he experiences the computer in the academic office:

> So yeah… that would be [long pause] that's pretty different from working at the office on a teaching day. In the home office, I might just sit there [said with emphasis] at the computer. I might just sit there and write until the end of the day or whatever… in that time in the home office, I might not talk to anyone for hours at a stretch. And I usually just chip away at whatever paragraphs or whatever part of the thesis I'm working on at the time, trying to 'bring things together'.

Time can move slowly for Kevin in the home-office:

> You just sit there and write and write [long pause] …you don't move much. It can be a really long day. It's a sustained kind of engagement that calls for a level of determination and lots of time.

Kevin's experiences academic writing at the computer in his home office is as a prolonged activity, which requires deep involvement and considerable time.

According to his narratives in this section, when Kevin leaves the academic office at the end of the day his focus shifts to his home office and its computer. This marks the start of his "other day", the time he starts his real work. He experiences the computer in the home office as a device that is never switched off and is always waiting for him to get back to it. He relates to it through an emotional feeling that constantly urges him to return to it. His narratives also reveal that working on the computer in the home office can be a solitary activity that requires isolation and a determined effort to bring things together. He is aware that the solitary nature of computer work

also involves long hours of sitting, long hours during he does not move much.

Overall, perusal of Kevin's descriptions reveals that he experiences time somewhat differently from Matthew and Liberty. He experiences time in a smooth and structured way throughout his day, with one activity flowing smoothly into the next. As with Matthew and Liberty, the same everyday practices linked to working at the desk with the computer are also evident. However, Kevin's narratives reveal a more complex subjective experience of the academic activities that are being carried out at the computer as part of his teaching labour and developing scholarship. This experience involves the thesis in the home office. While Kevin's description, similar to those of Matthew and Liberty, reveals a spatial dimension in his relations with computers, it differs considerably from those of his two fellow candidates. In Matthew and Liberty's experience of computers, there is an emphasis on an external spatial world, a world outside of the desk. Kevin's narratives on the other hand, reveal a relationship with the computer that is restricted to three spaces: the academic office at work; the home office with its computer; and a metaphysical or 'third space' involving the computer, Kevin's cognition, and the resources he is using.

Introducing Jane

Jane has an extensive background in dance education and experience as a lecturer and director of dance. The way she moves and holds her body is at one with her world of dance and her love of movement. She started ballet early in life and has continued with dance as a discipline of the field of movement, mastering contemporary dance practice, yoga, and integrated somatics - the study of the moving body in space - with dance training.

The start of Jane's typical work day

The first part of Jane's day starts early in the morning with the yoga session, and continues with her teaching which takes place in the dance studio. Usually before Jane even arrives at work in the morning, she has done a session of yoga:

> *Mostly my days start with yoga before I even leave home. I sometimes do a two hour class early in the morning or I'll do something like a one and a half hour practice at home.*

Jane still manages to arrive at work fairly early in the morning. Most days she goes to the dance studio (not her desk in the academic office) where she prepares for the students she will teach that morning. This teaching takes place in a large spacious dance studio.

Jane describes a typical teaching day as follows:

> *Well... I'll describe today because that's as typical a day as any day…. We started out doing what I'll call a technical class. So, that's mostly around technical training. And then, the second part of the class, which is more about addressing concepts, follows on from that. And the concept that we were looking at today was 'range of motion'. I usually talk about it as a range of motion more than flexibility because I want to encourage them to see things more broadly than they might have come in with. So, that was the morning's teaching Only after all of that do I go to the office.*

We can see from the above narrative that Jane makes her way to the academic office only after she has taught in the dance studio. And, that the computer does not really feature in the above quote.

Jane working at her desk

If Jane is not teaching in the dance studio, she can be found at her desk in the office she shares with several other lecturers. Jane's desk and working

area reveal a neat working space. Everything is carefully placed in a specific location.

> *Well, space is very important to me and I don't like working in a mess. So I do tend to keep my area here fairly organised.*

Jane is particularly sensitive to the spatial area at the desk. Even the way in which her resources are arranged at the desk speaks of sensitivity to space. Her teaching resources are carefully placed in shelves on the one side of the desk:

> *I have a file close by here on this side that just about has all the things that I need ...very immediately in it, like the teaching stuff that I will be needing ...with student timetables, that sort of thing. And then over there, on the left hand side, to the back is the telephone, and in front of that are some papers that need to be dealt with. Yes, there are specific places for these things here at the desk. Well, even the computer is over there to the side of the desk.*

She likes to work in a carefully ordered space (see Appendix 7. Photograph 7: Jane at the desk). Even the computer has its own specific place: in that it is deliberately placed to one side of the desk so that she has an open writing space directly in front of her:

> *I have the computer over there, to one side of the desk, so that I have a free space in front of me which I use for writing. I often prefer to write by hand because when you write at the computer it's different...you have to be there in your chair sitting in a particular way.*

The above narrative reveals Jane's deep awareness of how her body experiences natural movement when she works at the computer. She deliberately tries not to make the computer the main reference point at her desk.

Jane has a particular perspective on the computer:

> *Well, it's just a tool ... it's not exciting, it's just a tool that I have to use in the day. it's just* (pause) *it's just like my car, you know. I use it to get*

from A to B during the day. That's all…it's a work thing and I would prefer not to use it if I could.

She then describes what it is like for her to be working at the computer:

Then I just sit at my desk all day doing office work [she emphasises and draws out the words "sit at my desk all day doing office work"] *…or I'll just try and find lots of reasons not to sit at my desk all day.* From the tone of Jane's narrative, it would appear that she does not like being at her desk for extended periods of time because it involves sitting for large parts of the day. Yet, like the others in the office, there are times when Jane is happy to sit at the desk, particularly when she is involved in creative projects. However, Jane does not look forward to those times when she has piles of office work on the desk.

Well, I don't enjoy those times of the year when I'm just doing lots of office work. I go crazy after about three days… you're just sitting and sitting at the computer all the time. And, if I have to work all day there [she pauses to think about it] *it's difficult for me to move in a natural way. So I don't really like being at the desk for such a long time.*

More than any of the other interviewees, Jane's descriptions of working at the computer reveal a sense of bodily awareness in her experience. They show a deep awareness of how physical activity is restricted at the desk:

It's just that, I don't like sitting down that amount of time. If I get up, go to work, then sit and sit in the office all day, I don't do enough physical activity and I need to do something, like move about. Yes, the computer makes me feel stuck and I don't want to be 'stuck'. When I work at the computer, I have to be there in a chair…and I don't like having to sit all that time.

On her more sedentary days, when Jane has a lot of office work to do in the academic office, she does not get the physical activity she would like to have.

Jane's desk is situated some distance directly opposite the doorway of the office, against an outer glass/window wall, which extends the whole length of the building, revealing an extensive vista stretching into the distance. She sits with her back to the doorway, looking out at the view:

> *It's useful for me that I walk from the door straight to my desk. Well, I don't have to go into any other spaces to get here…and it's important for me to sit so that I can see the view. I often look at it …being able to look at it keeps me sane!*

One feature of Jane's desk is its spatial relationship with the outside world.

Like Matthew, it is important for Jane not to be disturbed as she works at her desk. However, the way in which she goes about doing this is very different:

> *Because of the interruptions here in the room … I try to create my own space as much as possible…I just sort of create this bubble around me, and try to get on with what I'm doing.*

Jane strives to create a private space of her own albeit not a physical space in the way that Matthew creates a space for himself, but rather an invisible arrangement of space, an "imaginary" space.

Examination of Jane's narrative in this section reveals several practices linked to working at her desk with the computer. Although Jane unarguably views the computer as a useful tool, the term 'avoidance' seems to characterize her relations with it. She would prefer not to go to the office at, to spend the day teaching at the dance studio. This becomes evident in the temporal and spatial dimensions within her day, which are closely intertwined. Unlike Matthew, Liberty or Kevin, she avoids going to the office where possible. In the first part of her day, she is involved with movement and space. She leaves her "office day", to use her words, to the second part of her day. Her time seems to be experienced in a drawn out way, particularly when there is a lot of office work for her to do at her desk.

In addition, Jane likes to work in an ordered space: she likes things to be in specific places. Her desk is positioned so that she can take in the view. The computer is to one side, leaving a free space for her handwritten tasks. She also creates an imaginary private space for herself at the desk in an attempt to block out interruptions by her office colleagues. She does this by surrounding herself with a psychological "bubble" which separates her from the rest of the office environment. Matthew and Jane also create private spaces for themselves at their desks; but, but they construct them in different ways. In contrast to Jane, Matthew erects physical barriers or boundaries to prevent interruptions. Among his other tactics, are the headphones he often wears to create the private space he requires.

Jane leaving the academic office at the end of the day

Like Matthew, Jane's experience of working at the desk also includes a bodily dimension, which manifests in her awareness of the ways in which computer work restrict her natural bodily movement and makes her feel 'stuck' at the desk. It is, therefore, not surprising that where possible, Jane avoids using the home computer once she has left the academic office.

> *So, when I come home from work I don't want to be sitting at a computer, even though I've got a lovely little laptop...Because when you're sitting there at the computer you can't move in a natural way you're really stuck there...and I don't want to do that in home time.*

Another reason Jane gives for avoiding the computer at the end of the day is its association with work, the fact that it has an invasive nature that impacts deleteriously on her home time:

> *So, I guess for me, the computer equates with work… it's a work thing. I don't have to use it after work. I'm not like that. Well, I don't want to come home to a stream of emails ...because being on the computer is about work. So I tend not to write letters on the computer during home time if I can avoid it, because it's a 'work thing'.*

From the above quote, clearly, Jane equates the computer with work because she sees it as a 'work thing'. For this reason, she is careful about maintaining a boundary between work and home.

In effect, if one considers all Jane's narratives, it is evident that tactics of avoidance marks her relations with computers. Unlike Kevin and Matthew, who make their way immediately to their desks on arrival at work, Jane's day commences differently, away from the desk and the office computer. Usually, the first place that Jane goes to in the morning will be the dance studio - a place of open space and movement - where she prepares and does her teaching for the day. Furthermore, the spatial and temporal dimensions within Jane's day are particularly distinctive when compared with those of the other lecturers. Jane's day is polarised between her two work locations; namely the dance studio in the morning and her desk in the academic office in the second part of her day. The first part of her day is marked by her experiences of bodily movement in the spaciousness of a dance studio. Only much later in the day, when her teaching is over, does Jane make her way to the office, and this she does with some reluctance. These divisions continue in her understanding of time, which is also divided between the two spaces.

In the second part of her day, time seems to move more slowly for her, particularly when she is busy with a heavy schedule of office work, most of which involves work on the computer. During such periods, she experiences time through a bodily awareness of restriction, which intensifies with the hours that she spends sitting at the desk. She feels stuck at the computer and cannot move her body, as she would like to. She likes to work at the desk in a certain way. Her teaching resources, including the computer, have specific physical locations on her desk. In addition to the care and neatness she affords the physical space at her desk, she also creates a psychological space for her to work in. This takes the form of an invisible psychological bubble that she constructs to seal herself off from the rest of the room as she works at the computer. Jane's descriptions of computers are marked with a bodily-

kinaesthetic experience, which contrasts with her experience of sitting at the desk. It is, therefore, hardly surprising that avoidance and evasion dominate the temporal dimension of her day.

Introducing Alice

A love of sport and physical activity has inspired Alice from an early age. Her love of Leadership and Movement Education has resulted in a successful career trajectory that has taken her to different parts of the world. Movement and Composition of Movement are her areas of speciality. Over the course of this study, Alice's role has changed from that of a lecturer and course director to a managerial position. Although Alice's managerial responsibilities have required her to reduce some of her lecturing time, nevertheless, she is still involved with teaching. When she teaches, she works mainly with the first year intake. She constantly reflects on physical education, what it should entail, and what it means to be, in her own words, "a fabulous physical educator". It is important to her to be such a good role model for her students. Alice describes her teaching and its practical and theoretical aspects as follows:

> *With academic rigour increasing, and demands increasing constantly, and us trying to improve everything we are doing here within the institution. A fair bit of theory and research goes hand- in- hand with the unit that I teach. So... while I take two practical classes where I actually run and am physically involved with the students for the majority of the weeks, a strong lecturing component is also associated with this course.*

The start of Alice's typical work day

In her first interview, Alice described the start of a typical teaching day before her promotion to management. At that time, her teaching load and responsibilities were different from those of her current position requires.

She begins her day at the desk by checking email messages and communicating through email. She also checks a daily list of tasks to be done for the day, and reflects not just on the practical teaching she will be doing, but also on lectures and research. She describes her day as a constant stream of activity, with one activity flowing into the next:

> *Yes, I would come in primarily first thing in the morning to check my correspondence, and communicate back with the students or any of the senior management or lecturing staff here at the college. Then I would check phone messages and make sure that I'm on top of things. It's a constant stream of activity all day for me.*

Similar to the other lecturers' tasks, e.g., checking email and communicating through email, Alice too pursues these same practices.

Alice explains how she checks a few other things at her desk:

> *I usually have a daily list of things that I need to try and achieve …so I continue to work on that. Yes, I would do that, and I would also perhaps do some photocopying, and reflect on my class, if I'm teaching that day. I would also make sure that my equipment will be set up properly. So... that's mainly the practical supporting equipment. And then from there... I will continue to work forward on things that are coming up for the rest of the week.*

This means that there is a lot for her to consider first thing in the morning:

> *So... it's not just about the practical side of things here, but there are lectures that need to be prepared for the day, and then there is always the research aspect as well… one thinks about that all the time. There's a constant stream of activities to the day, even now.*

Although Alice's narratives show the same everyday practices, they differ from those of the other lecturers in that Alice's experience moves between a past and a present time.

Alice working at her desk

Alice's promotion resulted in her occupying a bigger office; it is spacious with an unusually large desk. Her computer is placed at the side, on a small table that stands next to the large desk. Through the office's open doorway one can see her sitting sideways at times, working at the computer. At other times, she sits in a full frontal position, conversing with the person sitting across the desk from her.

Alice's present office reveals a carefully ordered environment. Things are filed away in cabinets, documents neatly placed in folders, with textbooks and journals carefully stacked on the shelves behind her chair. However, the digital pictures of her previous office - taken at the start of the study – reveal that her old office was marked by a different spatial arrangement. With much-used text books, journals, and assignments were either randomly stacked on her desk or scattered on floor. Alice reflects on the photo of her old office (See Appendix 7. Photograph 10: Alice at the desk in her old office)

> *Yes, this photo* [referring to her old office] *makes the space look more busy... doesn't it...this one here? I guess I was caught up more with my daily materials and practical teaching at that point in time…*

Before her promotion, Alice was involved in considerably more face-to-face teaching which required her physical engagement in practical settings. Her later narratives reveal that she spent less time at the computer in the old office:

> *Yes, if I look around here now at this office* [referring to the one that she moved into after her promotion] *I've got more filing cabinets handy, more admin stuff in folders than I did way back then, when I just taught at that time.*

Clearly, Alice's description of her academic practice moves between a 'then time' and a 'now time'. Her descriptions also refer to a past and a present

office space where she experienced her work in different ways. Alice notes that her days are no longer the same since her promotion:

> *There is not a lot of free time now to stop and reflect…I spend a lot of time now at the computer... there's a constant stream of work and responsibilities. But, I'm always considering physical education in the sense of 'what should it be ?' And 'what sort of foundation tools do our students need so that they have the skills that will allow them to be fabulous physical educators in practical settings?*

From her narratives, it becomes clear that Alice experiences her present typical day as a constant stream of work and responsibilities. She also finds herself spending a lot more time at the computer.

Alice continues by describing her typical day in the teaching semester in the following way:

> *A typical lecturing day can be divided between 'the practical side' and a 'sedentary side' at the desk. It's quite a good balance actually - when the semester is in place. There's a fair bit of practical work that I can do besides just being at my desk. And that allows me to keep myself balanced.*

She considers that the above two sides provide a balance to her day. However, at times most of Alice's typical working day can be spent at her desk. On those days she spends most of her time communicating through the computer:

> *At those times I spend the majority within the four walls of this office, basically doingcommunication through the computer. So primarily, I'm communicating. That is one of the main roles that I now have, and I actually prefer to do that through the computer. So...there is this constant stream of communication that I have to attend to…*

Apart from her teaching commitments, Alice sees the activity of communication as one of her most important functions in the college. She does this mostly through the computer.

In her management position, her main role is one of communication; thus, a large part of her day is spent attending to a constant stream of emails:

> *So on a daily basis ...I'm constantly getting enquiries and having to give some feedback. I deal with a lot of student leave requests and students troubleshoot from me the majority of the day as well. So ...I'm just fielding constant enquiries from students, whether they're related specifically to a program or whether they are related to student enquiries or general health and well-being of students. There's a constant stream of enquiries that I constantly need to attend to....*

Emails keep arriving at her desk and she responds to them promptly:

> *These generally just keep coming constantly through the email process here. And I find that easier* [meaning the email process] *to be able to read their information or the questions that they have for me or to be able to give them the answers that they're hopefully wanting. I'm able to send it straight back to them without spending time stopping, answering phones, calling somebody back, checking messages on the phone...*

For Alice, communication is an integral part of her day. She keeps abreast of matters by communicating mainly through the computer. She also experiences time in her typical day as an endless stream of activity involving all the duties that are now part of her new role, and communicating via email is one of those activities.

Clearly from her above narrations, several practices linked to working at the desk with the computer are evident in Alice's experience. These include checking and communicating through email, and preparing for the day's teaching (if that is on her schedule). Alice's narratives cover different times

in her career and, by extension, correspondingly different offices. Her past academic office experience, when she was doing more lecturing and was more deeply involved in teaching physical activity, contrasts with her present experience which plays out in a new academic office marked by sedentary activities. At times, and depending upon her schedule, her working day is divided into two parts; her practical teaching if she is going to be teaching on that day, and attending to the responsibilities that go with her promotion. Such a temporal arrangement usually gives her a chance to balance moving and sitting in the day. However, as she explained, at other times her day is spent at her desk, within the four walls of her office. She experiences her present time (after the promotion) as a constant stream of work and activity, which takes place mainly in the second office. In that office, the main activity with which she engages is one of communication with students and fellow workers.

Alice leaving the academic office at the end of the day

At the end of her academic day, Alice eschews using her home computer. Instead she creates opportunities, which will allow her time for physical exercise:

> *I have to put systems in place at home having young children… time in the workday is taken up with communication, and my roles and responsibilities. I need time for home and myself as well.*

Alice logs off from her computer and leaves work quickly, often still reflecting on her 'to do list' and whether she has completed the tasks that needed to be done. She likes to feel that she has had a productive day at the computer:

> *I like to feel in my own mind when I leave, that I've achieved something, and I've been able to knock everything off the 'to-do' list for the day. But, if I've been in a situation where I've had to have a lot of face to face contact, or a lot of meetings, then it really limits the productivity at the computer. And I think* [longish pause] *that it's not really a lack of*

productivity, but sometimes, we like to see that we're actually achieving those 'computer tasks' on the list [another pause] *getting through those computer tasks and all the other parts that are now done by computer.*

She has even thought about the implications of not being able to achieve the computer tasks on her list for the day:

The face of the worker has changed dramatically as well ... and I think you work beyond your workday, and you continue to work at home and on the weekends at every occasion. Because if you can't always get it done at work, you tend to do it at home afterwards. So ... it's a problem to balance work-time and home-time.

Alice describes how she attempts to draw a boundary between work and home time and actually find more time for other dimensions that are important to her:

I need home-time to be parent-time and wife-time as well. And in all of that I need body-time as well. That's really important to me. I'm trying to use my weekend-time, if I need to do work, to come in here [meaning her academic office] *to work, so that this is the working hub, and I'm trying to move away from doing my research work at home. So, I need to find those windows of opportunity which will give me time to do the things I need to do.*

Alice frequently comes back to her academic office on the weekends. She uses her weekend time to catch up on her research work, something she prefers to do in the office rather than at home. It is also evident that Alice manipulates the temporal and spatial dimensions in her life to accommodate her various needs.

Making time for the body is important to Alice; she usually finds time after work, particularly after a sedentary day:

Well, I guess I try to be acutely aware of that. So I try to find those windows of opportunity.

However, sometimes the computer consumes too much of Alice's time:

> *There are times when the computer needs to consume much more of my time and I have to commit to that time at the computer. Then, there are times when I don't allow that to happen ... in that I make sure to find that window of opportunity. But, it also means that I get further and further behind with all the work that I should be doing at the computer.*

This can definitely be a problem for Alice:

> *Realistically, I could spend my whole day working from early in the morning at work, till late in the afternoon at work* [which would mean a day of sitting at the desk and at the computer for her]*, and then…still work all night on our computer as well. So I do try to address this before things get out of balance.*

In the above narrative Alice tells how she avoids bringing computer work into 'home time' and 'family time'. If she needs to do extra work on the computer, she will do that by making a special trip back to her office on the weekends to work on the computer there. She does try to address the situation. In the next chapter we will see how Alice goes about the process of restructuring her experience of computers, particularly when it threatens to take up too much of her time.

When considering all of the above narratives provided by Alice, description emerges which is very much a retrospective reflection in the sense that it is situated in temporal and spatial dimensions which move between a past experience (when she did a lot of practical teaching) and a present experience (which is the result of her promotion with its managerial responsibilities). In Alice's present, her relationship with the computer is foregrounded by her need to communicate and attend to things on a daily basis. She experiences this as an endless stream of activity that arrives at her desk throughout the day. Apart from her teaching commitments, Alice sees

the activity of constant communication as one of the most important functions of the day and she does this mainly through the computer. When she is teaching, her day is divided into two parts consisting of a practical and a managerial side. Very different temporal and spatial dimensions, when compared with those of Matthew, Liberty, Kevin and Jane, mark her descriptions. Even the two offices held different spatial experiences for her in as much as her relations with their computers were interwoven with temporal relations. Alice's time is further divided into home-time, family time and personal time: she refers to as "body time". It is also here in her descriptions of the end of the day that her relations with the home computer become evident. She avoids working on computer work in family-time. That can be done in weekend-time and will involve making a special trip back to work on the office computer. Like Jane, Alice too is extremely fit and enjoys moving and being physically active. But, her motivation to maintain this level of physicality comes from a different angle. Alice's motivation is to strike a balance between the time she spends at the computer and the time she needs to look after her body. Her narratives (Chapter 6) reveal how her natural awareness of the body in her experiences of computers extends into a practice of bodily discipline which strives to balance sitting at the desk, where she is busy maintaining the constant-ness of it all, with the practical side of movement; that is her need to be that perfect physical educator.

Discussion of the chapter: Contextualizing themes of time and space

This chapter set out to capture through their narratives the lecturers' experiences of computers in the academic office over three parts of the day; their arrival at the start of the day, working at the desk during the day; and, leaving the office at the end of the work day. Although the descriptions reveal that all of the lecturers were doing the same everyday practices at

their computers, they experience the computer in different ways. As Giorgi (1997) observes, the variant themes/structures in the lived experience of phenomenological research first need to be brought to light before one can arrive at the invariant structure. In this study, the invariant themes in the lecturers' experiences of computers could be found in the existential dimensions of time and space, revealing the existence of different inter-personal relations with computers (captured in Table 4).

Table 4: Variations of time and space in a typical day

TIME
The start of the work day at the computer
Immediate start (Matthew, Kevin, Liberty, Alice)
Delayed start (Jane)
Speed/tempo/pace/regularity/rhythm
Fast and condensed (Matthew)
Slow (Jane)
Steady (Kevin)
Constant stream (Alice)
Interrupted (Liberty)
Quantity of time during the day: Insufficient/sufficient
Not 'enough time' in the day for all of the lecturers
Time as before work time, during and after work time
This varied for all lecturers.
Type of time
Work-time, home-time, desk-time, family-time, body-time, computer-time, coaching time, thesis time.
SPACE
Work space: Variations in location
Academic office / lecture room
Home office
After hours work
Affective space
Work / home
The space at the desk
Physical and psychological space
The academic office as an open public space
The lecturers' desks as idiosyncratic personal spaces
At the desk - A private psychological space
Virtual space of the computer and the practices
Communicative space
Creative space
Formative space

In the first part of this discussion, I visit the everyday practices that the lecturers engage in at their computers; thereafter, I discuss how their lived experience varied through the themes of time and space captured in Table 4.If one considers all of the descriptions in this chapter, it becomes evident that the computer plays a central part in the lecturers' everyday practices. In a typical day, the first thing they all do on arrival, except for Jane, is to go their desks in the academic office and switch on their computers. At the start of the day, Matthew, Liberty, Kevin and Alice are all busy using their computers to do routine work, which involves 'checking email' and 'communicating through email'. Jane's initial actions are also focused on computers, albeit characterised by avoidance and evasion in her efforts to bring about her interactions with computers much later in the day. As the day moves on, the five lecturers in this study are busy with the following activities at their computers: preparing the teaching resources for the day, reworking lectures and tutorial material, and researching new knowledge. In midst of these actions, they are still keeping abreast of incoming emails and continuing to communicate through email. Furthermore, these everyday activities are experienced in different ways within the private subjective world of each lecturer who is influenced by a personal understanding of time and space. The lecturers' actions also showcase the relations with their computers.

- **Time in the descriptions**

All of the lecturers expressed spoke of the pressure, of there not being enough time to undertake their academic practice. They also spoke of external and internal constraints that affect how they interpret time in their day and their lack of it. They responded to this lack of time in individual ways, their experiences revealing different temporal speeds, patterns and rhythms. For example, the time problem emerged in Matthew's narrative, through his expressions of "no time to waste", "not enough time in the day" and "everything is done on-the- run". Consequently, he intentionally works quickly, doing multiple tasks wherever possible as he tries to make the most

of his time. His lived experience of computers is embedded in a fast moving and hectic day.

Liberty's temporal dimension reveals a pattern of constant interruptions, which originates in her open-door policy at her desk. This means that she does not have enough "desk-time" (as she describes it), to complete all of her computer work. The result is that she is always on the lookout for ways to make more "desk-time". In contrast to Liberty, Kevin's experiences of computers are situated in an ordered temporal dimension, with one activity flowing smoothly into the next one his day progresses. After completing one task, he moves calmly on to the next task as though following a well-travelled path that he walks daily. Looking at his experience more carefully, one realizes that this careful control of time in his lived experience has to do with the completion of his thesis in the second part of his day. While Kevin is very conscious of time in his day, Jane is not really conscious of it in the first part of her day that takes place in the dance studio. Time seems to be given over to an activity that she enjoys. However, when she moves to the desk in the academic office, her awareness of time changes, especially on days when she has to be "sitting there all day doing office work". On those occasions, time passes slowly for her: she experiences the day as very long. Alice's narratives reveal temporal shifts between past-time when she did a lot of practical teaching and her present-time, which is the result of her promotion with its managerial responsibilities. In her new position, she experiences time as a "constant stream of activity" embodied in the "things" that constantly arrive at her desk throughout the day. She also sees her working day as divided between a practical side and a sedentary side.

Further temporal differences may be seen in the ways in which the lecturers manipulate the structure of their working day by dividing time into segments suited their particular style of working. For example, Matthew has two parts to his working day: he divides his work between his academic role and his coaching role. He has a condensed day fulfilling two roles. Kevin,

on the other hand, perceives his time as two days: the first day is used for his teaching while the second day is used for the completion of his thesis which takes place in the home office computer. Jane's experience also reveals her working day as having two distinctive parts; the first takes place in the dance studio and the second is spent at her desk in the academic office. Liberty actions represent another manipulation of time which involves making desk-time when she needs to get through her computer work. Alice's time is manipulated in a different way again, e.g., making "windows of opportunity" which allow her to have home-time, parent-time, wife-time, body-time and weekend-time. Over the weekends she also creates work-time in which she returns to her work hub, the academic office.

- **Space in the descriptions**

In addition to the variations in the temporal dimension of each lecturer's narratives, the lecturers' experiences of computers also reveal a spatial dimension, which involves the work/home division. Both Matthew and Liberty use the computer in the academic office as a focal point for academic work. Furthermore, they deliberately manipulate the physical space at the desk in order to create their preferred working environment. For example, Matthew's space at the desk has been closed off to prevent people from accessing his area as he works between the two computers. Even his headphones signify his creation of a personal space that discourages interruption. By contrast, Liberty's space has been opened up and her computer moved to one side, her intention being to invite people into her area so that they feel welcome. Her spatial arrangement, which is suited to her open door policy with students, actually encourages interruptions while she is working at the computer. We also see a manipulation of another kind of space at Jane's desk. She creates a psychological space for herself through the invisible "bubble" she uses to block out disturbances around her as she works at her computer.

There are also indicators of other manipulations of a spatial nature in the lecturers' experience. Jane's experiences, for example, are the most marked by different spatial dimensions. Unlike all the other lecturers, whose interactions with the computer on arriving at work are the primary indication that they have begun their day of work at the desk, Jane's workday commences somewhere different. She avoids going to the academic office so that she can delay working on the computer. Moreover, Jane also has different bodily experiences in each of the two spaces in which her lived experience plays out. The first part of Jane's day is centred on movement and space, which she experiences in the dance studio. Only after that does she make her way to her desk in the office where she has a bodily experience marked by feelings of stuck-ness and bodily restriction. To a lesser extent, Kevin's descriptions are also marked with the spatial dimensions of two separate offices. Although he makes a smooth transition from the work office to his home office, his experiences after leaving the academic office occur in a different space, which produces other demands on him. The home office - with its computer - is a second space he experiences in his day; and, it generates certain feelings in him. Unique to Kevin's description is his spatial experience of writing in the virtual space of the computer. His lived experience can be compared to the movement of "cycling" which takes place not only in the space of the computer, but also between the journal articles on his desk and then back into the space in the computer.

Apart from the temporal and spatial differences themes, there are also further differences, which extend into the way in which the lecturers perceive 'work' linked to the computer. These differences may be viewed as a sub-theme in the narratives. For example, all of the lecturers separated their work at the computer from other activities; and, they all referred to work at the computer in different ways. Kevin refers to the thesis, which he works on in his home office in his second day, as "the real work". When Liberty is working at the computer, she is busy with "desk-work" (computer

work), which she does in "desk-time" during "work-time". Her work is further divided into "heavy work" and "light work". After hours, computer work becomes "heavy-work": Liberty does not like having to do computer work in her home office. As a result, she avoids doing computer-work in home-time, choosing to do "light work" which involves marking or reading.

Both Liberty and Jane describe the computer as "a work thing". In Jane's experience, the computer is "a tool" and "a car" that she would use to get from one point to another and a work thing. Moreover, she would prefer not to use it if she had the choice. Computer work makes her feel "stuck at the desk" as she puts it. Matthew experiences work at his two computers in a fun way. He uses them for multi-tasking. At the same time, he imagines himself to be a sixties keyboard player in a rock band moving between two keyboards. He describes his academic work as "a desk-job" which involves a lot of sitting at the computer. For Alice, on the other hand, work at the computer is about a constant stream of communication, which has to be managed alongside several other areas in her life.

Apart from the temporal and spatial differences themes which mark the different modes of interrelations, and the various ways in which the lecturers perceive 'work' linked to the computer, other dimensions of a phenomenological nature can seen in the descriptions. One of these involves the temporal way in which the lecturers follow a mapped route as they work through a range of activities in a typical academic day. A temporal continuity marks this route for them and leads them along from one point to another. "Temporal continuity seems absolutely essential for making sense out of our everyday experience" (Gallagher & Zahavi, 2008, p. 70). Phenomenologists agree that the world is coherent and meaningful for people because they are able to navigate through a stream of consciousness without getting lost in the temporal structure (Gallagher & Zahavi, 2008). According to the phenomenological line of thought, people's activities are permeated with temporality and temporal structures that give meaning and coherence to their experience.

In a sense, the academic day is 'mapped' for the lecturers in time and space. If one reviews the descriptions, there is a temporal coherence to the way in which the lecturers' experience their day as it unfolds in a seamless flow of continuously moving time. The lecturers shift easily from one activity to the other, and from one space to another, negotiating a stream of consciousness, which is organized by a temporal structure that 'maps' out the academic world they inhabit, and how they need to move through it. Without this movement, the lecturers would not be able to make sense of their experience of that temporal structure.

Another phenomenological aspect that needs to be thought about when considering the descriptions can be seen in the descriptions is that of historicity which is also linked to temporality through a 'temporal stretch' which involves past, present and future. According to phenomenology, a person's temporal experience is always intertwined with historicity. "Even what appears as the most immediate experience may be permeated and influenced by earlier experiences and by acquired knowledge, as well as by a background knowledge that is shaped by the larger forces of culture and language" (Gallagher & Zahavi, 2008, p.85).

If one thinks phenomenologically about the descriptions in this chapter, the presence of an academic historicity comes to light in the lecturers' narratives of practices that have been changing through computers. Some of their past experiences of teaching prior to the computerisation of their practices, serve as the horizon and background of their present experiences. Also, when absorbed in what they are doing in the present, they also have the capability to plan for the future. The phenomenological relationship between a person's past, present and future experience is succinctly summed up by Gallagher and Zahavi (2008) in the following way: "Historicity means not simply that I am located at a certain point in history, but that I carry my history around with me; my past experience has an effect on the way that I understand the world and the people I encounter in the world" (Gallagher &Zahavi, 2008, p.85). The lecturers are part of a historical community of practice involving Physical Education, Health and Movement; they are inheritors and continuers of those traditions in human time.

It is through human time, that the lecturers are conscious of their historicity as human- beings and academics. Gallagher and Zahavi (2008) point out that human time is neither subjective time of consciousness, nor the objective time of the cosmos. It involves life-story time in that "it is a narrated time, a time structured and articulated by the symbolic mediations of narratives" (Ricoeur, 1988, p. 244 cited in Gallagher & Zahavi, 2008, p.86). If one considers the lecturers in the context of human time in this chapter, phenomenologists would claim that the beginning of each lecturers' story has already been made for them by other factors (parents, siblings, friends, the knowledge domains in their fields of practice, the technologisation of practices) and the way that the story unfolds is only in part determined by their own choices and decisions. Their stories are interwoven with references to the changing nature of teaching that reflects a larger historical and educational structure.

Conclusion

When the lecturers are not teaching, they are usually at their desks in the academic office where the computer becomes the focal point of their activities. Despite the fact that on a typical day the lecturers are all engaged in the same everyday practices at the computer, clearly, they experience the practices through different temporal and spatial dimensions which can be traced as main structures (or themes) marking their narratives. In addition to the temporal and spatial structures within each lecturer's experience, an embodied structure, which is yet to be shown in more detail, also came to light in all of the lecturers' narratives. In the following chapter, I explore the lecturers' embodied experiences as the invariant structure through more narratives.

CHAPTER SIX: THE BODILY DIMENSION IN LECTURERS' EXPERIENCES OF COMPUTERS

Introduction

This chapter explores the body in lecturers' experiences of computers in everyday academic practice. The previous chapter showed the variant themes of time and space in everyday academic practice by describing a typical day according to three temporal dimensions: the start of the day; working at the desk during the day; and, leaving work at the end of the day. It became evident that all the lecturers experienced computers in individual ways influenced by different temporal and spatial dimensions. Moreover, in all of the lecturers' narratives, bodily awareness of the experience was present at one point or another, pointing to an invariant theme in which the body was implicated within the experience. In this chapter focus is upon the invariant theme - the phenomenal body that is experienced in unfelt and felt ways - in the lecturers' awareness as they intentionally go about the routine and taken-for-granted practices at their computers.

In Chapter 3, two central features of phenomenological experience were identified as consciousness and intentionality. There is an inseparable connection between these two features in every experience, which entails an object in an environment or something in the world that presents itself to a person's consciousness (Giorgi, 1970; 1979). In the case of the lecturers' everyday practices with computers, this phenomenon is revealed in the lecturers' consciousness i.e., in their narratives describing their experiences at the desk. Although my study commenced with a broad inquiry into lecturers' experiences of computers, the data was collected in a setting that privileged the moving body. Furthermore, in my analyses of the interviews revealing this group of lecturers' everyday experiences of computers, many of their descriptions of academic practice at the computer revealed an

embodied consciousness or awareness of their experience as unfelt at times, and as felt in others.

As I have observed in Chapter 5, lecturers carry out a range of academic activities during the day. Their narratives referred to different academic activities in which the computer is involved and to others in which it is not involved. Some activities inherently involve the computer and involve routine but intentional actions for the lecturers that are often procedural and administrative. Examples of these include checking and communicating via email. Other activities require creative and skilful actions on the part of the academic e.g., the preparation of lectures, searching for new teaching resources, and writing up a thesis or a Word document. Within these activities are a number of taken-for-granted practices that contribute to their achievement. These resonate with the concept of *bricolage* that requires a person to come up with innovative and original ideas at a moment's notice; they are expected to produce or create something from whatever happens to be available at the time. Such activities, such as tweaking and reworking, are often taken-for-granted in the sphere of academic work. Therefore, in my study, descriptions of everyday practice at the computer are conceptualised through two categories: routine practice and taken-for-granted practice. Generally speaking, the activities that make up these practices tend to be overlooked in academic practice because they are so deeply embedded in the everyday life-worlds of academics.

The routine and taken-for-granted practices constitute parts of the everyday activities that are intentionally done by lecturers, and experienced in an on-going stream of consciousness which is reflected in their shifting awareness in their narratives. In some instances, focus on the actions of academics is away from the body with the result that bodily awareness is relegated to the background. This allows the academic not only to become completely absorbed in the activities, but also to expand them in relation to time and place. In other instances, focus is on the actions of the academics. The physical condition in their awareness is prioritized at the expense the academic activity; as a result, awareness of the body

is in the foreground of their experience. Drawing these threads together, this chapter explores the phenomenon of embodied awareness of computers as the lecturers go about their routine and taken-for-granted everyday practices. Section1 of the chapter focuses on the 'unfelt body'. It describes everyday practice at the computer through a range of activities that are experienced in a bodily sense, which is unfelt by the lecturers as they go about the 'doing' of their activities. The purpose of the section is to show that there is a dimension to the lecturers' experiences of computers in everyday practice, which is experienced in an embodied way that is 'unfelt' in their pre-reflective awareness.

In Section 2 of the chapter, I describe the 'felt body', which surfaces in the lecturers' awareness of their lived experiences of computers, particularly as the day progresses. My purpose is to show that there is another dimension in everyday practice wherein sense of body is no longer unfelt and in the background, but 'felt' and in the foreground of the lecturers' awareness in feelings of restriction and corporeality. Importantly, the narratives in this section reveal a concealed practice of 'balance' involving small tactics, which the lecturers employ at their desks and after work in response to the perceived restrictions and corporeality.

Section 1: Interpreting the unfelt body in lecturers' narratives

In chapter 5, the lecturers all emphasised that when they were not teaching, they would usually be 'at the desk'. Being at the desk for the lecturers, more often than not, meant working at their computers. As noted in the Introduction, these lecturers are specialists in the field of physical education. This came to the foreground in their descriptions of their academic practice, through the embodied dimension within their experiences of everyday practices. In this section, I examine how lecturers experience their everyday activities, and the degree to which said activities are linked to the computer. First, their narratives of their experiences of computers will show that as the lecturers get drawn into the doing

of an activity, awareness of the body moves into the 'background' or shifts to the fringes of consciousness where the body is unfelt. Second, the unfelt body can also be seen in narratives that reveal the 'extended body' operating in virtual space, doing activities that used to be done by the physical body in a concrete context.

Routine Practices at the computer

In their descriptions of their daily experience of everyday practice, the participants in this study showed how the computer has become the focus of an array of activities at the desk, some of which may be categorised as routine practices. In this study routine practices can be categorized as those activities in academic work which are in the focus of the lecturers' awareness, like responding to email, but are repetitive, procedural and administrative. They are also routine in the sense that they are intermittently repeated in the course of the day at the desk in a habitual way which is done automatically by the lecturers.

Consciousness and intentionality are important dimensions in phenomenology. "In the phenomenological tradition, this idea that consciousness is always consciousness of something, is referred to as the intentionality of consciousness" (Gallagher & Zahavi, 2008, p.107). When one reads the lecturers' narratives, one has to keep in mind that there is another story behind the text, and that is a story of how their words or actions reveal their consciousness and intentionality's. The phenomenological line of thought on consciousness recognises that phenomenal consciousness during experience entails self-consciousness that comes in many forms and degrees (Gallagher & Zahavi, 2008). A person can be aware of an external object such as a computer at a perceptual level, and at another level, be aware of their experience of it and what they are using it for. A person can also be conscious of working at a computer without being aware of their consciousness, despite the fact that they are performing a task that requires skill and expertise. Such states of self-consciousness are described as "non-reflective self-awareness"

(Goldman, 1970, p.96 cited in Gallagher & Zahavi, 2008, p. 51) and "peripheral self-consciousness" (Gallagher & Zahavi, 2008, p. 51).

Each lecturer's experience of the start of a typical day reveals his/her engagement with repetitive activities such as checking email, followed by communicating through email. Generally, at the beginning of the working day in the academic office, the lecturers (with the exception of Jane) turn on their computers and start the routine practice of checking their emails. This becomes another routine practice**:** the lecturers continue communicating through email throughout the day.

Checking email

In the previous chapter, the computer is the focus of the academic office. All the lecturers (with the exception of Jane) start their workdays by switching on their computers. Then, they start to check their emails. Jane also engages in this practice of checking her emails later in the day "to stay on top of things". In their narratives, clearly checking their emails is an important and not-to-be-missed routine activity that marks the beginning of the academic day and is done repeatedly throughout the day.

> *You're always checking to make sure that there's nothing you need to know about prior to the class starting…and then you're also checking up on day-to-day happenings…yeah…on all the things that get communicated to you in a tertiary set-up* (Kevin).

There is also an expectation in the routine that lecturers must know what is going on and respond to what is happening in their respective environments.

> *You have to* [emphasizes 'have to'] *check emails all the time... whether you like it or not...you have to stay on top of things* (Jane).

> *You're expected to know what's going on…* (Kevin).

Checking email is done so often during the day that the lecturers do it automatically:

> *I'm always checking throughout the day, you know ...even between lecturing ... whenever I get a chance to get back to the desk... therefore, I'll check and check again and again* (Liberty).

> *I'm constantly checking throughout the day. This just happens automatically* (Alice).

> *Yeah absolutely. I'll check and check throughout the day... between the normal schedule, and whenever I get back to the desk* (Matthew).

> *I'm constantly doing that automatically to stay on top of things* (Jane).

> *You go on checking throughout the day just to make sure you haven't missed anything* (Kevin).

From the above comments, it becomes clear that checking email is a practice that is performed automatically during the day. The routine action involved has become an integral part of the social norm of the day in everyday academic practice. Its importance is demonstrated by it being the first activity of the day and the lived experience of the lecturers shows the urgency of the activity. The lecturers say that they are obligated not only to check their emails first thing in the morning, but also continually throughout the day and even after work.

The lecturers described their experiences of this routine world further:

> *It's almost a little bit like you're on call all the time... something like an on-call doctor. At any time of the day or night, you have to be ready to fire off an email* (Kevin).

> *Yeah, they can reach you now any time of the day or night ...there's nowhere to hide because they can always reach you* (Matthew).

> *They can email you anytime... you know... and you feel that you need to get back to them there and then (*Liberty).

Not only do the lecturers routinely check their emails, but they also feel obligated to respond to the students immediately:

> *Many institutions now have rules about how long a lecturer can take to respond to a student's email, an issue of concern for the lecturers. So, you've got twenty-four hours and …okay, you have to have written back to that student…I don't know, you feel obligated to respond* (Kevin).

> *So umm…I feel I must get back to the student as soon as possible* (Liberty).

> *I would like to feel that I can use emails when I want to, not just when they arrive at the desk…but, I feel obligated to respond. But these days, there are so many arriving that they disturb you at the computer because it happens just in the corner there...that little reminder that there is an email waiting and you have to decide whether to ignore or respond to that little envelope there* (Jane).

There is another side to email:

> *Yeah...But at the same time I guess, the other edge of the sword if you like... is that you need to be on the ball more often. So... you need to be ready on Sunday night to fire an email back that helps someone out with a problem that is going to be an issue on Monday afternoon, or something like that… so you really need to be on the ball* (Kevin).

> *You need to be able to give them the right feedback at any time* (Liberty).

> *You're expected to respond and know what you're talking about…absolutely* (Matthew).

From the above comments, it becomes evident that this particular routine activity also involves an appropriate response from lecturers who are busy with a social practice that entails turn-taking in communication between two parties.

Scrutiny of all of the above descriptions involving the activity of checking email reveals that the lecturers are totally focused on the task at hand and are drawn into the routine-ness of the activity. Bodily awareness is in the background as they get on with an important activity that is a main focus in their awareness. They become engrossed in the academic demands of the task. Bodily awareness has moved to the background or fringes of their actual lived experience of the activity where it is unfelt. The main focus of their behaviour is on checking and being available to make the right responses.

Communicating through email (the virtual body)

The data revealed different interpretations vis-à-vis email communication, which is experienced through a virtual extension of the body. That is, the lecturers have experiences that take place in a virtual environment free from the constraints of the physical environment. In Matthew's case, it was about a way of dividing himself between his students:

> *Yes, it's good, because students can still each get a piece of me… yeah absolutely. If it wasn't for the computer, I don't think I would be able to spread myself so thinly. There just wouldn't be enough of me to go around. But with email, if I have to, I can send out a piece of myself every day to each student* (Matthew).

This can have positive consequences; for example, greater freedom and not being restricted:

> *You've got this broader scope to communicate...You're freer.especially when students send work to you. So you can correct it and send it back the same day. So I guess... you're not locked down physically to just being in front of the group as in a lecture* (Liberty).

Communicating through email allows lecturers to critique students' work through an extended bodily presence.

> *I'm always giving students feedback through email…I do that automatically. Whether it's a question about a particular task or wanting to make an appointment or whatever. When students send me their assignments, I use the tool track changes. So I can import comments and make some changes so that when this feedback is emailed back to them, they can accept or delete the comments I've made. And so you know, I can actually attend to them without them having to come and see me in person.* (Liberty)

Lecturers also enjoy being able to connect easily to large numbers of students:

> *It's cool being connected to so many students …absolutely, it's so much easier because you can send things out to students without having to go through things individually…you can speak to a hundred students in one go …at the same time you can speak to hundreds of students* (Matthew).

However, there are some negative consequences attributed to the boundaries between their work and their home lives become blurred as a result of lecturers having acquired an extended body:

> *In the past, lecturers would walk into a lecture …do the job and then walk out, and that would be the end of that. But, now a student can have access to you ….and, a boss or a spouse, can have access to you twenty-four hours a day. The expectation is that you should pick up the phone or answer the email so it becomes difficult to leave behind the work at work or leave the home at home* (Matthew).

> *Students can now invade your home on the weekends* (Kevin).

The sum of the above descriptions suggests that communicating through email does have a repetitive, procedural and administrative dimension to it. It is now very much part of academics' experiences in the workplace which is done

automatically throughout the day. The computer, an integral part of these processes, has been incorporated into their bodily schema as the virtual unfelt body that allows them to interact effectively in a virtual academic context.

Taken-for-granted practices at the computer

In addition to the routine practices that are part of everyday academic practice, there are other activities that are quietly carried out by lecturers on their computers. These activities tend to be considered taken-for-granted practices in the execution of academic labour at the digital interface. They are marked by ordinariness, a lack of visibility in academic work, which tends to acknowledge the final outcome of all of the activities that form part of this particular everyday practice. The creative experience underpinning the activities in these taken-for-granted practices tends to be overlooked in the doing of this form of academic work. Only the lecturer who is busy working on them is privy to that experience, although the outcomes of these practices are known in academic labour as 'part of their work'. To give examples, lecturers may often be busy with the following activities: preparing and reworking resources for their teaching commitments; searching for new materials on the web to improve their teaching resources and to keep them up-dated in general; or, bringing things together in Word documents as they table their research.

The concept of bricolage comes to mind in these practices as they show an element of creativity within the flow of each lecture's experience. During these periods the lived phenomenal experience of the activities is at the forefront of the lecturers' awareness, and physical bodily awareness is relegated to the background. Like with bricolage, the lecturers work on the spur of the moment in these activities, regularly coming up with innovative and original ideas, constantly re-organizing academic content to keep up with the changing nature of their practices. In this taken-for-granted work the following activities come to light at the desk: tweaking and reworking; searching and sifting; and, bringing things together.

Tweaking and reworking

There are several sections of the data that reveal the lived phenomenal experience of an activity, which entails tweaking and reworking at the computer. This activity usually takes place after the routine practices have been attended to. The lecturers start preparing the day's teaching or work using resources that will be needed for their teaching in the future:

Following on from that [the routine practices] *…and assuming that I'm preparing some class for that day, I'll be working on that…whether it be touching up a power-point lecture, or working on a hand-out for a class or something like that, reworking things. And they all revolve around getting ready for class or whatever you're planning to do that day* (Kevin).

Tweaking and reworking at the computer is an activity which focuses on changing things to make an improvement in something that is taught on a regular basis:

So oftentimes, instead of making things up from scratch…it's a lot about trying to improve things one way or another…whether it's tweaking a lecture you know, changing some aspect of it … making it more visually appealing or changing the pedagogy of it. Or whether it's getting some worksheets out for the day. You could be doing any of those things you know...you do them automatically. You may be reworking them or whatever…to ask different questions to what you did last time...and you're always trying to make things better (Kevin).

Tweaking and reworking is enjoyed:

It's enjoyable to change and rework things. Because, you're reworking things, so your lectures become better each time…you can see them change as you rework things and that's enjoyable (Liberty).

There is a sense of creativity and excitement in the practice:

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I love preparing new units of work… particularly when I find a website or information that I can actually apply in my class… I get really excited… because it's given me a chance to be able to be creative... and if my students are going to use it, at least it allows them to be creative and to think in a creative way as well, you know (Liberty).

In contrast to the previously routine practices described, lecturers are enthusiastic about and motivated when undertaking a taken-for-granted activity:

As I said before, I've got lots of screens going at the same time. I'm working on my laptop and on my computer so there are several windows open and I'm moving between them all …absolutely, working on a whole lot of material at the same time. As I said before, it's really enjoyable for me to do it that way (Matthew).

The phenomenal experiences of the lecturers in all of the above narratives dealing with tweaking and reworking reveal it as a creative activity which the lecturers enjoy doing in their daily practice. The main focus of their awareness is on the activity itself: other thoughts have either moved into the background or into the fringes of their awareness as they become drawn into it. Although they might be aware of their actions at the computer, the main structure of their awareness is centred on the present task, which could be a lecture or tutorial required for the day's teaching.

Searching and sifting

Another taken-for-granted activity that takes place at the computer was described by the academics in this study as "searching and sifting". This involves working through knowledge information networks in order to "find the right stuff" [as several of them noted]. It involves the virtual body working in virtual space in order to keep abreast of the latest developments and research.

The lecturers in this study sensed the expectation that knowledge in disciplines is continually expanding, in line with advances in information technology. As a result, they felt pressured to constantly up-date their knowledge:

> *There's always new stuff to look up all the time…yeah, you do that automatically...and it's expected that you'll cope with everything that's out there* (Matthew).

> *Almost every day you know, every day there's something new that you have to look up or learn about …something that you'll need to bring into your unit or adjust. You just do that automatically without thinking* (Liberty).

> *I'm constantly having to keep myself up-dated with everything that's out there* (Jane).

> *You have to know what's going on in your field (* Kevin).

Lecturers must know where to find the latest research relevant to their particular discipline and how to use what they find:

> *You have to be able to find the right stuff out there. It's very much an individual thing ... it's expected that you'll cope with all the stuff, and know what to do with it* (Kevin).

> *You need to know all the stuff that's 'out there' for your units, and what to do with it. So you have to be on the lookout, you know* (Liberty).

> *It's expected that you'll be able to work through it all and find the right stuff, absolutely* (Matthew).

> *You're always trying to keep up because things are constantly changing out there* (Alice).

From the lecturers' comments, it becomes evident that they experience an invisible activity at their desks. This activity involves the extended virtual body working through motions of searching and sifting at the computer in order to find

the right resources and to keep the lecturers up-dated. A more detailed description of the lived experience of this activity is provided in the vignette below. Although the vignette stands alone as one lecturer's specific description of his [her] lived experience of searching and sifting, it may be extended to other lecturers' experiences of the activity as well. The vignette reveals the complex nature of the activity, and the way in which a lecturer's extended virtual body interacts with the lecturer's physical body through embodied knowing.

Vignette

> *Usually to find information via the Net, for example … I'll start with a Google search…because a lot of the Health issues that we cover are actually government initiatives and, therefore, I need to go to government websites to find a report and so forth. And from that, usually a report is linked to a particular university. And then from that … you need to be able to evaluate what resources you've come up with, to make sure they're reliable and valid….that's important being able to make the right decision there and then. It takes some time sifting through everything….*
>
> *There's so much information out there, that you really have to think things through …it's a case of "No, this is not it. It's got it, but it's not exactly what I want" But when you find it …everything is just there ready for you to use. And I automatically think to myself: "This looks just right. It's perfect." And it's like you've struck 'gold'! It's like you've discovered something wonderful. And then I can take my 'gold' and actually present it to students. Because I know it's supported by evidence and research that's been proven. It just looks right. I know that because I can identify and evaluate it as a good source and a reliable source* (Liberty).

The description of the lived experience of the lecturer in the above vignette reveals that the activity involves not only the skills of searching and sifting,

involves not just these two skills, but a whole range of other skills that include processes of selecting, reviewing, discarding, knowing, evaluating, and decision-making, as well as learning while the activity is being carried out. It also shows the inner world dialogue that takes place within the lecturer's consciousness and guides the searching and sifting process.

The above narrative also foregrounds the lecturer's extended virtual body, which is involved in the doing of this kind of academic work. The extended virtual body is closely intertwined with the lecturer's physical body, which is being used unconsciously as a point of reference during the activity. Reflection on this description, using a phenomenological lens, reveals an intelligent body in operation. It automatically adapts to the virtual environment that it is working in, and its finely tuned body schema assists in the search as it feels its way around that virtual environment.

Bringing things together

Another activity, which can be categorized as taken-for-granted practice, involves the production of academic writing at the computer, an activity that is discernible in certain descriptions. This activity revealed the lived experience of bringing research together in a text. In the process of academic writing, lecturers have to bring together formal academic writing skills, creativity, extensive knowledge of the literature pertaining to their subject matter, original thought, and insight as they go about creating a text on the screen. They have to consider grammar and flow within their writing, as well as references essential to support their work. At the end of the process they have produced a text.

Kevin's interview included a rich description of his lived experience of academic writing at the computer. If one thinks phenomenologically about the next few narratives, it is evident that Kevin's awareness has been 'taken-up' in a goal-driven practice, which involves the activity of bringing things together. His self-awareness and actions are completely immersed in the doing of academic writing.

During the activity, all sense of the body and awareness of being bodily located at the desk are in the background of Kevin's consciousness. One can see how the academic world in which he operates is presented to him, and how he acts on that presentation by bringing things together at the computer.

> *You just know that things are looking right there for you...because they're in the right form and that gets you going…and you're so happy about that because you have been able to bring all those things together there in the right way. You don't really think about anything else when it's like that* (Kevin).

In the above description, clearly Kevin becomes completely absorbed in his academic writing. His focus is on bringing the text together in the right way on the screen: bodily awareness is in the background of the activity.

Kevin elaborates further on his inner world experience of bringing things together:

> *And when the right things start to come together, start falling into place … you just carry on working with the flow of things…and you can be working there like that for some time, bringing things together. You don't even think about the time when it's working out for you* (Kevin).

On some occasions, however, Kevin loses track of time and place, using the home office computer:

> *It's very individualised, it's very much just you sitting there … just you and the computer...you can be sitting there for hours working at the computer without realizing where you are…you don't even notice the time then at those times.*

From the above narratives, it is evident that Kevin is unaware of time and space as he works on enjoyable tasks. Moreover, thinking phenomenologically about the lived body that is in harmony with what it is doing, may reveal two key

characteristics of the phenomenon. First, Kevin's meaning of the above experience is instinctively taken up by his lived body, which is unfelt at a conscious level, yet motivates this subsequent experience. This is evident in the way that Kevin automatically knows without having to think consciously, that the right things are coming together at the computer, and because they are right they guide his subsequent experience. Second, the unfelt body manifests at times when Kevin is unaware of his body. As he becomes carried along in the practice, his conscious sense of being bodily located and working in a body disappears into the background of his awareness during the activity. Even his sense of time and space disappears.

Similar to Liberty's description of searching and sifting, the extended virtual body is also evident in Kevin's experience of academic writing at the computer. As Kevin continues with his academic writing, his sense of his physical body is relegated to the background of his experience. However, at the same time there is an extended virtual body in the foreground of the operations at the computer, slipping in and out of both the real and virtual worlds:

> *Yeah, the computer is pretty much the focal point of such a day…it will have three, if not four document windows open …there could be pieces on results and discussion chapters, and your referencing program, or whatever. But your workspace is almost the whole room as well and things will be feeding back into the computer. You're moving between all the texts and different mediums and you're stepping in and out of a space as you're writing sentences …and putting things together and playing around with things, or whatever. …you may even be flipping through a book at the same time* (Kevin).

In the above narratives Kevin is intensely focused on what he is doing at the computer. Although he moves backwards and forwards between the real and virtual worlds, his awareness is completely engrossed in the doing of the task and all that it involves.

Kevin clearly finds his experience rewarding and motivating:

> *I'll be writing something again …. I'll be like cycling or toggling between the drafting kind of space and the space where I'm really trying to write and get those ideas together …and you feel so happy with what is going on because everything is coming together just right* (Kevin).

Writing at the computer is easy for Kevin at these times: it does not feel as though he is working:

> *You don't feel that 'writing at the computer' is work, because it's all coming together. At those times you can get carried along by it all* (Kevin).

Kevin also describes writing at the computer as an activity that results in creative output:

> *Generally again, it's a very individualised process putting it all together, it's very much just you there …chipping away at the computer….punching away… as you bring all those things together. At the end of it there is something there that wasn't there before…and that's really apparent when you're writing at the computer because it's something that you've created* (Kevin).

Only much further on in his narrative, does a sense of bodily awareness return in Kevin's experience of writing at the computer. It occurs when his awareness shifts back to his physical body and he returns to the present time:

> *And at the end of the day, when you finally look up from your hands and fingers and read what you've written there all that time …and you realize how long you've been sitting there and what the time is... then you can really see what you've brought together* (Kevin).

With the passing of time, awareness of the body returns into the fringes or margins of Kevin's consciousness. It is evident in his narrative that Kevin has regained his sense of his physical body, as well as an awareness of time related to his experience.

If one thinks phenomenologically about Kevin's activity of bringing things together at the computer (as evident in the above descriptions in this section), it may be that many lecturers experience aspects of academic writing in similar fashion. Kevin's narrative reinforces the notion that it is the unfelt body in its various guises that plays a pivotal role in opening up the virtual academic world for him. It helps to facilitate his intense engagement at the computer through its ability to move into the background of his awareness, allowing him to concentrate fully on the task at hand. At such times, his activities at the computer are definitely experienced through the lived but unfelt body, which is totally at home and in harmony with the virtual world of the computer.

The phenomena of the unfelt body

In Section 1 of this chapter, I show that there are two dimensions in which sense of the body moves into the background of the lecturer's awareness - as the unfelt body - in his/her experience of computers in everyday practice. The lecturers become deeply involved in two practices that they carry out at their computers, i.e., working on routine or taken-for-granted practices. Routine practices involve activities, which focus on checking and communicating through email. The taken-for-granted practices require the lecturers to focus on tweaking and reworking, searching and sifting and bringing things together at the computer. At times, the lecturers become so completely absorbed in the doing of these practices that they experience them in a disembodied way. In the process of bringing these practices into existence, the lecturer's bodily awareness shifts into the background or fringes of their consciousness.

The first way in which the unfelt body may be interpreted is the way in which it shifts into the background of consciousness during the experience of 'focal disappearance' (Merleau-Ponty, 1962). During focal disappearance, people's levels of awareness change, move in and out of consciousness, or even linger at the fringes of consciousness during this experience (Gurwitsch, 1969). In many of

their narratives, the lecturers' consciousness seems to be completely taken up with the doing of practices: all sense of the body is absent during this experience. And, in general, awareness of time does not feature in their narratives.

A second way in which the body as unfelt is interpreted in the lecturers' narratives is through the extended body, which can be seen as operating in a virtual academic space. Although the lecturers pursue their work in a physical environment, their narratives reveal how their embodied world of practice is shifting into the virtual world of the computer. In this shift, computers have (a) extended the lecturers' understanding of operating in an academic world; and (b) changed the ways in which they prosecute their work. Furthermore, the computer has the capacity to extend the physical body that has made the computer an integral part of what it means to be a lecturer.

At another level, the descriptions categorized as experiences involving the unfelt body, can be taken further through phenomenological perspectives of consciousness which echo with some many of the descriptions of the unfelt experiential world of the lecturers. In recent years, phenomenology's conceptualisation of consciousness has been taken up in contemporary discussions in philosophy of mind and consciousness in an attempt to understand human experience more deeply.

According to phenomenological lines of thought, there are different forms of consciousness in experience. Gallagher and Zahavi (2008) note that although phenomenologists disagree on important questions concerning methods and focus, there is almost unanimous agreement when it concerns the relation between consciousness and self-consciousness, and the different forms it takes. Phenomenologists argue that:(1) first- personal awareness of one's own experience amounts to a form of self-consciousness; (2) there is a primitive form of self-consciousness that is integral and intrinsic to a person's mental state; and, (3) they reject the suggestion that people are attentively conscious of everything that they experience, because there are unnoticed or unattended experiences

(Gallagher & Zahavi, 2008). In the last of these, the authors give as an example a car that a person has driven home in automatic pilot mode, and not remembered making the trip, or the route that they took to get there. The person recalls little about the driving they must have been doing, just that they got home safely. Without doubt, the above analysis is relevant to some of the descriptions in the section on the felt body in experience.

A minimal form of self-consciousness is evident in many of the lecturers' narratives. The concept of pre-reflective consciousness (the term pre-reflective awareness is also used in the literature) is an important dimension in phenomenology's interpretation of how self-consciousness is experienced by a person. Gallagher & Zahavi (2008) point out that phenomenology's line of thought regarding pre-reflective self-consciousness is a feasible way to describe how a person experiences experience. A minimal form of self-consciousness (pre-reflective consciousness/awareness) is a constant feature in people's conscious experience (Gallagher & Zahavi, 2008). "Experience happens for the experiencing subject in an immediate way and as part of this immediacy, it is implicitly marked as *my* experience. For the phenomenologists, this immediacy and first-personal giveness of experiential phenomena is accounted for in terms of 'pre-reflective' self-consciousness" (Gallagher & Zahavi, 2008, p. 46).

In phenomenology, pre-reflective self-consciousness is taken to be an intrinsic feature of the primary experience that a person has. Lived phenomenal experience should be understood at a tacit level in that what the person experiences, takes place at a non-objectifying level. The person's experience is not perceived or observed as an object by the experiencer, because the experience is always already something for them in the sense that they are pre-reflectively conscious or aware of the experience. They can reflect and attend to their experience afterwards, but then it is objectified and becomes a conscious experience in that the person's awareness comes into the foreground of their thoughts.

In pre-reflective or non-observational self-consciousness, experience is given to a person as a subjective experience. Although the person is pre-reflectively aware of their experience, they are unconscious of it and tend to ignore it in favour of the object of their activity. In the descriptions the lecturers have periods when they are fully absorbed and preoccupied with their tasks at the computer, and what is expected of them in everyday academic life. As such, they do not notice their experiential life. However, during the flow of their primal experience, they are usually able to respond to their actions in a spontaneous way through their pre-reflectively self-consciousness. If one thinks phenomenologically about the descriptions, it is evident that the lecturers' experiences of their practices is given to them as a subjective experience, happening over and above their experiential life which they do not really notice, although they are pre-reflectively aware of it in a tacit way.

Consciousness in the lecturers' narratives needs to be considered not only through pre-reflective self-consciousness, but also reflective consciousness, a kind of self-consciousness that comes to the surface through reflection during a person's experience. On a typical day, according to the lecturers' descriptions, there was an increasing revealed awareness of a bodily dimension to their experiences of computers. In the next section, the narratives show how lecturers' sense of the body at the desk shifted from the lived-unfelt body, making meaning of their experiences of computers through the felt body.

Section 2: Interpreting the felt body in lecturers' practices of computers

This section describes the felt body in the lecturers' descriptions of lived experiences as they interact with the computer. As shown in the previous section, the sense of the physical body can be unfelt and relegated to the background of awareness as the lecturers work on routine and taken-for-granted practices at their

computers. However, there are also descriptions in which a felt sense of the physical body has moved into the foreground of the lecturers' awareness during their experiences of working on computers, or as a result of the experience. The felt body manifests in two different ways in their narratives: first, in the lecturers' feelings of bodily restriction; and, second, in the physical reminders, which they feel corporeally at the end of the day.

The lecturers' narratives explicate the ways in which they practice small tactics at the desk in response to their experiences of restriction and corporeality. The tactics they employ are suggestive of Certeau's (1984) concepts (see Chapter 2) and of the ways in which people utilize hidden operations (tactics) in the main practice they are translating into action. According to Certeau (1984), this allows them to redefine their interactions with the main practice and to create private spaces for themselves that are known to them personally. From their narratives it becomes evident that the tactics employed by lecturers working with computers are linked to the phenomenal experience of the felt body in the following two ways: (1) lecturers use tactics when they experience bodily restriction at the desk; and, (2) lecturers use tactics to address the physical reminders which they feel corporeally after leaving the academic office at the end of the day.

The felt body as the restricted body

The first way in which the felt body manifests in the lecturers' narratives is through a felt sense of restriction that they experience while working with computers. In Chapter 6, I observe that when the lecturers are not teaching, they spend most of their time at their desks in the office doing academic work, which usually involves working at the computer. At times, this work happens at a routine and procedural level, e.g., when the lecturers are deeply absorbed in the doing of the day's academic work. However, a sense of deep absorption in the task is not always the case. There are three different ways in which their pre-reflective awareness of restriction can be linked to their experiences of computers. First, restriction results from feelings of being 'stuck-at-the-desk', which further result

in their desire for bodily movement being articulated. A second way in which restriction manifests is in their descriptions of their awareness of restricted types of movement, for example, sitting, which the lecturers associate with computer work. And third, restriction can be desired or self-imposed in some cases so that lecturers can spend more time at their computers.

The first type of experience of the phenomenon of bodily restriction appears in their narrative as psychological feelings of being bodily stuck at the desk. All four the lecturers made reference to this phenomenal experience:

> *If you're not teaching you're stuck at the desk* (Kevin, Liberty and Matthew).

> *You're actually locked down when you're there at the desk* (Kevin and Liberty).

> *Yeah, I suppose too… this is the first job that I've had where I'm stuck at the desk so much* (Matthew).

> *Yes, the computer makes me feel stuck and I don't want to be 'stuck' You have to be in your chair there. And, if you're working at the screen, you're stuck there in the chair* (Jane).

> *There are days when you don't move around a lot…so umm…you're really stuck there trying to get through everything* (Liberty).

> *Our bodies are made for movement primarily ....and what we teach is all about movement. So it's strange to be stuck there like that now* (Jane).

All of the above descriptions reveal the lecturers' phenomenal experience of being bodily stuck at the desk, an experience that contrasts with their desire to experience the body's natural movement. For the lecturers, being stuck at the desk is a phenomenal experience in which bodily movement has been psychologically confined or restricted.

The second way in which the lecturers' feelings of bodily restriction is revealed, is in their narratives that show their awareness of the way in which the body is limited in the types of movement allowed when academic practice is increasingly mediated through computers. There narratives show that while their academic practices are largely restricted to sitting, they include hand and eye movements:

> *I get a sore bottom sometimes from all the sitting …and as I've said before, this job is now a much more tied-to- the- desk job than teaching in a school. Lecturing now involves lots of sitting and desk-work* (Matthew).

> *I don't feel good the next day when I've had a day of sitting in the office, but that's now part of the job... I don't move about like I should* (Alice).

> *I just don't like sitting down that amount of time...But that's what's expected of you now. If you get up, go to work, sit in the office all day…come home from work…sit some more ....then you're just sitting all the time and I don't like doing that. But, that's what happens now...you can't get away from the desk-work* (Jane).

> *So much of what you do is now done through the computer, even teaching through the computer …so you're moving less and you don't always realize that's happening to you* (Liberty).

> *Yes, you sometimes can be sitting there for hours at a stretch just to get through the work you have to do…you can really feel it in your body afterwards* (Kevin).

The above narratives include references to academic practices involving a limited range of movement. It is as though their practices as human movement lecturers are restrictive to the body when compared with other practices. Furthermore, they show that the activity of 'sitting' is becoming a taken-for-granted experience within the nature of academic work today and that it hides a bodily experience, which is usually not considered in relations with computers.

A third way in which restriction is revealed is when the lecturers self-impose restriction on themselves in order to get through all of the computer work they need to do. Some of them deliberately restrict themselves to their desks during the day, making desk-time so that they can complete certain tasks:

> *So umm… I'll even make desk-time then to get through everything… I'll try not to have so many interruptions at the desk because I need to be there to do all those tasks* (Liberty).

Other descriptions show that the lecturers actually feel the necessity to self-impose restrictions on themselves in order to do the academic work at their computers that is expected of them:

> *You need to be there on your own to do it all …it's expected that you'll cope on your own and be able to do the things you need to do. So it just sort of has to be you there at the desk, you know what I mean ? Just you at the computer, working things out (*Kevin).

Some lecturers employ specific tactics to assist their practice of 'self-imposed restriction' at the desk so that they can work without disturbance:

> *As I've said before, this space* [behind the desk] *is only large enough for me...no-one else can get in here to disturb me...and, with my headphones on, that's even better then, because it has to be just me there at the desk.* (Matthew)

The above two descriptions not only reveal that the lecturers desire a form of self-imposed restriction, but also show that there is a hidden dimension of isolation within the experience. Boyer (1996) as noted in Chapter 2 claims that modern workplaces with their computers tend to isolate workers on a daily basis so that they are restricted from experiencing the real world in the way that it should be experienced.

The lecturers also desire self-imposed restriction at their desk because they do not want to take computer work home with them:

So I need to be here at the desk… because I'll only leave for home at the end of the day when I've finished all the computer work. I'll try not to take computer work home with me if I can help it…so I need to be there at the desk (Liberty).

After considering all of the above narratives in this section, which focus on the lecturers' experiences of restriction in everyday academic practice, it becomes evident that restriction is manifest in three different ways in the lecturers' relations with computers. First, restriction has a psychological dimension perceptible in their feelings of being 'stuck' at the desk. Second, their sense of restriction manifests in narratives that deal with movement being limited and the way in which the body is implicated in relations with computers. Third, restriction is actually desired in some cases: it is self-imposed by the lecturers so that they can get through their work.

The narratives also reveal the lecturers awareness at a pre-reflective level that they are moving less and sitting for longer periods of time as they work on practices that are increasingly mediated through the computer. Moreover, their reactions are in line with the way in which the lived body of phenomenology (see Merleu-Ponty's (1962) concept of the intelligent body in Chapter 3) is able to respond to its life-world experience and to what it experiences. According to Merleu-Ponty (1962), when the lived body is in harmony with its life-world, i.e., when its natural body schema is at home with what it is doing, that experience is often unfelt in a person's embodied awareness. However, there are also times when this harmony is interrupted. This can be seen when unfelt awareness in the natural body schemas of the lecturers is interrupted and changes to a felt bodily awareness. Thus, in this section the felt body of phenomenology is manifested in the foreground in the lecturers' consciousness through an awareness of body schemas that are experiencing changes in their natural movement.

However, the lecturers' phenomenal experience of restriction can be unpacked further through another phenomenon that involves balance. In response to this

restriction, the lecturers employ small micro-tactics within their practices in an effort to balance their situation at the desk. In the next section, I delineate how the lecturers go about achieving balance in their relations with computers through their use of micro-tactics.

The practice of 'balance' and the restricted body

The lecturers experience the phenomenon of working at the computer either as in balance or out of balance. Their narratives point to micro- actions being used by the lecturers to maintain a sense of balance or correct an imbalance. This sense of balance stretches across several areas in the life- world of the lecturers, encompassing the day, the lecturers' role, work and home relations, and time spent at the computer. Balance is achieved through micro-tactics which involve taking small physical and cognitive breaks that allow the lecturers brief moments of escape and evasion of working at the computer.

The tactics are pre-empted in descriptions that first highlight the sedentary nature of computer work and the body's restriction of natural movement at the desk.

> *I do not like sitting for that long...and, if I'm sitting down for the majority of the day I'm aware of certain parts of my body- my hip flexes, my lower back, my hamstrings -all these areas are going to be negatively affected by the increase in sedentary activity that I'm doing. And I need to do something about that.* (Jane)

> *The body is made for natural movement and it's easy to forget that when you're sitting at the desk. You're teaching for part of the day... and the rest of the day is at the desk...and between that there's your body ...and when you've just been sitting all day, you can feel it in your body* (Liberty).

In order to maintain natural movement at the desk, the lecturers try to balance their sitting with moving during the day:

I try to balance the sitting with the moving and the moving with the sitting. I try to do that at all times (Alice).

You have to move as well while you're sitting at the desk you know. You have to balance sitting and moving (Liberty).

I need to think about the balance between it all ...how much I sit and how much I move... so that I maintain natural movement as much as possible (Jane).

But sometimes lecturers cannot manage to balance the sitting with moving at the desk. When this happens, they feel this imbalance in a bodily way:

Often when I start working, I just put my head down and keep going and going ...then it's difficult later on getting back to normal, because you feel in your body as though you've actually been doing something physical...although you've just been sitting there all day (Kevin).

The lecturers spoke about balance in many different ways. For example, they talked about trying to balance the ways in which they experience the academic day with regard to theory, desk-work and practical teaching:

A balanced work day is much more enjoyable for me and makes me feel good about things. So, I'm really trying to balance the theory and admin with my practical teaching that involves movement skills ...so that way I get a balanced working day. (Alice)

At times, the lecturers spoke about balance in a broad sense, about where it is related to balancing the roles that are part of academic work.

You're trying to balance your identity as a lecturer and as a researcher...You're trying to be that positive role model that you're meant to be if you're going to be teaching Movement Skills (Alice).

At other times, the search for balance focuses on work and home life, and what they do to keep their work life in balance:

The face of the academic worker has changed dramatically …and I think you work beyond your workday and on the weekends...whenever you get the chance, you continue with work. You have to work to keep yourself balanced (Alice).

It's not always easy to keep yourself balanced. So as I've said before, I try not to take computer work home with me after work, although there was a time when I used to do that (Liberty).

Alice stresses that balance is something that needs to be worked at constantly. Her narrative shows how she tries to balance the amount of time that she spends at the computer:

Well, I guess with balance I try to be so acutely aware of the time I spend there. There are times when the computer needs to consume much more of my time and I have to commit to that time at the computer. Then there are times when I don't allow that to happen and try to balance the situation (Alice).

The body is also implicated in the search for balance:

And you're trying to keep your body balanced in all of that. You're constantly trying to attend to all these things and still have the balanced body…I'm always looking for 'windows of opportunities' to spend time on my body (Alice).

At the end of the day I also have to balance looking after myself (Matthew).

All of this [referring to the sedentary aspect of computer work] *has a negative impact on one's metabolism… it has a negative impact on one's body and health if you lose that balance …so you have to, as much as you can, try to balance 'the sitting side' with all the other aspects. That way you feel better physically at the end of the day* (Liberty).

For the lecturers overall, a balanced workday is seen as being more enjoyable. It makes them feel "better" physically at the end of the day. Consequently, they try to create balanced workdays by using tactics to maintain balance in their relations with computers. These involve: taking small breaks, appreciating the view; and, re-defining the space at the desk. As suggested previously, their descriptions of restriction prompt the observation that the lecturers have experienced an interruption to the natural body schema of the lived body of phenomenology. The lecturers respond to the interruption by utilizing the tactics that allow them to re-structure the way in which they experience restriction at the computer and regain a sense of balance.

(i) The tactic of taking small physical breaks at the desk

There is one tactic that can be linked to the lecturers' feelings of being glued to the desk: it involves taking small breaks between the everyday practices they do at their computers. This tactic alerts their awareness that they need to periodically re-engage in a small activity that involves natural bodily movement that takes them away from the desk:

> *I try to move around during the day ...yeah, like going to do some photo-copying or getting something to drink, like that ...you need to take a little break every now and again... just to get away from the desk* (Matthew).

> *You need to take a break every now and then, when you're working there you know what I mean? Some release ... especially when you're locked down there at the desk* (Liberty).

> *It's important to have a break, even if it's doing stretches every now and again...you can't be stuck here all the time in a chair* (Alice).

> *I need to make sure that I have those breaks when I'm working at the desk...I need to break up the sitting with some moving ...and sometimes, even doing*

mum things, like checking up on the children, gets one away from the desk for a few moments (Alice).

You need to deal with being there [at the desk with the computer] *... you need to work in some breaks... Even sometimes quickly look up the surf conditions or the weather or whatever ...just to get away. You have to find that balance* (Ken).

At times they forget to take the breaks:

But you don't always remember to take the breaks that you should ... you just keep going and going until you suddenly reach that point when you just have to have that small break ...you just feel that you have to have it then, and it can't wait because you feel it in your body. And you take those things [the sitting and the feeling stuck] *with you in your body when you leave at the end of the day* (Kevin).

On the days when you forget to take those little breaks, your body lets you know afterwards (Liberty).

The above narratives confirm that the lecturers take small physical breaks in between their main practices at the computer. If they omit to take the breaks, their bodily awareness reminds them of the limits of working at the computer. Moreover, by taking these small physical breaks, they are able to reduce their feelings of restriction at the desk at least to some extent and feel more balanced.

(ii) The tactic of taking mental breaks at the desk

In addition to taking small physical breaks, the data reveals that the lecturers intermittently take small mental breaks by looking at the view, which they are able to see from their desks. It momentarily allows them a brief cognitive break during their experiences of computers. This tactic comes to the foreground in their narratives expressing appreciation of the view:

It [the view] *allows me thinking time ... which means that I can get away from here. So having the view of the bridge in the distance is actually a way for me to get away from the desk... because you know, I can meditate and de-tense by just looking at it in the distance. I mean not de-stress, but de-tense. I love the harbour bridge in the distance. It just inspires me so much, especially when I can just look out and see green trees and the harbour bridge in the distance....you feel that you get away from the desk* (Liberty).

I think I spend a fair amount of time being aware of the view. It helps me when I think...to be able to look out...and it's like getting away in a sense from being stuck here in my chair. If I was working up against a blank wall that would be a lot harder for me to do (Jane).

It becomes clear in the above narratives that the lecturers use the view as a tactic that allows them to have a cognitive break between periods of concentration at the computer. By taking in the view, they seem to re-structure their experience of restriction so that they enjoy a brief escape or reprieve from working at the computer.

(iii) The tactic of manipulating space at the desk

The lecturers' descriptions of their experiences of computers highlight their intentional use of spatial tactics at the desk. The ways in which this occurs vary because each lecturer uses the spatial tactics to create an 'academic climate' or environment that is not only in harmony with her/his way of working with computers, but helps to facilitate his/her academic work at the computer. In some instances, they use spatial tactics grounded in a traditional understanding of space, while in others, their spatial tactics move beyond traditional conceptualisations of manipulating space to involve meta-physical and virtual spatial tactics. Moreover, their narratives reveal the interactive relations between their use of spatial tactics, their experiences of restriction, and the goals each wishes to achieve during the day.

For example, Matthew deliberately restricts access to his area of the room by utilizing specific spatial tactics to make this possible. As already suggested in Chapter 5, because there is not enough time in his day, a side of his experience reveals a desire for more restriction at the desk:

> *I have found that by moving my desk and turning my computer screen and bookshelf around, I've positioned myself in a much smaller space* [a corner space] *that isn't easily invaded...and I can do all the work I need to do. Yes, it's a small space that isn't easily invaded while I'm trying to work. This is perfect, absolutely ...this is all the space I need here. I've got a very small area behind me now...and it can't easily be invaded. There's room just for me...and I can now get on with the job. This is how I like to* work (Matthew).

It is evident from the above that Matthew deliberately practices spatial tactics that will minimise interruptions in his corner of the room. He likes to work in a small area behind the computer, in a space that is structured to discourage interruption. This also helps to balance the shortage of time in his day. By employing spatial tactics, he creates an academic environment that is suited to his situation and facilitates his practices at the computer.

Liberty as opposed to Matthew, does not want to feel restricted by the computer at her desk. So she utilizes spatial tactics to open up her space:

> *I've re-arranged things here to make them better for me ...moved my desk around to make my work space more efficient ... I don't have to speak to them from behind the computer anymore. So... it's a much more open space. And I don't feel restricted because students can join me here. I'm not hiding away behind my computer. So you know, this is a much more workable space for me now because I've re-arranged it that way. But it does mean that my day is constantly interrupted ...so I'm always searching for more desk-time which means that I'm always trying to balance that with seeing my students* (Liberty).

Her particular spatial tactic has been to arrange things at her desk to accommodate her open-door policy (see Chapter 5). Liberty's space needs to be open: she does not want to be hidden away behind her computer. Through her spatial tactics, she creates an academic environment that is suited to her way of working at the desk. But, at the same time, it will not only mean that she needs to find more desk-time to complete computer tasks, in effect she will experience more restriction at the desk.

Jane, in contrast to Matthew and Liberty uses a spatial tactic that allows her to create an inner metaphysical space for herself at the desk, despite the fact that there are several other lecturers using the same office:

> *Space is very important to me and I don't like working in a mess. And I tend to keep things neat and organized. My desk is only a few paces from the doorway. It's useful to me that I walk from the door straight to my desk ...I don't have to go through other spaces to get there* [meaning the work areas of the other lecturers in the office] *And, as much as possible, I just sort of create this bubble around me and I try to get on with what I'm doing at the computer ... it makes it better for me and at least this way, I can balance my work at the desk so that I can get through it*
> (Jane).

It becomes clear from the above narratives that the invisible bubble that Jane creates around herself is a symbolic way of structuring a private inner-world space that helps her to focus on her practices at the computer. Her tactic also allows her to balance her workload at the desk.

Kevin's description, on the other hand, shows that he practices a spatial tactic which not only involves self-regulation vis-à-vis his access to the Internet, but also deliberately restricts his focus to the academic space of his computer:

> *One of the things I tend to do when I really need to sit down and get through the work...is that I actually pull the Internet connection out of*

the computer. I literally pull the cable out of the back... that way I can't quickly just check an email or something like that...not even a surf report. It's as if you've deliberately broken that connection with the outside world. And, you're saying what you need to do is right here, right here in this computer. It's just you and the computer here and that is where you need to focus. You don't need to be working outside that space at all. So that's a kind of restriction and self-regulation that I do ...by pulling out the Internet connection, I'm really trying to keep focused on the computer and what's going on there. It's as though I deliberately impose that kind of way of working on myself (Kevin).

From the above narratives, it becomes clear that the lecturers intentionally use spatial tactics to structure the ways in which they individually experience their computers. The following aspects are worthy of note: (1) the use of individual tactics to manipulate space at the desk so that the users create personal climates for themselves in which to do their computer work; (2) these tactics frequently involve physical, meta-physical and virtual dimensions in the lecturers' relations with computers; and, (3) in some cases, the tactics are used to balance the life-world situation in which lecturers have to achieve certain goals.

Consideration of all of the above descriptions of seeking balance when working with computers reveals that they are all in response to the restricted body. It is through a seeking of balance when working with a computer that consciousness of the body moves into the foreground of the user's awareness. As a consequence of their phenomenal experience of being glued to the desk, the lecturers experience an interruption in their natural body schemas that have been developed to favour the moving active body in their academic life-world. As a result of their experiences of computers, the lecturers employ small tactics (micro-tactics as it were) to counter their feelings of bodily restriction. These tactics in the main involve the practice of finding balance. This may be temporal when they take physical or cognitive breaks, spatial when they balance the work/home divide, or bodily when they balance moving with sitting.

The tactics can also be interpreted in the light of a hidden production (not unlike Certeau's hidden production, see Chapter 2), which takes place during the lecturers' experiences of computers in which the felt body is involved in everyday academic practice. In the following section, the felt body comes into the foreground as the corporeal body in a second way. It is also linked to another production of tactics that involve self-regulation.

The felt body as the corporeal body with painful reminders

A second way in which the felt body manifests in this study is through the corporeal body, which comes into the foreground as a result of the lecturers' experience of restriction. With the passing of time, the felt sense of the corporeal body, i.e., the felt physical body emerges in the lecturers' experiences as a 'painful reminder'. In the following narratives, the corporeal body takes prominence in the lecturers' awareness of the physical heaviness and pain they feel at the end of the day.

Academics who work on computers do not always take enough breaks. The result is a painful reminder that a body mediates academic work:

> When you've been working there a long time ...umm...sometimes the whole day you know ...you're left with a pretty physical feeling afterwards because your body doesn't allow you to forget... because afterwards all that relates to painful reminders that you feel, and you feel kind of heavy at the end of it... you've got sore eyes, headaches, sore back...and the strange thing is, you've just been sitting (Kevin).

> On those days... I do notice that if I'm not careful, my body starts to feel horrible and fat and tense ...and umm I tend to get quite stiff... I mean, my body tends to tense up and I feel heavier especially if I've been at it

all day, you know… And when I go home, I take that heavy feeling with me… you know what I mean? (Liberty).

When you leave the office at the end of the day, you sometimes carry all those things with you... when you leave (Matthew).

Their bodies do not allow the lecturers to forget the experience of sitting for long periods of time and moving in a limited way. There are other observations in the data that point to the after-effects of their phenomenal experience of being stuck at the desk in which the corporeal body comes to the foreground:

You've just been sitting there all day working away. So, things sort of stick with you even when you get up and start moving around …yeah, and you kind of feel like you've been out doing something physical, because you actually feel sort of beaten up, you know …and you haven't even left your chair. But, it takes it out of you it can be just so mentally demanding on you. It's kind of translated into a physical feeling of tiredness and feeling heavy …even a massive headache. You just don't feel the same (Kevin).

I find when I'm inactive… when I've had very long days sitting and I haven't been able to move around like I would, with administrative roles and working on my computer … I'm extremely tired the next day, just from all the sitting. When I'm sitting constantly a lot of the time I notice that I get extremely tired with a heavy feeling ...it feels as though I've fallen into a rut of tiredness and it's difficult for me to get up the next day (Alice).

The narratives in the above section show that there is a bodily reaction in the lecturers, which is linked to their experience of restriction. This results in the corporeal body coming to the foreground of the lecturers' awareness. The lecturers respond to this through self-regulatory tactics in an attempt to regain the balance they have lost. The tactics they employ are described in the next section.

The practice of 'balance' and the corporeal body

Examination of the self-regulation tactics that the lecturers employ reveals that they use tactics at the end of their workday to balance the corporeality they feel in their bodies. The lecturers practice self-regulatory tactics after work in order to "get away from the desk"; to "leave the work at work"; and to get the body "moving again". These tactics are self-regulatory in the sense that the lecturers are 'listening' to their bodies in response to the painful reminders created by working at the computer. The tactics allow the academics to reconnect with their natural life-worlds, and to counteract or release them from their corporeal feelings. The self-regulatory tactics described in the next section involve: movement and exercise; making body-time; avoiding the computer after work; and, decompression.

(i) Self-regulation through movement and exercise

Some of the tactics employed to counteract the above painful reminders involve 'movement and exercise" at the end of the day. These are done because the lecturers say that they need to normalize how they feel.

> *It's important to me afterwards ...to get out and do something active out there to get back to normal. So I've been trying to go for a walk a couple of days in the week at the end of the teaching day, but it doesn't always happen* (Jane).

> *I'll sometimes squeeze in a quick swim or go for a walk. Especially when I've been sitting there all day and begin to feel it in my body* (Kevin).

> *At the end of the working day you have to get back to normal...so you have to do some exercise or something like that. Absolutely (*Matthew).

So I'm usually okay to take my dogs for a walk when I get home and this helps me to leave the work at work (Liberty).

At the end of the day, it's very important to get the body up and moving again… to get it away from the sedentary position when you've been sitting there for a large part of the day (Alice).

In the above quotations it is evident that the lecturers employ certain activities to counteract the painful reminders.

(ii) Self-regulation by prioritizing 'body-time'

A second self-regulatory tactic manifests in the ways in which the lecturers intentionally go about prioritizing body-time for themselves after work. The challenge for the lecturers is to find time at the end of the working day to keep up their levels of physical fitness. In order to ensure their fitness, the lecturers create opportunities that will allow them to focus on the bodily dimension after their experiences of computers in everyday academic practice:

I have to put systems in place at home… having young children… I have to make body time. So I need to create that window of opportunity when, perhaps the children are in bed, to do exercise so that I look after my body. I work really hard at trying to find that time …because realistically I could spend my whole day working from early in the morning at work, till late in the afternoon at work, and then still work all night on our computer [at home] as well, answering emails and communicating through email. So I'm always on the lookout for those windows of opportunity (Alice).

You need to make the effort to move after work...even if it's walking to the post office with a letter instead of using email. You need to be on the lookout for those opportunities, instead of taking the easy way out which would be sending an email rather than writing an actual letter and then physically walking to post it. You need to make time for your body (Jane).

It is particularly important for this group of lecturers to find body-time for themselves at the end of the day. They use their bodies as instruments to demonstrate physical skills and movement in their teaching:

> *And in all of this we have to make time for our bodies to look after them in a physical way. This is so that we can still move our bodies and still perform certain physical tasks and show our students exactly what we believe best practice is in a physical education setting. So that's a real challenge...* (Alice)

> *The majority of time throughout my day is often sedentary which means that I have to work so much harder at maintaining the physical side of my life now...and make time for it. This happens particularly with age because we're not getting any younger, unfortunately* (Alice).

> *But at the end of the day it's very important to get the body up and get it moving again, especially when you've been sitting for a large part of the day. You need to make time for this after work (Jane).*

It becomes evident in the above narratives that the lecturers practice self-regulatory tactics so that they can have 'body time' for themselves at the end of the working day.

(iii) Self-regulation through 'avoidance'

A third form of self-regulation, i.e., a tactic of avoidance, is practiced by the lecturers at the end of the day. Although this tactic relates back to the body, it is being practiced in a different self-regulatory sense by the lecturers. This is a pre-emption of potentially painful reminders that is particularly obvious to people highly attuned to working with the body. The lecturers attempt to achieve a balance between the computer at work and the computer in the home office (which the lecturers deliberately avoid):

At home I try not to use the computer too much. I guess for me the
computer equates with work…it's part of the work thing. So when I come
home from work I don't want to be sitting at my computer (Jane).

As I've said before, in previous years as soon as I got home…I would
turn the computer on. But now I try to keep work at work, so that home
is home for me… and so therefore, I only use the computer at home if it's
a necessity... so there's no need to turn the computer on (Liberty).

I try not to work on the computer at home. If I have work to do on the
weekends, then I try to come in to the office so this is my working hub,
and it's away from the home (Alice).

In Jane's narratives about what she does and does not do after work, we see that
she deliberately avoids doing reading and writing activities at the computer. For
Jane, computers are part of work milieu wherein she experience bodily restriction
at the desk. The sedentariness results in painful reminders for her. Therefore, to
avoid these painful reminders, she intentionally regulates her interactions with the
computer after work:

Well, yes … I can print an email out, but it becomes part of the work
thing then and I don't tend to write letters on the computer because
being on the computer is about work. And I guess for me … the computer
equates with work and sitting for long hours ... and I don't still want to
be doing that after work (Jane).

Rather than use the computer after work, Jane prefers to do hand-written letter-
writing and avoids reading books on a screen. She compares the differences
between reading on a screen and reading an actual book:

Like with reading [long pause] *because it's different to read things there*
on the computer. It is not the same when I read a book on the
computer… even a letter is different when it's done on the computer. So
I choose not to use it after work …

Jane elaborates on how the computer changed her bodily experience:

> *For instance, if I'm reading a real book, I can lie on the floor, on my*
> *back, on my front, I can even prop myself up with arm and read…. and I*
> *can have many different postures or organisations of myself when I'm*
> *reading a book and I can't do that with a computer.*

She also makes a comparison between traditional letter-writing and email
communication, and the way in which the body is implicated in different ways
in these two activities:

> *But these days, more and more … I tend not to be as good a*
> *correspondent now as I used to be ….and I think a lot of it is because we*
> *write by email ….because it's a whole lot quicker in that you don't have*
> *to go to the post office… and get a stamp and send the letter, and*
> *whatever. And in writing or receiving a letter on the computer ….I don't*
> *have the paper from a pad …that I can then take to the lounge room and*
> *curl my legs up…. and sit in a seat or on the floor ….and read or write a*
> *letter. If you're doing it at the computer you're stuck there in the chair.*

Jane provides an example of intentionally regulating her involvement with the
computer after work. Her avoidance of the computer is a deliberate tactic of self-
regulation, which privileges the body and its natural movement. She practices self-
regulation to pre-empt the onset of painful reminders should she continue working
at the computer when she gets home.

(iv) Self-regulation through a circuit-breaker

There is a fourth kind of self-regulation that is related to the intensity of working
at the computer. Matthew has, as he puts it, "a plan to leave all those things that
are part of the tied-to-the-desk job" behind at the end of the day. His plan involves
his practice of 'decompression', which allows him to "clear the head" [as he puts
it] after a typical day at work. This is a tactical response to the intense way in
which he experiences his day during which he tries to do as much as possible in as
little time as possible. As a result of the intensity of his day, Matthew needs a

circuit breaker before re-connecting with his after-work life. He achieves this by returning to the things he enjoys doing most, ice-skating and swimming for example.

Matthew narratives his after-work life:

But at the same time… yeah… I suppose there's a level of decompression that I need to do before I'm able to go and throw myself into family life…and connect with everybody again… you have to have a plan…absolutely…there's an after-work life as well for me, but I need to clear my head first so that I don't take the work things home with me.

Normally during the week, I suppose, how I clear my head is …I do exercise through my ice skating after work, and that helps me to be able to forget about work things, and then I'm able to go home and I suppose, feel normal again. Sometimes I'll go swimming with my little boy …and it's just him and I ….and we just swim with each other and it's just such a nice way to be able to clear my head. After the exercise I feel really refreshed, and back to normal …yeah absolutely…. I'm then able to go and do all the things I need to do …like be a husband and be a dad.

So I suppose when you think about it, every day of the week I need to do some sort of physical activity after work to clear my head and get rid of the heavy feeling. Yes, exactly that …absolutely … I need to clear my head, get back to normal and in that way I get away from the desk and leave the work things behind (Matthew).

Mathew needs a mechanism to separate his busy workday from his other activities. He separates the two by utilizing a physical circuit-breaker that he not only enjoys, but which allows him to reconnect to his home life and after-work life space.

The phenomenon of the felt body

In the academic practice of working with a computer, awareness of the body shifts between different states. As a result, it can disappear in a person's awareness or can be felt after a particular activity. Thus, there are times when an activity is experienced at a pre-reflective of awareness where the physical sense of the body is unfelt (see Section 1 of this chapter). At other times, the sense of the body seems to move into the foreground of the lecturers' experience so that it is felt during the activity.

In this section, the felt body manifests in two different ways. The first way was as 'the restricted body', which featured in the many descriptions that emphasised a phenomenal dimension of restriction in the lecturers' relations with computers. The second way in which the felt body revealed itself in experiences of computers was as 'the corporeal body', marked with painful reminders. This occurred with the passage of time, particularly as the lecturers' experiences became embodied. In addition, their narratives showed that the lecturers practiced self-regulatory tactics (tactical operations) to counter the physical limits of being bodily restricted at the desk, and to deal with the corporeal and painful reminders of the physical body.

In sum, the phenomenon of restriction was first evident in the lecturers' embodied feelings of being 'stuck-at-the-desk', resulting in their awareness that their natural bodily movement was being confined. The second place in which restriction could be seen was in their narratives that revealed their awareness of changing academic practices and the ways in which their bodies are implicated in said change. The third place where restriction became evident in this study was in narratives claiming that it was actually desired or self-imposed by the lecturers because they needed to spend more time at their computers.

As the day passed, physiological discomfort came to the fore in the felt body. For example, in their narratives, lecturers described their feelings of corporeality and

pain that resulted from their interactions with computers, revealing that there is a bodily limitation to the experience. The lecturers experienced a felt tiredness, despite the fact that they had only been sitting at their desks. However, what their descriptions of working with computers actually show is the corporeal body of phenomenology that is no longer in harmony with its actions. Consequently, the lecturers practice tactics to assuage their feelings of restriction and corporeality. Some take little breaks, both physical and psychological, to balance the time spent at the computer, even re-arranging their space at the desk. Moreover, in order to address their experience of corporeality with its painful reminders, they practiced self-regulation; for example, they exercise before and after work, avoid computer work at home after work, or perform a circuit-breaker as a bridge after work.

To really appreciate the descriptions further in this section, one has to return to phenomenological lines of thought on consciousness again. Reflective self-consciousness, as promoted by the phenomenologists, comes with a marked distinction between the reflecting experience and the experience reflected on. Gallagher & Zahavi (2008) point out that the phenomenological line of consciousness describes two possible modes, pre-reflective and reflective, the one making the other possible. "The former has priority because it can exist independently of the latter, whereas reflective self-consciousness always presupposes pre-reflective self-consciousness" (Gallagher & Zahavi, 2008, p 62).

While the descriptions in the previous section reveal pre-reflective self-consciousness operating in the lecturers, in this section of the chapter they reveal a shift to reflective self-consciousness. Gallagher and Zahavi (2008) succinctly sum up the differences in the following way: "In contrast to pre-reflective self-consciousness, which provides us with an implicit sense of self at the experiential level, reflective self-consciousness is an explicit, conceptual, and objectifying awareness that takes a lower order consciousness as its attentional theme" (p.61).

According to the phenomenologists, people's experiences are always there for them in a tacitly self-conscious way because they are pre-reflectively conscious of

them as something that was already being experienced prior to their awareness of it. Through reflection a person can attend directly to the experience itself, turning it into an object for consideration. "Whereas pre-reflective self-consciousness is an intrinsic and non-relational dimension of the experience, reflection is a complex form of self-consciousness that operates with a duality of moments and which involves a kind of self-fission. Reflection occasions a certain kind of inner pluralisation. It makes subjective life thematic in a way that involves self-division or self-distanciation" (Asemissen, 1958/1959, p.262 cited in (Gallagher & Zahavi, 2008, p. 61). It is often through a person's articulated reflection and understanding of their experience, which draws on their pre-reflective consciousness, that the structures in a lived experience are appropriated through the phenomenological method.

If one views the descriptions in this chapter through a phenomenological line of thought, there are aspects in the lecturers' self-consciousness which show that they are unaware of the perceptual motor details involved in the doing of their work at the computer, for example working with their hands at the keyboard. There are other aspects in their consciousness that show an awareness of: environmental factors (e.g., the chair that they have been sitting on and their activities at the computer); previous experiences which are let go in awareness as the lecturers move forward into new activities (e.g., the flow of their experience which is there for them in their pre-reflective awareness and follows a set pattern in their academic day); reflective consciousness which is integrated with their sense of temporality and embodiment as they return to past experiences through their reflections (e.g., they remember certain things that have happened in their past); and, they have projected reflections into a future which has not yet taken shape (e.g., they anticipate things that are about to happen in future activities).

In the descriptions, there is more evidence of time-consciousness (mentioned in Chapter 5 where it was experienced pre-reflectively) which now shows up in the lecturers' objective reflections, revealing the physical impact of work at the computer over an extended period. If one thinks phenomenologically and

compares the two sections in this chapter, there is a marked shift in the lecturers' consciousness involving time and their embodied experience. Time consciousness moves into the foreground of their awareness when the temporal unity and continuity is broken in their stream of consciousness and they become aware of themselves in a bodily sense. Gallagher and Zahavi (2008) point out that phenomenologists appreciate the way in which people's temporal experience always contains an 'internal fracture', a mechanism that permits people to return to their past experiences through reflections which emanate from reflective self-consciousness.

Husserl's (1966a/1991) analysis of time-consciousness and its common temporal structure is a topic that is of particular importance for contemporary discussions in philosophy of mind and cognitive sciences (Gallagher & Zahavi, 2008). Husserl (1966a/1991) argued that experience of any sort has a common temporal structure. According to Husserl, at any moment of experience "a retential reference to past moments of experience, a current openness (primal impression) to what is present, and the potential anticipation of the moments of experience that are just about to happen" (Gallagher & Zahavi, 2008, p.78) is available to a person in their consciousness as "a field of lived presence" (p.78).

Some descriptions show that when the activity is no longer a cohesive temporal continuity for the lecturers, they experience a disruption, which is intertwined with a time-consciousness in their reflections. At such times the lecturers are simultaneously aware of more than just their present experience (e.g., the descriptions reveal that with the passage of time, an embodied disruption registers in the lecturers' consciousness which involves their awareness of a succession of temporal experiences which they feel in an embodied manner when they have been sitting at the computer for a long time). Phenomenologists refer to this as the *Principle of Simultaneous Awareness* (Dainton, 2000), which is an idea that was also taken up by William James (1950).

According to the Principle of Simultaneous Awareness, a person is simultaneously aware of more than just the present slice of experience of a temporal object (such as working at the computer) because in a single, momentary act of consciousness they are able to apprehend the whole succession of their experience there at the computer. Acts of awareness at such times may be momentary or fleeting, but they reveal an expansion of consciousness that is able to apprehend the entire temporal sequence of the activity over time. If one thinks phenomenologically about the lecturers' reactions in the second section of this chapter and the Principle of Simultaneous Awareness, there is definitely a story of disruption, time-consciousness and embodiment within the lecturers' experiences of computers.

Discussion: Contextualizing the theme of the body

This chapter has revealed not just the everyday academic practices that are experienced as the lecturers work on their computers, but, if one applies phenomenological thinking to the descriptions, the lived body is also seen to be operating in those practices.

At the start of their working day in the office, the lecturers are busy with routine practices that tend to be procedural and administrative, e.g., checking email and communicating through email; they are actions that are performed regularly at the computer as run-of-the-mill work. There is a dimension of automation to these actions in that they are experienced as a regular procedure that is done at the start of the day, and intermittently practiced throughout the rest of the day. There are also stimulating activities that make up the taken-for-granted practices; the lecturers experience enjoyment when tweaking, searching and sifting, and bringing things together at the computer. They are taken-for-granted practices due to their perceived ordinary nature and the fact that they are often overlooked as academic labour that is carried out at the computer. Both of the everyday practices require the focus of the academic at the computer. In some instances, the actions

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of the academics are experienced in a disembodied sense - as unfelt - which enables them to expand their practice in relation to time and space. In other instances, the actions of the academics are experienced in an embodied sense - as felt - wherein the physical condition takes pre-eminence over the academic practice.

In Section 1 of the chapter, the physical sense of the body was absent in the lecturers' pre-reflective awareness as they went about their everyday computer practices. If one thinks phenomenologically about their narratives, it becomes evident that there are times when the lecturers' experiences of the practices were underpinned by the lived body that was operating in a balanced harmony with the practices that were being carried out. The embodied sense of the experience was thus 'unfelt' and experienced in the pre-reflective consciousness of the lecturers. This happened in the lecturers in two ways: first, through the lived body (as understood in phenomenology) that practices focal disappearance, and disappears into the background or fringes of awareness in consciousness during work; and second, in the lecturers as their sense of an extended body which operates in the virtual environment of the computer.

In Section 2 of the chapter, it was evident that with the passing of time, the sense of a balanced harmony shifted in the lecturers' lived body, with the result that the felt body came into the foreground of their awareness through a reflective consciousness that objectified their experiences for them. At such times, the lecturers' actions were embodied as 'felt' within their bodies in two different ways: (1) in the feelings of bodily restriction they felt at the desk; and, (2) in their gradual awareness of painful corporeal reminders which were not experienced earlier in the day.

In addition, the lecturers' narratives reveal that they were involved in a practice of balance that could be linked to the tactics they employed. To balance their feelings (or sensations) of restriction and corporeality, they engage in small tactics at the desk, and after work. The former of these feelings, involve micro-tactics

during which they take small breaks, appreciate the view and re-arrange their space at the desk. They allow the lecturers to have brief cognitive and physical breaks when they feel that they are stuck at the desk and experience restricted bodily movement.

The feelings of corporeality in the lecturers can be linked to the following self-regulatory tactics: movement and exercise; prioritizing body-time; practicing avoidance; and implementing a circuit breaker described as 'decompression'. Due to the self-regulatory tactics they employ, most of them were able to regain balance in their natural bodily movement, and restore a sense of harmony to their life-worlds, thereby bridging work and home relations.

(i)   The lived body as a post-Cartesian perspective

Phenomenology promotes a post-Cartesian understanding involving a mind-body unity that has an important place in this discussion of the lived body and its close relationship with cognition and embodiment. How it is revealed in the descriptions, is also visited in the sections below. Phenomenological thinking challenges Cartesian perspectives on the mind-body division. The philosophical background in which the body and mind are treated as two separate entities is embedded in a Cartesian view of the body as a physical object, linking back to Descartes. Green (2015) notes that although understandings of the body as a post-Cartesian concept are not static, it is a rich resource for rethinking professional practice and education. The denial of the cognitive significance of the body has a long tradition in which intelligent behaviour has been treated as if it were independent of the body (Gallagher & Zahavi, 2008). However, alternative approaches can be found in the views of several contemporary philosophers and scientists who have rejected the Cartesian mind-body division. Many of these approaches originate in the phenomenological views of Husserl and Merleau-Ponty, and are implicated in notions of embodiment, embodied minds or the minded body. According to phenomenological lines of thought, the body plays an integral role in cognition.

(ii)   Cognition and embodiment in the lived body

Phenomenologists argue that there is no cognition without embodiment that a person's perceptions and actions depend on the fact that they have a body, and that cognition is shaped by a person's bodily experience. The body is not merely an object that can be seen and touched in the world. In phenomenology, the body is a transcendental principle - a lived body - because it is inserted in a deep way in experience, able to respond to experience as a 'resonating board' (Fuchs, 2005). Merleau-Ponty (1962) argued there is a complex bodily existence, entailing processes of embodiment that are mediated through the lived body. He argued that the lived body is a third category, situated beyond a physiological and psychological understanding of the body. As a principle of experience, it cannot be understood by an external perspective that has its origin in the anatomical study of the body (Merleau-Ponty, 1962). When one considers the descriptions of the lecturers' experiences in this chapter, one needs to view the lecturers as having experiencing, sensorimotor, living bodies which operate in a sophisticated area where the body is subject, experiencer and agent as it gives meaning to the experience it undergoes. This is an operating area of the body that has been missed by Cartesian ways of thinking. "When Descartes – according to standard interpretation- insists that he is a thinking thing, and is not his body, which is an extended thing, he thinks that he can think without his body thinking. In fact, however, Descartes was able to think such thoughts only because he was a living body that included a highly inter-and intra-connected brain" (Gallagher & Zahavi, 2008, p.136-137).

Invisible behind the lecturers' narratives in this chapter, is a complex bodily existence involving Merleau-Ponty's lived body and cognition. The descriptions not only show how the lived body manifests itself in the lecturers' shifting self-consciousness (pre-reflective and reflective), but also how it gives structure (temporality and spatiality) to their experiences. The lived body is operative in every perception and action of the lecturers, even when it acts as the extended body working in virtual space. It constitutes the lecturers' world in that their world is given and revealed to them in an embodied way that is interlinked with

their fields of practice. The lecturers have a proprioceptive sense of their physical movements, whether they are sitting, standing or stretching at the desk. They have a tacit and recessive sense of the space they work in. Even while their postural and positional senses tend to remain in the background of their awareness, their pre-reflective awareness of themselves as embodied beings is always with them.

(iii)   Embodiment, the environment and a body-style

The descriptions also reveal a side of embodiment that plays out in a body-environment relation. According to phenomenology, the environment is not simply a place where people perform actions. The lecturers' sense of embodiment shapes the way they perceive their environment and are situated in it. "To be situated in the world means not simply to be located someplace in a physical environment, but to be in rapport with the circumstances that are bodily meaningful" (Gallagher & Zahavi, 2008, p. 137). The lecturers can sense when they are fully attuned to their surroundings (particularly when they are doing the things they like to do) and they can sense phenomenal feelings of restriction and corporeality in their bodies as well. They operate through lived bodies that are in constant contact with their environment, intelligently integrated with it, and responding to it through a complex mind-body union. Gallagher and Zahavi confirm "…it is increasingly accepted that the brains we have are shaped by the bodies we have, and by our real world actions. Cognition is not only embodied, it is situated and, of course it is situated because it is embodied" (Gallagher & Zahavi, 2008, p. 132).

More can be said about phenomenology's understanding of the body-environment relationship and how the descriptions in Chapter 6 reflected the expression of a specific body-style. Phenomenologists argue that there is an ongoing co-construction between the body and its environment with the result that the body reflects or expresses the environment in some way (Ihde, 2002). Gallagher and Zahavi (2008) note that in phenomenology, the environment "calls forth a specific body-style so that the body works with the environment and is included in it" (p. 138). Bodies not only adopt postures as a way of responding to the circumstances

in their environment, but they develop feelings that are often shaped by the environment in which they operate. If one views the descriptions through the phenomenological thought in this area, there is evidence of a co-construction taking place, one way or another, between the lived body and the environment at the desk e.g., the lecturers' kinaesthetic sense of time and space, their feelings of restriction and corporeality, the tactics, all of these are evidence of an internal phenomenal existence in the lived body's experiences of computers in everyday academic practice. In support of this body-environment union, Gallagher and Zahavi (2008) note: "The 'internal environment' of the body, which functions homeostatically and automatically, and is constituted by innumerable physiological and neurological events, is simply an internalized translation and continuation of the 'external environment' (Gallagher & Zahavi, 2008, p. 138).

It can be argued that: (1) the self-regulatory tactics, are a response in the lecturers to phenomenological registers in their bodies, demonstrating not just a body-style responding to an environment, but the existence of a 'physical literacy' which is bodily-based, and an important part of their understanding of themselves as academics in the field of physical education; and, (2) that their practice of balance demonstrates a bodily-based practical wisdom which needs to be illuminated through the concept of *mētis* (as used by Certeau, 1984). Both of these explanations suggest a hidden, and yet to be articulated form of professional knowledge, originating in a mind-body union.

The lived body experiences space through a spatiality of situation which also eventually becomes part of a person's body-style. Phenomenologists recognise that the lived body operates in a bodily spatial frame of reference, involving a spatiality of situation (Merleau-Ponty, 1962). There are traces of this in the descriptions, particularly when one starts to reflect on the space at the desk and its relationship with the lived body. The lecturers' physical world is definitely organized around their bodies at the desk in the academic office. There, the space is carefully organized as an egocentric lived space to fit in with the personal arrangements that unfold around them e.g., Matthew's preference for a corner

space, Liberty's colourfully arranged area and Jane's meticulously neat desk (Chapter 5). In addition to egocentric space, the lived body also experiences space through a spatiality of situation. The lived body, as perceiver and actor, has a bodily spatial frame of reference that originates in an innate proprioceptive awareness and response to a spatiality of situation. Proprioceptive awareness involves an intrinsic sense of the position of one's body with respect to its limbs and overall posture. This is a spatial frame of reference that is bodily-based and gives a person, an innate understanding of their body in action in a space. On closer examination of this chapter, there are definitely occasions when the lecturers are unaware of their spatiality of situation at the desk i.e., that the computer has restricted natural bodily movement for them. Conversely, there are other times when an implicit frame of bodily reference i.e., their proprioceptive sense of the body kicks in so that they become aware of the way in which they are, or are not, using their limbs.

(iv)   The body schemas of the lived body

According to Merleau-Ponty (1962), the lived body has a functioning intentionality that is evident in some body-schematic processes that are immediately and pre-reflectively understood by the body as a body-schema (Merleau-Ponty, 1962). One of these, described as "the disappearing act of the body" (Gallagher and Zahavi, 2008, p. 144), is evident in this chapter, providing one thinks phenomenologically about it. When the lecturers are engaged in their work at the computer, sensory feedback about their body is reduced at times. The body proper (senses and organs) tries to stay out of the way as the lecturers get on with their tasks. However, as the lived body, it is invisibly present, helping the lecturers with their intentional focus on the task to be performed. Their attention is not on their bodily movement, or limbs. Although they may be sitting in a chair, using their hands and focusing on the computer screen with their eyes, they are unaware of these actions. This almost automatic mode, in which a person's actions are being controlled by body-schematic processes, exists mainly below the threshold of consciousness (Gallagher & Zahavi, 2008). These body-schematic processes are part of the lived body's functioning intentionality that is

immediately and pre-reflectively understood by the body as a body-schema (Merleau-Ponty, 1962).

Merleau-Ponty (1962) argued that there are two dimensions to a person's body-schema: (1) "the close-to automatic system of processes that automatically regulates posture and movement to serve intentional action; and, (2) our pre-reflective and non-objectifying body-awareness" (Gallagher & Zahavi, 2008, p.146). If one considers descriptions in this chapter from a phenomenological standpoint, then both of these body-schemas can be seen to be at work, just below the threshold of the lecturers' consciousness. There are times when they are clearly operating through a pre-reflective proprioceptive awareness of bodily action that allows them to perform intentional actions in an almost automatic way. The intentional object of their awareness is not on their body-in-action, but on the practices they are doing at the computer. At other times, they do become explicitly aware of their body actions involving movement (or lack of it), posture, pain and kinaesthetic sensations.

Phenomenologists agree that body-schemas are constantly changing, acquiring new skills and habits as the body interacts with its environment. The lived body is much more than a static fixed set of skills and abilities (Dreyfus, 2006). Gallagher & Zahavi (2008) point out "…the lived body extends beyond the limits of the biological body" (p.138). It can even expand its sensory repertoire to move freely in artificial environments created by complex technologies. This remarkable phenomenal adaptability resonates in the descriptions that show the lecturers operating skilfully in the virtual environment of the computer through extended bodies. They 'feel' the virtual world through the experiential field the computer discloses for their bodies. This happens in the same way that Merleau-Ponty's (1962) blind man's cane, once mastered, becomes part of the body where it eventually provides a parallel to sight.

(v)   Body-schemas with a physical literacy

A physical literacy is evident in the body-schemas of the lecturers in this study. The lecturers are particularly responsive to their kinaesthetic (sensorimotor) systems and the fact that computers afford limited bodily movement for them. The lecturers are in possession of a specialized bodily, kinaesthetic self-awareness that reveals their physical literacy. They know their bodies as having a set of skilled actions (capabilities belonging to the domains of physical education, health and movement) that they have acquired and embodied in their professional practice. From a phenomenological perspective, some of the descriptions do reveal that the lecturers have specialized body-schemas that are not always 'comfortable' with the sedentary nature of the actions experienced during the doing of computer work. At such times their bodies are in the foreground of their awareness, an object in their way, no longer supporting their cognitive work.

Conclusion

Kinsella (2015) refers to a new field of thought in research "that attends to the place and possibilities of 'the body' and 'embodied perspectives' for advancing understandings of professional practice" (p. 245). This chapter resonates with that new field of thought in that it depicts an 'embodied turn' and 'corporeal turn' in its theorizing of lecturers' everyday practice. In the final chapter (Chapter 7), the interaction of the body with the themes of time and space (see Chapter 5) will be discussed as an interrelated field of lived experience which can be analysed using Certeau's (1984) productions.

CHAPTER SEVEN: DISCUSSION

Introduction

In this study, I investigated lecturers' experiences of computers in everyday academic practice. Particular focus has been upon a group of lecturers who work in the field of physical education. Five lecturers participated in the research, each doing two in-depth interviews which focused on capturing experiences covering three temporal sections in their work day: the start of the day at work; working at the desk during the day; and leaving work at the end of the day.

The core research question in this study is: 'How do lecturers experience computers in everyday academic practice?' As the investigation evolved, the following subsidiary questions arose: 'What might a rich description of the lecturers' experiences disclose if it were sought from everyday practice which focused on ordinary activities at the computer in a typical day?'; and 'How is the relationship between the lecturers and their computers experienced in a context that privileges the moving body?' In order to arrive at a deep understanding of the phenomenon of lecturers and their computers, the subsidiary questions became important strands that could be traced through concrete descriptions of the lecturers' pre-reflective experiences.

In my attempt to answer the questions, two distinct, but complementary theoretical frameworks were used in this study. My understanding of everyday practice was shaped by the philosophy of Michel de Certeau (1984) (see Chapter 2). It was Certeau's intention that his ideas would be continued and explored in other milieus. Thus in this study, they were explored in one particular academic office wherein the lecturers' everyday academic experiences of computers unfolded at the desk. I also adopted a phenomenological approach because although Certeau was interested in people's practices and behaviour, he did not study these through a perspective of lived experience that deals with people's

consciousness. The research process and data explication was guided by Giorgi's (2008, 1970) stages of phenomenological practice augmented by Van Manen's (1997) hermeneutical approach to phenomenology (see Chapter 4), which allows for descriptions of lived experience to be meaningfully interpreted by the researcher. As the investigation progressed, Merleau-Ponty's (1962) phenomenology of embodiment (see Chapter 3) proved useful for interpreting the embodied nature of the lecturers' experiences. This study's modified phenomenological approach resulted in a schematic diagram which maps out the phenomenon as it appeared in the lecturers' consciousness as a unified form (*Figure 1: The body in the phenomenology of academic computer use).*

In this final chapter, the discussion will be structured around this schematic diagram and its various interconnected dimensions and horizons. In the first part of the discussion, I will look at how the lecturers' narratives revealed a phenomenon in which the body plays a central part in the consciousness of the lecturers in their experiences of computers. The lecturers' bodily awareness was integrated with the existential of time and space. The interaction of body, time and space also led to two modes of production involving the unfelt and felt body. Next, the productions will be explored, beginning with examination of the characteristics of primary and secondary modes of production before moving on to discuss each production in turn. This is followed by further reflection, highlighting other dimensions within the phenomenon. Following upon the above, my study's contribution to the literature will be discussed. In the last part of the chapter, limitations will be noted and the potential for future research discussed.
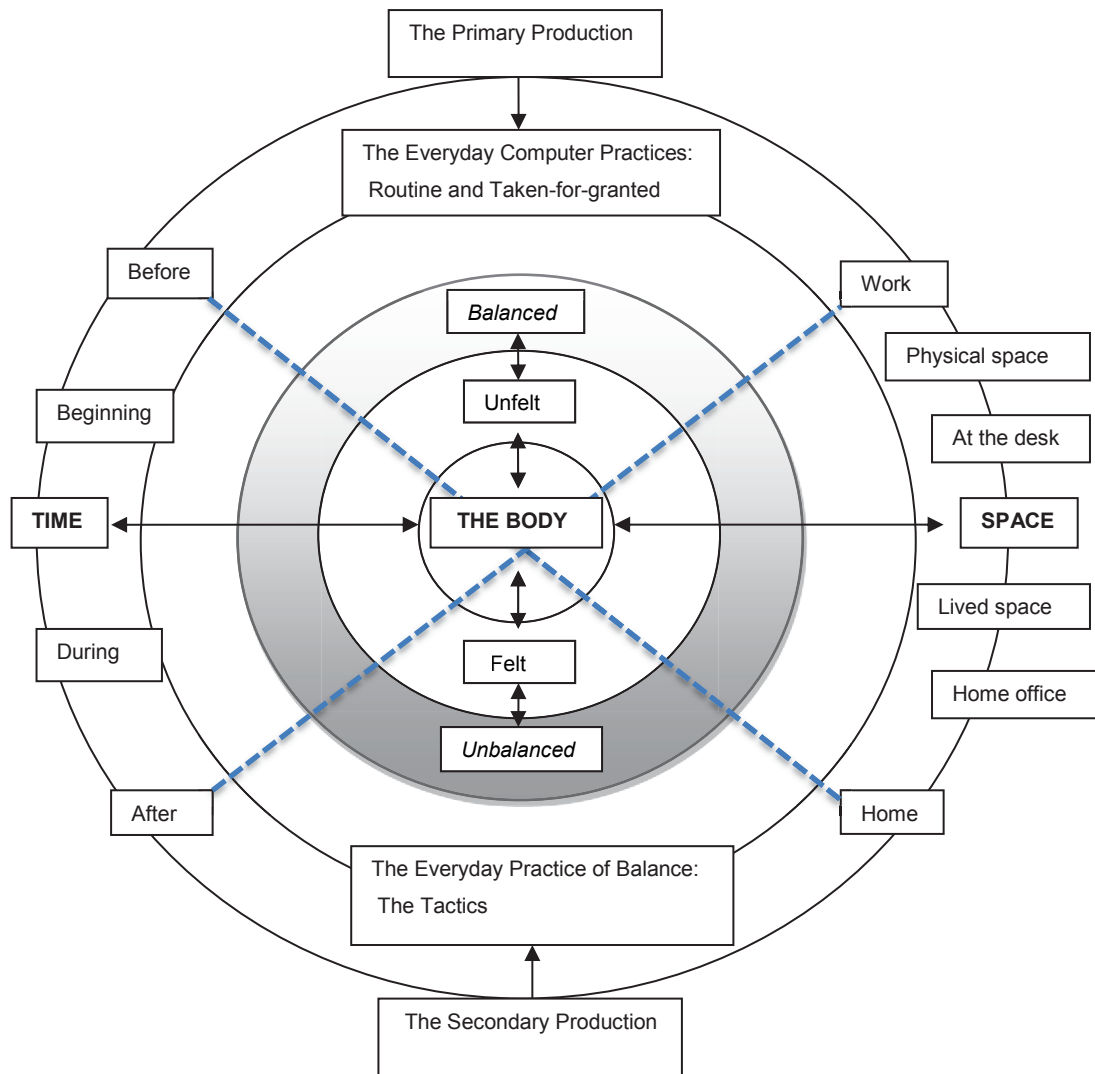
Figure 1: The body in the phenomenology of academic computer use

The body in the phenomenon

What exactly did I find in this investigation?

I found that the lecturers responded to their experiences of computers through the lived body, which extends to several horizons. Figure 1 is a composite framework or map that captures a larger picture of the various structures (themes) which came to light in the data. The lived body, which is beyond a physiological and psychological understanding of the body, is located at the centre of the

phenomenon, as a phenomenal experiencing body that extends into multiple horizons. It also aligns with Merleau-Ponty's (1962) interpretation of the lived body being part and parcel of its environment and of the experience it undergoes in that environment. Green and Hopwood (2015) have returned to Grosz's (1994) crucial question about what it means to place the body at the centre of investigations. By extension, they also ask why the body matters in practice, and why it is important for professional practice (Green and Hopwood, 2015). In this investigation I found that the lecturers responded to their experiences of their everyday practices through a deep bodily awareness which was sensitive to time and space, and experienced in different ways within the phenomenon.

In the academic office, the desk with its computer showed up as an anchoring point for the lecturers' bodies, i.e., a place where the everyday practices were being carried out. Whenever the lecturers used the term 'at-the- desk', they were, more often than not referring to themselves working at the computer on the practices. Consequently, 'being at the desk with the computer' in this study came to light as a place where the lecturers were bodily located when they were not teaching. At the desk, time was not just experienced in a linear way in a typical day, but also as a rhythm and pace which was deeply integrated with the practices being carried out. In addition, space was not just about objective space in different locations (such as the desk, lecture room or home office), but also about a third space - a lived space - that was being manipulated by the lecturers. In phenomenology, a physical place is not just seen in terms of an objective space, but rather as a space in which a lived temporal and spatial experience plays out for the body. I will elaborate upon this further in my discussion to show how the integration of body, time and space were enacted in multiple ways in the phenomenon.

Furthermore, when I considered the data through the lens of phenomenology, it became clear that the lecturers' bodily awareness was absent from some descriptions resulting in the phenomenon of the unfelt body at the desk. In other descriptions I found that the body came into the foreground of the lecturers'

consciousness. This shift in consciousness also correlated with the passing of time and the ways in which the lecturers' experienced the space at the desk through their bodies. In fact many of their narratives revealed how they felt restricted and stuck at the desk. This allowed me to explicate the phenomenon of the felt body during the experience.

In effect, what emerged from my analysis of the data was a story about lecturers experiencing the phenomenon in two ways: first, when they were operating though the 'unfelt body', particularly at the start of the day; and, then second, through the 'felt body' which came to light later in the day at the desk, urged by feelings of bodily restriction and corporeality. However, when I looked more deeply into the data, I found that there was much more behind the story of the shifting body awareness. This involved the two productions that were occurring in the phenomenon as a result of the interactions between body, time and space. I will now proceed to discuss these productions.

Productions in the phenomenon

Certeau's (1984) philosophy of practice will be used here as a lens through which to explore the primary and secondary production in lecturers' experiences of computers. Certeau (1984) expressed interest in the production that takes place as a person interacts with a representation (which can be an artifact, a text, even the act of walking through the city) and in the way in which a concealed secondary production is juxtaposed against the main production (see Chapter 2). According to Certeau (1982), if one seeks to understand people's real relations with a practice (in this study it was lecturers and their computers) and what the latter means to them, their relations must be analyzed on three levels: (1) through the mode of behaviour or activities that the practice calls forth as people go about the main production; (2) through examination of the concealed tactical operations people use as they interact with it; and, (3) by reflecting on other sides of the secondary production, involving age-old ways of operating which speak of a deep intelligence and wisdom. Equally important to this discussion is Merleau-Ponty's

(1962) phenomenology, which will be used as a second lens through which to elucidate the productions.

Characteristics of the primary production

My study brought to light the two types of production that occurred in the phenomenon of lecturers and computers: primary and secondary production. Primary production may be described as the 'open practices' that lecturers carry out every day at their computers as part of their academic responsibilities. My study showed that primary production was done with conscious intention at the computer and structured by known conventions that have become part of the practice of higher education teaching and the expectations of lecturers. Primary production involved two categories of everyday academic practice that the lecturers carried out at their computers (see Table 8).

Characteristics of the secondary production

 I also noted a secondary production, i.e., 'concealed activities' which were being done concurrently with the primary production of open practices. This involved the personal tactics, which the lecturers tended to use naturally and at an unconscious level of everyday life to restructure the ways in which they experienced their open practices. Here I found that the secondary production originated in the felt and unfelt bodily states. This could be linked to Merleau-Ponty's (1962) body-subject and its body-schema, which was sometimes in balance with the experience and at others out of balance with it. This meant that a secondary production of tactics - which I found could be categorised as a concealed everyday practice involving 'balance' in the lecturers' relations with the practices – occurred simultaneously with the main production of practices.

The primary production: The everyday academic practices

In this section, I describe in more detail how the main production (tabulated in *Table 5: The primary production in everyday academic practice*) became manifest in this investigation, and what it revealed about the phenomenon of academic computer use.

Table 5: Primary production in everyday academic practice

Primary Production	
Everyday Academic Practices	**Time and Space**
Routine practices Checking email Communicating through email **Taken-for-granted practices** Tweaking and reworking Searching and sifting Bringing things together (The everyday practices were carried out through different spatio-temporal styles of practice)	**Time as linear** **Time as temporal** Different personal understandings of time interacted with practices **Space as physical (objective)** **Space as a lived personal space (egocentric space)**

The main question in this investigation 'How do lecturers experience computers in everyday academic practice?' can be answered not only through the primary production itself which came to light in the lecturers' experiences in a typical day, but also in the way in which it was deeply integrated with each lecturers' experience of time and space, resulting in different spatio-temporal styles of practice. On a typical day, the main production started early in the morning when the lecturers, with the exception of one, arrived at the academic office, immediately went to their desks, and switched on their computers. Their descriptions of their experience revealed the 'open practices' associated with

academic computer work. At the desk, primary production first began with the *routine practices* that involved 'checking' and 'communicating through email'. The lecturers did these activities routinely and intentionally as they carried out the typical duties accepted as work that academics do daily at the computer. Interestingly, at this stage of the day there was no clear evidence of secondary production in the data.

As the day progressed, primary production continued at the computer. The *taken-for-granted practices* were visible in the ordinary academic work and teaching labour that lecturers carried out at their computers, academic activities that involved 'tweaking and reworking', 'searching and sifting', and 'bringing things together'. As their working day in the academic office drew to an end, the lecturers' relations with their respective home office computers assume a particular importance vis-à-vis their 'after-work-behaviour'. My research revealed their different relations with the computer in the home office, as well as their different understandings of academic work after leaving the academic office.

In addition to the everyday academic practices evident in the primary production, a further factor that emerged from the data was the way in which said production was marked by each lecturer's unique inhabitation of time and space. There was a tremendous variety in time and space within the phenomenon (see the two columns in *Table 6: The variety of time and space)*. For example, my exploration of the temporal dimension in the primary production revealed that it commenced in different ways for each of the lecturers. And, it was marked by different speeds, rhythms and patterns as it was carried out. This meant that each lecturer's experience was not only embedded in linear time, but also shaded by a temporality which was unique to his/her way of being inserted in linear time and experiencing computers. Space as objective/physical and a lived third space (see the second column of *Table 6: The variety of time and space*), was also intertwined with the linear and temporal dimensions of the practices, resulting in each lecturer's experiences being located in a unique spatiality. All of the lecturers

began the day from different physical and lived spaces; and, they carried this distinction with them throughout the working day.

Table 6: The variety of time and space

Time as linear and temporal	Space as objective/physical and lived space (third space)
The start of the work day Immediate/Delayed time Work time: Before/During/After time Speed/Tempo/Pace: Fast/Slow/Steady Regularity: Constant/ Interrupted Quantity of Time: Insufficient/Sufficient Continuous/Divided time Type of time: Work-time/ Home-time /Desk-time/Family-time/Body-time/Computer-time /Present-time/ Past-time	Work Space: Academic office/At- the desk/ Lecture room/ Home office Place and Space: Work/Home /Other Physical and psychological space Private concealed space/ Public space Personal space at the desk: Colourful/neat/ordered Virtual space Creative and formative space in the computer

In the main production, I found out that in the main production each lecturer used and experienced time and space in a unique way. For example, in Kevin's day there was a marked division of time and labour in his primary production that took place in an extended day that played out in several spaces. The first part of the day was taken up with his production of academic practices and teaching, while the second part was allocated to his thesis in the home office. The flow of his experience was marked by an ordered sense of time, despite the fact that he experienced his production as two days that he tried to fit into one. He made a smooth transition from his work space to his home office space. Kevin's narratives also showed that he experienced a space that was located in the computer. He felt that he could enter and leave this space at will as he worked on his academic writing. Moreover, he saw it as a formative and creative writing space in which he was able to manipulate his thinking through the journal articles

and textbooks, which were being brought together in the computer. In a similar way, Matthew also incorporated two jobs into one day; but he structured his time differently. He multi-tasked by working on two computers simultaneously with the result that his relations with the computer were experienced in a condensed temporal frame, which moved at a fast pace. At the end of his working day, his transition to his home space and family was not easily handled. Working at the computer in the home office was eschewed in favour of family time.

Using Certeau as a criterion, the lecturers could be seen not just as producers of a primary academic production, which was taking place at the computer, but also as producers of a personal spatial-temporal style of practice that they used while they went about the main production of their everyday academic practices. Despite the fact that they were all doing the same everyday academic practices, the lecturers each had an individual style of practice peculiar to their creative manipulation of time and space in their relations with their computers. Furthermore, their personal spatio-temporal styles revealed an inner creativity and agency as they carried out their everyday practices. Each lecturer was deliberately structuring how he/she would experience working at the computer and how and where that experience would unfold as the day progressed.

However, within the personal spatio-temporal styles that marked the primary production of everyday practice, Certeau's hidden secondary production was also evident in the data. Although production was invisible, there was evidence of its existence in the participants' narratives, by extension providing an answer to the first subsidiary question. I found an interesting correlation between the actual tactical measures that the lecturers employed and the phenomenal bodily experience linked to their everyday practices. I explore this concealed production further in the following section.

The secondary production: tactics employed in the everyday practice of 'balance'

In this study, I found a secondary production involving tactical operations *(see Table 7: The secondary production in everyday academic practice)* linked back to a concealed practice of balance which could be correlated with the lecturers' feeling 'in balance' or 'out of balance' in their bodies as they went about the primary production.

Table 7: The secondary production in everyday academic practice

Secondary Production	Everyday Practice of Balance	The Body
	The unfelt body (in balance) In the background of awareness during the everyday academic practices	**The lived body** - at one with what it is doing

	The felt body (out of balance)
	(a)The phenomena of the restricted body and the micro-tactics:
	  Taking small physical breaks
	  Taking mental breaks
	  Manipulating space at the desk
	
	(b)The phenomena of the corporeal body and the self-regulatory tactics:
	  Movement and exercise
	  Body-time
	  Avoidance
	  Circuit-breaker
		The corporeal body
		
		Time and space –with the passing of linear time and objective/physical space at the desk they became aware of restriction and painful reminders

In order to appreciate the lecturers' shifting bodily experience fully and how it was linked to these tactics, I briefly return to Merleau-Ponty's (1962) conceptualisation of the body, leading to an analysis of how it is implicated in the tactics. Merleau-Ponty's (1962) understanding of the body as having a natural body-schema and way of fitting into the world cannot be discounted in the lecturers' personal experience and in the ways in which their changing awareness

of their bodies could be linked to a concealed production of tactics involving each one's individual sense of balance.

I found that the tactics were really about a practice of balance that was occurring alongside the primary practice. For example, the main production revealed that the academics often sat for long stretches of time at the desk. At the desk, and with the progression of time, they had a phenomenal experience of shifting bodily awareness, which involved restriction and corporeality. Consequently, when I applied phenomenological thought to particular descriptions, it was evident that the 'intelligent' body, as conceptualized by Merleau-Ponty (1962), had a part to play in the tactics that were being used to restructure the way in which time and space would be experienced. It also provided an answer to the second subsidiary question 'How is the relationship between the lecturers and their computers experienced in a context which privileges the moving body?'

The secondary production became particularly evident when I looked at how the lectures went about practicing 'balance' to deal with their feelings of bodily restriction and corporeal discomfort. For example, they resorted to a range of micro-tactics at the desk that involved taking small physical and mental breaks, and manipulating the space at the desk. Their employment of these micro-tactics not only helped to facilitate their primary production, but also provided the lecturers with small opportunities to escape or modify how they were experiencing computers as they went about the primary production.

The data also revealed that after leaving work, the lecturers practiced 'self-regulatory' tactics to counteract the corporeal discomfort they were feeling, particularly if they had been sitting at the desk for a large part of the day. This could be seen in how they went about practicing 'balance' after work, through tactics involving: movement and exercise; prioritizing body-time; avoiding the computer in the home office; and, utilizing circuit-breakers which allowed them to 'decompress'. Furthermore, these tactics allowed them to reconnect with a lived bodily vitality that was in harmony with the life-world in which they customarily operated. Therefore, in this investigation, I found that the secondary production

was not only proof of the existence of an invisible embodied dimension within the phenomenon of academic computer use, but also that the lived body was playing a part in it.

For example, there were descriptions of experience in the data that could be framed through the lived body of phenomenology, which although in the background of consciousness where it was unfelt during the primary production of routine- and taken-for-granted practices, nevertheless assisted the lecturers to engage with the academic world via the computer. Thus, each lecturer's lived phenomenal body was busy with its own concealed production of tactics involving consciousness that was unfelt and in the background or margins of awareness, during her/his experience of the computer. One could thus argue that the lived body, through its own tactics of being 'absent' during certain experiences, was really operating in harmony with the practices that were being done at the computer in two different ways: (1) when bodily awareness shifted into the background or margins of consciousness; and, (2) as the extended body operating in the virtual world where it continued to be unfelt in the present awareness of the lecturers. For most of the lecturers, this was especially evident in the first part of the day, when they were automatically drawn to their desks, started checking their emails, and spontaneously moved on to engage with other tasks at the computer. What I came to realise here was that that the lived unfelt body was itself involved in a concealed production that was actually facilitating the primary production.

Moreover, with the passage of time, the unfelt body moved to the foreground in the subjects' practices, a process evident in the lecturers' narratives which resonated with their felt bodily states involving feelings of restriction and corporeal pain. The felt body, like the unfelt lived body, was therefore, implicated in the secondary production of tactics. It could be argued that this eventuated because the lecturers were being true to themselves as academics that were operating in a specific life-world that structured their body-schemas in a natural way of being. Hence their attempts to use tactics to maintain or regain balance.

What is new in this study, and in understanding the secondary production, is the way in which the lecturers' descriptions of their tactics may be 'read' or analysed through the phenomenal body, which responds through a natural intelligence when it is in or out of balance with its experience. If one thinks first phenomenologically about the phenomena of the felt and unfelt body in the data, then about the tactics, it becomes evident that there is a deep interconnection between the body as felt or unfelt during the primary production and each lecturer's personal understanding of time and space in his/her narratives. My study illustrates this interconnection as an integral feature which cannot be ignored in the phenomenon, given that academics working with computers are either involved in - or shaped by - their secondary production as they prosecute their primary production.

Reflecting on the two productions

Reflection on the phenomenon as a whole (see Figure 1), could give rise to questions of whether or not the primary production actually commences beyond the horizon of the academic office. As already observed, the lecturers' day commences in the home space. It is here that their focus is on family, getting ready to travel to work, and generally preparing for the working day in ways that are obvious to the external observer. They may even check and communicate via email prior to actually leaving for the office. At this point in the day, it seems feasible to speculate, there may well be a concealed secondary production already going on in the home space. For example, lecturers may be feeling physically tired from working the previous night in the home office; or, they may feel apprehensive about the day ahead and how much work they have to get through. They may even be gearing themselves up to face the working day using their own routines and tactics. In her narrative, one of the lecturers said she always did yoga before work in the morning. Another stopped to pick up a take-away coffee on the way to the office. Lecturers working on theses or journal articles may have worked late into the night in their home offices.

Another aspect of the lecturers' experiences may go further in answering the question 'What might a rich description of the lecturers' experiences disclose if it were sought from everyday practice which focused on ordinary activities at the computer in a typical day?' Certeau's (1984) interpretation also allowed the secondary production to be considered as a *poïesis* characterized by skillful action and creativity. For Certeau (1984), the term *poïesis* had a particular meaning linked to the Greek word *techne* where it was associated not just with skill and craftsmanship, but also with a creative dimension. This study has proven that there is indeed a creative dimension within the phenomenon.

As suggested in Chapter 2, a *poïesis* is not necessarily visible; for this reason it is difficult to find and articulate. Buchanan (1992) supports this proposition. Examination of their narratives reveals a Certeau-ian *poïesis* not only in their productions, but also in tactics employed by the academics. Their narratives reveal a group of lecturers who have all the relevant abilities to competently practice their academic skills and craftsmanship at the computer as they go about their everyday practices on a typical day. Although these practices are generic, the lecturers bring their own creativity to the way in which they experience their labour during these practices. I found that the academics in this study made personal adaptations that suited their individual needs without interfering with the main production, creative adaptations that were only known to them.

Furthermore, the lecturers demonstrated a hidden agency, i.e., through the tactics that allowed them to re-structure their bodily experience of restriction and painful corporeal reminders at the end of the day. Far from being passive recipients of the felt experience of computers that has been embodied in them, they responded in creative and intelligent ways by restructuring their embodied experience through their tactics of self-regulation at the end of the working day. These tactics (a) helped them to return to the natural body schemas they were used to operating, and, (b) restored their natural way of being which was second nature to them.

Although the secondary production of tactics showed that the lecturers practiced an agency and inner freedom which empowered them, one could also argue that there was evidence in the data of a life force in which the body as understood in Merleau-Ponty's (1962) phenomenology played a part in the practice of balance. For example, analysis of areas of the data showed that the lecturers' appeared to be responding to an inter-corporeal voice originating in their individual body-schemas. They responded to this voice in a creative way that revealed 'intelligent' bodily-based behavior that could be traced through their narratives. They were particularly sensitive to the body's 'inner voice', which cautioned when their body-schemas were no longer in harmony with what they were doing. They responded to their experiences of computers by employing self-regulatory tactics, which were in harmony with their life-world of physical education that privileged the active body.

Certeau (1984) showed particular interest in uncovering a deep intelligence and tacit wisdom in behaviour (*metis* see Chapter 2)*,* which played out in the background of people's everyday practices. He argued that by drawing on this intelligence and tacit wisdom, people are able to transform their environments without affecting their primary production. In addition, *metis* involves the use of tactics that seamlessly integrate with the main practices as they are being carried out. Furthermore, through the concealed tactical operations which people implement at the right point in time, they are able to produce "a founding rupture or break" within the practice (Certeau, 1984 p.81). During this investigation, I found that the tactics employed by the lecturers provided evidence of an intelligent and tacit wisdom that resonated with Certeau's appreciation of *metis*. In this study, through the secondary production, I found out exactly how the lecturers went about making that break or rupture during the main production and later at the end of the working day.

Conclusion to the discussion on the productions

In this investigation, I found that the phenomenological body (the lived experiencing body) played a central role in the phenomenon of academic computer use. Furthermore, the phenomenon was deeply integrated with each lecturer's understanding and experience of time and space in horizons that went beyond the academic office. During their everyday academic practices, the lecturers' awareness of the body shifted from an unfelt sense to a felt sense, which, upon deeper analysis, translated, into the lecturers' feeling either in or out of balance. A Certeau-ian analysis provided evidence of two productions in the lecturers' experiences of computers. My analysis showed that the primary production was about academic open practice done with conscious intention and structured by particular academic conventions. In contrast, the secondary production involved concealed practices and personal tactics that often occurred at an unconscious level. It also revealed the existence of a powerful agency at play in the lecturer's interactions with computers, a finding that makes a particularly relevant contribution to the literature that I discuss next.

The contribution of this study to the literature

In Chapter 2 three areas of literature were identified as significant for this investigation and its questions. I now briefly return to each of these areas to comment on the findings and their contribution to the key issues and assumptions that underpin the literature.

The field of higher education literature

When one considers computers in the context of higher education, they are frequently seen as ubiquitous tools that affect every academic's practices. In effect, they have become are also very much part of everyone's work practices wherein they tend to be taken-for-granted. However, this study's findings challenge the underlying assumption in much of the higher education literature,

i.e., that computers constitute a neutral force in lecturers' dealings with them. My study has shown that this is clearly not the case. Despite the fact of the plethora of studies dealing with learning and assessment involving computer technologies, few have dealt with academics' subjective experiences in this area. With the exception of McShane's (2004, 2005, 2006) research, which focused on lecturers moving into online teaching, lecturers' experiences linked to ICT have yet to be fully explored. My study makes a contribution to the extant literature by highlighting lecturers' actual experiences of computers in an everyday setting, introducing the human dimension into this interaction. It also proposes two perspectives, which may be used to understand lecturers' engagement with computers and their experiences in the digital environment. McShane's (2006) research argued that not only were lecturers' making an uneasy transition into the online environment, but their effectiveness as performers, carers, and directors was being challenged by ICT. While McShane (2006) provides an informed overview of how lecturers are adapting to online teaching and the challenges to their identities, my research shows that there is not only a main production occurring, but also a concealed practice of tactics devised by the lecturers to cope with the impact of computers on their everyday academic practices. In doing so, it revealed a complex human dimension to academic's experience at the digital interface where cognitive abilities are clearly intertwined with the lived body and its immersion in time and space.

There is another side to this study, which is located in its resonance with Heidegger's significance of educational thought and practice, and the literature that recognizes the ontological dimension to epistemology in higher education (Barnett, 2004, 2005; Dall'Alba & Barnacle, 2005, 2007). Heidegger (1967/1998a), who was critical of thinking and knowledge in higher education, questioned the ways in which those concerned "increasingly instrumentalise, professionalise, vocationalise, corporatise and ultimately *technologise* education (Thomson, 2001, p. 244 cited in Dall'Alba & Barnacle, 2007). He argued that education should be about the transformation or turning around of the whole human being, and that being and knowing were deeply intertwined with the

context in which they took place. Through his concept of Dasein, he emphasised the integrated nature of people's ontological experience with the world, and their being-in-the-world.

Heidegger described the technologisation of human being (Dasein) and nature using the term *enframing,* which he took from early Greek philosophy. "Enframing means the way of revealing which holds sway in the essence of modern technology and which is itself nothing technological"(Heidegger, 1954/1977, p.20). He was deeply aware of the way in which human being and nature can be changed and reduced into useful and exploitable commodities through *enframing.* His essay titled *'The Question concerning Technology'* (1977), in which he presented his critique of reasoning and instrumentalism, provides a thought-provoking view of the highly technologised production that is taking place in higher education today. Drawing upon his early critiques of higher education (starting as far back as 1911 at his inaugural lecture at Freiburg University), Heidegger claimed that he had uncovered an ontohistorical nihilistic logic in human thinking, *enframing*, which could have a negative impact on educational institutions. He was concerned that educational institutions, with their increasing technologisation and their policy of *enframing,* could bring about a nihilistic technological understanding of being.

According to Heidegger (1967/1998a)*,* knowledge is not accessed conceptually or intellectually in isolation, but through a deep contextual immersion that involves activities and practices with things and others. People are situated in the world through their knowing (knowledge), being always ready and open to the possibilities of being in particular social and historical contexts (Heidegger, 1993/1978). Formal knowledge is not just about an intellectual side which is acquired and manifested in a person's way of thinking as knowing, but about knowing and being which are interdependent. "Instead, knowing is always situated within personal, social, historical and cultural setting, and thus transforms from the merely intellectual to something inhabited and enacted: a way of thinking, making and acting. Indeed a way of being" (Dall'Alba & Barnacle,

2007, 682). Ontology and epistemology are, therefore, linked in a complex and symbiotic relationship that involves an embodied experience resulting in many possibilities of being. If one reflects on the lecturers' narratives in this study, and how they respond to their academic responsibilities through knowing which has originated in an historic understanding of their work as lecturer-teachers, it becomes evident that they are on a cusp between past ways of knowing themselves as academics and new ways of being and becoming technologized academics.

Heidegger's concept of human Being (*Dasein*) and its deep connection with knowledge embodied in the humanities and natural sciences, allowed him to question existence and how people's existence can be changed as they acquire knowledge that has also undergone changes. He was not referring to surface academic trends, but rather expressing deep concern vis-à-vis the ontological impact on the ground of educators' existence, and for what happens as their knowledge and practices change in response to technologisation. He was questioning the ontological deficit in *Dasein* resulting from higher education's preoccupation with hyper-specialisation, its pursuit of fragmented bodies of knowledge and individuals who exist in cultivated academic areas, only for their use-value (Thomson, 2001). From a Heideggerian perspective, the inherent logic of *enframing* in human thinking is always driving this process, resulting in a technological understanding of *Dasein* that gradually transforms existences into resources to be optimized. Thomson (2001) succinctly sums up the relevance of Heidegger's perspective of *Dasein* in the following way: "Our Dasein - in the community of researchers, teachers, and students- is determined by science or knowledge. Our very 'being in the world' is shaped by the knowledge we pursue, uncover, and embody" (p.250).

In the final discussion of this study, I have reflected on whether the phenomenological descriptions of the lecturers' experiences of computers in everyday practice revealed the nihilistic side of *enframing?* ; or stripped the lecturers of their intrinsic understandings of themselves, transforming them and

their knowledge into resources to be used for optimal effectiveness? In the first set of interviews, the lecturers' pre-reflective understanding of their experiences was marked with an invisible agency which could be seen in the many ways in which they were resorting to *bricolage* as they coped with their technologisation.

In this study, it can be argued that the lecturers were responding to their *enframing* by computers through *bricolage.* According to Certeau (1980), ordinary people always manage to 'make do' or get by in situations which have been structured by those in power. They constantly adjust their practices using small ruses or tricks in creative ways. Through their own logic, they recombine the rules and products that already exist in the culture of their context, while still co-operating and doing what is expected of them. In this study, it can be argued that the lecturers resorted to *bricolage* in two ways. (1) When they were executing the taken-for-granted practices as they prepared for the day's teaching; and, (2) used tactics to 'make do' and improve the ways that they experienced their computers. By resorting to *bricolage,* lecturers revealed an inner freedom and power that allowed them to cope with their *enframing* by computers.

The lecturers' use of *bricolage* could clearly be seen in the first set of interviews. These revealed each lecturer's spontaneous pre-reflective attitude in an immediate sense in his or her consciousness, and before they had time to reflect on their experiences. However, this was not the case when I met them the second time, to pass on the transcription of the first interview. In that round of discussions, *bricolage* receded into the background, to be replaced by the lecturers' concerns about technology. This can be attributed to the fact that after the first interview, lecturers had time to reflect on their relations with computers and this meant that many of the comments they made afterwards came from a reflective attitude on technologisation, rather than a pre-reflective attitude (important in Merleau-Ponty's phenomenology). For this reason, I only comment briefly on the second set of interviews to acknowledge that they do show an ontological dimension that mirrors Heidegger's concerns about *enframing*. That interview is really outside the boundaries of this study with its focus on Merleau-Ponty's motor-

intentionality, and therefore, should become part of a future project that will draw on Heidegger's phenomenology with its 'ready-to-hand' approach. Nevertheless, his concerns need to be noted and do have a place in this study.

Heidegger (1993/1978) argued that educators need to look at the history of Dasein (being) to fully understand where contemporary education is going. To achieve this, they need to be able to (1) analyse the nature of their ontological epoch; (2) understand how their intelligibility (knowledge) is grounded through *enframing;* and (3), realize how *enframing* moulds present understandings of education. When I looked at the transcriptions of the lecturers' comments from the second meeting when we met, the above three dimensions are evident in the numerous ways that the lecturers were questioning and commenting on their teaching, what they taught, and how their practices were changing as a result of computerisation. They were aware that their existence and the ways in which they experience their Dasein as educators in the field of physical education were undergoing a transformation. However, one needs to see the implications of this for the lecturers in this study, especially when one considers the lived body's sophisticated malleability as it mediates body-styles and body-schemas that are constantly changing through embodiment, often at a pre-reflective level of consciousness. As the practices in their disciplines change, they will also be changing.

Perspectives on human-computer relations in society

In a broad sense, the views in this literature are shaped by a deterministic stance on technology, which reveals a concern about technology's ability to change culture and society. One of the main assumptions in this extant body of literature claims that people's relations with modern technologies should not be taken-for-granted because they do have an impact on society. This extant literature, which tends to make exaggerated claims about modern technologies, is often based on speculative and cautionary views that tend to err on the negative side. If one

compares the findings of my study with the themes in the socio-cultural body of literature (Boyer, 1996; Greenfield, 2003; Haraway, 1985; Strathern, 2000/01; Turkle, 1997, 1984) this investigation delivers an important insight into this particular sphere by exposing the complex reality behind people's relations with computers which goes beyond arguments surrounding whether computers are making cultures better or not. My study adds to this literature by showing that although computers unarguably impact on the experiencing body, there is a powerful human agency involving balance in people's relations with computers. Rather than the latter robbing them of meaning and authentic human interaction as some writers fear, computers provide them with opportunities to be creative and to experiment so that their physical environment at the desk can complement their virtual environment. My study went beyond virtual versus the real environment arguments in the socio-cultural literature to reveal deep meaning and authentic human contact with the computer.

There is also a premise in the socio-cultural literature involving a mutual co-construction where people are transformed by modern technologies, which in turn are transformed by them. Although I discerned evidence of a transformation in educational culture in the ways in which the lecturers were experiencing their academic practices, this study shone light on the lecturers' 'co-existence' with computers, and how they employed pre-determined tactics to effect personal adjustment to the ways in which they experienced computers. Rather than talking about changing, shaping and remaking culture as is often the case in socio-cultural literature today, my study added another element by allowing me to talk about a 'co-existence' which was occurring in people's relations with a work tool. It went beyond the argument of online interactions replacing real world interactions through a culture of simulation (as noted by Turkle, 1995) raising the level of discussion by demonstrating another angle in people's relations with computers.

While the philosophy of technology critique (Borgmann, 1985; Heidegger, 1977; Ihde, 1990; Winner, 1997, 1998) is general, this study adds to that corpus of literature by looking at a particular technology, the computer. The above writers

tended to critique human-technology relations from a distance, not through people's actual lived involvement with technology, something my study does. Although themes in the philosophy of technology literature were not fore grounded in the research process, they do have perspectives which throw yet another light on the findings. Heidegger (1977) argued that people's true relations with technology are buried under technology's everyday use and instrumentality; as a consequence, people are unable to see that relationship for what it is. My study shows how a particular group of academics use tactics to restructure the ways in which they experience the computer. Furthermore, it also reveals that my interviewees are not necessarily being controlled or taken over by technology: they are able to manipulate how their experiences will unfold. By integrating small tactical operations into their everyday relations with the computer, they demonstrate a concealed agency as they go about their work.

Winner (1997, 1998) cautions that people are subsumed into technological systems resulting in their reconstruction as humans who are nothing more than operators of systems. My study looked beyond Winner's concerns of changing human behaviour or being subsumed by technology to reveal the deep 'behaviour change' and 'accommodation', which was taking, place alongside everyday computer practices. This study has revealed that lecturers are not simply operators in a system wherein they repeatedly perform practices: they used time and space in individual ways to their advantage. Furthermore, most of them were quite 'at home' with their experience of computers. Despite the fact that computers and their associated technologies are transforming academic practice, the lecturers in this investigation were not passive recipients of that impact. Rather, they have emerged as creative agents drawing on specific tactical operations to establish some control over how they experience working at the computer.

Another argument in the extant literature i.e., that offered by Borgmann (1984), is at best cautionary. As well as warning about the *device paradigm* in technology and its illusion of making work lighter, Borgmann (1984) claimed that the device paradigm replaces and excludes the human presence within activities and in doing

so, changes their relations with the environment. My study adds to the literature by explicating what human-technology relations are really like in an actual setting. At one level in this study, it was evident that computers in fact lighten the lecturers' work burdens. However, while computers allow the lecturers to communicate and work with multiple students through an extended virtual body, the experience was also only possible because the lecturers were embodied. The virtual body had not replaced the physical body as such; but it was in a close relationship with it. This means that the execution of academic work at the computer still requires the physical interface of a human being who is bodily situated in a concrete world. At another level, my data shows that the lecturers' awareness of their transforming academic environment was mirrored in the disruption they felt to their body-schemas, which were trained for a life-world of organised bodily movement, rather than for the sedentary experience that is structured by the computer. Some of the lecturers took control of this situation by not allowing the device paradigm to encroach on their home time. They also deliberately went about re-balancing their embodied experience at the end of the working day using self-regulatory tactics.

The human-technology relationship is also explored by Ihde (1990, 2002) who argues that technologies transform human experience through four human-technology relations, one of which casts yet another light on the findings in this study. Ihde (1990, 2002) claims that there is a human experience of instrumentation in which instruments such as glasses, telescopes and microscopes gradually become incorporated into a person's body schema. They relate to the world through a human-technology relation that has been embodied by the person, while at the same time extending and changing their relations with the world. A challenging question that Ihde (2002) asks is: 'How are we embodied in relation to various technologies?' My study makes a contribution here by revealing the actual human experience of instrumentation in a particular group of academics whose experience was embodied during their interactions with computers. The study revealed how technology extended their practice and shaped them in the process.

Even although the philosophy of technology literature recognizes that technology occupies a central role in modern life, it tends to promote cautionary views regarding the nature of people's relations with technology. Despite the fact that technology critiques view people as having little agency (Taylor, 2011), my study shows that this was not the case in lecturers' relations with computers. This study shows that the lecturers' relations with computers were marked by a concealed practice of 'balance' that was populated by numerous small tactical operations. In doing so it brought to light the complex story of purposeful action and coping that underpins the lecturers' involvement with technology.

Literature on practice and practice theory

The third body of literature that proved relevant to my investigation was that of practice theorists and, by extension the notion that practices may be used as a means to understand issues in different disciplines (Schatzki, 20001). This study makes a contribution to that body of literature by focusing on the ordinary world of everyday academic labour at the computer, drawing on Certeau's (1984) interpretation of practice and bringing the body into that interpretation. Buchanan (1992) argues that while Certeau initiated his project on studying ordinary people's practices and their tactical operations, he never completed it. His aim had been to propose a tentative theory of everyday practices, which would be tested by others engaged in the study of social milieus (Buchanan, 1992).

While my study is a continuation of Certeau's approach to studying practice, my stressing of phenomenology with its emphasis on experience has given an extra edge to Certeau's theory. What my study brings to this literature is the way in which the lived body in the phenomenological and Merleau-Pontyian sense can be situated in everyday practice at the digital interface. Phenomenology's focus on lived experience, consciousness and intentionality allowed for a deep level of analysis of the lecturers' behaviour as they went about their everyday practices at the computer. Through phenomenology, their tactical operations could be linked

to an inter-corporeal subjective world, which revealed the lecturers' awareness that their natural body-schemas were being challenged by the transformations in their practices.

O'Loughlin (1995) highlights the way in which Merleau-Ponty's body-subject's lived bodily engagement with its environment, operates independently of a "cognitive map" (p.3). This is attributable to an understanding that comes from "invisible but intelligent threads which stream out between the body and that world with which the body is familiar" (p.3). In this study the lecturers made meaning of their experiences through a complex embodied understanding, which revealed them as intelligent body-subjects deeply connected to the environment in which they were operating. Alongside the primary production with its everyday academic practices, they were able to carry out another practice - balance - which showed the deep connection between their bodies and the academic environment they were experiencing.

Recent practice literature (Green & Hopwood, 2015) argues for a reconceptualised view of professional practice by focusing on corporeality as a distinctive concept, highlighting the relationship between practice and the body. The authors question whether practice, and in particular professional education, can go on without a body, particularly as the movement towards 'virtual' forms of professional education increases through "postmodernising developments in technology and culture" (Lyotard, 1984 cited in Green & Hopwood, 2015, p.15.). They note that "This [context] is perhaps especially important and indeed challenging for professional education, which has experienced what seems to be an ever-increasing emphasis on 'mind' at the expense of 'body' (Green & Hopwood, 2015, p.15). Hence, the authors question what is involved: (1) when practice and the body are brought and thought together; (2) whether the body matters; and, (3) what they simply call *corporeality* or "corpor-reality" (Green & Hopwood, 2015, p.16). My study makes a contribution to the said literature; it does treat the body in practice in a different way, and this is in line with perspectives which the

authors foreground as a template or framework for how researchers might engage with the body in practice.

My study draws on frameworks that are in sharp contrast to the Cartesian views critiqued by Green & Hopwood (2015) and adopted by many investigating ICT practices. It draws on post-Cartesian views in which the body and practice were brought together in a new in way through: (1) Merleau-Ponty's phenomenology that privileges the body in experience; (2) and, a particular conception of everyday practice by Certeau.

This meant that Merleau-Ponty's lived and corporeal body in the lecturers' everyday practices could be 'excavated' in their narratives.

My study's participants revealed that they inhabited bodies which were not just separate entities as they went about their academic work, but phenomenal experiencing bodies, which through their practices, had been trained in certain ways to interact with his/her world, and even react to that world through actions which emanated from a bodily response. Thus, this study' analysis of the body in everyday practice is in line with what Reckwitz has to say about the different way of seeing the body in practice:

> Practices are routinized bodily activities; as interconnected complexes of behavioural acts they are movements of the body. A social practice is the product of training the body in a certain way: when we learn a practice, we learn to be bodies in a certain way (and this means more than to 'use our bodies'). A practice can be understood as the regular, skilful 'performance' of human bodies. This holds for modes of handling certain objects as well as for 'intellectual' activities such as talking, reading or writing. The body is thus not a mere 'instrument' which the agent must 'use' in order to 'act', but the routinized actions are themselves bodily performances (which does not mean that a practice consists only of these movements and of nothing more, of course). These bodily activities then include routinized mental and emotional activities that are – on a certain level – bodily, as well (Reckwitz, 2002, p.252 cited in Green & Hopwood, 2015).

When reflecting phenomenologically on the narratives in this study, it evident that *corporeality* was intertwined in the 'doing' and experiencing of academic work, which the lived body facilitated in deep ways at times. In doing so the study raises not just the question of the corporeal body in practice, but also that of lived bodily engagement as practices are being carried out. It makes a contribution to the extant literature by revealing that in this particular group of lecturers, there is a practice of a deep lived bodily engagement- involving balance - which accompanies their primary production of everyday academic practices at the computer.

Contribution to a broader understanding of the human experience of computers

Taken together, while one might expect academics teaching the same subject to employ similar practices, this study, by exploring lecturers' ordinary everyday work practices found many differences. The desk with its computer in the academic office represented a personal place for each lecturer. It was here that the everyday practices unfolded as a primary production that the interviewees experienced in different ways. This was evident in the lecturers' behaviour, which showed how their relations with computers were characterised by different spatio-temporal styles. For example, the lecturers' relations with the computer were organized in temporal and spatial ways that made the production of practices more amenable to them both during and after work.

This study also highlighted an often-overlooked side to academic labour, which takes place in a desk-bound context. The main production of everyday academic practices with its epistemological orientation involving the lecturers' knowing and knowledge requires them to be physically located in their chairs at the desk, and often for large parts of the day. As I have shown, a complex ontological dimension also underpins each academic's narrative; it reveals their existence as educators in the field of physical education, and how they 'cope' with the

instrumentalism and technologisation that marks contemporary higher education. The erasure of academics' bodies from conventional accounts of academic work does not do justice to the complexities of knowledge production and teaching, and results in a deceptively one-sided account of professional practice in academia.

This investigation, which uses a phenomenological process involving eidetic reduction and imaginative variation, arrived at an essential finding, an essence, in the lecturers' experiences of computers which may also be intrinsically general in academics' relations with computers. The production of academic practices at the computer is intertwined with a phenomenal experiencing body - revealing an ontological dimension- which has yet to be recognised in lecturers' work, despite the fact that academic teaching and scholarship is increasingly located at the desk with its computer. Not only is there a main production that occurs in academics' relations with computers: this production also involves a concealed secondary production of tactics - a *poïesis* - in which the phenomenal body is implicated during the experience of everyday practices at the computer. My findings reveal that there is another level of human existence in their relations, one that is marked by shifting embodied feelings (unfelt and felt), and body schemas which respond to those feelings through a concealed everyday practice of balance. The study shows that lecturers' bodies, as 'thinking bodies', do matter in their relations with computers, and are capable of operating on different levels during knowledge production.

This study allows critique of academic body-schemas within the historic stream of teaching and scholarship. One can reflect upon what scholars' lived bodily engagement with their environment was like in pre-computer days, and the degree to which that engagement has shifted as a result of changing academic practices and teaching which are now - more often than not - located at the computer. Worth noting again in this study is that the lecturers were orientated to a world which privileged physical education. To this end, the study shows they are orientating themselves towards changing academic practices that are increasingly instrumentalised and technologized through the

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computer-related technologies. These require that the lecturers need to be practicing 'sedentary activity' at the computer, as opposed to 'natural activity' which is a hallmark of everyday life and difficult to represent. It remains to be seen whether lecturers in other fields practice tactics that are linked to the phenomenal body. Further studies may also reveal that more recent technologies could be changing this by allowing lecturers to operate from places, other than the office.

If one considers academics' experiences of computers through a phenomenological understanding of the body, there needs to be an acknowledgement in academic work of the role that the body plays in knowledge production. This is an area that has yet to be acknowledged. Boyer (2005) questions why the corporeality of experience is overlooked by intellectuals who always assume that genuine knowledge is that which originates in a pure cognitive process. Kinsella (2015) claims that "the place of the body in knowledge generation has been silenced as a result of the dominance of technical rationalistic perspectives" in professions" (p.249).

This study makes a contribution by offering an account of new territory which draws on a rich and well-developed intellectual frameworks relating to the body and embodiment, as well as practice theory and philosophy, to show the lived experience in lecturers' professional practice linked to computers. Few accounts focus on academics as embodied subjects. According to Green and Hopwood (2015) dominant discourse remains within a classic Cartesian mould, separating mind from body, and treating practice as cognitive and rational. As Green & Hopwood (2015) note: "Lack of attention to professionals' bodies in accounts of their practice constitutes a major shortcoming" (p.4). The use of Merleau-Ponty's (1962) phenomenology combined with Certeau's understanding of everyday practice brought to light an intelligent/thinking body at work within the practices.

This study represents a potential research space for ethnography to illuminate everyday practices further in the sphere of academia. Although the study focuses

on a particular group of lecturers, who specialize in areas that privilege the moving body, one also needs to consider its findings through Ihde's (1990) perspective of phenomenology: in other words an ongoing horizon of meaning and action which extends into areas beyond the desk in the academic office (as this study has shown). It would be interesting to investigate whether other academics share the same bodily awareness. Further studies could explore how academics from other disciplines experience restriction and corporeality, and the tactics they use to counter embodied feelings of imbalance during their in-office and after work experiences of computers. People in other contexts may well respond to feelings of restriction and corporeality in different ways from those experienced by the participants in this study.

Conclusion

"Articulating the body as a concept is an important philosophical project at this moment in time" (Kinsella, 2015, p.246). Recent literature (Green & Hopwood, 2015) raises philosophical questions and opens a dialogue concerning the ways in which the body as a post-Cartesian concept might be relevant to professional practice (Kinsella, 2015). This study is part of an emergent genre of research following a post-Cartesian approach that focuses on the embodied side in professional practice, learning and education. It shows that beyond physiological and psychological understandings of the body, there is a third bodily existence of an ontological nature that has implications for the lecturers' professional practice. When one considers the lecturers' experiences of computers through phenomenology, the existence of embodied experience needs to be acknowledged in their everyday practices. Through a Certeau-ian understanding of everyday practice, the findings in this study reveal that academic work at the computer is not only about an on-going main production that is experienced in different ways by the lecturers, but also a concealed secondary production of embodiment - a *poïesis* - that could be linked to the lived body of phenomenology in their activities. The secondary production affirmed that there is a larger story behind lecturers' computer practices, and this involves the way in which the lived body

shapes how they perceive and think about their professional practice. Cartesian perspectives of the body have not been able to reveal this invisible area of practice which is beyond rationalistic or cognitive realms.

APPENDICES

Appendix 1: HREC Clearance Letter 2006-180A

30 August 2006

Dr Jo Mckenzie

CB01.27.12

Institute for Interactive Media and Learning

UNIVERSITY OF TECHNOLOGY, SYDNEY

Dear Jo,

UTS HREC REF NO 2006-180 – MCKENZIE, Dr Jo, KANDIBINDER, Dr Peter (for DREYER, Ms Anne-Mare EdD student) - "Seeing Ourselves: A study of lecturers' experiences of computers in everyday academic practice in the workplace"

Thank you for your response to my email dated 16 June 2006. Your response satisfactorily addresses the concerns and questions raised by the Committee, and I am pleased to inform you that ethics clearance is now granted.

Your clearance number is UTS HREC REF NO. 2006-180A

Please note that the ethical conduct of research is an on-going process. The *National Statement on Ethical Conduct in Research Involving Humans* requires us to obtain a report about the progress of the research, and in particular about any changes to the research which may have ethical implications. This report form must be completed at least annually, and at the end of the project (if it takes more than a year). The Ethics Secretariat will contact you when it is time to complete your first report.

I also refer you to the AVCC guidelines relating to the storage of data, which require that data be kept for a minimum of 5 years after publication of research. However, in NSW, longer retention requirements are required for research on human subjects with potential long-term effects, research with long-term

environmental effects, or research considered of national or international significance, importance, or controversy.

If the data from this research project falls into one of these categories, contact University Records for advice on long-term retention.

If you have any queries about your ethics clearance, or require any amendments to your research in the future, please do not hesitate to contact the Ethics Secretariat at the Research and Innovation Office, on 02 9514 9615.

Yours sincerely,

Professor Jane Stein-Parbury

Chairperson
UTS Human Research Ethics Committee

Appendix 2: HREC Approval to transfer to Doctor of Philosophy

From: Pei Pei See

Sent: Wednesday, 6 April 2011 3:43 PM

To: Jo McKenzie; Sandra Schuck

Cc: Anne-Mare.Dreyer@student.uts.edu.au; Margaret McGrath; Juleigh Slater; Aki Plume

Subject: Anne-Mare Dreyer ▮▮▮▮▮

Dear A/Prof McKenzie & A/Prof Schuck,

This is just to let you know that Anne-Mare Dreyer submitted a request to transfer from course C02050 (Doctor of Education) to C02041 (Doctor of Philosophy) and it has now been approved by the Dean of UGS. As the request to transfer course was received after the census date, the student system will not allow us to do the conversion until the next semester. Anne-Mare have been advised of this and that this should not prevent her from proceeding with working on her thesis and submitting it for marking as a PhD. Should there be any problems please let me know.

Many thanks,

Pei Pei

Ms Pei Pei See

University Graduate School

University of Technology, Sydney

PO Box 123

Broadway NSW 2007

Tel No: +61 2 9514 2401

Fax No: +61 2 9514 1588

Appendix 3: Consent Forms for the Interviews

This data collection activity is part of Anne-Mare Dreyer's project for the Doctor of Education qualification at the University of Technology, Sydney. The project is titled: *"A study of lecturers' experiences of computers in everyday academic practice in the workplace"*.

Lecturers have a range of diverse interactions and experiences with computers in everyday academic practice within the workplace. The intention of this study is to explore some of their experiences, and to consider the implications of these experiences for the development of new practices.

All data will be gathered between July 2006 and July 2007. Participants who agree to take part in this study will be involved in the following process (and verbal permission will be sought for each process):

- Data gathering will initially begin with the natural observations of the researcher in a field journal. As these observations are of a more general nature, this will neither involve a time commitment nor interfere with participants' everyday academic practice at all;
- The researcher will request permission to take a video recording – from a distance - of the participants in their workspaces interacting with their computers. This will be done for a short agreed period only. The participants can abstain from this part of the data gathering process if they so wish;
- In the next phase, the participants will be asked to take several digital photographs of their computers within their work areas, and to select from this workspace an item of interest – or several - that they are happy to include alongside the digital photographs which will be used in the next phase of the data gathering process, i.e., the interviews. A digital camera will be provided by the researcher for the participants to use in this data gathering process;
- Two semi-structured in-depth interviews with the participants will then take place, each interview lasting no longer than one hour;
- Interviews will be audio-taped and transcribed;
- Summaries of the interviews will be available, should the participants request to read them;
- Further member checking with the participants will take place in the form of face-to-face communication, e-mails and telephone conversations. Inconvenience with regard to this will be minimised.

Participation is voluntary. Refusal to participate or withdrawal from the study will incur no penalty or loss of benefits. Participants are free to stop an interview at any stage of the interviewing process, and to call a halt to the video-taping process at any time.

Confidentiality will be protected by replacing real names with pseudonyms throughout this study. In such cases, the true identity of the participants will be concealed through the use of pseudonyms at all times.

Participants may ask the investigator (Anne-Mare Dreyer) any questions about this research study at their convenience, either by phone (02 9739 3346), via e-mail (adreyer@acpe.edu.au) or in person.

Participants may also contact the UTS Human Research Ethics Department Office, Level 7, Tower Building, University of Technology, Sydney, PO Box 123 Broadway NSW 2007 with questions about their rights as research subjects.

Each participant will be given a copy of the consent form to keep.

_____

Signature of subject or subject's legal representative.

_____

Date: _____

Note: _____

This study has been approved by the University of Technology, Sydney, Human Research Ethics Committee. If you have any complaints or reservations about any aspect of your participation in this research which you cannot resolve with your researcher, you may contact the Ethics Committee through the Research Ethics Officer, Ms Susanna Davis (ph:95141279), Susanna.Davis@uts.edu.au. Any complaint you make will be treated in confidence and investigated fully. You will be informed of the outcome.

Appendix 4: Guide to the Interviews

A: Information supplied to the participants about the interview procedures

The researcher will be trying to understand - as far as possible - the participants' experiences of computers in everyday academic work practices through their eyes, and together with them will probe their experiences fully in order to reach an understanding. The participants will be interviewed in such a manner that will allow them to tell their individual story in their own terms.

The phenomenological orientation of this study will shape the types of questions that will be asked during the interviews. The interviews will pursue a semi-structured approach, looking for the "first opening" which will be a direct experience of a participant linked to his/her computer.

The researcher intends to use photographs of each participant's computer and workspace as a tool to start a dialogue in which a spirit of interconnectedness will be an important element.

The researcher will ask each interviewee if he/she has any questions about the project; and, I will inform them that the interviews will take approximately 60 minutes. Questions will cover three broad areas: lecturers' experiences of computers, interpretations of their relationships with computers, and new academic work practices linked to the computer.

The interviews will be recorded for transcribing purposes.
The tapes will be destroyed. Each interviewee will be shown a copy of the transcript.

B: Tape identification
Start recorder.

Today is the [date] and this is tape 1 of the lecturer interview in the ACPE for an investigation of lecturers' experiences of computers in everyday academic practice in the workplace.

B: Outline of the main questions posed during the first interview

1. Can you please tell me something about yourself and your area of specialisation?
2. Can you take me through a typical day as an academic. How does the day at the office start?
3. What do you usually do when you are not teaching?
4. Can you tell me about things that you enjoy doing at the desk?
5. What is working at the desk like?
- How do you feel when you sit down at the computer?
- What thoughts go through your mind as you work there?
6. How does your day usually end?
- What thoughts go through your mind when you get ready to leave 'your desk' at the end of the day?
7. How do you feel at the end of the day when you leave the office?

Appendix 5: Summary of a first interview

Interview 1 (Ken)

In the first interview K is a part-time lecturer at two different institutions. However, the job that takes up most of his time is as a Ph.D. research student, with the result that he currently teaches only two to three days a week because the rest of the week is taken up working on his Ph.D. He teaches the sociology of sport and the cultural underpinnings of sport and physical activity. His research – an action research project dealing with the social construction of curriculums in health and physical education- has ethnographic underpinnings. For K, a typical Uni day takes two different forms. On a "teaching day" he usually arrives quite early before his class starts. One of the first things that he does is to turn on the computer. This occurs approximately the same time that the lights go on in the office. Straightaway, he begins to check his emails and to make sure that there is nothing he needs to know prior to the class starting. He also checks on the other day-to-day messages that are communicated via email in a university. Thereafter, and if he is going to be teaching, he prepares to take his class. This can involve reworking a lecture, making handouts or tweaking things in an effort to improve them in one way or another. He usually just sits by himself working, "punching away" at the computer, and at whatever else he needs to do to prepare for a day of teaching.
Themes: Arriving at the office (time –immediate start); checking and communicating through email; getting ready for the day's teaching (working at the desk on everyday practices).

But for K, as already suggested, a typical teaching day has another day to it. This "the other day"is experienced mainly at home finishing his Ph.D. And, again, this "other day" is spent mostly in front of the computer. It is a very different day as well: there is no email facility at home to distract him. He switches the computer on and starts to read over what he wrote the day before. His referencing program will come on so that he can attend to this at the same time as writing or taking down notes. And, again, it is just K, sitting there in the room alone, "chipping away" at the computer. At the same time -while "chipping away" - there are usually a number of different things happening in his home office. The computer screen will be a dominant feature on the desk, and there will be books scattered all over the floor, journals all over the books, a writing pad next to him, and even the computer itself will have several document windows i.e., the results chapter, a discussions chapter, or his referencing program. All this will be swirling around him in the room and he'll be "cycling" between the different things. His workspace takes up almost the whole room. The computer being the real focal point of all that is spread out around him and feeding back into the computer. He might not talk to anyone for hours on end; he will just be sitting there, writing incessantly until the end of the day. So a Uni day really has two albeit totally different days. But, throughout, the computer is the key focus of both days.
Themes coming through here in this section: K's relationship with the computer at work and his relationship with the computer at home/ the temporal dimension in his day which is divided between two locations.

K views the term "cycling" at the computer level as a process of maximising and minimising windows, switching between something where he is drafting up some ideas or writing his thesis document, or bringing up and referencing quotes that he may want to use to substantiate some data. His work requires him to constantly juggle the different things around him. Ever so often he will be "flipping" the pages of a book, trying to find some information he is looking for. *Theme space and his style of working at the computer.*

K describes the computer as a "formative space". For him, the computer is formative because it is a space where things kind of happen in terms of his own thesis. It allows him to step in and out of said space while he is writing sentences and "juggling" things. He experiences it as a creative space: his creativity is sustained through the journal articles and textbooks that he reads. At times when he "hits" a section wherein nothing is happening in his thesis, or struggles to write a specific paragraph, then, after reading a couple of paragraphs in a book or a journal article (which may not even be related) his creativity starts to flow again. He looks into the computer and can see it on the screen-face. *Theme: Lived space in the computer.*

K "does his own thing" with the computer: he tailors it so that it works for him, a process that allows him to set up windows in a certain way. One of the things he has done during the writing of his discussion chapter is to create a document for storing information. "I read through things, even if I didn't need that quote or that idea then and there, I just switch on the computer screen. I switch on so that my drafting document pops up and I'll put down that idea for later. Then, when I'm writing something again, I'll be cycling or toggling between the writing kind of space and the space where I'm really trying to write and get those ideas together." We can see here that the purpose of K's thesis writing, the computer can be a space where he is really creative and productive, and, by extension happy with what is going on. He employs a tactic to help him along. But, on the other hand, "at the same time, and sometimes the same day, sometimes the same hour it can be a really frustrating space because nothing is happening, and those things are not coming together. And that is the way that word processors are set up …it's a really obvious reminder because when nothing is happening….it's a blank page, it's a white document or it's a blinking cursor." So either way, he just has to get past that point at which he is not putting anything down. At such times - when it is difficult to write – he will actually try to do something "to pull himself out of that hole". He will pull up something he has written before, e.g., an ideas document or an online journal that he'll flip through to try to "tee off" again, and to get the ideas flowing through his writing. "So in that way, ummm you get into the flow of it". K's narrative revealed that there are definitely periods in his writing where everything is "sort of coming together again. " *Themes coming through: Space as a liminal space, a formative space, a productive space, a creative space, a happy space, a frustrating space, a flowing space. The unfelt body at work. K's use of tactics as he works.*

Also, K observes word processors these days "fix up your typing as you go along," so that by the time he glances up from his fingers to the face-screen, not only has he written a couple of good sentences, but the computer has checked his spelling and everything else. And this makes him feel even more confident. For example, two weeks ago he wrote a paragraph on which he had literally been working for approximately three years because he has had so many versions of it in different sections coming together in different ways. "But this was the first time that he could really unleash and really pull it all together…and when I got it down and when I was reading it back …I was like …oh wow that is what I wanted to say for a long time you know. It was just really a happy moment like there was a bit of dancing going around in the room because I was just like …wow that it sooo good!" On the other hand – in the same way- K can have those times when on reading back over something that he has written, it (the computer) reminds him that he doesn't know what he is writing about, that things are not clear in his head. He can see clearly from the text on the screen-face that things are not right yet for "it hasn't come together yet and it is going to need more work." *Theme coming through: The computer as helping partner/guide/ Bringing things together.*

K describes the actual experience of working on a computer as a "pretty physical feeling" because his body does not allow him to forget that he has been sitting there and peering into a screen-face, sometimes for hours on end. Like many people who work on computers, he doesn't take the breaks he should. "If things are going, if I'm flowing with what I'm doing, then I put my head down I just keep going. So when you look up and you realize you have been sitting there for a long time and you have been staring at the screen for a long time, or maybe you are not even sitting on your chair right….and all that relates to sore eyes, headaches, sore back.." All of these are painful reminders for K that he has been sitting in a chair and looking at the screen for a really long time. He describes how the painful reminders "sort of stick with you even once you get up and you start moving around. You kind of feel like you have been out doing something physical because you actually feel sort of beaten up ….and you haven't even left your chair, you have been there all day. But, it takes it out of you …." Although he may just sit and write all day – doing nothing at all physically demanding – at the end of the day he may have a massive headache and feel really tired. "It has all just been so mentally demanding and kind of translated into a physical feeling of tiredness or exhaustion …or just, I don't want to sit here anymore." *Themes emerging: His embodied experience/ The body and the computer/ Working without consciousness/ he also has a particular style of working/ the felt body/corporeality.*

K's story about a memorable email experience. It had been a teaching day and he was "pretty tired" at the end of it, having done his teaching for the day. In between he was preparing things, checking emails and attending to all the other admin- linked everyday practices. And when he got back to the computer, he had to attend to "more admin and computer kind of stuff." Then in the afternoon, he received an email from an academic friend who had just finished her Ph.D., and started teaching at a well-known university overseas. She had been gone for weeks. She sent pictures of the house that she had moved into and descriptions of "how she gets to work and what work is like, and all that sort of thing." It was his first communication from her. He had been feeling "just so tired"; but, when he read this email which had so much energy about it he "bounced right back into things" because he could see how after finishing her Ph.D., over a year ago, "she went to a really good job at a great university and she was so excited about what she was doing." So reading her email gave him "a real kick ahead". He was not only just happy for her, but for himself as well in that he was not that far away from being able to do something similar. K comments : "It was sort of energizing you know, I guess I was pretty tired in part from doing computer work, also drained from being in front of the students. But this was a real pick-me-up. I could feel it in my body. This email was about a real life out there …five or six photos and a couple of paragraphs …across intercontinental waters…and then all of a sudden it was like I was hanging out there and getting to see how she lived her day and everything. So it really turned me around on that day."*Theme: Communicating through email.*

K notes that email is a demanding form of communication because "all of a sudden you are accessible almost twenty-four hours seven days a week one way or another." Also, institutions now have rules about how long a lecturer can take to respond to a student's email – sometimes twenty-four hours is the deadline for a lecturer's feedback – and they have to have written back to that student. "It's almost a little bit like you are on call or something like an on-call doctor!" However K says that in some ways email is really good because students can "fire off" one or two questions to him about an assessment task or something like that, and he can get something rapidly back to them which hopefully "really turns them around and gives them a kick ahead." So in that way K feels that it can facilitate the teaching and learning that happens in his subject because "You've got this broader scope to communicate." However the other edge of the sword is that he needs to be

"on the ball" more often. "So you need to be ready on Sunday night to fire an email back that helps someone out with a problem that is going to be an issue on Monday afternoon or something like that…" *Theme: The experience of communicating through email (Routine practice).*

K says that the computer that the computer not only facilitates teaching and learning with colleagues, but also "individualises" him and his work. It allows him to do his section of the work which he can then "fire off" to a colleague for him to do his section then, as opposed to both of them sitting down together to do something. K sees teaching as being a fairly individualised activity. "It is sort of your own classroom, we don't really team teach that much at a tertiary level…you are sort of doing it yourself. All the complaints, all the happy students, whatever, they all kind of filter through you on way or another." So for K teaching can be an individualised activity process in which he is individualised himself through the process itself as well. "So it's probably not that surprising that the work on the computer…it's just sort of you and the computer, you know what I mean, like you don't get a lot of other people's ideas necessarily fed into things. You kind of expect that you can sit down, you can sort it out fairly quickly …."
Theme: The solitariness of computer work.

Also, it is not a though he is in a situation where he often has big meetings telling him what to do, but it is rather a situation of talking things through quickly amongst themselves and deciding what they are going to do with things. Often it might be a quick email message about something so that when "we do see each other we are kind of already on the same page and we can talk about it pretty quickly." However K points out that there is another side to this situation which is that he and a colleague do at times actually work collaboratively at the screen-face when they plan a presentation together. "And we just sat there in front of my computer, we had Microsoft Power-point open, and we just started going through and talking about what we want to do and how we want to organize it and that sort of thing. So in that way it was a collaborative kind of thing, but because it was a visual medium you could sort of edit and change and do whatever on the spot …and it's much easier to see what you do, how it is going to look, reorganize things rather than just you know, sometimes when things are on paper, they are ideas, they are not necessarily organized in the way that they are going to be organized in the future."
Themes: Working at the computer / A collaborative and creative partnership.

Both of K's work stations – at Uni and at home – are "pretty similar." He says that they are best described as "chaotic and messy" because he is the kind of person who has to have "pretty much everything they want to use out in front of them." If he is using books and journals in his home office they will not be in the filing cabinet but they will be basically at arm's length. At Uni he tends to have video tapes, reading lists, marking criteria and all those things that he needs for the lecture will all be there close by. "I'll tend to have all those things pretty handy and pretty close, and the end effect is that day to day it looks pretty messy stuff everywhere." But in this chaotic and messy work space - whether it be home or work – there is some organisation because K knows where things are and what is going on. "And yet, like at home, I'll tend to know exactly where everything is, like I'll know where I put that journal article in a certain pile or that the ideas I want to work with are contained in this stack of journal articles or something, like this is the theme I want to write about today." Moreover K's computer desktop is very much like the actual desk top of his desk because "over time, as the semester wears on it kind of gets messier and messier or more chaotic" but he

knows, most times, where things are and what folder he put them into. So there is some organisation to all this messiness. Interestingly, he says that there those times too when "it's almost like the technology allows you to be kind of a bit crazy with your organisation, a bit messy, a bit all over the place because you know you have "search" functions and "spotlight" and all these kind of computer-aided things that help you find the document that you misplaced." So the computer can help him to locate that PDF of the journal article that was meant to be in the readings folder but somehow ended up in another folder. So this function within the computer is a bit of a backstop and a safety net for him. Generally K tries to keep on top of things as much as possible but there are times when his organisation slips up. He says: "if you do get lazy like I do then it's okay because you can just "search" for it and you can find it. *Theme: How he experiences his work station at Uni and at home (lived space/third space). He has his own style of working. The work office and the computer in the home office.*

At the end of the day when K switches off the computer at Uni he feels that he can go home to start "the real work" which is part of his "other day". He can get back to what he is meant to be doing. "When I switch off the computer at the end of the day, I sort of feel like I can go back to, I can go back home and turn on "the other computer" and do what at the moment for me is the real work." While the teaching work and the work at Uni is very important, and he really likes doing that, at the moment the thesis is taking up most of his time and thoughts, with the result that there is, he says, a degree of breaking off, a degree of separation where he leaves the teaching, the admin, the emails, the marking and all those things behind him. "Just like before , I described that the first thing when you come into your office, the first thing you do almost is turn on the computer. Almost the last thing that you do is turn off the computer." And when he turns it off he thinks "that's gone, you have finished with that and you can go back home and you can write there!"
Theme: Leaving the academic office at the end of the day./Space/Time.

At home the computer is different for K. "It's different at home because at home I hardly ever turn the computer off. The computer kind of stays on all the time because there is always "that feeling" that you'll get back to it" So K's computer at home stays on all the time. Even if he started early in the morning and decided later in the afternoon that he is going for a swim he'll still leave the computer on and just put it to sleep. "There is always "that feeling" that maybe later on you'll get in and you'll just put in a few more references …or you'll think about that paragraph that you just couldn't finish and you'll go back to it and you'll be able to finish it" Theme: Home Office/Affective Space.

So he thinks it is different at the two locations. One computer always stays on because there is always "that feeling" that he might get back there while with the other computer, he's not racing to switch it off, but he's not sad when it goes off because then he is out of the office, on his way home or to do something else. And so there is a finality to leaving work. *Theme: Time and space: leaving work for the home office. Theme: His relationship with the two computers – the one at Uni and the one at home.*

There are some things about computers that K has been reflecting over. The first one is that there is often a number associated when one works with technology. One is give a user ID and it controls and limits one's access one's access to various aspects within the organisation. K's email is made up of the letters of his name and then there is a number tacked on at the end. When K has to work the photocopier and the printer he has to

put in a user number as his identification which limits how many copies he can print off. "So" he says "there is this kind of number you know, number element to when you work in this digital world. You are a bit digitised yourself in a sense." The other thing that K has considered is the level of electronic surveillance that is attached to all of this. Academics' desktops are now actually visible to essential administrators in many institutions. They can see what one is doing exactly. Also one's Internet traffic is monitored, and emails recorded and stored and can be pulled up years later. And this means that there is a whole level of digital surveillance which K sees as contributing to a degree of self-regulation in what one does and how one uses the facilities. K is not even talking about suspect activities here but he is asking "are you willing to get on line on a work computer and pay your electricity bill? Because presumably you type in a password or something or other which makes you identifiable to someone or other who is watching. Like when I pull up my Internet banking, my bank identification, account details, all that comes up, all that is visible. So yeah, there is an aspect of self-regulation." *Theme: Lecturers' experiences of computers.*

Furthermore, K in general has an issue with the surveillance of people because he tends to think "it is associated with a sort of de-professionalisation, a lack of trust in what you are doing, a lack of confidence in you for not knowing how to use your time …so that somehow in the eight or ten hours that I'm in my office I can't manage to spend three hours to pay my electricity bill or something like that ….I'm not saying that work should exactly say "Yes, that's fine, go for it, pay your bills" but what I'm saying is that in the space of my day, much of it is geared around work and teaching sort of things, your "life things" just need to sneak into those little gaps, you kind of just need to fit them into the little space in between. K describes how he has experienced self-regulation at home with his own computer. When he would sit down to write and he really wanted to write that day one of the things/strategies he would do at home was to disconnect the Internet connection – literally pull the cable out of the back of his computer- so that he couldn't just quickly look up the weather for a surf report or be tempted to visit some other site or so. "It was sort of you know, like you were breaking that connection to the outside world and you were saying that what you need to do right here, right now in this room, you and your computer in this space ….this is where you need to work. You don't sort of need to be working outside that space at all." So he was regulating himself, making sure that he wouldn't be tempted to go surfing, making sure that he was going to stay in that space with his computer where he was meant to be working. *Themes: Self-regulation; Becoming a number; Electronic surveillance; using tactics of self-regulation.*

K tends to learn computer programs and technical things "pretty rapidly." But there is other learning on the computer that is more drawn out and occurs over time "like things that accrue on top of each other." He says that there is also a level at which he learns even during the course of one day on the computer. "For example, like in terms of thesis writing or something, you might break down some data, you might have a look at some quotes that you've got from some interviews, start to piece them together and link that up with some literature that you know of or a kind of analysis that you are aware of, and you'll actually piece that together. And for me that is knowledge production. That is what learning is, you come up with an idea about what is in front of you, a way of thinking about it, a way of theorising and at the end of the day there is something there that was not there before." K notes that knowledge production is really apparent when he is writing in a word processing document. For on a word processing document it's a case of starting off with "blank slate stuff" – there is not much there to begin with - but afterwards at the end of the day, when he scrolls back over the

pages he has written, he can see that it is all knowledge there that he has produced. And when he has had a good day of knowledge production, he is left with a wonderful because he has seen pieces "coming together" on the screen-face. Furthermore, this "coming together" of the pieces is confirmed through a sense of actually "knowing" that something is about to "come together." "It's like when you find a couple of good quotes which, if you are working off an electronic transcript ….you find some good quotes, maybe you have got some online journals or something like that, and when those pieces start to come together, you can actually know that something is about to come together, and how to write about it so that it makes sense and comes together." And then once it "come together" K describes the experience in the following way: "That is just a really awesome feeling, but it is also a feeling that you are making inroads into something, like it's that step closer to being either where you want to be or to the kind of writing that you want to write. If you are thinking in terms of an argument I guess it's another step in your argument. It's that bit closer to having something that overall, you know, has some flow in it, it has some sense …and has some impact in terms of knowledge in the real world, or knowledge in whatever discipline you are in." *Theme: Knowledge production/creation- bringing things together at the computer.*

K has seen how extremely frustrated some people can become through computers and other modern technologies. He is "pretty well done by computers" but he knows people who get incredibly angry and incredibly grumpy in the workplace when things don't work. "Generally at the start of the semester" he says "you need a subject outline, you need a schedule, you need the role, you need this and you need that, and you need it all then and there…there is no sort of extra time" And when equipment breaks down people can get really frustrated, he has noted.

It is almost as though the electronic equipment knows when you are in times of critical need and one should really remain calm and pretend that you do not need it. So when things do not work, the behaviour of some people can change and the ways in which they relate to the computer is more evident. So computers do have transformative elements about them in the sense that they can transform not only behaviour, but also what one can become (see K's story in the interview about his brother who has RSI and how this impacts on the development of his career as a researcher who has to do a lot of data entries). K. notes that there is a transformative element that can be associated with what people might regard as improving you as a person (through the computer), but "there is also a transformative element that is related to you know …. The word I used before was "crippling" you as a person" when you can't do your work on the computer because of

 K notes that when he works at the computer and doesn't sit correctly, he can be left with a painful reminder. "Although I do a thing where I cross one of my legs over the other when I sit and work ….after doing that for a week, I wondered why I felt like I had pulled this muscle, and of course I had been sitting terribly and had hurt myself." But his eyes have degenerated since he started his Ph.D. His optometrist tell him its because he sits in front of the computer all day and her expression to explain the deterioration is "it is because your world is very near." "She always says everything I do is right there very close to me whether it is reading a book, whether it is looking at the computer screen, whatever, it is all right in front of me and my eyes have…I think the prescription has doubled in five years….so it has got twice as bad in five years or so at a time when she argues – because I've stopped growing- my eyes should have "plateaued out". But instead of "plateauing out" they have got worse because of the work that I do".

Theme: The corporeal body and computers/ painful reminders/restriction.

Appendix 6: Presentations during the thesis

Paper Presentation: Describing the experiences of lecturers' use of computers in everyday academic practice: A phenomenological case study.
University of Technology Sydney. Faculty of Education. 2008 Post Graduate Student Research Conference . Open-ing research space-s. Friday 30th May Saturday 31 May UTS City Campus, Level 6 Training Rooms, Building 10, Jones St Ultimo.
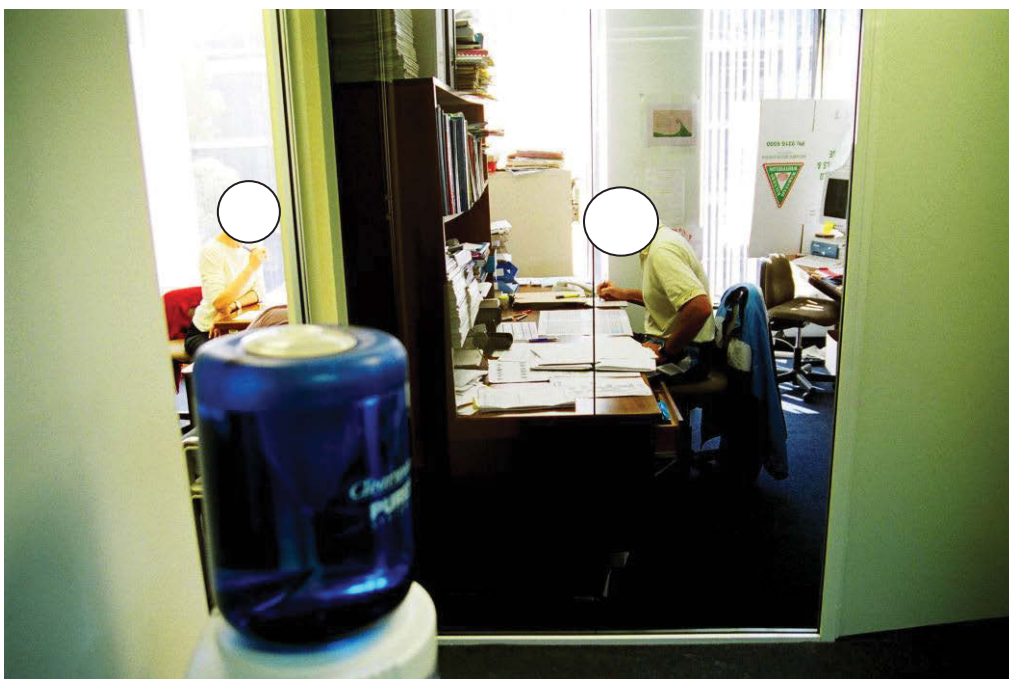
Appendix 7: The life-world at the desk

Photograph 1: My desk in the office

Photograph 2: The far corner of the office

Photograph 3: Chatting in the office

Photograph 4: Capturing the fleeting moment

Photograph 5: At the desk
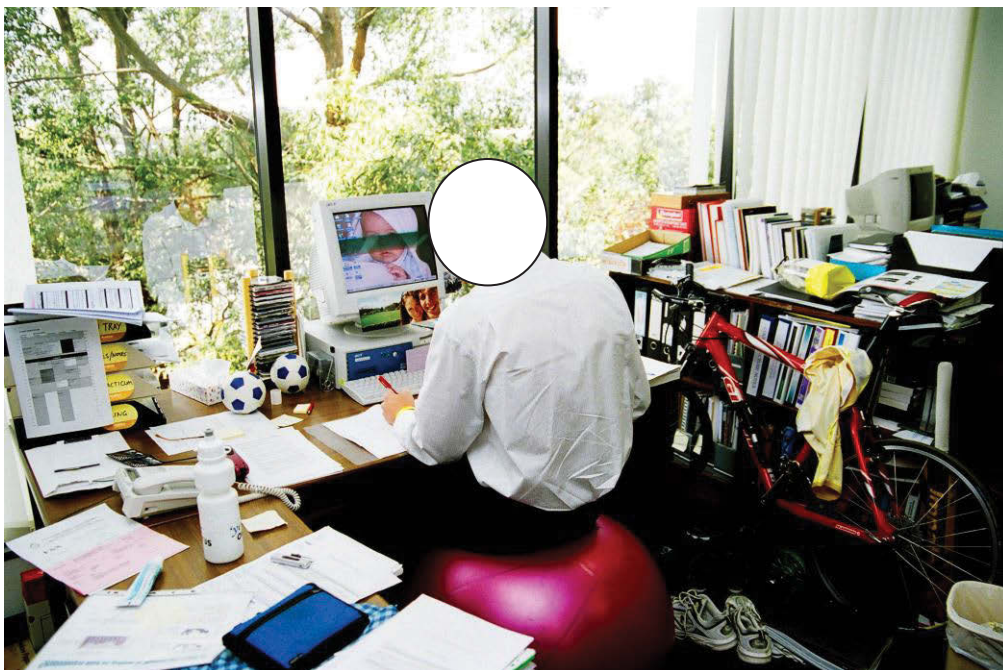
Photograph 6: Liberty working at her desk
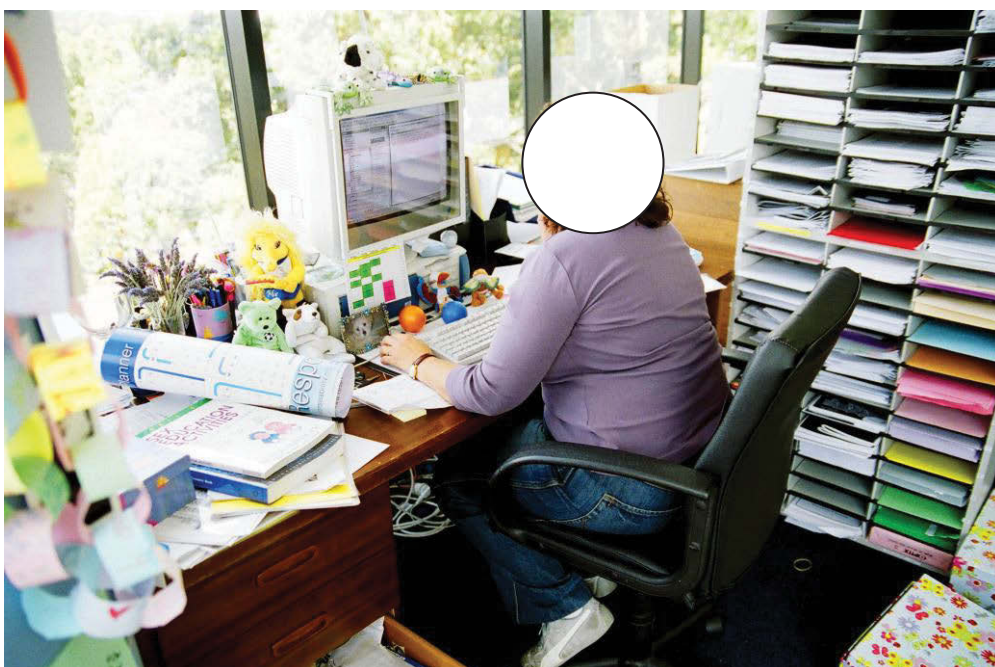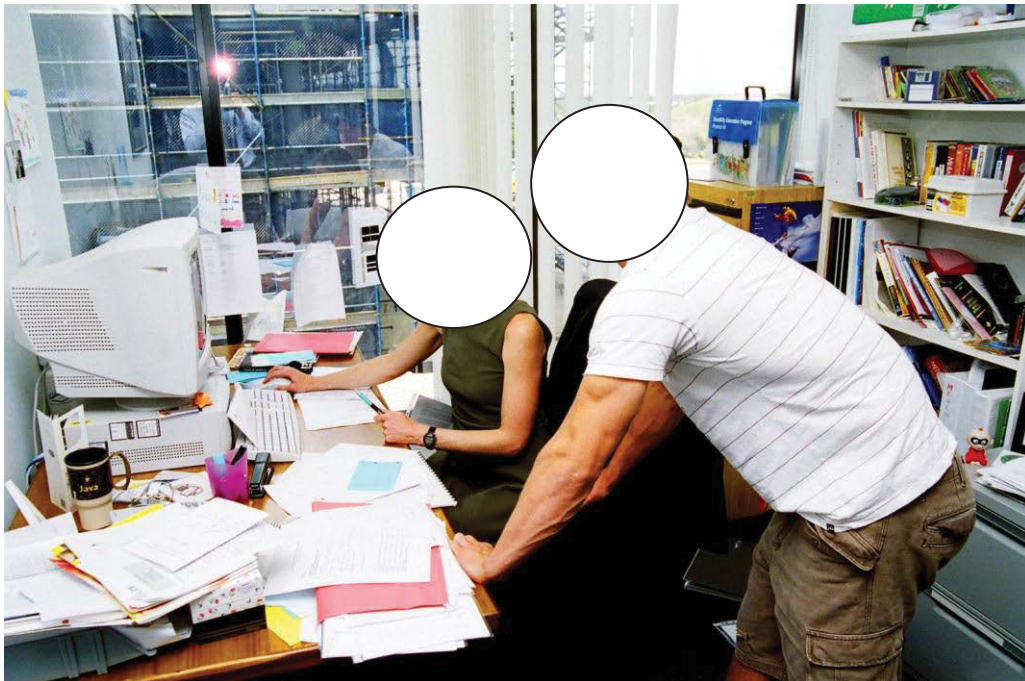
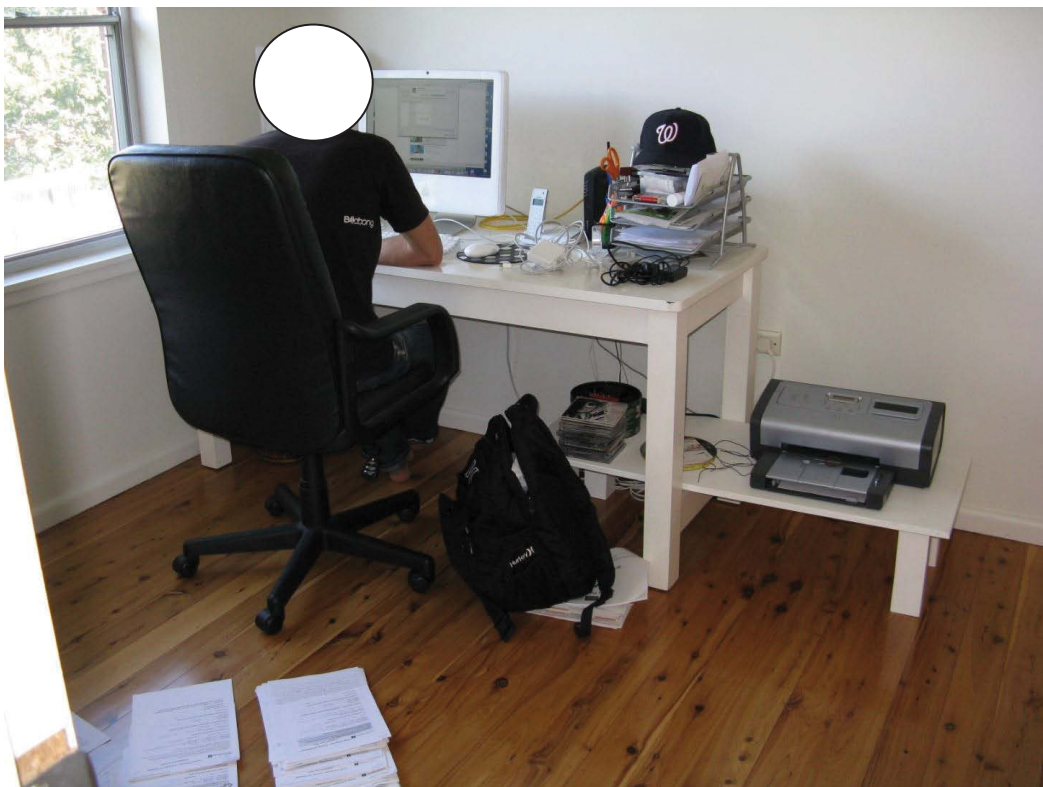*Photograph 7: Jane working at her desk*
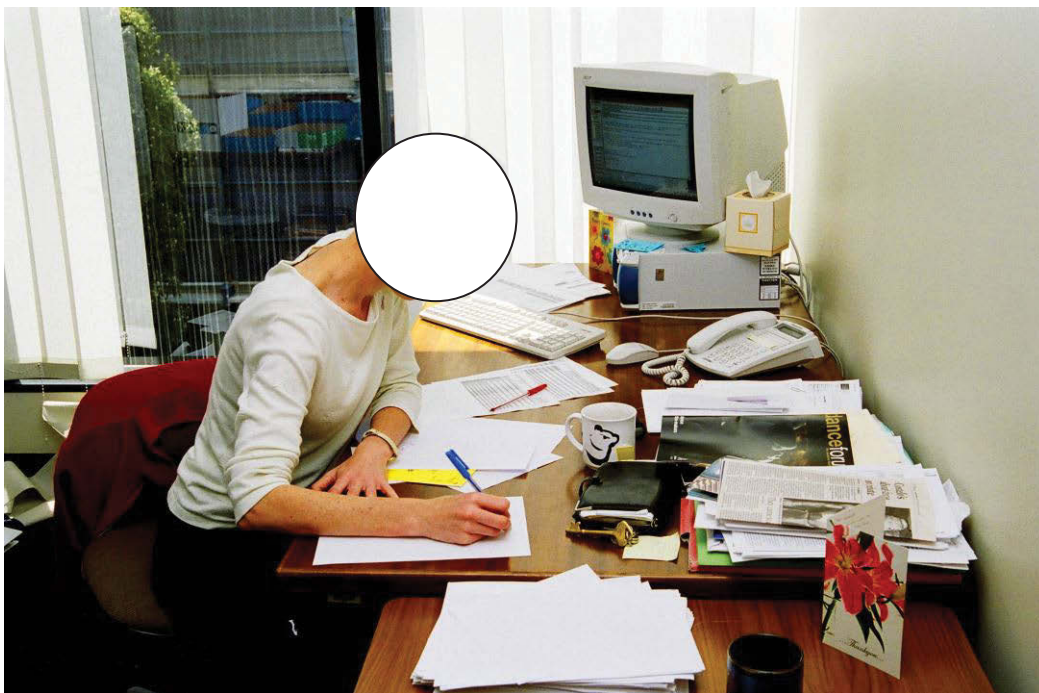
Photograph 8: A decorated computer
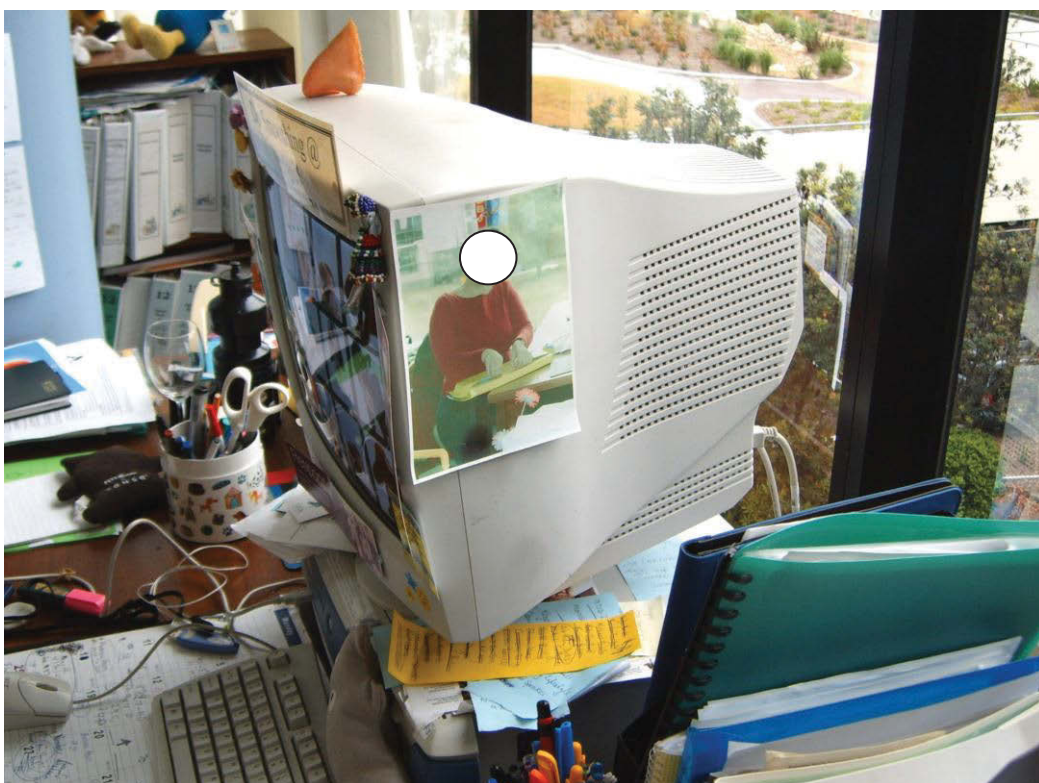
Photograph 9: Matthew's corner

Photograph 10: Alice at the desk in her old office

Photograph 11: Kevin in the home office

Appendix 8: List of tables and figures

BIBLIOGRAPHY

Armour, K. (1999). The case for a body focus in education and physical education. *Journal of Sport, Education and Society*, *4*(3), 5-16.

Barnett, R. (2004). Learning for an unknown future. *Higher Education Research and Development, 23* (3) 247-260.

Barnett, R. (2005). Recapturing the universal in the university. *Educational Philosophy and Theory,* 37 (6), 785-797.

Barnacle, R. (2001). *Phenomenology*. RMIT University Press.

Bashir, T. (1998). Dangerous liaison: Academics' attitude towards open learning in higher education. *Open Learning, 13* (1), 43-45.

Beebe, R., Vonderwell, S. & Boboc, M. (2010). "Emerging Patterns in Transferring Assessment Practices from F2f to Online Environments" *Electronic Journal of e-Learning.* 8 (1) 2010, (1-12). Retrieved from www.ejel.org/issue/download.html?idArticle=157

Berndtsson, I., Claesson, S., Friberg, F., & Öhlén, J. (2007). Issues about thinking phenomenologically while doing phenomenology. *Journal of Phenomenological Psychology, 38*, 256-277.

Birch, R. (1989). On phenomenology and its practices (part I). *Phenomenology and pedagogy, 7*, 187-217.

Blake, N. (2002). Hubert Dreyfus on distance education: Relays of educational embodiment. *Educational Philosophy and Theory, 34*(4), 2002.

Boddy, G. (1997). Tertiary educators' perspectives of and attitudes toward emerging educational technologies, *Higher Education Research and Development, 16*(3), 343 -356.

Bogdan, R.D., and Biklen, S.K. (1992). *Qualitative research for education: An introduction to theory and methods.* Boston: Allyn and Bacon.

Borgmann, A. (1984). *Technology and the character of contemporary life: A philosophical inquiry.* Chicago: University of Chicago Press.

Bourdieu, P. (1977). *Outline of a theory of practice*, trans. Richard Nice, Cambridge: Cambridge University Press.

Bourdieu, P. (1990). *The logic of practice,* trans. Richard Nice, Stanford: Stanford University Press.

Boyer, M. C. (1995). The corporeality of expertise. *Ethnos,* 70(2), 243-266.

Boyer, M. C. (1996). *CyberCities: Visual perception in the age of electronic communication*. Princeton Architectural Press.

Brown, S. R. (1999). Beyond the fringe: James, Gurwitsch, and the conscious horizon. *Cogprints.* School of Electronics and Computer Science, University of South Carolina. Retrieved from http://cogprints.org/1000/

Buchanan, I. (1992). 'Writing the wrongs of history: de Certeau and post-colonialism' *Journal of the South Pacific Association for Commonwealth Literature and Language Studies.* Number 33. Retrieved from http://wwwmcc.murdoch.edu.au/ReadingRoom/litserv/SPAN/33/Buchanan.

Buchanan, I. (2000). *Michel de Certeau. Cultural theorist.* London: Sage Publications.

Caelli, K. (2000). The changing face of phenomenological research: Traditional and American phenomenology in nursing. *Qualitative Health Research, 10*(3).

Casey, E. D. (1994). *Getting back into place: Toward a renewed understanding of the place-world.* Bloomington: Indiana University Press.

Casey, E. D. (1997). *The fate of place: A philosophical history*. Berkeley: University of California Press.

Cerbone, D. R. (2006). *Understanding phenomenology*. Stocksfield: Acumen Publishing.

Certeau de, M. (1980/1984). *The Practice of Everyday Life.* Translated by Steven F. Rendall. Berkeley: University of California Press.

Cloke, P., Philo, C., & Sadler, D. (1991). *Approaching human geography: An introduction to contemporary theoretical debates.* New York: Guildford Press.

Coaldrake, P., & Steadman, L. (1999). *Academic work in the 21st Century: changing roles and policies* (Canberra, Commonwealth of Australia, DETYA Higher Education Division).

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education.* (6th ed.) London: Routledge/Falmer.

Colaizzi, P. (1978). Psychological research as the phenomenologist views it. In R.Valle & M. King (Eds.), *Existential-phenomenological alternatives for psychology* (pp. 48-71). New York: Oxford University Press.

Crotty, M. (1998). *Foundations of social research: Meaning and perspective in the research process.* St. Leonards, Vic: Allen & Unwin.

Dainton, B. (2000). *Stream of Consciousness: Unity and continuity in conscious experience.* London: Routledge.

Dall'Alba, G. & Barnacle, R. (2005). Embodied knowing in online environments. *Educational Philosophy and Theory.* Vol. 37, No. 5, 2005.

Dall'Alba, G. (2005). Improving teaching: Enhancing ways of being university teachers. *Higher Education Research and Development.* Vol. 24, No. 4, November 2005, pp. 361-372.

Dall'Alba, G. & Barnacle, R. (2007). An ontological turn in higher education. *Studies in Higher Education.* Vol.32, No.6, December 2007, pp. 679-691.

Damasio, A. (2006). *Descartes' error*. London: Vintage Books.

Dang, T. T., & Robertson, M. (1910). Pedagogical lessons from students' participation in Web 2.0 *TESOL in Context, 20*(2), 5-26.

Denzin, N.K., & Lincoln, Y. S. (2012). *The SAGE handbook of qualitative research* (4th ed.). Thousand Oaks, CA.: Sage

Dilthey, W. (1985). *Poetry and experience.* Selected Works, Vol V, Princeton, N.J.: Princeton University Press.

Dilthey, W. (1987). *Introduction to the human sciences.* Toronto: Scholarly Book Services.

Dreher, H.V. (1997) *Empowering human cognitive activity through hypertext technology.* PhD Thesis. Perth, WA: Curtin University of Technology.

Dreyfus, H. L. (1972). *What computers can't do: A critique of artificial reason.* New York: Harper. Dreyfus, H. L. (1991). *Being-in-the-world: A commentary on Heidegger's being and time, Division I.* Cambridge, MA: MIT Press.

Dreyfus, H. L. (1992). What computers still can't do: A critique of artificial reason. Cambridge, MA: MIT Press.

Dreyfus, H. L. (2001). *On the Internet.* London: Routledge.

Dreyfus, H. L. (2002). Anonymity versus commitment: the dangers of education on the Internet. *Educational Philosophy and Theory, 34*(4).

Dreyfus, H. L. (2006). Merleau-Ponty's Critique of Mental Representations: The Relevance of Phenomenology to Scientific Explanation. *Intelligence without Representation.* Retrieved from http://www.hfac.uh.edu/cogsci/dreyfus.html.

Embree, L. (1986). *The encyclopedia of phenomenology.* Dortrecht: Kluwer.

Fuchs, T. (2005). Corporealized and disembodied minds. A phenomenological view of the body in melancholia and schizophrenia. *Philosophy, Psychiatry & Psychology* 12: 95-107. John Hopkins University Press. Retrieved from www.klinikum.uni-heidelberg.de/.../fuchs/Corporealised-Minds.pdf

Gadamer, H-G. (1989). *Truth and method* (2nd rev. English ed.). (Trans. J. Weinsheimer & D. Marshall), New York: Continuum.

Gallagher, S. & Zahavi, D. (2008). *The phenomenological mind. An introduction to philosophy of mind and cognitive science.* London: Routledge.

Giddens, A. (1984). *The constitution of society.* Berkeley: University of California Press.

Giorgi, A. P. (1970). *Psychology as a human science: A phenomenologically based approach.* New York: Harper & Row.

Giorgi, A .P. (1985b). Sketch of a psychological phenomenological method. In A. P. Giorgi (Ed.), *Phenomenology and psychological research.* Pittsburgh: Duquesne University Press.

Giorgi, A. P. (1997). The theory, practice and evolution of the phenomenological method as a qualitative research procedure. *Journal of phenomenological psychology*, *28*(2), 235-261.

Giorgi, A. P. (2008 a). Concerning a serious misunderstanding of the essence of the phenomenological method in psychology. *Journal of phenomenological psychology 39*, 33-58.

Giorgi, A. P. (2008 b). Difficulties encountered in the application of the phenomenological method in the social sciences. *Indo-Pacific Journal of Phenomenology, Volume 8, Edition 1.* Retrieved from www.ajol.info/index.php/ipjp/article/viewFile/65428/53118

Giorgi, A. P.(2009). *The descriptive phenomenological method in psychology. A modified Husserlian approach.* Pittsburgh: Duquesne University Press.

Glendinning, S. (2007). *In the name of phenomenology.* London: Routledge.

Gosper, M., McNeill, M. and Woo, K. (2010*).* Harnessing the Power of Technologies to Manage Collaborative e-Learning Projects in Dispersed Environments**.** *Journal of Distance Education.* 24 (1), 167-186. http://www.jofde.ca/index.php/jde/article/view/642

Green, B., & Hopwood, N. (2015). Introduction: Body/practice. In B. Green & N. Hopwood. (Eds), *The body in professional practice, learning and education: body/practice. Dortrecht:* Springer International Publishing, pp.3-14.

Green, B., & Hopwood, N. (2015). The body in professional practice, learning and education: A question of corporeality. In B. Green & N. Hopwood. (Eds), *The body in professional practice, learning and education: body/practice.* Dortrecht: Springer International Publishing, pp. 15-33.

Green, B. (2015). Thinking bodies: Practice theory, Deleuze, and professional education. In B. Green & N. Hopwood. (Eds), *The body in professional practice, learning and education: body/practice.* Dortrecht: Springer International Publishing, pp. 121-136.

Grosz, E. (1995). *Space, time and perversion: the politics of bodies.* New York: Routledge.

Gurwitsch, A. (1964). *The field of consciousness.* Pittsburgh: Duquesne University Press.

Hagar, P. (2012). Theories of practice and their connections with learning: A continuum of more or less inclusive accounts. In P. Hagar; A.Lee; A.Reich. (Eds), *Practice, learning and change: Practice-theory perspectives on professional learning.* Dordrecht: Springer Science+Business Media.

Haraway, D. (1991). 'A Cyborg Manifesto: Science, Technology and Socialist-Feminism in the Late Twentieth Century'. In D. Haraway, *Simians, Cyborgs, and Women.* London: Free Association Books, pp.149-81.

Hativa, N., & Goodyear, P. (2002). *Teacher thinking, beliefs and knowledge in higher education.* Dortrecht: Kluwer Academic.

Heidegger, M. (1927/1962). *Being and time.* Trans. John Mcquarrie and E. Robinson. New York: Harper & Row.

Heidegger, M. (1954/1977). *The question concerning technology, and other essays.* Trans. W. Lovitt. New York: Harper & Row.

Heidegger, M. (1993/1997). *Basic writings.* Trans. D. Farrell Krell. New York: Routledge.

Heidegger, M. (1967/1998a) Plato's doctrine of truth. Trans T. Sheehan in: W. McNeill (Ed.). *Pathmarks.* Cambridge: University Press.

Hein, S., & Austen, W. (2001). Empirical and hermeneutic approaches to phenomenological research in psychology, a comparison. *Psychological methods,* vol. 6; no.1, 3-17.

Hopwood, N. (2010). *Dwelling in complexity: relational-ecological understandings of context, space, place and the body in professional practice.* University of Technology, Sydney. Paper code: 1897. Paper presented at the AARE Annual Conference, Melbourne, 2010.

Howes, D. (2003). *Sensual Relations: Engaging the senses in culture and social theory.* Ann Arbor: University of Michigan Press.

Husserl, E. (1970a). *The crisis of European science and transcendental phenomenology,* Evaston: Northwestern University Press. Translated by D. Carr. Evanston, IL: Northwestern University Press (Orig. pub. German, 1954).

Husserl, E. (1970b). *Logical investigations.* Vols. 1 & 2. Translated by J.N. Findlay. New York: Humanities Press, (Orig. pub. German, 1962).

Husserl, E. (1983). *Ideas pertaining to a pure phenomenology and to a phenomenological philosophy*. Second Book. Trans. F. Kersten. Dordrecht: Kluwer.

Hycner, R. H. (1985). Some guidelines for the phenomenological analysis of interview data. *Human Studies* 8, 279-303. Dortrecht: Martinus Nijhoff. Printed in the Netherlands.

Ihde, D. (1979). *Techniques and practice*. Boston: D. Reidel.

Ihde, D.(1990). *Technology and the lifeworld. From garden to earth.* Bloomington: Indiana University Press.

Ihde, D. (1993). *The philosophy* of technology: An introduction. New York: Pragon House.

Ihde, D. (2002). *Bodies in Technology.* Minneapolis: University of Minnesota Press.

James, W. (1890). *The principles of psychology.* Retrieved from https://ebooks.adelaide.edu.au/j/james/william/principles/index.html

James, W. (1902). The varieties of religious experience. New York: The Modern Library.

Johnsson, M.C. (2012). Sensing the tempo-rhythm of practice: The dynamics of engagement. Chapter 4. In P. Hager et al. (Eds), *Practice, learning and change: Practice theory perspectives on professional learning, professional*

learning, Professional and Practice-based Learning 8. Dortrecht: Springer Science+Business Media.

Kemmis, S. & McTaggart, R. (2000). Participatory action research, in N.K. Denzin and Y.S. Lincoln. (Eds.), *Handbook of Qualitative Research* (2nd ed.). London: Sage, pp. 567–605.

Kinsella, E.A. (2015). Embodied knowledge: Toward a corporeal turn in professional practice, research and education. In B. Green & N. Hopwood (eds) *The body in professional practice, learning and education. Body/practice.* Springer International Publishing, pp. 245-258.

Kvale, S. (1996). *InterViews. An introduction to qualitative research interviewing.* London: Sage Publications.

Laurillard, D. (1993). *Rethinking university teaching: a framework for effective use of educational technology*. London: Routledge.

Laurillard, D. (1997). The processes of student learning. *Higher Education,* 8, 395-409.

Laurillard, D. (2007).Modelling benefits oriented costs for technology enhanced learning. *Higher Education,* 54 (1), 21-39.

Leder, D. (1990). *The absent body.* Chicago: University of Chicago Press.

Light, R & Kirk, D. (2001). Australian cultural capital – Rugby's social meaning: Physical assets, social advantage and independent school. *Culture, Sport, Society,* 4 (3).

Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic Inquiry.* Newbury Park, CA: Sage Publications.

Markauskaite and Goodyear (2009). *Designing for complex ICT-learning: understanding teacher thinking to help improve educational design.* Retrieved from www.ascilite.org.au/conferences/auckland09/procs/markauskaite.pdf

Martin, E., Prosser, M., Trigwell, K., Ramsden, P. & Benjamin, J. (2000). What university teachers teach and how they teach it. *Instructional science,* 28 (5), 387 -412. http:// dx.doi.org/10.1023/10265599127

Mautner, T. (ed.) (1996). *Dictionary of philosophy.* Harmondsworth: Penguin Books.

Marx, K. (1963). "Alienated Labour" in *Karl Marx: Early writings*, trans. and ed. by T.B. Bottomore. New York: McGraw-Hill, pp.120-127.

McShane, K. (2002). *Academics' metaphors and beliefs about university teaching and learning.* AARE 2002. Sourced 3/03/2006. Retrieved from http://www.aare.edu.au/02pap/mcs02081.htm

McShane, K. (2004). Integrating face-to-face and online teaching: academics' role concept and teaching choices. *Teaching in Higher Education,* 9 (1), January.

McShane, K. (2005). Sending messages to a machine: Articulating ethe-real selves in blended teaching (and learning). *Revised paper submission to E-learning Journal.*

McShane, K. (2006). *Technologies transforming academics: Academic identity and online teaching.* Ph. D. thesis. Sydney: University of Technology.

Merleau-Ponty, M. (1962). *The phenomenology of perception.* Trans. C. Smith, London: Routledge & Kegan Paul, (Orig. pub. French, 1945).

Moran, D. (2000). *Introduction to phenomenology.* London: Routledge.

Morris, D. (2008). The body. *In Merleau-Ponty. Key concepts*. R. Diprose & J.Reynolds. (Eds.). Stocksfield: Acumen Publishing, pp.111-120.

Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage Publications.

O'Loughlin, M. (1995). *Intelligent Bodies and Ecological Subjectivities: Merleau-Ponty's Corrective to Postmodernism's "Subjects" of Education.* Retrieved from http://www.ed.uiuc.edu/EPS/PES-Yearbook/95_docs/o'loughlin.html 14/

Patton, M.Q. (1990). *Qualitative evaluation and research methods*, 2nd ed. Newbury Park, CA: Sage.

Prosser, M., & Triwell, K. (1997). Relations between perceptions of the teaching environment and approaches to teaching. *British Journal of Educational Psychology,* 67, 25-35.

Ramsden, P. (1979). Student learning perceptions of the academic environment. *Journal of Higher Education,* 8, 411-427.

Raturi, S. & Boulton-Lewis, G. (2014). Shaping lecturers'beliefs about teaching and learning in higher education in the Pacific. *Issues in Educational Research,* 24 (1).

Relph, E.D. (1973). *Place and Placelessness.* A revision of the author's thesis. London: Pion, 1976.

Richardson, J.T.F. (2005). Students' approaches to learning and teachers' approaches to teaching in higher education. *Ed. Psychology.* 25 (6),

December 673-680. Retrieved from
www.science.smith.edu/~jcardell/Courses/EGR325/Readings/

Richardson, J.T.F. (2010). Approaches to studying, conceptions of learning and learning styles in higher education. *Learning and Individual Differences.* Retrieved from www.elsevier.com/locate/lindif.

Russell, H. (2005). *The lived experience of laterlife computer learners.* Sydney: University of Technology. Ph.D. thesis.

Sappey, J. & Relf, S. (2010). Digital Technology Education and its Impact on Traditional Academic Roles and Practice. *Journal of University Teaching and Learning Practice.* 7 (1).
 Retrieved from http://ro.uow.edu.au/jutlp/vol7/iss1/3

Sartre, J-P. (1995). *Being and nothingness. An essay on phenomenological ontology*. Trans. Hazel Barnes. London: Routledge.

Schatzki, T.R. (1996). Social Practices: A Wittgensteinian approach to human activity and social order. New York: Cambridge University Press.

Schatzki, T.R. (2001). Introduction practice theory. In T.R.Schatzki., K. Knorr Cetina., & E.von Savigny. (Eds.), *The practice turn in contemporary theory.* London:Routledge.

 Seamon, D. (2000). *Phenomenology, place, environment and architecture: A review of literature.* Retrieved from
 http://www.arch.ksu.edu/seamon/articles/2000_phenomenology_review.htm.

Selwyn, N. (2012). *Sharpening the 'ed-tech imagination': improving academic research in education and technology.* Learning with New Media Inaugural Conference, 23 March.

Shotter, J. (2006). *Talk of saying, showing, gesturing, and feeling in Wittgenstein and Vygotsky.* Dept. of Communication, University of New Hampshire, Durham. Retrieved from http://www.massey.ac.nz/~alock/virtual/wittvyg.htm

Shotter, J. (2011). Embodiment, abduction, and expressive movement: A new realm of inquiry? *Theory & Psychology.* 219 (4) 429-456.

Smith, D. Woodruff., "Phenomenology", *The Stanford Encyclopedia of Philosophy (Winter 2005 Edition)*, Edward N. Zalta (ed.), URL = http://plato.stanford.edu/archives/win2005/entries/phenomenology/.

Smith, S.J. (1992). Studying the lifeworld of physical education: A phenomenological orientation. In A. Sparkes (Ed.), *Research in physical education and sport: Exploring alternative visions* (pp. 61-89). London: The Falmer Press.

Soja, E. (1996). *Thirdspace: Journey to Los Angeles and the real-and-imagined places.* Oxford: Blackwell.

Spinelli, E. (1989). *The interpreted world.* London: Sage.

Strathern, M. (2000/01). *Abstraction and decontextualisation: an anthropological comment* [ESRC conference 'Virtual Society ? Get Real!], Cambridge Anthropology, 22:52-66. Revised in S. Woolgar(ed), Virtual Society? Technology, cyberbeole, reality. Oxford: OUP, 2002 Retrieved from http://virtualsociety.sbs.ox.ac.uk/GRpapers/strathern.htm sourced 31/10/2005

Taylor, A.E. (2011). Body and technology: reframing the humanistic critique. *Janus Head.* 12(1). Trivium Publications, Pittsburgh, PA.

Thomson, I. (2011). Heidegger on ontological education, or: How we become what we are. *Inquiry,* 44, 243-246.

Throop, C. J., Murphy, K. M. (2002). Bourdieu and phenomenology. A critical assessment. *Anthropological Theory.* 2 (2),185-207 London: Sage.

Trigwell, K., & Prosser, M., & Waterhouse, f. (1999). Relations between teachers' approaches to teaching and students' approaches to learning. *Higher Education,* 37, pp. 57-70.

Trigwell, K., Prosser, M., Martin, E. & Ramsden, P. (2005). University teachers' experiences of change in their understanding of the subject matter they have taught. *Teaching in Higher Education,* Vol. 10, No2, April 2005, pp. 251-261.

Throop, C. J., Murphy, K. M. (2002). Bourdieu and phenomenology. A critical assessment. *Anthropological Theory.* Vol 2 (2): 185-207 SAGE Publications.

Turkle, S. (1984). *The Second Self: Computers and the Human Spirit.* Granada Publishing Limited.

Turkle, S. (1995). *Life on the screen: Identity in the age of the internet.* New York, Simon & Schuster.

Turkle, S. (2011). *Alone together. Why we expect more from technology and less from each other.* New York, Simon & Schuster.

Turner, V. (1966).*The ritual process: Structure and antistructure.* Chicago: Aldine.

Van Manen, M. (1997). *Researching lived experience: Human science for an action sensitive pedagogy* (2nd ed.). Ontario: The Althouse Press.

Van Manen, M. (2002). Phenomenology online. Retrieved 2/3/06, from
http://www.phenomenologyonline.com

Welch, A.J. (2001). Finding a way through the maze. In Barnacle, R. (2001).
Phenomenology. RMIT University Press.

Weller, M. (2011). *The digital scholar: How technology is changing academic practice.*
http://www.bloomsburyacademic.com/view/DigitalScholar_9781849666275
/book-ba-9781849666275.xml

Willis, P. (2001). The 'Things themselves' in Phenomenology, *Indo-Pacific Journal of Phenomenology,* 1 (1).

Willis, P (2004). From "The things themselves" to a "Feeling of Understanding":
Finding different voices in phenomenological research. *Indo-Pacific Journal of Phenomenology,* 4(1), 1-13.

Winner, L. (1977). *Autonomous technology: technics out-of-control as a theme in political thought.* Cambridge, Mass: MIT Press.

Winner, L. (1986). *The whale and the reactor: a search for limits in an age of high technology.* Chicago: University of Chicago Press.