Virtual Worlds as Pedagogical Places: Experiences of Higher Education Academics

by

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I am the author of the thesis entitled Virtual Worlds as Pedagogical Places: Experiences of Higher Education Academics

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Abstract

Significant changes in higher education are challenging ways of being for academics. The rapid development of technologies, combined with the influences of globalisation on higher education, is creating an increasingly different environment for university learning and teaching. More and more, online technologies are being utilised in the creation of new learning environments to cope with these changing dynamics. Virtual worlds are part of a wide range of technology-mediated learning spaces now used by universities that are challenging established pedagogies, practices and ways of being an academic.

This thesis explores how academics in higher education experience virtual worlds as pedagogical places. Using the virtual world Second Life™ as a lens, I examine the changing nature of embodiment, pedagogy and place for academics and the significance these changes have for academic identity and practices. A hermeneutic-phenomenological approach following van Manen (1990) is used for this inquiry and it is framed by post-phenomenological philosophies of human–technology relations after Ihde (1990, 1998, 2002, 2011a, 2011b) and Verbeek (2005, 2008). Theories of extended embodiment established by Merleau-Ponty (1962) and Heidegger (1962) underpin the understandings of experiences mediated through the concept of the avatar.

In order to capture thick descriptions that provide insights into the lived experience of academics’ realities, data were collected from academics who had
direct experience using Second Life for learning and teaching. The data were analysed through hermeneutic phenomenology and discourse analysis approaches. This interpretive research method uses data extracts to include the reader in the process.

It will be argued that the results from this research indicate that virtual worlds are places where academics dwell pedagogically. Further it will be argued that virtual worlds can be creative, playful, agential and collegial places for academics where they engage with student avatars in a pedagogically caring way. The virtual-world place is a figured world that influences ways of being and ways of feeling, and this has strong implications for academics’ professional identities and how they see themselves as academics in these spaces. The results from this research have implications for the professional development of academics as we move further into the 21st century and virtual learning spaces increasingly become the norm.
# Table of contents

Chapter 1: Introduction to the research
  Introduction.......................................................................................................................... 1
  Rationale................................................................................................................................. 1
  Overview of focus and purpose of the study ................................................................. 2
  Additional focus..................................................................................................................... 3
  Research questions............................................................................................................... 4
  Background............................................................................................................................ 5
  From my perspective.............................................................................................................. 5
  Global context......................................................................................................................... 10
  Role of virtual worlds in online learning............................................................................. 11
  Higher education................................................................................................................... 15
  Defining virtual worlds......................................................................................................... 18
  Virtual world evolution........................................................................................................... 19
  Significance of the research................................................................................................... 21
  Context and boundaries of this research............................................................................ 24
  Theoretical and philosophical framework............................................................................ 27
  My previous experience with phenomenology.................................................................... 29
  Assumptions of the research................................................................................................. 30
  Thesis structure..................................................................................................................... 30
  Limitations of the research.................................................................................................... 32
  Clarification of terms............................................................................................................. 33
  Key terms.............................................................................................................................. 34
  Summary................................................................................................................................. 36
Chapter 2: Review of the literature and context of the research

Introduction

Ideas of the university

Globalisation and the information and knowledge society

Massification

Internationalisation

Globalisation, space and time

Information and communication technologies (ICTs)

The role of technology and its uptake in higher education

Universities as reconfigured spaces

Reconceptualising higher education

Learning spaces

Learning spaces, pedagogy and built pedagogies

Learning spaces as material worlds

Learning landscapes

Recombinant learning landscapes

Morphing role of academics

Early adopters and innovators

Virtual worlds: history and context

Synthetic environments

Virtual reality environments

Virtual worlds in K–12 education

Second Life in higher education

Australian context

Presence – a brief introduction
Current presence research ................................................................. 71
Gaps in the literature ........................................................................ 73
Summary ............................................................................................. 75
Chapter 3: Embodiment, pedagogy and place ..................................... 76
Embodiment ....................................................................................... 78
Theories of embodiment ...................................................................... 79
Embodiment and technology ............................................................. 80
Human–technology relations: Ihde and Verbeek ............................... 83
Avatars ............................................................................................. 87
Proprioception and embodied interaction ......................................... 87
Avatars and embodiment .................................................................. 89
Avatars embody identity .................................................................. 92
Avatar identity as Discourse identity ............................................... 93
Institution identity .......................................................................... 94
Discourse identity .......................................................................... 94
Presence and immersion .................................................................. 95
Botgirl questi ................................................................................ 97
Pedagogy ......................................................................................... 99
Introduction ................................................................................... 99
Pedagogy as being with ................................................................. 99
Embodied and relational pedagogy ............................................... 100
Dwelling pedagogically ................................................................. 102
Place ............................................................................................... 104
Overview of space, place and sense of place ................................. 105
Introduction to place ....................................................................... 106
Defining place............................................................................................................. 106
Rhythms and flows...................................................................................................... 107
Approaches to sense of place...................................................................................... 108
The brain and body: experiencing place................................................................. 110
Embodied place and identity ................................................................................... 112
Home........................................................................................................................... 114
Virtual places............................................................................................................ 115
Virtual-world places echoing concrete places ....................................................... 116
One group’s experience of a virtual sense of place.................................................. 117
Virtual place metaphors ........................................................................................... 120
Place pedagogies....................................................................................................... 121
Materiality of place.................................................................................................... 122
Material pedagogies.................................................................................................. 125
Place-ballet................................................................................................................ 125
Architectural space of virtual-world spaces ............................................................ 126
Gaps in the literature that this study addresses ...................................................... 129
Summary.................................................................................................................... 129

Chapter 4: The research approach......................................................................... 131
Introduction................................................................................................................. 131
Personal frames that have influenced the study..................................................... 132
Research paradigms.................................................................................................. 132
Ontological position.................................................................................................. 133
Epistemological position........................................................................................... 134
Interpretive stance..................................................................................................... 135
Research methodology and context........................................................................ 136
Consideration of alternative methodologies .................................................. 138
Ethnography ............................................................................................................ 138
Symbolic interactionism ......................................................................................... 140
Phenomenology overview and origins ................................................................. 142
Descriptive and interpretive .................................................................................. 143
Bracketing .................................................................................................................. 145
Intentionality .......................................................................................................... 146
The lifeworld .............................................................................................................. 149
Hermeneutics .......................................................................................................... 150
Lived experience ...................................................................................................... 152
Developing the phenomenological question ....................................................... 154
Post-phenomenology .............................................................................................. 155
Method ...................................................................................................................... 157
Introduction .............................................................................................................. 157
Research methods .................................................................................................. 158
Participant recruitment ......................................................................................... 159
Ethical considerations ............................................................................................ 161
My role as researcher ............................................................................................. 162
Conducting online interviews .............................................................................. 165
Interviews as intercorporeal experiences .............................................................. 167
Data transcription, confidentiality and storage ..................................................... 169
Limitations of the study ......................................................................................... 169
Criteria for trustworthiness ................................................................................... 170
Credibility ................................................................................................................. 171
Transferability ........................................................................................................ 172
Confirmability ...................................................................................................................... 172
Additional evidence of rigour ........................................................................................... 172
Analysing the data ............................................................................................................. 173
Dwelling with the transcripts ............................................................................................ 176
Developing broad themes ................................................................................................. 176
Selective approach ............................................................................................................ 177
Materiality of analysis ....................................................................................................... 178
Close reading of data .......................................................................................................... 179
Drawing out key themes ..................................................................................................... 181
Discourse analysis .............................................................................................................. 182
Figured worlds ................................................................................................................... 184
Summary ............................................................................................................................. 185
Chapter 5: Findings ............................................................................................................ 187
Introduction ......................................................................................................................... 187
Embodiment ....................................................................................................................... 188
Embodied professional identity ......................................................................................... 188
Embodying, negotiating and shaping identities ................................................................. 190
Visual cues .......................................................................................................................... 194
Building cues ...................................................................................................................... 195
Signifying a profession ....................................................................................................... 197
The Authoritative Academic ............................................................................................. 198
Creating identity through contrast and social good ......................................................... 200
The Collegial Academic .................................................................................................... 205
Constructing avatar student identities and relationships .................................................. 206
Transient identities ............................................................................................................. 209
Being an avatar academic requires a specific skill set..............................213
Lived experience: time, place, relationship and embodiment.............217
To care........................................................................................................220
Academic agency......................................................................................221
Pedagogy....................................................................................................223
Creating pedagogical places.....................................................................224
Agentive pedagogical artefacts.................................................................226
Pedagogical figured worlds....................................................................227
Performative pedagogies .........................................................................232
Scaffolding old practices in new spaces..................................................233
Geographies of pedagogical freedom, fun and playfulness................234
Place..............................................................................................................240
Place-making............................................................................................241
Belonging and dwelling places.................................................................243
Materiality and virtual-world artefacts....................................................246
Artefacts as signifiers of identity and identity praxis.............................247
Artefacts of different realities .................................................................249
Academic creativity and fulfilment through making.............................251
Summary.....................................................................................................255

Chapter 6: Discussion and conclusion.........................................................257
Introduction................................................................................................257
Virtual world as pedagogical tool or to dwell pedagogically..................259
Embodiment...............................................................................................260
Introduction................................................................................................260
Embodiment shaping identity and being or dwelling..........................261
Avatar embodiment and academic identity .............................................. 262
Avatar appearance ............................................................................... 262
I avatar ................................................................................................. 263
Co-constructed identity ....................................................................... 264
Relationship between academic and avatar ........................................ 267
Extended body and proprioception ...................................................... 268
Embodied skills .................................................................................. 271
Dwelling as an extended, intentional being through one's avatar .......... 273
Modalities of academic identity: authority and collegiality ............... 274
Pedagogy .............................................................................................. 275
Care and why is it important for higher education today ................. 276
Pedagogy of care and dwelling ........................................................... 277
Pedagogical freedom, playfulness and academic agency ................. 279
Place .................................................................................................... 280
Creating pedagogical places ............................................................... 281
Creating a learning place with care ..................................................... 282
The lay of the land .............................................................................. 284
Materiality, place, building and dwelling .......................................... 285
Virtual-world places as figured worlds .............................................. 287
Place-making and creative fulfilment ............................................... 288
Summary of discussion ...................................................................... 290
Conclusion .......................................................................................... 293
Aim of the research ............................................................................ 295
How the research has been conducted ............................................. 295
Significance ......................................................................................... 296
Chapter One

Chapter 1: Introduction to the research

Introduction
In this chapter I provide an overview of the broad global issues from which the impetus for this study has emerged and introduce my aims in undertaking the research project on which this thesis is based. The background for the study on a personal level is introduced, as are the global influences on change in higher education that contextualise the research rationale. An outline of the research methodology and the philosophical frames that guide this research is presented and I explain key terms, clearly state the delimitations and limitations of the research, and provide a guide to the overall structure of the thesis.

Rationale
The use of virtual worlds in higher education has emerged from influences arising from globalisation and the exponential rise of developments in technology. Consequently, these influences have created widespread change in higher education, particularly over the past few decades, with significant implications for teaching and learning and the kinds of learning spaces that academics encounter. This research is an inquiry into the experiences of university academics who are using virtual worlds for teaching and learning. My interest in undertaking this inquiry is influenced by my own work in learning innovation at an Australian university and previous research in virtual environments.
Overview of focus and purpose of the study

The focus of this research study and thesis is to understand how virtual places can be pedagogical through the lived experiences of higher education academics. Virtual worlds are part of a suite of technologies contributing to new landscapes of learning spaces in higher education and, as a review of literature in Chapter 2 will reveal, the perspectives of academics is missing from the conversation. The aim of this research study therefore is to uncover academics’ perspectives on the use of virtual worlds for teaching and learning, and the implications this may have for their role as academics. The virtual world Second Life™ is used as a lens to examine how virtual spaces influence ways of being an academic and the consequences for teaching and learning. Inasmuch as Second Life (SL) acts as a lens, the additional lenses of embodiment, pedagogy and place are used to refine and condense the research focus. A hermeneutic phenomenological approach provides access to the phenomenon – the experience of a virtual pedagogical place – through interpreting of the kinds of experiences that make the place pedagogical for this group of academics.

This thesis examines how academics experience being an academic avatar based on theories of extended embodiment (Merleau-Ponty, 1962; Heidegger, 1962) through the mediation of technology (Ihde, 1990, 2002). It seeks to further develop understanding of the kinds of pedagogical experiences that may be afforded by virtual worlds from the pedagogical perspective that van Manen (1990, 2000, 2008) describes as seeing the student and being associated with tact and care. This pedagogical approach is
by nature relational, which is an educational process of building relationships (Bingham & Sidorkin, 2008). It is uncertain from extant research whether there is a possibility for a relational pedagogical approach in the increasingly online nature of today’s universities. However, Chick and colleagues (Chick, Haynie & Gurung, 2012) suggest a multi-relational approach that involves any number of people associated with a student’s learning and can be leveraged through online technologies.

A further objective of this study is to understand the kinds of experiences that make a virtual world a place. Human geographers such as Relph (1981, 2008) and Tuan (1975, 1979) believe that for a place to be meaningful, it has to be meaningful for someone; so this is what makes a virtual place meaningful. This requires interaction by someone with a place and relationships built with the objects or artefacts that dwell in the place, as well as with others who are in that place. Although human geography tends to view places as containers for experiences, the perspective of this research aligns more with Dovey’s (2010) concept of place as an assemblage. Therefore, places in virtual worlds may be seen as assemblages of many different kinds of experiences, which will be filtered through embodiment, pedagogy and place for this study.

Additional focus
In developing the research questions for this study, I have included questions that focus on the materiality or the architecture of the virtual space. I have done so because the importance of the physicality and material artefacts of the learning space is gaining momentum; the architecture, interior
architecture, design, furnishings and technology integration are being recognized as critical to the quality of learning and engagement for students. There is a realisation among educationists and researchers that spaces matter and can have a powerful impact on learning (Van Note Chism, 2006). Monahan (2000) introduces a different dimension to learning spaces referring to built pedagogies where learning spaces embody certain values and curricula depending on their design. These perspectives have seen many universities in Australia and internationally build new spaces and transform existing spaces to that are responsive to different pedagogical approaches (see for example Fisher & Newton, 2014).

As Oblinger (2006) points out, learning spaces tend to reflect their times. Traditional assumptions of learning space design have been challenged researchers (see Academic Development Group, 2013; Blackmore, Bateman, Loughlin, O’Mara & Aranda, 2011), with old industrial models of lecture theatres and tutorial rooms making way for spaces that reflect the life of today’s young people and their changing educational needs. Understanding how important place is for learning in physical contexts raises considerations for similar attention to applications in virtual learning spaces.

**Research questions**
The overarching research question is:

- How do academics experience virtual worlds as pedagogical places?

This is supported by four sub-questions to address the three lenses through which this study is examined: embodiment, pedagogy and place. An
additional sub-question deals with that materiality of virtual places, which assists in the understanding of experiences of place.

The first three sub-questions are:

- How is being an academic embodied in a virtual world?
- How do academics experience pedagogy in a virtual place, particularly the pedagogical relationship?
- How is a virtual learning place experienced by academics?

In answering these questions, the research illuminates a more complex understanding of what it means for academics to ‘be’ virtual academics, teaching virtual students in virtual places.

Alongside the three areas of embodiment, pedagogy and place, there are a number of discipline areas and discourses that intersect, overlap or influence my research aim. These are woven into the literature review to signal their significance for the research and also to help contextualise my choice of method and methodology. I draw on human geography because it is deeply connected to human interaction with place and space, while environmental psychology provides understanding around affective/emotional responses to the physical character of places; both approaches have a long history of place inquiry and theory.

**Background**

*From my perspective*

This research study has grown out of previous research I conducted in a Western Australian senior high school as part of a master's degree examining the use of 2D multiuser virtual environments – a multi-user object oriented
(MOO) environment. While the MOO project did not examine academics’ perspectives on virtual places, it generated my interest in the possible salience of these spaces and how they shape people’s virtual identities and experiences.

The MOO project was based on an online role-play gaming framework that had a medieval event – the siege of Rochester Castle by King John – as its storyline and was integrated into the high school curriculum for science and society and environment classes. For me one of the most intriguing findings from the Rochester Castle MOO research project was the concept of a virtual ‘cubbyhouse’ (see Irving, 2005). As part of the project, students used the MOO to create a virtual replica of the medieval Rochester Castle located in the United Kingdom and role-played the 1215 siege by King John. The cubbyhouses were secret rooms the players created that ‘floated’ free of the formal architecture of the castle. This is not an unusual phenomenon in itself, as generally a player will create a room or cluster of rooms, furnish this with text, images and objects, and then link it to the main architecture. However, these rooms were never linked to the main architecture; they were kept separate and secret within the MOO interface, and people other than the owner could only access them by obtaining the room (object) number so they could teleport directly there. One student in particular created an elaborate medieval tavern with guest rooms and cellar that took considerable time and effort. As the MOO administrator, I often encountered this student spending long hours after school working on his virtual tavern and he spoke of it as a
special place. It was as if each of these students were building a cubbyhouse where they could invite friends, be creative or just retreat from the castle.

At the time, this made me consider whether it was possible that virtual cubbyhouses operated in similar ways to what Korpela (1989) calls “restorative” places in his study examining the secret places where children find comfort. In Langeveld’s (1983a, 1983c) phenomenology of children’s secret places, he refers to this kind of place or “secret places” as “a home where one finds oneself at home, a place where one is with oneself” (1983a, p. 183). In the real world, cubbyhouses and secret places are important imaginative and creative places where children role-play imaginary worlds and “whoever truly enters the secret place, enters a true illusion” (Langeveld, 1983a p. 183). Indeed, the significance of place is recognised as integral to childhood development within the Reggio Emilia tradition, where place is considered a third teacher (Strong-Wilson & Ellis, 2007). Therefore it was intriguing to me that students were creating these kinds of imaginary places in a virtual space.

This capacity for the participants in virtual worlds to imagine they are in a space that is real enough to require private spaces and also their ability to move through a virtual space as if they were traversing a real space with geographical or spatial qualities were fascinating to me as a researcher. Additionally, the interaction with 2D digital artefacts by the students and their identification with their 2D avatars, which were represented by an image and textual description on a page similar to a simple webpage,
Chapter One

projected a strong sense of being in a place and of being someone mediated through these 2D representations.

Van Manen (2014) states that a phenomenological question may arise at any time when we have an experience that leaves us reflecting in wonder over something. I was left reflecting in wonder at the idea that a virtual space might be a meaningful place and that experiences with others as avatars in virtual spaces could be meaningful. It made me want to explore this concept of being in a virtual place further.

**Affective spaces**
In addition to my desire for greater understanding about virtual spaces and relational experiences, I have been a user of virtual worlds for quite some years, primarily in a work setting in order to develop learning environments, but also on a personal level and my personal experience was that some virtual world spaces were more comfortable or more interesting to be in than others. This is a phenomenon also identified by Peachey (2010) when gathering feedback from friends and colleagues who were trying out virtual world spaces created for Open University. Peachey identifies key design features that make spaces more appealing for users including being based on physical world features that are known or recognisable. For example, simulated natural environments with greenery such as lawns and trees together with meandering paths linking key places are interesting and encourage users to explore the virtual world space.
Chapter One

**Home**
As stated earlier, SL is the virtual world platform of focus for the current study and a more thorough overview of how this platform is used in education is provided in Chapter 2. In SL, a participant is able to set a particular place as 'home' so that they can return there (teleport) with a click of a button and are always in that place when they log in. This is a coordinate, an exact mathematical position in a 3D space made up of vectors that are determined by an x, y, z position. This 'home' is a similar concept to a homepage on a website, only personalised to an exact coordinate. In SL, when setting your home it is generally not overtly to a mathematical coordinate but to a familiar place and then the coordinates are recorded to enable you to return to that position.

When I was first exploring SL and before I had a 'home', I liked to put my avatar somewhere private before logging off. I always sought places that were a bit secluded; sometimes it was a tree house or the balcony of a library. Until I found these places, I left my avatar on the same bench overlooking a pond in the grounds of an institution, always the same place. At first I thought that when I exited from an SL session, my avatar would slump over where standing, as it does when a player's engagement with SL is inactive for a while. I hated the thought of my avatar standing slumped over in the middle of somewhere, out in the open, looking a bit silly, lost and forlorn, and I didn’t want any other player doing anything to it. I also found it disconcerting logging back on and wondering where I was; if the land was strange, I felt a bit anxious and quickly found somewhere to teleport to. Later when I was
working on a project to develop a clinic for teaching health science students in my university, I made that clinic my 'home'. This space has not been used for a couple of years, but I still have the clinic as my 'home'. I feel comfortable logging onto SL and finding myself in the clinic near the waterfall. This need for place-making is not an uncommon phenomenon and is a fundamental behaviour for users of virtual worlds (Boellstorff, 2008; Martinez, 2011; Plunkett, 2011).

The ability to experience a sense of place in a virtual world, as I have stated, is intriguing for me personally and, as an academic developer in teaching and learning at an Australian university, I have noticed a shift towards teaching spaces that are online or that integrate a range of online spaces with physical spaces. I am curious about how academics feel about teaching in different places and therefore have chosen virtual worlds as a lens through which to examine the experiences of academics adapting to the changing nature of university teaching and learning spaces.

The adoption of virtual worlds in higher education and the changing nature of learning spaces have not happened in isolation. They are influenced by broader global changes that include the rise of the knowledge society and rapid technology developments.

**Global context**
Higher education has undergone enormous change and restructuring for some considerable time (Slaughter & Leslie, 1997; Clark, 1998; Trowler, 1998) and will continue to do so well into the future (Altbach, 2008, 2013a;
Barber, Donnelly, Rizvi & Summers, 2013; Johnson, Adams, Cummins et al., 2013; Teichler, 2014). There are many influences on change in higher education that have greater or lesser impact for different countries. However, the overarching influences on change in universities are acknowledged as globalisation, the rise of the knowledge or information society, and advances in technology (see Blackmore, 2002; Altbach, 2004; Marginson & van der Wende, 2007), which present continuing challenges for higher education policy, systems and practices globally (Zgaga, 2013; Khan, 2015; Scott, 2011).

Globalisation means that competition among traditional education institutions is moving beyond geographical borders as online technologies open up possibilities for students to study anywhere and anytime and almost any subject (Bhandari & Blumenthal, 2011). Wading into the competitive mix are the new for-profit and virtual institutions that are expanding at a rapid rate (Stallings, 2001; Robins & Webster, 2002; Newman, Couturier & Scurry, 2010). Moreover, this is coupled with a student demographic that does not fit with the traditional 18–24-year-olds studying fulltime on campus but is highly distributed, requires flexible study options and is often located in diverse time zones. Consequently, universities are exploring ways of being more relevant and flexible within a diversified market (Mangeol, 2014).

**Role of virtual worlds in online learning**

This significant increase in the number of students studying online brings into question the capacity of universities to provide opportunities for quality learning that transcends the propensity for content-driven modalities that is reflective of much of the online learning currently available. In addition to the
changes affecting higher education mentioned above, pedagogies are needing to be adapted for the digital age (Beetham & Sharpe, 2013; Voogt, Erstad, Dede & Mishra, 2013). Research supports the understanding that conceptual knowledge cannot be abstracted from the activity in which it is situated and that learning and cognition are undoubtedly connected and situated (Brown, Collins & Duguid, 1989; Bell, Maeng & Binns, 2013; Dawley & Dede, 2014).

Facilitating learning in situ with other students within a particular social and cultural context is challenging for educators outside physical world examples, however much has been written of the ways in which multi-user online games, virtual worlds and augmented reality games can create contexts for learning through situated cognition (see Gee 2003; Squire & Klopfer, 2007; Squire, 2011). Furthermore, Duncan, Miller and Jiang’s (2012) extensive review of virtual world literature found twelve types of educational activities used in virtual worlds, including fieldwork, laboratories, quests and inquiry-based learning, that signal evidence of situated learning opportunities. It would seem the rise in virtual worlds has the potential to augment other forms of online learning and to complement face-to-face teaching and learning.

With the prospect that online technologies will come to be a dominant space for teaching and learning in higher education, an assumption could be made that technologies that create mixes of online, offline, digital, physical, augmented and mobile spaces will become part of the norm for higher education. Indeed, Keppell and Riddell (2012) insist this is already so.
Chapter One

Pedagogies need to be adapted for these hybrid learning spaces and teaching staff need to adapt to multiple academic identities and multiple pedagogies, and to learn to teach in multiple not-seen-before hybrid spaces. Virtual worlds, or virtual-world type places in some guise, will be part of this ecology of learning spaces. This research study, to some extent, is answering questions around these issues. I make a further assumption that, given the rapid rate of the change happening in higher education, many academics are largely unprepared for teaching in the kinds of places virtual worlds represent.

Many see virtual worlds not simply as pedagogical tools but rather as places of “social and cultural innovation” (Jensen, Phillips & Strand, 2012 p. 3) and “large-scale persistent places that many users can inhabit together” (Schroeder, 2011, p. 5) that paint a much richer image of social and cultural interaction. Moreover, the role of place in education has long been recognised as a critical element for the learning process (see Sobel, 2005; Gruenewald, 2003, 2008).

As I will discuss in later chapters, the key researchers and writers about place are human geographers and environmental psychologists, among a plethora of others who have explored concepts and expressions of place through many different senses and lenses. Their understanding of place and what leads to a sense of place for some is that an individual, group or community develops a relationship with a place through interaction that imbues the place with meaning (Malpas, 1999) and, as Vanclay (2008, p. 3)
notes, to put it very simply “place is space that is special to someone”. If this is the measure of place in real-world contexts, what might signify place in virtual worlds? Is it possible for interaction with the space and for relationships to be developed with the space and the digital artefacts that constitute that space? These are questions I explore through this research.

Being an academic involves being somewhere, in a learning space, and teaching someone. Traditionally, in a real-world physical context, teaching generally meant being in a classroom, tutorial room, lecture theatre or other education institutional space and there teaching a cohort of students. Due to the change currently occurring in higher education, Archer (2008) notes that ‘being’ an academic and what actually constitutes academic work is a constantly evolving practice. Teaching in virtual environments brings another dimension to the complexity of being an academic today.

As previously mentioned, higher education is currently experiencing a paradigm that is being completely transformed and reconfigured to include many different modes of teaching and learning space combinations. This research study is situated within this new paradigm of teaching and learning space reconfiguration and there are several things it seeks to know. Firstly, how does an academic adjust to being an avatar academic with considerations of professional identity and pedagogy or pedagogical approaches? Secondly, how does an academic experience a digital environment as a learning space? Being an academic is multifaceted and involves building relationships between themselves and their students, and
themselves and the learning space, and building bridges that create a
dialogue between the students and what is to be learned. So how might an
academic do this when they are an avatar and their students are also avatars?

The use of virtual worlds in education does not sit within a void but is part of
a technology-in-education continuum fuelled by the exceptional growth in
technology over the past few decades, which in turn is influenced by and
influences unprecedented global change. The integration of learning
technologies or information and communication technologies (ICT) in higher
education learning spaces is viewed as imperative in order for universities to
address the broad-ranging changes brought about by globalisation and the
rise of the knowledge society.

**Higher education**
Academics today are teaching more and more in learning spaces that do not
fit traditional university spaces of lecture theatres and tutorial rooms (Sellers
& Souter, 2012). A number of reports and publications on learning spaces in
the past decade attest to the changing nature of learning and teaching spaces
(see, for example, JISC, 2006; Temple & Barnett, 2007; Temple, 2008a,
2008b; Thody, 2008, 2011; Neary, Harrison, Crellin, et al., 2010; Summerfield
& Smith, 2011; Brooks, 2012; Fraser, 2014, 2014b; Rook, Choi & McDonald,
2015). It is increasingly becoming the norm for academics to teach in an
online environment for at least some of their classes if not all. A recent report
by Norton and Cherastidtham (2014) for Australian independent think tank
*The Institute* focusing on public policy indicates a trend towards greater
online enrolments in Australian universities. This trend is reflected in the
United States, where online enrolment in 2012 exceeded overall growth in higher education, with approximately 70 per cent of US universities viewing online learning as part of their long-term strategy (Allen & Seaman, 2014). Furthermore, Norton and Cherastiditham note that the boundaries between online and on-campus are beginning to blur, with on-campus students often doing much of their study online and physical spaces such as labs often provided for students studying wholly online.

Learning management systems (LMS) are the predominant platform used for online learning in higher education. While LMS can offer many tools and functions, they are primarily about managing learning and are limited in the learning experiences they can provide. Other forms of online spaces, such as virtual worlds, have generated considerable interest in their pedagogical affordances (Farley, 2011). SL, which is the key virtual world explored in this thesis, has been the dominant platform in higher education since its inception just over a decade ago. The pinnacle of SL usage was towards the end of the first decade of this century and there has been a marked decline in appeal since then. However, steady interest and practice in higher education sectors has prevailed despite the complex issues associated with integrating virtual worlds such as SL into teaching and learning (McDonald, Gregory, Farley, et al., 2014).

This interest has been particularly consistent within the Australasian region, quite possibly because of a strong community of research and practice supported by DEHub (Distance Education Hub), a consortium of five
universities from Australia and New Zealand; the University of New England, Charles Sturt University, Central Queensland University, the University of Southern Queensland and Massey University. A recent comprehensive scoping study report undertaken by DEHub on the use of virtual worlds in education found there were 65 respondents teaching 125 subjects in virtual worlds (Dalgarno, Lee, Carlson, et al., 2011). Moreover, Blascovich and Bailenson (2011, p. 2) insist that “technology developments powering virtual worlds are accelerating, ensuring that virtual experiences will become more immersive by providing sensory information that makes people feel they are ‘inside’ virtual worlds”. Indeed, McDonald and colleagues (McDonald, et al., 2014) note that virtual worlds have weathered the hype and subsequent sliding into the trough (as in, Gartner, 2008), and are now climbing the slope of enlightenment.

At the commencement of this research study, there was no literature that I could find that focused in any depth on how academics experience being an avatar academic and the implications this might have for their identities as academics. Additionally, there was little I could find examining their experiences of virtual teaching places and the implications of these spaces for their teaching and their pedagogy. A recent paper suggests professors are able to maintain their professional identity in virtual worlds as avatars (see McArthur, 2010), signalling an emerging interest in understanding identities and ways of being in virtual worlds for academics. Furthermore, for the most part virtual worlds are imaginative, fantasy spaces that are quite different to university learning spaces. Therefore little is known about what it means to
be an academic in a virtual world and what makes a virtual world space pedagogical, which consequently is the focus of this thesis.

**Defining virtual worlds**
Throughout this thesis, the term ‘virtual world’ is used; therefore it is useful to establish what I mean by this term before proceeding. However, it should be noted that the rate at which technologies are developing means that definitions of these spaces are always evolving. Moreover, as Bell (2008) and Warburton (2009) among others point out, despite considerable writing from a range of contexts that include academics, developers, industry professionals and the popular media, there is no definitive explanation of a virtual world to date. Not only is there no absolute definition, but the term ‘virtual world’ is often replaced or used interchangeably with other terms such as ‘3D immersive environment’, ‘multi-user virtual environment’ and, as Castronova (2008) suggests, ‘synthetic environment’ or ‘synthetic world’.


> A computer-generated display that allows or compels the user (or users) to have a sense of being present in an environment other than the one they are actually in, and to interact with that environment (Schroeder, 1996, p. 25).

A brief definition such as this, however, tends to reduce the complexities of virtual worlds, but it is these complexities that set virtual worlds apart from other 2D and 3D environments that are able to evoke a sense of presence or ‘being there’. Virtual reality (VR) practitioners and theorists, for instance, insist that presence can be experienced in VR environments despite their
lacking the social, cultural and persistent dimensions of virtual worlds. The persistent nature of virtual worlds is described as one of their defining features; however, it is also the fact that virtual worlds provide a participatory (Pearce, 2009, p. 19) affordance that provides a different experience of presence to that of VR. Additional virtual-world features include a sense of embodiment through configurable avatars, which act as embodied virtual representations of users.

This research study makes the assumption that the very complexity of virtual worlds means that as well as participants experiencing a sense of ‘being there’, this ‘there’ can actually become a meaningful place, and that there are similarities with how physical places are described and experienced through the writings of human geographers, as shown in Chapter 2.

**Virtual world evolution**
A brief look at the evolution of present-day virtual worlds is beneficial, as there is a distinct process of development that has taken place over several decades. It is also important to acknowledge the origins of the essential characteristics of virtual worlds today; social interaction, immersiveness, identity play, a sense of presence and the persistent nature of the environment remain intact in current formats. Virtual-world ancestry could be established in forms of play such as board games and physical role-playing games; however, Warburton (2009) suggests its evolution cannot be separated from the progression of technology.

The visually rich, immersive, multi-user virtual environments available today
have emerged from relatively humble beginnings. Indeed, the genealogy of
massively multi-user online games (MMOGs) such as World of Warcraft®
that dominate current online gaming and virtual worlds such as SL, which
counts its inhabitants (participants) in the millions, can be traced back to
text-based online environments in the late 1970s such as MUDs (multi-user
domain or dungeon) (Bartle, 2010) and MOOs (multi-user [domain] object
oriented) (Curtis, 1991). MUDs and MOOs are text-based, computer-
mediated networked environments where players can directly express
themselves through their choices of player name and gender and through
their self-description.

Although there are considerable visual, physical and conceptual differences
between these early text-based virtual worlds and the MMOGs and virtual
worlds of today, they all provide a space where players can develop
identities, interact, communicate, exchange information, socialise, play,
develop communities, make friends, build things and exist as characters or
personalities through their online personas or ‘avatars’. As Turkle (1995)
pointed out well over a decade ago, this type of space allows participants to
explore different or multiple identities through their avatars, which they
might not do as easily in real life.

Later versions of MOOs have been successfully used for educational purposes
in higher education (see Rune Holmevik & Haynes, 2000), in primary and
secondary education (see Bruckman, 1997; Irving, 2005; Lee, Eustace,
Fellows, Blytheway & Irving, 2005) and in psycho drama (see Murray, 1997),
demonstrating a pedagogical grounding that has been further developed with multi-user games and virtual worlds in education.

**Significance of the research**

There are several important areas where this study makes original contributions: 1) to discourses around the emerging role of place in technology-mediated contexts for teaching and learning in higher education; 2) to understandings of the changing nature of the embodied academic in technology-mediated places; and 3) to pedagogies in immersive avatar-mediated learning spaces.

This study examines the changing nature of ‘being in the world’ for higher education academics or, rather, being an academic in a changing world.

Through the lens of a particular virtual world, I examine how virtual places change or challenge the nature of embodiment, pedagogy and place for academics, with a view to understanding what this might mean for the identities and the practices of future academics. The purpose of this research is to develop an understanding of the meaning of the experiences that academics undergo when using virtual worlds for teaching and learning. Inasmuch as it examines these experiences, this research endeavours to contribute to the language and theory that articulate these experiences. A key focus is on understanding being an avatar academic and teaching avatar students in virtual spaces.

Higher education teaching staff have various titles such as professors, lecturers, tutors and academics; however, I use the term ‘academic’ to
represent any higher education staff in roles that encompass teaching in a virtual world. I argue throughout this thesis that virtual worlds are, or can be, places and that it is possible for them to be salient places where academics may experiment with various ways of being an academic. The main focus of my research is on the notion of place and how academics experience virtual place in their teaching and learning praxis. I also examine this experience through two additional lenses or domains of experience – pedagogy and embodiment. In undertaking this research, I contribute to developing a language that describes the kinds of interactions and relationships that articulate experiences of places in technology-mediated spaces.

The technologies that are influencing the spaces of teaching and learning have introduced significant blurring of the boundaries between virtual and physical spaces and between embodiment and the technologies that facilitate new embodied interactions, and this blurring signals challenges ahead for teacher training and professional development (Price, Rousso, Pontual Falcao & Sheridan, 2009). Indeed, the implementation of virtual worlds and similar technologies is creating new spaces for learning that are immersive and create a sense of presence and embodiment, and so form part of an emerging theory of embodiment.

Undoubtedly, teaching and learning in higher education has undergone considerable change over the last decade, particularly so in recent years. This transformation is part of interconnected changes broadly affecting many aspects of higher education. The drivers of these changes are as extensive as
the changing structure of the global economy from a manufacturing to a knowledge basis, and as wide reaching as to encompass substantially different student requirements than for previous generations. Indeed, the world has changed dramatically in a very short time, without historical parallel. Advances in information and communication technologies (ICTs) are widely accepted as either driving change or facilitating the change of other drivers (OECD, 2005). In addition, technology-driven change influences the role of teaching staff and the spaces in which they teach. This research examines the nature of the experiences of higher education staff teaching in the technology-mediated spaces that are afforded by 3D virtual worlds.

Virtual worlds are part of the ICT continuum in education, contributing to combinations of face-to-face, online, augmented, simulated, virtual and hybrid learning spaces that offer unprecedented challenges across the spectrum of teaching and learning in higher education. The future of higher education is contingent on many things; however, being able to reach a broader student demographic from diverse geographical locations with engaging, authentic and situated learning opportunities is critical for attracting students and thus for universities remaining viable in an increasingly competitive market. Clearly, traditional formats that require students to be on campus for their studies does not fit this viability model and it is strongly apparent that online technologies will play an increasing important role and that some form of virtual world or virtual-world environment will be part of this future in higher education.
Therefore, understanding what it means to be at academic in these kinds of spaces will benefit a broad range of higher education staff, including academics, academic support staff, instructional designers and learning technologists. Furthermore, this current research contributes to an emergent area of research examining perception, embodiment and experience in technology-mediated spaces and technology-mediated intentionality (see, for example, Verbeek, 2005; Ihde, 2009; Farr, Price & Jewitt, 2012; Selinger, 2012; Marshall & Hornecker, 2013; Tripathi, 2015).

While there are literally hundreds of virtual worlds in use across a wide range of age groups, this research focuses on SL, primarily because it was the most widely used at the time of undertaking the research and so participants were easily located and approached because of the extremely active education community surrounding SL through listservs, blogs and wikis. Much has been written about virtual worlds in education; however, the majority of this focuses on their learning contexts and affordances. Their use in education is still a relatively emerging field; however, the existence of an active research community suggests this technology has a wide range of learning affordances (Gregory, Gregor, Campbell, et al., 2010) and will continue to gain significance in higher education teaching and learning.

**Context and boundaries of this research**

Understanding academics’ experiences of virtual pedagogical place for this research has been gained within a specific context, point of view and point in time. The context is academics engaging in their professional work associated with teaching and learning and therefore the experiences are from
the points of view of academics within this context. Consequently, the experience of virtual place is examined through the lifeworld of a group of academics in a particular place and time. Edmund Husserl originally developed the concept of lifeworld through his phenomenological work during the late nineteenth and early twentieth centuries (see Beyer, 2013). A lifeworld is the world of “lived experience” (van Manen, 1990, p. 182), which is the taken-for-granted, transparent everydayness experienced in the mostly spatio-temporal patterns of a person or group’s everyday life (Seamon, 1979). The lifeworld of this study is the academics’ world of teaching and learning and, in particular, teaching in the virtual environment of SL.

The hype generated by the launch of the virtual world SL in 2003 reached its peak in the Gartner Hype Cycle (Gartner, 2007) in the period around 2005 to 2008. It remained at its peak for longer within higher education sectors than for commercial sectors, despite a steady progression down to the trough of disillusionment by 2009 (Corbyn, 2009). At this time it was suggested that, while the pedagogical advantages of virtual worlds were obvious, establishing them within the infrastructure of higher education institutions was the challenge.

Persistent interest in and support for virtual worlds in higher education are evident through the considerable literature that continues to be published, some of which is examined Chapter 2. The challenge for institutions integrating virtual worlds into their teaching and learning, and using Moore’s concept of technology uptake (see Moore, 1991), is bridging the gap between
the innovators and early adopters who have broken the ground and the ‘early majority’ who will facilitate wider integration.

There are many virtual-world platforms available, but SL became the popular choice among education institutions because it is relatively easy for users to create 3D content and, with the addition of Linden scripting, to make this content interactive and to control the sharing of it with others (Kemp, 2011). Many corporations and organisations created a presence on SL in its formative years but, despite the intense hype and excitement in the early years, this sector has now almost entirely abandoned SL. This happened for a range of reasons, but generally because SL did not meet the expectations generated during the hype. While the use of SL in higher education diminished considerably when registration fees were increased around 2011, it tends to be the dominant SL user today. This research focuses on the use of SL primarily because it has been the predominant platform used by higher education at this point in time and in that context provides a consistent research environment in that all participants are experiencing a similar environment.

The notion of ‘virtual’ worlds is problematic as it is often seen in relation to a real/virtual binary. Boellstorff (2015) argues emphatically against this binary and insists that scholarship on virtual worlds must resist articulating real and virtual as opposites. From the perspective of this research study, I use the term ‘virtual world’ only because it is a widely recognised term associated with the kinds of technologies involved in my research and so to
Chapter One

diverge would create confusion. In the spirit of clarity I use the term ‘virtual world’ to discuss this research; however, this study challenges the assumptions associated with this term that imply virtual worlds are somehow separate from and less real than the physical world and that experiences associated with virtual worlds are not real.

Theoretical and philosophical framework
In this thesis, I employ a hermeneutic phenomenological research paradigm in order to understand the meaning of experiences. The epistemological foundation of my research is participants’ truth and reality of being a virtual academic. It is the research participants who have experienced being an academic in a virtual world and I can only interpret their experiences. Each participant’s experience is different from the next; their experience is unique to them and their interpretation of their experience may well differ from how other participants interpret their own experiences. The philosophical frames for this research are ontological, with the nature of being and what it means to be in a virtual world at its core. Phenomenology is the philosophy and methodology for understanding the lived experiences of humans, the experience of ‘being’ in the world (Merleau-Ponty, 1962).

For this research, it is important to understand how academics perceive the digital artefacts such as avatars, buildings, landscapes and interactive objects that are the materiality of the virtual world. In order to understand participants’ perceptions of and relations to digital artefacts, I frame this inquiry within the concepts of technology-mediated experience and technological intentionality (Ihde, 1979, 1990, 1998, 2002, 2011a, 2011b;
Verbeek, 2005, 2008). Technological artefacts, according to Ihde, can be experienced not in the same ways as we experience physical artefacts, but nonetheless they are experienced in some way and this experience can be interpreted.

Drawing on Ihde’s (1979, 1990, 1998) concept that technology has the capacity to transform perception and his framework of human–technology relations, I seek to establish ways in which to understand and discuss how academics experience ‘being’ an academic in technology-mediated teaching and learning places and spaces. Ihde builds on Heidegger’s (1962) philosophy of technology and being to insist that there are new ways of experiencing that are parallel to corporeal experiencing. Moreover, there may be new neurological pathways being built to allow these ways of experiencing. Human–technology relations provide new or different ways for being-in-the-world or, as Vial (2013a, 2013b) suggests, different ways of feeling-in-the-world.

Through this research, I argue that technology-mediated spaces such as virtual worlds can be, and are, experienced in ways that are meaning making and/or meaningful (Thomas & Brown, 2009), just as (although in different ways) non-digital places can be. This study identifies that people can experience technology-mediated spaces that can be ‘places’. It explores experience and the complexity of what academics bring to a situation, their past experiences, subjective realities and layering of subjectivities and identities in building an academic identity through their avatar.
My previous experience with phenomenology
I encountered phenomenology many times in my previous postgraduate studies and, while the philosophy always intrigued me, I had difficulty in comprehending what it was about and how it could be used as a research methodology. I found many of the texts too dense and when I thought I had a reasonable grasp, this disappeared just as quickly, because different authors seemed to have very different views of what phenomenology is, almost seeming to contradict each other at times.

Bachelard’s (1994) *Poetics of Space* was an influential text in my early thinking about the lived experience of space and place and the possibility that this experience might not be a full, sensorial, corporeal experience. The role of imagination in an individual’s experience of an object revealed by Bachelard’s writing piqued my interest in what might constitute experience. This was particularly intriguing in relation to the possibility of experiencing something through an avatar. Revisiting this text helped shift my perception or understanding of place to incorporate something that is unencumbered by temporal, physical, concrete spaces and to re-examine the idea of what place might be and how it might be experienced. Indeed, his poetic exploration of the possibility of changed psychological states in ‘real’ environments like deserts, vast plains and the depths of the ocean, where it is not the place that changes but our own nature. This approach alone is, of course, not reason enough to determine the suitability of a methodology; however, it did influence my thinking and contributed to my choice of methodology.
Through this research study, I examine the possibility for virtual places to be contexts for new and/or different ways of being a teacher, where a teacher’s bodily ‘presence’ may be reimagined and re-mediated by the space and the technologies that support or create that space.

Assumptions of the research
This research study makes the assumptions that virtual worlds are environments that can contain places used in education as learning places and that the virtual world is not simply a learning tool or a technology that assists or facilitates learning. This distinction is based on Messinger and colleagues’ (Messinger, Stroulia, Lyons, et al., 2009) typology of teaching and learning in virtual worlds, which was adapted from Porter’s (2004) typology of virtual communities.

Thesis structure
I start Chapter 2 by providing a fuller description of the global context for this research study regarding the changing nature of higher education. I give an overview of the impact of globalisation and the knowledge economy on higher education that brings with it new ideas for the evolving nature of universities and the resulting changes to learning landscapes. I raise the question of the changing nature of what it means to be an academic in the 21st century and how this question is addressed through this thesis within the context of teaching and learning in virtual worlds. The chapter concludes by providing an overview of virtual worlds, examining the literature pertaining to virtual worlds in higher education, and situates my research within the broader context of virtual worlds as part of a technology continuum and ecology of learning spaces.
Chapter 3 introduces in further detail the three lenses through which I examine academics' experiences of virtual worlds, which help to answer my research question. These lenses are embodiment, pedagogy and place. Literature discussing the theories, disciplines and contexts for these lenses is examined and contextualised to frame the current study.

Chapter 4 presents the approach I take for this research, discussing the methodology and methods and justifying my choice in the context of the research study. I discuss the research paradigm, theories and philosophies that frame this research study. The research design is explained within the context of my methodology and theoretical frames, and how the data are gathered and analysed is described.

Chapter 5 presents my research findings, providing examples of how I reached these findings. Extracts from the raw data are included to allow the reader to participate in forming their own interpretations without invalidating my findings.

Chapter 6 discusses the key findings of my research and locates them within the field of current research, describing how my findings contribute to this field. I explain the significance and originality of these findings, make suggestions for future research and provide a conclusion to this thesis.


Limitations of the research

At the centre of this study is the notion of place in the context of a learning space. This research does not fall within the category of place-based pedagogy as understood by environmentally focused place-based learning, as exemplified by Gruenewald (2003, 2008). It possibly sits within a similar paradigm of the extensions of place-based learning that includes place and community more broadly, because the virtual world is an environment and could form an integral part of the teaching and learning experience.

This study focuses on the academic’s experiences of pedagogy, rather than focusing on the learning or the learner’s perspective. As virtual worlds are an emerging learning space, there are few previous models on which academics can base their approach. There has been little opportunity to learn from others or to undertake professional development on teaching in virtual worlds. As these academics are early adopters of teaching in virtual worlds, it is important to understand what has contributed to their experiences.

The limitations of this research are framed by the explicit use of SL as the virtual-world medium that the participants have used; therefore, while it is expected that the findings would be applicable across a range of virtual worlds, I cannot confirm that this is in fact the case. The focus of the research inquiry is the nature of the experiences of academics using virtual worlds and does not include student perspectives or experiences, nor does it report on whether the teaching is successful or not.
The research is also limited by a restricted number of participants (n=10); however, this is more than sufficient for a phenomenological analysis, because phenomenology is about in-depth interviews with as few as one participant, although Giogio (2000, 2009) recommends around 10 participants to determine the essences of experience and establish themes within these essences between the participants.

In one sense, this research study is situated within the field of learning spaces in higher education research; however, as stated, it is not concerned with student perspectives or the kinds of learning afforded by these spaces. Rather, it is concerned with academics’ perceptions and experiences of teaching in these spaces because, as the literature review demonstrates, this is a little-researched area. 3D virtual worlds such as SL have been used in higher education for roughly a decade and their uptake has been relatively slow, but it has been persistent and steady and continues to build a significant presence.

**Clarification of terms**

My use of the term ‘virtual world’ is in reference to multi-user, 3D, persistent, avatar-based spaces that can be customised or ‘built’ by users. In many other cases this term is used in reference to massively multi-user online games (MMOGs) and, while there are many similarities and crossovers within a shared research field, MMOGs differ in that they are specifically games and most often goal-oriented, whereas virtual worlds are not games (although games can be played in them) and they are mainly social spaces. Although the focus of this research is not on game worlds, it is helpful to include literature
that examines MMOGs because there are many features that are shared and
oftentimes game researchers are examining similar issues for virtual worlds
and do not separate these (see Ducheneaut, We, Yee & Wadley, 2009; Ratan &
Hasler, 2014).

**Key terms**
Following is a list of key terms with explanations of how these terms are used
in this thesis:

**Avatar** – this is a 3D character that represents the user in-world; this study
views an avatar as an embodiment of the user, not simply as a
representation.

**Digital artefact** – this is an object, avatar etc. that is recognised as something.

**Discourse** – discourse with a capital D [D]iscourse is distinguished by James
Gee (1999, 2000) from discourse as language-in-use to include social
practices such as values, ways of thinking, perspectives and so forth. In this
thesis I use Gee’s approach to identity to examine a specific context – that of
being and avatar in a virtual world.

**E-learning/online learning** – electronic learning and online learning is
typically learning conducted with the use of the Internet.

**Embodiment** – this thesis takes the position of a bodily way of experiencing
the world with the body schema extended through technologies.

**Intentionality** – a key phenomenological concept that (simply put) refers to a
human being’s consciousness or awareness of the world, of things, objects,
experiences and so forth that form the relationships between humans and
the world.

**In-world** – this refers to being in the virtual-world space.
Chapter One

Learning management system (LMS) – this is a networked computer software application for the administration, documentation, tracking, reporting and delivery of learning programs. Popular examples are BlackBoard™ MOODLE™ and Desire2Learn™.

Lifeworld – refers to the taken for granted, lived experiences of everyday life.

MOG/MOO – Multiplayer Online Game and Multi-user Object Oriented are early generations of today’s virtual worlds. These are 2D online environments that are predominantly social but can have game-like qualities. Early examples were mainly text-based that progressed to my visual interfaces.

Multistability – developed by Don Ihde as an approach to understanding the multiple and unpredicted ways in which technology is used apart from its original intention.

Place – this thesis takes the position that place is a particular location (physical, virtual or imagined) that is meaningful to someone.

Pedagogy – as stated on page 99 of this thesis, the pedagogical perspective I take in this thesis is ontological, rather than epistemological, and is a relational pedagogy inspired by phenomenological thinking that is being-with or to accompany students or learners.

Space – the definition of space in this thesis is dependent upon the context in which it is used and whether it is a noun or a verb. Space becomes a place when it is meaningful to someone.

User – this is the corporeal person participating in the virtual world.

VLE – refers to virtual learning environment. This term is often used in literature to describe online platforms that facilitate learning. It is often used
in place of learning management systems (LMS) and for other platforms that offer more game like experiences. I use the term VLE for environments that are outside the mainstream LMS stated above.

*Virtual reality (VR)* – this is a 3D, computer-generated environment generally accessed via stereoscopic head-mounted devices.

*Virtual world (VW)* – this is a 3D, online, persistent environment where users are represented by avatars; Bell (2008, p. 2) defines a VW as “A synchronous, persistent network of people, represented as avatars, facilitated by networked computers”.

**Summary**
In this chapter, I have introduced the research and the focus of the study. I have provided an introduction to the background and context within which this research study is situated and explained the reasons for my interest in studying academics’ experiences of virtual worlds. I have provided a brief overview of virtual worlds and discussed their origins in order to provide a context for current-day versions. I have given an overview of the main theoretical framework guiding this research, explained the limitations I have placed on the research in order to make it manageable and provided an overview of the structure of the thesis. Finally, I have provided a clarification of the key terms associated with virtual worlds.

In the following chapter, I examine the literature on the global and technological context of change in higher education that is facilitating new learning spaces, which include virtual worlds. Learning spaces and the
morphic role of the university academic are examined and a broad overview of virtual-world literature is presented.
Chapter 2: Review of the literature and context of the research

“The world has entered a phase of history of which change is an essential feature, but change that is radically different from that experienced in the past” (UNESCO, 1998).

Introduction
In Chapter 1, I introduced the focus of the research, which is to understand how virtual worlds become pedagogical places for academics. That academics are using virtual worlds for teaching and learning is due to a complex system of global and technological influences that have transformed higher education over the past decades and continue to do so. First, this chapter situates the changes in higher education that have led to virtual worlds being incorporated into learning landscapes for many universities, which in turn influences pedagogies and the ways in which academics embody these virtual spaces. Change in higher education sits more broadly within the complex and varied changes that come under the umbrella of globalisation (Van Damme, 2001), the rise of the knowledge society (UNESCO, 2005) and the exponential rise of technologies that influence learning spaces and academic roles and teaching practices (Steel & Andrews, 2012).
Second, the chapter reviews the literature on new learning spaces in order to contextualise virtual-world spaces as part of the pervasive transformation of higher education spaces referred to as ‘learning landscapes’ (Thody, 2008; Neary, et al., 2010). The final section of the chapter examines the extant literature relating to the use of virtual worlds in higher education in order to identify gaps in taking into account academics’ perspectives and experiences in these spaces, which my study addresses through this thesis.

I demonstrate through this thesis that virtual worlds represent significant spaces as precursors to new kinds of immersive and connected learning spaces that are influencing pedagogies and ways of being a 21st-century academic. The concepts of Mitchell’s (1995, 1999, 2002, 2003) recombinant architecture and Horan’s (2000a, 2000b, 2001, 2007) recombinant design are useful in conceptualising the complexity of new learning spaces and they frame my thinking about how I envisage universities will evolve. Through this thesis, I suggest that virtual-world learning spaces are part of the dynamic interplay of physical and virtual space within the broader context of higher education learning landscapes. Within this milieu, this chapter introduces the ways in which globalisation is thought to be influencing assumptions about reality and particularly ontologies of space and place, which I continue to explore through later chapters.

**Ideas of the university**
In introducing ideas concerning the nature of virtual worlds within the context of higher education, understanding of the evolving nature of higher education learning landscape can be advanced through Mitchell’s (1995)
Chapter Two

calendar of the ‘city of bits’.

Nearly 15 years ago, Mitchell discussed the ways in which cities are becoming systems of virtual spaces interconnecting but
also splitting physical as well as virtual spaces, thereby generating new
interactional space and place subsets. An example of this concept applied to
the higher education learning landscape is when technology enhances
physical classrooms in different geographical locations and time zones are
linked as one learning space with one lecturer. Interactions between students
and the lecturer occur in real time despite the possibility of each classroom
being hundreds or thousands of kilometres apart (see, for example,
Westberry, McNaughton, Billot & Gaeta, 2013, 2015). The technology enables
each classroom to be connected to the others. Universities are, I suggest,
undergoing similar spatial transformations to those described by Mitchell
and can be conceptualised in terms of a ‘university of bits’.

On a related note, Barnett (2011, p. 446) insists, “the university lives amid
multiple time frames and in multiple spaces”. Therefore, not only are there
multiple kinds of interlinked spaces, but there is also compression of space
and time and of local-to-global relationships. Virtual worlds encompass these
features and add yet another dimension, in that they introduce a third space
that mediates the interactions of academics and students through avatars.

This is discussed in more detail in Chapter 3, but a brief example comprises
space one, where the academic is sitting at their computer, space two, the
space where the students are sitting at their computers, and the space of the
virtual world, which creates a third space where academic and students
engage in pedagogical interactions and activities through their avatars.
Globalisation and the information and knowledge society

This section signals globalisation as a complex system of engagement, integration and convergence, that Marginson and van der Wende (2007) note heralds a new era in higher education. Scott (1998), however, suggests that higher education is also an agent driving globalisation. Indeed, the world has undergone unprecedented change across a broad economic, political, cultural, social and technological spectrum now loosely defined as globalisation. Scholte (2005) describes this as becoming more global through supraterritorial, transworld and transborder relations leading to the world becoming more connected but also interdependent.

Globalisation is often referred to in terms of increasing world interconnectedness through the “blurring of borders of national systems” (Teichler, 2004, p. 10) however, Scholte (2005) broadly defines it as respatialisation, referring to the narrowing of space and time, including impacts on social life. Many have written of globalised space–time compression and this is examined in a later section of this chapter. In a following section, I explore the respatialisation of teaching and learning in higher education in order to articulate the distributed nature of teaching and learning and the space–time compression afforded by virtual environments.

The terms ‘information society’ and ‘knowledge society’ are often used interchangeably. However, as Anderson (2008, p. 6) points out, “a knowledge society necessarily presumes an information society, but not the other way around”. Both information and knowledge societies are based on a
knowledge economy where global economies have moved from the production of materials to the generation and production of knowledge or knowledge-based services (Powell & Snellman, 2004). The distinction between information and knowledge suggests a substantial difference in meaning between the two but, as Anderson (2008) notes, information is made up of data that have been intentionally structured, whereas knowledge is a cognitive process of interpretation and analysis.

The development of a knowledge-based economy is directly linked to globalisation and influences the changing nature of higher education in many ways, most significantly for this research study through massification (Altbach, 2004, 2013a, 2013b; UNESCO, 2005), internationalisation (Thune & Welle-Strand, 2005), diversification (Teichler, 2004) and the need to be more competitive (Bradley, Noonan, Nugent & Scales, 2008; De Zilwa 2010).

**Massification**
Massification is the unprecedented growth in universities becoming more accessible for a broad spectrum of the community (Altbach, Reisberg & Rumbley, 2009), resulting in large classes and rethinking of pedagogical approaches (Arvanitakis, 2014; Hornsby & Osman, 2014). ‘Diversification’ is a term broadly encompassing the expansion and complexity of tertiary education systems and institutions, their funding models and the offerings of programs and degrees to adapt to the diverse needs of a changing workforce.

**Internationalisation**
The term ‘internationalisation’ is often used interchangeably with ‘globalisation’; however, it refers to trends that have opened up higher
education institutions to increasingly mobile students from across the globe, rather than only local students, beginning in the late 20th century (Knight & De Wit, 1995; Kehm & Teichler, 2007). The changes to traditional funding models (Jongbloed & Vossensteyn, 2001; Dougherty, Natow, Bork, Jones & Vega, 2013) necessitate institutions becoming increasingly competitive in order to attract students. Indeed, it is the increase in student numbers and the diversity of the student body that require different learning modalities, particularly for geographically distributed learning, which presents substantial challenges for universities (Seimens, 2005; Irvine, Code & Richards 2013). Early ideas of internationalisation have expanded to become ‘comprehensive internationalisation’ (CI), a more integrated approach to internationalisation that embraces all aspects of higher education including leadership, faculty, students and governance (Hudzik, 2011).

Although the idea of information and knowledge societies began to be discussed in greater depth across a range of discourses in the late 20th century (see Castells, 1996; Cortada, 1998), the discussion began several decades earlier within management and organisation management culture and discourse. The ideas of the production and distribution of knowledge (Machlup, 1962), the ‘knowledge worker’ (Drucker 1959, also 1993, 1998) and the ‘knowledge society’ (Drucker, 1969, Bell, 1973) arose around the early 1960s. This latter work presents a perspective that is strongly economic and organisational, while the work of Castells (1996) is sociologically oriented.
More recent attention among thought leaders has focused on the social and cultural dimensions. The United Nations Educational, Scientific and Cultural Organization (UNESCO), for example, has a broader, more holistic perspective on the knowledge society that encompasses “social, ethical and political dimensions” (UNESCO, 2005, p. 17) and places greater emphasis on education and the role of education in the knowledge society. The UNESCO (2005) report entitled ‘Towards knowledge societies’ describes knowledge-based societies as economically, socially and culturally supportive societies that contribute to the wellbeing of the whole society at community and individual levels and that are supported by an information-age framework (UNESCO, 2005).

Indeed, the rise of the knowledge-based economy and society means that higher education is expected to play a critical role in ensuring graduates have the necessary skills and knowledge to be competitive professionals in a global market (UNESCO, 2005, 2011) and so universities must adopt innovative and cutting-edge technologies if these expectations are to be met (Kukulska-Hulme, 2012). This in turn is shaping the role of academics and where, how and the ways in which they teach.

Globalisation, space and time
Globalisation has influenced the ontologies of space and time so that we now experience a different reality in relation to these dimensions (Scholte, 2005). Scholte suggests the supraterritorial relations of globalisation have altered conceptions of time so it is now experienced more as speed than distance, as a result of the collapsing of space–time relations. This collapsing or
compression of space–time, primarily afforded by ICT, is not a new idea, having been an area of interest for geographers since the latter part of the 20th century (see Harvey, 1990; Massey, 1991, 1999; Thrift, 1988, May & Thrift, 2001) and also for sociologists such as Castells (1996, 2010, Castells & Kumar, 2014).

However, for Scholte (2005), supraterritorial relations are the “social connections that substantially transcend territorial geography”. Furthermore, he notes global social relations have become a field in their own right based on the world as a whole, as one place rather than geographical territories. He suggests “virtual reality ... illustrates an adjusted ontology” (p. 267) whereby people accept what they see on the screen, the images and so forth, as real despite this imagery not conforming to geographical reality. Scholte’s perspective is that a person’s acceptance of technology-mediated imagery is an ontological shift towards an acceptance of that imagery as reality.

This is key to understanding how academics perceive or interpret virtual-world spaces in a certain way through digital artefacts. It also links with Ihde’s (1998) hermeneutics of artefacts and technology-mediated experiences, which is examined in Chapters 3 and 4 and which frame this inquiry into academic experiences. As I have stated earlier in this chapter, the use of virtual-world technologies in higher education does not happen in isolation, but is part of an ICT continuum in education.
**Information and communication technologies (ICTs)**

'ICT' is a term covering a very broad range of concepts, methods and applications that continuously evolve and virtual worlds such as SL are just one dimension of ICT. A simplified explanation of ICT is that it utilises telecommunications, computers, software and middleware in the communication and management of data – which includes transmission, retrieval, manipulation and storage of data.

Researchers have referred to ICT as the key driver of global change (Pestel & Johnston, 2000) which has a revolutionary social dimension (Garson, 2000) and is shaping education and training (Mclean & Wilson, 2009), all via information, capital and cultural flows (Castells, 2010). Pestel and Johnson (2000) insist it is the rapid pace at which ICTs are developed that in turn is driven by consumer demand, which has fuelled the transition to the information society; therefore, they posit, it is demand-driven. Grubler’s (1998) suggestion that no one technology significantly affects global change but, rather, it is technology clusters or bundles and their diffusion through widespread adoption, remains relevant almost two decades on.

Both Castells’s and Grubler's observations apply to some extent to education sectors’ uptake of technology. In the main, these sectors have been slow to embrace ICTs (Oliver, 2005; Brown, 2013) in comparison to others such as banking and entertainment. However, innovators and early adopters experimenting with technologies in higher education have led to a slow but
broad-based diffusion, which Kirkup and Kirkwood refer to as “gradualism rather than revolution” (2005, p. 185).

While ICT is often viewed as being a tool or providing tools to enhance learning and engagement, this study is more concerned with the new learning spaces evolving through ICTs. The term ‘ICT’ is no longer as popular as in the past couple of decades, because the integration of technologies in educational contexts has become pervasive, albeit at varying levels. Rather, the overarching paradigm of ICT is being somewhat replaced with references to specific technologies such as Web 2.0 and virtual learning environments (VLEs).

Laurillard (2012), however, insists that technology in learning is really in its infancy in comparison to how it will become – that is, it will become so fully entrenched in all aspects of learning that we will not refer to ICTs because they will become invisible. Laurillard uses the technology of paper as an example of how a technology (paper) has become so integral to pedagogy that no one refers to ‘paper technology’. Furthermore, Guttman (2003) reminds us that technology must be viewed along a broad continuum that includes books and blackboards, as well as the progressive integration of television, film and web-based mediums to the technologies of the current day. Therefore, all ICTs are part of a continuum within learning with a history, a present and a future and, while they will always be emergent, they will also become invisible at some point along that continuum.
In the following sections, the integration of technologies into education sectors is presented as a complex combination of policy and access to hardware, software and professional development that eventually results in curriculum integration. This is not an evaluation of the affordances of ICTs for learning, but instead seeks to position virtual worlds along the continuum of technologies that are shaping higher education.

The role of technology and its uptake in higher education
In the 1990s, it was anticipated that ICT would revolutionise higher education teaching and learning. While a revolution did not eventuate, a foundation was established that continues to gradually build, particularly through many universities using virtual learning environments (Kirkup & Kirkwood, 2005) such as BlackBoard,™ MOODLE™ and Desire2Learn™ that are generally referred to as learning management systems (LMS). As mentioned earlier, Scholte (2005) cites massification, internationalisation and diversification as key change agents for higher education.

Making higher education accessible to a high proportion of the population has been an imperative for almost all countries in order to sustain or improve economic wealth and for their citizens to be competitive in job markets (OECD, 2005). Most countries including Australia, the USA and the UK have introduced policy supporting access to higher education for all citizens, particularly for those of low socioeconomic status and minority groups (see Department for Education & Skills, 2006; Bradley et al., 2008; Devlin & O’Shea, 2011). The rise of e-learning, or online learning, has been exponential in order to meet increasing numbers of students and the needs of
a diverse and distributed student body, resulting in most universities offering online courses as part of their programs. The Open University system has gained traction, with Open Universities Australia enrolling over 60,000 students in 2012 with revenue of $191m (OUA, 2012), and the success of the UK Open University program is well known (Tresman, 2002). An additional dimension is that after the SARS crisis in south China, which virtually closed major cities like Hong Kong in 2002 and 2003, educational institutions were forced to consider alternatives to face-to-face learning (Bonk & Kim, 2004). This has had a significant impact on universities in Australia, with most universities evaluating their ability to operate in this kind of catastrophe (Feast & Bretag, 2005).

Extant literature indicates that some see ICTs as tools for learning (Kennedy, Dalgarno, Gray, et al., 2007; Kennedy, Judd, Churchward & Gray, 2008), whereas Al-Mahmood and colleagues argue that ICTs are providing new learning spaces in an environment of little research or understanding of the teaching and learning experiences in these spaces (Al-Mahmood, Goodacre & Applebee, 2006).

Virtual worlds are an integral part of a wider range of new and emerging technologies at the current position on this continuum and they provide different kinds of learning spaces to those of the established LMS, affording new pedagogies and contributing to the substantial change currently being experienced in higher education teaching and learning (see, for example, Barab, Hay, Barnett & Squire, 2001; Savin-Baden, McFarland & Savin-Baden,
Chapter Two

2008; Savin-Badin, 2010; Savin-Baden, Gourlay, Toombs, et al., 2010; Dalgarno, et al., 2011; Fominykh, Divintini, Prasolova-Forland & Petersen, 2013; Czart, 2014). The rise of ICT in all education sectors and the need to explore ways of meeting a wide range of learner needs in the 21st century have led to the emergence of a different kind of university to those of previous centuries and to different kinds of learning spaces.

**Universities as reconfigured spaces**
So far this chapter has provided a background and context for the unprecedented change in higher education globally. I have discussed the implications for universities brought about by the broad economic, political, cultural, social and technological changes of globalisation. I have examined issues for universities with the rise of the knowledge or information society, which in conjunction with globalisation has resulted in great changes for universities around the world. The rapid escalation of ICT has been highlighted in the context of change in teaching and learning practices and the delivery of higher education to an increasingly internationalised and diverse student demographic. Furthermore, I have provided an overview of ICTs in education of which virtual worlds are a node on a technology continuum in higher education. I have signalled that universities' learning spaces are becoming reconfigured spaces responding to the dynamics of globalisation and 21st-century learning. The following section examines the ways in which these changes are influencing learning spaces in universities, which in turn affects ways of being an academic.
Reconceptualising higher education

“[A]s we come to understand more about learners, how people learn, and technology, our notions of effective learning spaces have changed” (Oblinger (2006, p. 13). Within the influences bringing change to higher education, both the nature of learning spaces and the distributed nature of learning are important considerations in understanding how academics experience virtual worlds as learning spaces. Keppell and Riddle (2012) suggest that it is no longer possible to define universities as bounded spaces and they have become a complex mix of on and off campus, physical and virtual, formal and informal experiences that provide a highly distributed dimension to lifelong and life-wide learning. Indeed, tremendous change is taking place in universities (Miyoshi, 2002; Robins & Webster, 2002; Urry, 2002; Yates & Young, 2010; Brown, 2013; Chen, 2013;) and, while this change affects all facets of the university, it is the technological changes influencing learning spaces, thus affecting the ways in which academics engage in teaching and learning, that are of interest for this research.

Current literature on learning spaces tends to focus on the architectural and interior design of these spaces (Brown, 2014; Cleveland & Fisher, 2014; Fraser, 2014a, 2014b) and how spaces influence learning and student engagement, with scant consideration of evaluation and sustainability of the spaces (Oblinger 2006; Steel & Andrews, 2012). Moreover, Westberry and colleagues (Westberry, et al., 2013, p. 502) insist, “the experiences of teachers transitioning into new learning spaces, pedagogies and practices has been under-researched”. Indeed, there is very little literature examining
academics’ perspectives or experiences teaching in these spaces and the challenges they may present for embodied teaching practices and professional academic identities.

**Learning spaces**
Nearly three decades ago, Francis Hunkins, a well-known educationalist, informed an audience at the Center for Architecture and Education at Washington University that:

we need to deal with concepts of space and education that are indeed shocking. We need to realize that reasonableness is defined by present context. We further need to realize that what is unreasonableness today may be very reasonable in the 21st century, and it is for the 21st century that we are contemplating educational space (Hunkins, 1994, para 1).

Hunkins was ahead of his time and it is only relatively recently that significant changes to learning spaces have begun reflecting his vision over 20 years ago. During the past decade, higher education learning spaces have been transformed and reconfigured as networked, technology-rich spaces that better function as collaborative and active learning spaces (JISC, 2006; Dugdale, 2009; Boys, 2011; Peng, 2012; Brown, 2014).

**Learning spaces, pedagogy and built pedagogies**
A learning space embodies a specific kind of pedagogy and the lecture theatres, laboratories and tutorial rooms that are the traditional university spaces have constrained teaching and learning affordances (Thomas, 2010) that are regarded as teacher-centred and outward projected. These constraints are now considered out of synch with learning spaces that need
to foster student-centred, active and collaborative pedagogies (Van Note Chism, 2006; JISC, 2006) and, as Oblinger (2006) notes, learning spaces tend to reflect their time. When lecture theatres are reconfigured with multiple screens and networked technologies, they become multiple learning spaces within the physical space that are able to facilitate active, collaborative and engaging pedagogies (Brown, 2014).

Built spaces influence the kinds of pedagogies that take place within them (Monahan, 2000, 2002). Monahan approaches the connections between learning spaces and pedagogy in terms of built pedagogies, insisting that “built pedagogies operate along a continuum between discipline and autonomy” (2002, p. 5), which suggests that space is imbued with values. For instance, he uses the example of a very traditional learning space where desks are in neat rows facing the front, implying both conformity and rigid curriculum, whereas flexible learning spaces that can be reconfigured with screens and furniture take on new spatial proprieties that can be closed and intimate or open and collaborative. Therefore the qualities of learning spaces can either constrain or enhance pedagogy.

**Learning spaces as material worlds**
Roehl (2012) explores learning spaces in similar ways and suggests that classrooms and other learning spaces are “material worlds” (p. 109) and there is little research on the role of objects and artefacts that consist of complex layering “involving human actors, practices and things” (p. 109). Monahan (2002) insists the connections between learning spaces and pedagogy flow over into virtual spaces as well. This is an important
consideration for my research, because Relph (2007) cautions that because virtual worlds are a relatively new phenomenon, there are no established rules for developers in creating cues about how virtual-world spaces are to be experienced.

The concepts of materiality pedagogy and to some extent built pedagogy are explored in more depth in Chapter 3; however, there is a realisation, as Van Note Chism (2006) observes, spaces really matter and can have a powerful impact on learning. Learning does not always take place in formal education contexts (Cross, 2011), so there may be many ways of looking at learning places or, for that matter, the way learning places look. As Brown (2014) suggests, learning spaces encompass the full range of places in which learning occurs, from real to virtual, from classroom to chatroom, keeping in mind that learning and education are always taking place in some form through experience and are lifelong (Zull, 2011).

**Learning landscapes**

Literature on new learning spaces that are technology-rich and student-centred is dominated by physical or built learning spaces, with much of it focusing on the design phase (Steel & Andrews, 2012). The rhetoric around these new learning spaces is often framed as next gen or new gen or similar, indicating a break with the past and future thinking. These spaces are strongly focused as student-centred design or learner focused. The role of the academic tends to get lost in the mix or is not considered. Lippincott (2009) suggests the involvement of academics in the design of new learning spaces as well as the redesign of existing spaces is an opportunity to incorporate
pedagogical change; when academics were able to contribute, or better still when their contribution was central to the new design, much more satisfactory results were achieved through the changed pedagogy.

These new spaces are designed for student-centred pedagogies and it is often assumed by designers that teacher-centred practices will change accordingly, but this is most often not the case. Unless teachers are supported in adapting pedagogies to new learning spaces, their teaching practices will not change in most cases (Blackmore et al., 2011). Furthermore, there is little research attending to the ways in which new learning spaces shape student-teacher relationships and arrangements (Jamieson, Fisher, Gilding, Taylor & Trevitt, 2000). Additionally, in the literature on learning spaces, there are very few publications focusing on teachers’ or academics’ perspectives (Al-Mahmood et al., 2006) and this is a much under-researched area that my research goes some way in addressing.

Thody (2011) raises the issue of the need for a sense of belonging within these assemblages of physical and virtual spaces and dispersed campus configurations. These are sentiments echoed by Temple (2008b) in relation to students’ sense of connectedness with their university, which is an important issue and not well researched. However, I would extend this to include staff, as this is a dimension of interest for my research study because place influences feelings of connectedness. As Temple further notes, the “university, space and learning are intimately connected” (p. 239). I suggest that teaching is also intimately part of that connection, which in turn
influences pedagogy and the role of an academic. This concept of belonging and connections to space and place in a university context is extrapolated in Chapter 3.

Indeed, this is reflected in a chronology of the horizon-scanning reports compiled by the New Media Consortium. It should be acknowledged that these reports involve horizon scanning and therefore do not include technologies as they become more widely accepted and sustainable. However, in the 2007 report, virtual worlds were cited as a trending technology to watch and a simple word count brought up 46 mentions. In 2009, virtual worlds were included in the 2–3-year time frame to be adopted in higher education while the word count had dropped to 18, although in the ‘technology to watch’ section, virtual worlds were described as “firmly established learning spaces” (Johnson, Levine, Smith, Smythe & Stone, 2009, p. 5). This was possibly overly optimistic, as by 2010 there is no mention of virtual worlds and they have not re-emerged. Attention drawn to these kinds of predictions can be challenging and sometimes unhelpful for academics that want to establish strong foundations for ongoing virtual learning space development but then encounter perceptions that virtual worlds are yesterday's news.

**Recombinant learning landscapes**

At the beginning of this chapter, I mentioned using Mitchell’s concept of recombinant architecture (1995, 2002, 2003) and Horan’s (2000a, 2000b, 2001, 2007) recombinant design to provide a way of theorising about the interconnected physical and virtual spaces that make up the new learning
Chapter Two

landscapes of higher education. The term ‘recombinant’ originates from molecular biology and medical discourses, and refers to the joining together and/or splitting of molecules to merge with other forms so as to create new combinations (Mertz & Davis, 1972; Derkx, Janzen, Sorensen, et al., 2014). Mitchell’s early work ‘City of bits: space, place and the infobahn’ (Mitchell, 1995) painted a picture of cities falling apart through fragmentation; however, his subsequent works have brought the fragmented bits and pieces together to reconceptualise cities as connections or connectors of virtual and physical spaces. Mitchell’s (1995, 2003) work explains these juxtaposed physical and virtual couplings with examples such as hospitals/telemedicine and wild west/electronic frontier.

Horan’s (2000a) query about whether digital technologies can be “spliced into the recomposition of our homes, offices, communities, and cities to achieve optimal forms of space and place” (p. 12) could pose a similar question for learning spaces in higher education, as a way of conceptualising the emerging mix of virtual and physical spaces. Recombinant design and recombinant architecture are emerging areas and although they are not examined in any great depth in this study, are convincing areas for future research in higher education learning spaces. I mention them in this chapter because they serve to demonstrate the emerging ecosystem of learning spaces, which I argue virtual worlds are part of. Moreover, this is a means of articulating the emerging learning landscape in a metaphorical way that captures the entanglement of virtual and physical spaces with new spaces emerging as a result that pose considerable challenges for academics.
Additionally, this brings into focus why academics’ roles are changing and how this affects academic identities and the changing nature of pedagogies.

**Morphing role of academics**

Academic roles are morphing into specialised areas, away from the traditional teaching, research and service roles (MacFarlane, 2011). The effects of the changes being brought about by globalisation, such as massification and the integration of technologies that in some cases are creating quite complex and multiple instances of learning spaces, are now presenting challenges for pedagogies and to traditional academic roles.

Whitchurch (2008), for example, notes that the previous binary of academic and administration roles is both merging and producing other roles. Further to this train of thought, Macfarlane (2011) insists on a cautionary note that there are a variety of forces influencing what he terms the “unbundling” of academic praxis and the traditional role of academics becoming a more specialised area.

This is all giving rise to a range of other specialised professional areas such as learning technologists and student support staff (Krause, 2011; Whitchurch, 2008, 2012a, 2012b, 2015; Whitchurch & Gordon, 2010), referred to as ‘para-academics’ (Coaldrake & Stedman, 1999, 2001; Macfarlane, 2011). Little attention has been paid to the changing role of professional staff by academic researchers, although there is some literature from researchers examining their own professional practices (Graham, 2012a, 2012b). Whitchurch (2012b, 2015) refers to a new space between academic and professional domains, which she terms the ‘third space’. She insists that there is lack of
understanding about the identities and practices of both professional and academic staff working in these liminal spaces.

While there seems to be some disquiet within the literature about what is sometimes seen as an erosion of traditional academic identity, this could be seen as part of the overall paradigmatic shift in higher education in response to global changes that require new and multiple ways of being an academic. As Clegg (2008) points out, identities are not fixed and academic identity is a “multiple and shifting term [that] exists alongside other aspects of how people understand their personhood and ways of being in the world” (p. 329). Clegg acknowledges the complexity of academic identity and states, “it cannot be read off from descriptions of teaching, research, or management roles” (p. 1). Indeed McShane (2006) insists the widespread adoption of technologies by universities to facilitate online learning present additional issues for academic identity. McShane noted for instance that academics experienced a sense of distance between them and their students through online learning. This caused them to experience a lack of responsibility for student learning in online environments which was concerning for them. Furthermore they were troubled by the “loss of ability to respond spontaneously and with care” (p.285). I will be interested to see if teaching in virtual worlds offers anything for the academic/student pedagogical relationship.

Archer (2008) identified the key aspects of “being”, “having” and “doing” (p. 397) as critical for feeling like an academic. Moreover, Clegg (2008) notes
academic identities are becoming more hybrid and being shaped by the changing nature of universities. Virtual identities, I suggest, are part of the shifting and shaping of current academic identities. There are gaps in the extant literature examining the role of technology in academic identity, the concept of extended embodiment through technologies and technology-mediated ways of being an academic, which are areas that this research study addresses through the lens of embodiment.

**Early adopters and innovators**
With most forms of change, it is generally innovators and early adopters who embrace the change and establish the pathways for more widespread adoption. To use a marketing scenario, there is a chasm between the innovators and early adopters and the broader academic community, consisting of the pragmatic *early majority* and the conservative *late majority* (Moore, 1991). In order to bridge that chasm, it is necessary to understand the experiences of academics that are the early adopters of virtual worlds, which is the aim of this thesis, in order to provide valuable insights into the changing roles and identities of higher education academics in these spaces.

All academics interviewed for this research project were innovators or early adopters and similar themes arise from the literature. The key drivers initiating the use of virtual worlds in universities are predominantly individual innovator and early adopter academics although in some cases wider university support is evident (Kirrimuir, 2010). In many cases, the majority of responsibility for implementing the use of virtual worlds lies with the academic, with the academic encountering many additional problems.
Chapter Two

These can range from university management resisting or blocking the implementation to insufficient or inadequate IT systems for sufficiently managing students and teachers using the virtual world (Kirrimuir 2010). Therefore, innovators and early adopters of virtual worlds for higher education teaching and learning need to display considerable resilience and persistence.

The following section extends the discussion of virtual worlds by bringing contexts within geography, architecture and materiality into the discussion framework. This is in order to present virtual worlds as places for learning, not just as tools for learning, and because the academic disciplines associated with human–computer interfaces, interactional/instructional design and developers of virtual worlds also use this kind of descriptive language.

**Virtual worlds: history and context**

Chapter 1 introduced virtual worlds in a broad sense and in this section I provide a brief history and context to current virtual-world technologies. Just as the integration of ICTs in education is gradually evolving along a continuum, so too is the development of virtual worlds. The persistent, 3D, virtual environments of today's virtual worlds have their roots in quite simple text-based, computer-mediated environments that were initially developed in the late 1970s and became popular when they were more readily available in the 1980s and early 1990s. MUDs, MOOs and MUSHes (multi-user shared hallucinations) provided a virtual world where multiple users developed identities through their characters or avatars, giving them a name and a description (see Bartle, 2010). These environments were entirely
text-based; the physical architecture of the world, the physicality of the avatar, the navigation of the world and the interactions were all narrated through text. Users were able to build and manipulate the environment using a simple form of object-oriented programming. This is a feature they have in common with the more sophisticated, contemporary, 3D graphical worlds such as SL that can be created or built by users, albeit in an entirely different way using primitives (simple geometric shapes) and scripting language.

These original text-based virtual worlds were used in K–12 education over two decades ago (Bruckman, 1997) and in post-secondary education (Rune Homevik & Haynes, 2000), and I have also used these early versions in teaching as mentioned in Chapter 1. Therefore these text-based worlds are not only the precursors to the development of current virtual worlds, but are the precursors to the use of virtual worlds on the technology education continuum.

**Synthetic environments**
The term ‘synthetic environment’ is used most often in the context of training, such as the well-known flight simulator, but also has application to environments that have multiple-user capabilities. These environments are realistic simulations often used in training that simulates scenarios which are dangerous or difficult to replicate in real life, particularly for the armed forces and for medical and occupational hazard emergencies, but are also used for realistic corporate training (see Dede, 1996; Blascovich & Bailenson, 2011; Bastiaens, Wood & Reiners, 2014). Boerger and Tietgens (2014)
provide a comprehensive overview of available virtual environments for simulated education and training.

Castronova (2005), however, uses this term in relation to massively multi-user online games (MMORPGs), where large numbers of players interact with each other in computer-mediated online games, which he calls “crafted environments” (p. 4). These games are persistent in that they continue regardless of whether players log off and they are predominantly goal-oriented, with distributed players generally collaborating in teams to achieve goals that are inherent and progressive. Castronova’s insistence on referring to these environments as synthetic worlds rather than the more popular term ‘virtual worlds’ is because he believes the word ‘virtual’ sets up a false duality between what is ‘real’ and what is ‘virtual’ and that the latter is often perceived as virtual reality so that the word ‘virtual’ has been tainted through association with virtual reality.

**Virtual reality environments**
I make a distinction between these virtual reality (VR) worlds and virtual worlds because while the two are often perceived as being the same and there are similarities, at this present time they are different in a number of ways. They may converge or the distinction between the two may collapse in the future, and in some respects experiences can be similar to both technologies, but there are some differences that need signaling. Castronova (2005) points out that the development of VR created considerable hype early on in its development, with great expectations for rapid evolution from the laboratory to everyday use, but this did not eventuate. Despite this
setback, there has been a resurgence of VR, particularly with the
development of Oculus Rift™ which is making VR more accessible,
particularly in the development of immersive simulations for higher
education (see, for example, Bastiaens et al., 2014). Other innovations
currently emerging in VR are quite significant, especially when incorporating
augmented-reality technologies and haptic feedback. In particular, the
capability for instantaneous relay of real-world data for VR interaction using
the swarm concept – known as MUAVs (Maritime Unmanned Aerial
is gaining traction in higher education.

The key distinction is that virtual-world technologies such as SL are
persistent social worlds inhabited by many people, even in their hundreds of
thousands. VR applications, on the other hand, are single-user and computer-
simulated environments that rely on technological hardware, including
computers and devices such as data-driven gloves, head-mounted displays
and headphones, in order to engage with the simulation. Well-known VR
applications include serious war games and flight simulators (Grogan, 2014;
Grogan & de Weck, 2015). Also, museum and cultural heritage exhibits
increasingly utilise VR in order to create realistic experiences connecting the
general public with cultures and natural resources from other times and
places (see Lu & Pan, 2010; Champion, 2011).

The subtle distinction between places created in VR contexts and the kinds of
places found in virtual worlds is of great interest for this research study.
Firstly, VR contexts such as for museum purposes are concerned with *recreating* a specific place which either now exists or once existed in the real world and are created by VR professionals and cannot be changed in any way by anyone else, similar to game worlds such as World of Warcraft. SL, in contrast, is a world imagined and created by its users (Aurilio, 2014). Although many SL and other virtual-world places replicate real places or attempt to, in most cases more imaginative places are created, with floating skyboxes, holodecks, campfires and fantasy landscapes. The capacity for users to build their own worlds is one factor creating significant difference between the two technologies. Pearce (2009), however, found that while connectedness to the virtual environment is not contingent on participants contributing to the build, the environment contributes significantly to their sense of connectedness.

Finally, an important distinction is that in SL the experience of places is mediated through the avatar. Boeger and Tiegens (2014) regard the avatar as the interaction interface that enables interaction and communication in-world. Additionally, Aurilio (2014) suggests that it is the avatar interacting with the place that creates an authentic experience that is reified by the presences of others.

**Virtual worlds in K–12 education**

It is worth noting that virtual worlds have had strong support from the K–12 education sector, which tends to use many different virtual worlds in addition to SL such as Quest Atlantis, Club Penguin, The Sims, Minecraft and
Kaneva.¹ It is impossible to put an estimate on the number of children using virtual worlds in and out of school time, but it is considerable given that five years ago Club Penguin alone had over 22 million children registered (Marsh, 2010).

SL can only be used in secondary schools because of the age caveat. It has two grids that are separate from each other – one for 13–17-year-olds and one for those aged 18 and over. The age caveat on these grids creates problems for senior secondary school students turning 18 in their final year, as it separates them from their classmates. Well-known projects in the secondary schooling sector include the work of Sheehy (see McKibben, 2008; Calongne, Sheehy & Stricker, 2013) and the Global Kids project (see Qian, 2009). The addition of the K–12 context serves to establish the early grounding for virtual worlds in this education sector, with possible expectations for similar experiences in higher education.

**Second Life in higher education**

Overall, higher education has been the most enthusiastic education sector to embrace virtual worlds, with applications in a broad range of areas (de Freitas, 2006; Delagarno, et al., 2011: Lee, Dalgarno, Gregory, Carlson, & Tynan, 2013), particularly in the health sciences (Kamel Boulos, Hetherington, Wheeler, 2007; Toro-Troconis & Kamel Boulos, 2009) and teacher education (Gibson, Halverson & Riedel, 2007; Hinrichs & Wankel, 2013).

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¹ Quest Atlantis: [http://sashabarab.org/projects/quest-atlantis](http://sashabarab.org/projects/quest-atlantis)
Club Penguin: [www.clubpenguin.com](http://www.clubpenguin.com)
The Sims: [www.thesims.com](http://www.thesims.com)
https://minecraft.net/game
Kaneva: [www.kaneva.com](http://www.kaneva.com)
2011; Gregory, 2014; Gregory, Lee, Dalgarno & Tynan, 2015). The dominant themes of inquiry are the pedagogical affordances, the benefits for learners and the implications for educators (Bradshaw, 2006).

While there is considerable interest and abundant literature on the use of 3D gaming environments and virtual worlds such as SL in higher education (see de Freitas, 2008; Eschenbrenner, Nah & Siau, 2008; Thomas & Brown, 2009; Chen, Siau & Nah, 2012), there is very little literature that examines academics’ experiences of these immersive environments for teaching and learning. The omission of academic perspectives is indicative of most higher education literature on teaching and learning spaces and, while I am not advocating support of traditional teacher-centred pedagogies, a significant argument for this thesis is that to omit academics’ presence and perspectives is not helpful in fully understanding pedagogies for new spaces. Given that widespread teaching practices have not readily adapted to new physical learning spaces, it can be assumed that they will not adapt readily to digital spaces. Rather, as Carr and Fraser (2014) observe, academics tend to revert to teaching practices they are experienced in, which is usually how they were also taught. Experiences of teaching in immersive virtual spaces such as SL form part of what might be termed the new geographies of teaching and learning in higher education. I explore this concept in the following section.

**Australian context**
Interest in virtual worlds has remained high in the Australasian area (Lee, Dalgarno & Farley, 2012), with an active virtual-world community of practice centred around the Distance Education Hub (see DEHub, 2014), a research
consortium which began in 2009 with academics from five universities in Australia and New Zealand: University of New England, Central Queensland University, University of Southern Queensland, Charles Sturt University and Massey University. It has grown to include academics representing over 30 universities across these two countries.

A scoping study by Dalgarno and colleagues (Dalgarno et al., 2011) determining the state of play of virtual worlds in higher education in Australia and New Zealand found great diversity in the platforms used, modes of delivery, discipline areas, subjects and subject levels, but usage had steadily increased from year to year. This was despite the most popular platform, SL, having succumbed to the global financial crisis and dismissing a third of its workforce in 2010, causing great instability and risk for educators and institutions that had invested considerable time and financial commitment in their developments on SL.

An interesting finding from Dalgarno and colleagues’ (Dalgarno et al., 2011) report is that older academics represented an overwhelming majority of the respondents to their questionnaire, most of whom were in the 46–55 age range and a significant number were older. The authors insist these results need to take into consideration that older academics may have greater opportunity associated with seniority. Nevertheless, this finding is significant given predictions that the number of school-leavers entering higher education will become secondary to the number of mature-age students who
already have established careers and are gaining further qualifications or changing careers.

Gregory’s (2014) findings from a distance education study using SL as a learning space in 2008 and 2009 indicate that 14 per cent of students in the study were under 29 years of age, 67 per cent were aged between 30 and 45 years, and 19 per cent were aged between 45 and 59 years. Overall, Gregory contends, 86 per cent were over 30 years of age (p. 215), an indication that virtual worlds such as SL may provide persuasive spaces for widespread use in lifelong learning.

All the academics interviewed for this current research project were innovators or early adopters and similar themes arise from the literature, as discussed earlier. While in some universities faculties or departments may support the development and integration of virtual worlds and in some cases are drivers of this initiative, the key drivers are predominantly innovator and early adopter academics. The fact that the majority of responsibility for the implementation of virtual worlds is taken on by individual or groups of academics through their own initiative, numerous and in cases insurmountable problems mean that many projects are abandoned or do not proceed beyond a pilot format. Kirrimuir (2010) outlines succinctly the problems that higher education academics in the UK have encountered when implementing virtual worlds, most often SL. Kirrimuir identified a range of issues, including university management resisting or blocking the implementation, in addition to lack of time and funding for academics. The
overriding barrier at the time, however, was an inadequate IT system to sufficiently manage students and teachers using SL. This last barrier has been minimised in the last few years as academics tended to overcome obstacles or managed to work around them.

On a final note, Brown (2014) reminds us that while universities are experiencing the “first wave” of students with the characteristics of the net gen, the baby boomers and generation X are also becoming more like net gens in their use of technology, so learning spaces should be designed with students and staff in mind.

**Presence – a brief introduction**

In Chapter 3 I discuss presence within the discussion of embodiment and the avatar; however, here I describe the historical grounding of presence that developed through early VR research. Presence is a dimension of experience grounded within a VR research paradigm; some researchers of presence in virtual worlds base their understanding on VR research. Presence, or ‘telepresence’ as first coined by Marvin Minsky (1980), is often referred to in VR literature and, as Lombard and Ditton (1997, Abstract, para. 1) suggest, is “an illusion that a mediated experience is not mediated”. Telepresence derives from the sense of presence felt by interacting with another real space, such as during a teleconference or through a teleoperation, meaning the remote mechanical operation of an object. A contemporary example of remote operation is iron ore trucks in Western Australia’s far north Yandicoognina and Nammuldi mine sites being operated by someone over a thousand kilometres away in Perth (Diss, 2015).
Presence is often cited in virtual environment research, as the key to technology-mediated experiences and is a sense of being there in the space and being with others (Biocca, Harms & Burgoon, 2003). Of course, presence is not confined to digital technologies, because books, theatre and movies are immersive and can give a sense of being there. Early research on presence often referred to it in terms of the technology (Krueger, 1991; Greenbaum, 1992; Wilder, 1992) however, Steuer (1993) insisted it was the human dimension that signified presence and “the sense of being in an environment, generated by natural or mediated means, respectively” (p. 3). Schuemie and colleagues (Schuemie, Van Der Staaten, Krijn & Van Der Mast, 2001) note that participants of virtual environments experience presence despite knowing the environment is not real or not physically grounded in the real world. Feeling present in a virtual environment is also thought to require a low level of simultaneous real-world sense of presence (Slater, Usoh & Steed, 1994).

**Current presence research**

Most current research takes a cognitive and neuroscientific perspective on phenomena related to presence (Sjolie, 2012). Human interaction in environments can be monitored via brainwaves that determine what neurons are being activated and therefore what is being experienced (Blascovich & Bailenson, 2011). An experiment by Blascovich and Bailenson had participants wearing VR headsets and walking on a plank over an abyss. The plank and abyss were VR elements, but the participants displayed physical reactions of fear and anxiety and the brainwave monitors recorded sections of their brains being activated that relate to real-life fear and
anxiety. Blascovich and Bailenson have conducted these experiments time and time again over a number of years and they reap the same results each time in most cases and with a wide range of research participants. These experiments provide evidence supporting the notion that virtual experiences are real. This is of interest for the current study because it is here assumed that when academics teach in a virtual world, they are really teaching. They are not playing at teaching or simulating teaching – they are teaching.

While Blascovich and Bailenson’s (2011) findings are very intriguing, there is a subtle difference between this kind of presence or sense of reality experience and that of a virtual world like SL where the participant is represented by an avatar. In the VR experiments, the participants wore headsets and therefore these were first-person, not third-person, experiences. Despite this difference, people become attached to their avatars and their experiences through the avatar are similar (Yee & Bailenson, 2007, 2009; Blascovich & Bailenson, 2011), but there is an added dimension of identity through the avatar. Blascovich and Bailenson state that scientific research indicates the same brain areas are activated when the avatar is in particular situations.

For instance, being in close proximity to another avatar activates the field of proximation (Hall, 1966) in a similar way as in the concrete world. This field refers to the comfortable proximal distance that humans experience in relation to other humans. Hall determined that Americans required roughly 10 feet between strangers, while this distance was reduced with friends and
Chapter Two

much reduced with intimate friends and family. As similar fields of proximation apply in virtual environments, these environments are a suitable medium in which to study human behavior (Yee & Bailenson, 2007; Yee, Bailenson & Ducheneaut, 2009; Blascovich & Bailenson, 2011).

This reminds me of a seminar I attended in SL where 40 to 50 avatars were at the presentation – I was very mindful about going and sitting somewhere discreetly so I didn’t interrupt anything and also very careful when walking around and not standing too close to other avatars. I felt I made a terrible faux pas at one point when there was a talk with slides in progress and I thought I would have a look at who was there – each avatar sported their avatar name above them, but if you right-clicked on the avatar you could read their profile, which usually gave you their real name etc. I thought I was the only one who could see when I right-clicked on someone, that it only applied to my view, and I was happily ‘sneakily’ checking everyone out when all of a sudden, everyone started checking me out and I was extremely embarrassed that I had invaded their privacy. I have since kept my right-clicks to myself. This personal example demonstrates the different protocols and social practices that academics and students must be aware of when adopting the use of virtual worlds.

**Gaps in the literature**

While the main purpose of this chapter has been to contextualise the use of virtual worlds more broadly within global changes that in turn are affecting universities, it has also identified research gaps in a number of areas. The reviewed literature demonstrates that higher education teaching and
learning spaces are undergoing significant change in both physical and virtual contexts. Additionally, the literature indicates that virtual worlds are not an isolated phenomenon but belong to a broader pattern of digital places that are “emerging along a continuum of technology integration” (Horan, 2000a, p. 7) across education sectors. It also demonstrates the changing nature of higher education teaching places and the respatialisation of teaching and learning, which incorporates virtual, physical and hybrid spaces.

A significant gap is that the literature on new learning spaces makes little if any mention of virtual learning spaces, such as those provided by virtual worlds. It is as though virtual worlds are viewed as a fad that will quickly disappear. Furthermore, much of the writing on virtual worlds in education refers to them as pedagogical tools or as a teaching tool. Very little literature approaches virtual worlds as embodied learning spaces and even less gives consideration to the impact of materiality and artefacts.

While virtual worlds are primarily used for teaching and learning, there are many education-related activities that also take place in-world. For example, research is undertaken, seminars, workshops and conferences are conducted, special interest groups gather and socialising takes place. It is not fanciful to therefore envisage that virtual worlds could play a more comprehensive role in academic life in the not-too-distant future. Understanding how place is experienced in virtual worlds will become increasingly important.
Summary
The aim of this chapter has been to situate virtual worlds within the broader wave of globalised change and along the continuum of technology in education. This chapter started at the macro level of globalisation and the knowledge society, to briefly position the changes currently shaping higher education. Next I examined the literature on the respatialisation of teaching and learning, and framed the fragmented and distributed physical and virtual nature of new learning spaces within Mitchell’s (1995, 2002, 2003) and Horan’s (2000a, 2000b, 2001, 2007) concepts of recombinant architecture and recombinant design.

I highlighted the changing role of academics amid the changes taking place in higher education and the role of innovators and early adopters in driving adaptation to change. Finally, this chapter has reviewed the literature on virtual worlds in education, signalling the gaps that my research aims to address and situating virtual-world spaces within the recombinant learning landscape. The next chapter examines embodiment, pedagogy and place within the context of literature and theory.
Chapter 3: Embodiment, pedagogy and place

The previous chapter established the context influencing the major changes to higher education teaching, learning and learning spaces that have been brought about by globalisation and the rise of technologies. I turn now to discussing the three lenses through which I examine how academics experience an aspect of this change in relation to their teaching and learning practices using virtual worlds. Embodiment, pedagogy and place are the lenses through which I examine these experiences. The purpose of this chapter is to review and discuss the literature in relation to theories, disciplines and contexts that provide grounding in understanding how these dimensions are experienced in virtual contexts by academics, and to highlight gaps in existing knowledge.

I discuss what is known and not currently known about embodiment, pedagogy and place within the context of academics’ experiences. Along with the philosophical frames and the methodology, the perspectives from which I examine embodiment, pedagogy and place are informed by phenomenological and post-phenomenological thinking. Additionally, this chapter articulates the connections I draw between the intentionality inherent to phenomenology that is discussed in Chapter 5 and the intentionality of avatars and objects, which brings into focus the materiality of learning spaces as active agents in the teaching and learning process.
This chapter is divided into three main sections relating to each lens in order to provide structure; however, these dimension are never separate from each other and are always interdependent and connected. In the first section, I examine embodiment and contextualise it within phenomenological and post-phenomenological ideas of technology-embodied relations. I take this perspective in order to answer the research question on how academics experience the virtual world mediated via their avatar.

The second section examines pedagogy and, in keeping with the research paradigm and methodology, the focus on pedagogy is ontological rather than epistemological. The focus is on academic experiences through the pedagogical activity that is place-making, performed and embodied by the academic. I take the perspective of pedagogy as experiential (Ellsworth, 2005a, 2005b), relational (Murphy & Brown, 2012) and embodied practice (Dixon & Senior, 2011).

In the final section of this chapter, I focus on place and examine the fields that broadly intersect this research study, including human geography, environmental psychology and other spatial sciences, because the nature of place inquiry is transdisciplinary. Historically, scholarly writing on place has been dominated by sociological and geographical discourses; however, there is an emergent research field around technologies and place within these fields and in new fields of inquiry that this current research study will contribute to. The intention of this section is to explore the ways in which place has been conceptualised through the different disciplines and how
these conceptualisations have influenced my research and highlighted gaps associated with experiences of place that are mediated through digital technologies. Place has material qualities that can be physical, relational (Relph, 1976; Tuan, 1975, 1979; Massey, 1991; Ury, 1995) and existential (Bachelard, 1994).

In order to assist in answering the sub-question of how the materiality of virtual places is experienced, the literature and theories of materiality are discussed in relation to place in virtual contexts. The materiality of place is explored because of the significance of the university as a built environment that can be examined in terms of locational and social capital (see Temple & Barnett, 2007; Temple, 2008b) through sites of teacher and student interaction.

**Embodiment**
Theories of embodiment have a very long history, with early Christian texts asserting that the human body gives concrete form to the metaphorical body of Christ (Hansen, 2003). Philosophically, notions of the body and embodiment have been theorised, contested, debated and retheorised through different lenses (see for example, Chrisley & Ziemke, 2002; Niedenthal, Barsalou, Winkielman, Krauth-Gruber & Ric, 2005; Davis & Walker, 2010), with the nature of embodiment and what constitutes embodiment a key issue. Adding to this complexity are emerging theories influenced by technological advancement that are leading to new ways of conceptualising the body and reconceptualising ideas of embodiment. Of particular importance for my research is how embodied experience and
interaction in virtual environments can be articulated through the avatar.

**Theories of embodiment**
Merleau-Ponty (1962) introduced a phenomenology of embodiment that considers the lived body as a way of experiencing the world, which was a departure from the Cartesian model of a mind/body duality existing at the time (see Smith, 2014 for more on René Decartes). For Merleau-Ponty, the body cannot be viewed purely as an object that is a collection of organs, fluid, muscle, bone, skin and so forth. Rather, it is a schema that is an all-perceiving union of mind and body and the bodily intentionality of being in the world. Embodiment for Merleau-Ponty, therefore, is a holistic sensing of the world, not specific senses operating independently but in unison, everything combining to interpret the life-world. It is a pre-reflective state of knowing where the body is in space and is as much a perceiving body as it is a body to be perceived by others. Furthermore, Merleau-Ponty insists that the body is the reference point from which all else in the world is perceived and experienced.

The primary interest in embodiment for this current study is the idea of the extended body originating from Merleau-Ponty (1962) and Heidegger (1962) that has been taken up by others such as Ihde (1990, 1998, 2002) and Verbeek (2005, 2008) to incorporate relations with technology. Through this thesis I argue that the avatar is embodied by the academic and becomes part of the academic’s body schema. The avatar becomes the academic’s bodily point of reference within the virtual world. Using Ihde’s human–technology relations, the academic/avatar can be theorised in terms of an embodied and
a hermeneutic human–technology relation, which I flesh out a little later in this chapter.

**Embodiment and technology**

Merleau-Ponty (1962) and Heidegger (1962) both explored ideas of technology and embodiment relationships where technologies became part of the experiencing body. In turn, each of these philosophers have influenced contemporary thinking on human–technology relations through the works of Ihde (1990, 1998, 2002) and Verbeek (2005, 2008), which helps in addressing the question of how virtual worlds are experienced by academics in becoming pedagogical places. As highlighted in Chapter 1, the perspective I take with pedagogy is that it is not something that happens in instructional isolation, but is influenced by contexts and places and embodied relational practices (see Dixon & Senior, 2011). Embodiment and pedagogy are discussed in more detail later in this chapter; however, in order to begin to conceptualise embodied pedagogy involving virtual worlds and avatars, a theory of human–technology relations is needed to guide the process.

This thesis draws on Merleau-Ponty’s (1962) theory of embodiment and perception, arguing that this theory may also be applied to virtual worlds, particularly in describing avatar embodiment. For Merleau-Ponty, artefacts and technologies become part of the body schema, and he used examples of a blind person’s cane and the feather in a woman’s hat in discussing how the spatiality of the body was extended through these artefacts. For instance, in his example of the blind man’s cane becoming a seamless extension of the man’s body in his experiencing of the world, it is not the cane so much that is
experienced, but rather the footpath or objects encountered through the cane. Furthermore, in the oft-used Merleau-Ponty (1962) example of a feather in a woman’s hat, the woman is able to negotiate doorways and so forth without damaging the feather in her hat because she has tacit knowledge of where the feather is. The feather, according to Merleau-Ponty, has become part of the woman’s body schema: it is embodied by the woman. This concept applies in relation to my research: the avatar becomes part of the academic’s body schema, as I have stated previously, just as a hat does for the wearer and a bicycle does for the rider. Steptoe and colleagues (Steptoe, Steed & Slater, 2013) note that both neurological and behavioural studies suggest the plasticity of the human brain enables the body schema to be extended by objects and artefacts that are reconfiguring the space around it.

Similarly, Heidegger (1962) describes tools in terms of being ready-to-hand and present-at-hand. A very simplistic explanation of this theory is that a tool/artefact/technology is ready-to-hand when a technology with a specific purpose is used unconsciously by the user and thus becomes an extension of the user’s body. Heidegger’s famous example is a carpenter using a hammer; the hammer has a particular intentional use (i.e. to hammer nails) and so becomes an extension of the carpenter’s arm. The carpenter may experience the metallic hardness of the nail and/or the texture of the wood, but is not so much conscious of the hammer. The hammer becomes present-at-hand when it breaks or is not in use, and then it is objectively present (Verbeek, 2001).
Brey (2000) notes, however, that a technology such as a hammer is also for acting on the world, not only for perceiving the world via the technology. Therefore, artefacts extend the body and the user’s experience of the environment is perceived and acted on through them (Brey, 2000). The point of explaining these examples is because I suggest the extension of the academic’s body is experienced through the avatar’s motility in the virtual world. Moreover, the theories of Merleau-Ponty and Heidegger, and Ihde’s and Verbeek’s extended body and human–technology relations assist in answering the research question of how virtual-world places are experienced in a pedagogical way for academics. The avatar, I propose, mediates experiences of teaching and learning in the virtual world for academics and this will be explored further throughout the study.

So far I have outlined some theories of the extended body through artefacts and technologies from key theorists of embodiment; however, these theories are predominantly applicable when there is some measure of contact between the body and the technology. But the avatar is not in physical contact with the person it embodies. Brey (2000) briefly touches on this issue in relation to flying a model airplane and muses on how malleable the body schema is. The airplane, he insists, becomes a second reference point for the body in its encounter with other objects and he states that video games and VR present similar experiences. This perspective, however, omits the emotional connection that it is possible for a person to have with their avatar and the social nature of the avatar, which can have its own intentionality. I now examine Ihde (1990, 2002, 2011a, 2011b) and Verbeek (2004, 2005,
2008) a little more closely and bring Warburton (2008) into the mix in order to articulate the position I take that is missing in the extant literature on embodied technologies and how my research makes a contribution to this literature.

**Human–technology relations: Ihde and Verbeek**

Ihde (1990, 2002) introduces a philosophy of human–technology relations that is useful in exploring ways for understanding experience and embodiment mediated through an avatar and, in addition to Verbeek (2005, 2008), sheds light on the intentionality mediated by technologies. The concept of embodied technologies from these philosophers provides a bridge of understanding between the technologies of virtual worlds and the lived experience of academics. It is from the perspective of these underpinnings that I examine how experiences contribute to a virtual place becoming pedagogical for academics.

The post-phenomenology that both Ihde (1990, 2002) and Verbeek (2005, 2008) adopt retains the central phenomenological idea of intentionality. Technologies can be embodied by their users and they can mediate embodiment and play a mediation role between humans and their environment. Ihde’s phenomenological approach to technology provides a framework for analysing the phenomenon of technology-mediated experience. Ihde has developed four concepts for the mediated relationship between human beings and technology. He uses the term ‘technology’ interchangeably with ‘technics’ and sometimes ‘techne’, and identifies the four relational dimensions as embodied, hermeneutic, alterity and
background. The figure reproduced below (see Figure 1.) was developed by Verbeek (2004) to describe Ihde’s human–technology-mediated relationships:

![Diagram of human–technology relations](image)

**Figure 1.** Human–technology relations (after Ihde, 1990) (Verbeek, 2004, p. 2)

It is the first two relationships that have the capacity to assist in theorising the relationship between the person and their avatar, as I will demonstrate through this research study. The embodiment relation is when the technology is incorporated into the body, not in a literal sense, but it becomes so much a part of human experience that it ceases to become distinguishable, much as described in the examples from Merleau-Ponty and Heidegger earlier in this section. Ihde (1990) uses the example of optical glasses; when he puts them on for the first time, they immediately transform his visual capability to see the world. The glasses (technology) are in a position of mediation between the viewer and the world and, when the glasses become familiar enough to the user, they cease to be discerned as separate. This is a simplified example and Ihde extrapolates it to examine the complexities of technology as the mediator; however, this simplified version serves to illustrate the concept.
Ihde’s second human–technology relationship is hermeneutic: it “provide[s] representations of reality, which need to be interpreted by humans in order to constitute a ‘perception’” (Verbeek, 2004, p. 1). The example Ihde (1990) uses is the case of using a thermometer. The thermometer is not taken into embodiment, but knowledge from interpreting the thermometer reading provides information about the body: how hot or cold it is. Through this thesis, I argue that the avatar enables the user (the person behind the avatar) to interpret certain things. Nonverbal cues and body language signals in the concrete world are biologically and cultural determined (see Wainwright, 2010; White & Gardner, 2013) and are interpreted by others as part of communication exchanges.

Currently avatars do not have the capacity to enact the subtleties of body language, but there are many possible avatar actions that signify certain things as part of communicating with others and more complex nuances are on the near horizon (see, for example, Mancini, Ermilov, Castellano, et al., 2014; Goldberg, Christensen, Flash, Giese & Malach, 2015). These currently available actions, in conjunction with the spoken or typed word, add levels of complexity to interaction and communication in a virtual world and must be interpreted by other users, who in turn respond through their avatars. This is not a hermeneutic human–technology relation in the true Ihde (2002) sense, but it does entail hermeneutic analysis of another avatar in relation to one’s own avatar in order to understand what is being communicated.
Moreover, the physicality of the virtual world, the graphical 3D environment, needs interpreting in order for the avatar to interact with it. For example, a learning space in a virtual world may have interactive objects that facilitate learning and these need to be interpreted as ‘things’ in order to be interacted with in a certain way. The avatar is then directed to interact with them. Pearce (Pearce, 2006a, p.1) refers to this as “spatial literacy”—the ability to read and interpret meaning and narrative embedded in virtual space in a particular way”. The user is continually interpreting the environment and the interaction by the avatar in ways that co-shape the user’s experience of the [virtual] world.

Although Ihde’s hermeneutic human–technology relation contributes to framing the interpretation of virtual world physicality, Ihde (in Ihde & Selinger, 2003) has insisted in the past that the human–technology relationship within a simulated world via VR is an alterity relation. This implies that the human relationship is with or to a technology and is not embodied or hermeneutic. Furthermore, Ihde (2002) discusses the virtual body in terms of “technofantasies” (p. 14) and bodies that are “thin and never attain the thickness of flesh” (p. 15, original italics). However, as mentioned previously, the avatar plays a significant role in co-shaping the user’s experience through being an agent in the interpretation process. Moreover, in my research I argue that there is a relationship between the user and their avatar that is more meaningful than a person’s relationship with a thermometer or eyeglass, the type that is more central to Ihde’s research.
Avatars
Ihde (2002) discusses embodiment in terms of knowing where your body is in space, being able to ‘know’ the extremities of your body as you move about the world and negotiate spaces, which includes knowing you can fit through spaces without measuring yourself against them. Pearce (2009) describes similar concepts in relation to avatars and the sense of presence that participants experience in virtual worlds. She suggests that the sense of presence is a sense of awareness of the avatar’s body being in the virtual world, seeing it in relation to virtual-world materiality and in relation to other avatars. The avatar and the user are intrinsically linked and in most senses the avatar does not exist without the user.

Proprioception and embodied interaction
Phenomenology’s central theme is embodied experiential meaning and in order to come to terms with a phenomenological understanding of the embodied avatar, I draw on Merleau-Ponty’s (1962) concept of proprioception. As mentioned previously in this chapter, Merleau-Ponty theorises embodiment in terms of the body schema and intuitive knowing of the periphery of the body and one’s body in space. The embodied avatar and proprioception reveal the two worlds that academics inhabit simultaneously – the physical and the virtual – by the physical body (the academic) and the virtual body (the avatar).

‘Proprioception’ is a term often used in medical and physical rehabilitation contexts. In this sense it refers to “the sensory information that contributes to the sense of position of self and movement”. Body position is perceived at
both the conscious and unconscious levels. The information from conscious proprioception is utilised to facilitate complex motor activity, while unconscious proprioception is important to coordinating basic postures during sitting, standing and simple gait activities (Johnson & Soucacos, 2010).

VR research introduces proprioception as a concept within the context of virtual experience (Fuchs, Hafez, Koudja & Papin, 2011), which at times incorporates physical rehabilitation (Kreshner, 2004; Cho, Ku, Cho, et al., 2014; Laver, George, Thomas, Deutsch & Crotty, 2015), but is also used in discussing how video games are experienced in an embodied way through an avatar (Shinkle, 2008).

Virtual worlds are not experienced in the full sensorial modality possible in the concrete world; however, Egoyan (2007) suggests the virtual world is experienced as performance, rather than sensation. Virtual embodiment through an avatar is experienced through proprioception – the ability to sense the position, location, orientation and movement of the body and its parts. This perspective is of interest for a number of researchers of human interaction design who are exploring the nexus of body and technology interactions. Larssen and colleagues (Larssen, Robertson & Edwards, 2007), for example, introduce a feel dimension to interaction design that incorporates knowledge of one’s body orientation in space and its relation to things in space with the body as reference point. This perspective is gaining popularity among embodied game designers, where game interaction is a bodily experience. The introduction of Nintendo Wii® has brought embodied
game interaction to the general public on a large scale through console-based interfaces where physical bodily gestures interact with game elements. The rise of mobile games, particularly those using geographic information systems (GIS), bring another level to embodied games, creating hybrid spaces that combine virtual and physical spaces (Richardson, 2011; Farman, 2013; Irving & Hoffman, 2012, 2014), engaging bodily movement through spaces while interacting with virtual artefacts.

**Avatars and embodiment**

According to Ihde (2002), a phenomenological understanding of our sense of being a body relates to “our motile, perceptual, and emotive being-in-the-world” (p. xi). However, Ihde sees this as one’s sense of being a body – what he calls ‘body 1’ in contrast to the other as socially and culturally constructed, which he calls ‘body 2’. In this sense he is referring to how our body is transcribed or inscribed through and with our social and cultural context. Ihde also refers to the ‘here-body’ or ‘myself-as-body’, which is not delimited by the skin surface or the outline of the body, in a similar vein to Merleau-Ponty (1962). Ihde states that the here-body has a kind of sensing which goes beyond its perimeter but that still belongs to the intentional body or is still part of the intentional body and extends beyond the skin. Ihde illustrates this with the example of a martial arts practitioner being able to sense or anticipate blows from behind and execute blows or “aim one’s activity beyond any simple now-point” (2002, p. 6).

Ihde differentiates this here-body from the (personally) perceived body, what he calls the “disembodied over-there body” (2002, p. 6). The over-there
body is the body that observes itself. Ihde illustrates this phenomenon through asking his students to describe in a phenomenological way the experience of skydiving. He found that a percentage of the class described this in the here-body and gave a relatively full sensorial account that included the feel of the wind in their face and the ground rushing towards them giving them a sick feeling in the stomach. The rest of the class gave an over-there body account as if spoken in the third person. Ihde describes this as similar to when someone describes an out-of-body experience: they describe the experience in the ‘I’ context but as an observer.

This is much the same as the way a person is represented in-world by an avatar. The default viewpoint of a person participating in a virtual world is from behind their avatar and this is the predominant viewpoint for general use. If the avatar is manipulated to walk, the person can see the avatar walking from a rear position and has a framed view of the virtual-world space. The framing is firstly the field of vision of the person; if it is on a very large screen, the scene just outside the focus point is visible but not in focus. Below is a screenshot of the default camera perspective that includes the user’s avatar in the viewpoint (see Figure 2.).
The point of view is provided via a ‘camera’ which can be manipulated to change the viewpoint from just behind the avatar to a side view and a front view, but also a ‘mouse view’ or ‘mouse look’, which sets the camera to a first-person perspective and in a sense the camera can be detached and the avatar left behind and so the participant can ‘move’ around the virtual space more quickly and not be seen by others. While others cannot see them, they may communicate via voice and/or text chat; however, it is the avatar that ‘embodies’ the user in the virtual world. Without the avatar, the user is participating in the virtual world, but the avatar is the signifier that they are there, a signifier both to the user themselves and to others. Below is the same screenshot as the image above but from the mouse view perspective (see Figure 3.).
Chapter Three

Figure 3. Second Life mouse view (Irving, 2016)

**Avatars embody identity**
Avatars in MOGs are different from those in social worlds. In game worlds there is little option for customisation of avatars, as the game developers largely prescribe them. Furthermore, the developers have set the characteristics and behaviours of the avatars. While there may be a choice of avatars, this choice is limited to a set number of pre-configured avatars (see Figure 4.).

Figure 4. Avatars (Irving, 2016)

As Pearce (2009) notes, developers are projecting their own ideas or assumptions about the qualities of the avatar character in a game. The
distinction between MOG avatars and the avatars of social worlds such as SL and some game worlds is the agency that users have over the development and identity of their avatar.

When users have agency over the development and identity of their avatar, a close connection can form. In her in-depth study of the game Uru, Pearce (2009) found that players likened the loss of their avatars when Uru’s servers were turned off to a “kind of death” (p. 119). This is not the same as the many deaths a player experiences in a regular MOG, because those deaths are part of the game and the avatar is then renewed or takes on a different character (avatar). When a player develops their own avatar, Pearce suggests that the avatar becomes a part of the player’s identity, not just an extension of their identity, but an identity that exists in a given context or “a version that exists in a particular mediated context” (p. 119). Gee (2007) refers to this as ‘projected identity’, which is examined in the following section.

**Avatar identity as Discourse identity**

A critical perspective on identity for this research is that identity is developed and experienced within specific contexts or, as Gee (2000, 2011) describes, as being a ‘kind of person’ in a given context. Gee insists that everyone has multiple identities that they enact or act through in specific contexts. The relevance of different kinds of identities for this study is that the identity the avatar generates reflects the user of a virtual world or is shaped by the user. While Gee (2000) suggests identity is a useful ‘analytical lens’ for understanding education, it is also a useful perspective in looking at
how avatars extend the identity of the virtual-world user, in this case the academic.

Gee (2000) offers four categories in which to view identity – nature N-identity, institution I-identity, discourse D-identity and affinity A-identity – however, he insists these are not separate from each other. Gee often uses D-identity with a capital D as in Discourse and it the form I use throughout this thesis. Discourse is the identity that is most relevant for this thesis; however, institution identity would also be relevant for academics because the university bestows or authorises a certain kind of identity.

**Institution identity**
Institution identity (I-identity), according to Gee (2000), is an identity authored by an institution and performed through the discourses associated with that institution. The identity of a medical doctor and the power of that identity, for example, are authorised through the discourses associated with the medical institution. This not only refers to a hospital, although the hospital is a central author, but to the entire institution of medicine. For academics, the institution is a university and the particular position in the university held by the academic influences how others perceive them and, indeed, equally importantly, how they perceive themselves. A professor is authored an identity via the institution that has certain rights, privileges, expectations and so forth.

**Discourse identity**
Gee describes Discourse identity with a capital D in order to distinguish it from discourse that is interaction through language. For Gee, Discourse
identity is an ‘identity kit’ and is connected to ‘being’ in the world or ways of being in the world. He clarifies this as being in the world and being a kind of person in the world. While Discourse identity incorporates interaction through speaking and writing, it has a more complex meaning that encompasses a range of associations, understandings, practices, knowledge, interactions, conventions and so forth. People have multiple identities and multiple life-worlds coinciding with those identities.

In a virtual world, the academic is an academic avatar in a space and therefore may encounter new or different ways of being an academic through their avatar in this different space. Turkle’s (1995) seminal work on identity in the age of the Internet, for example, highlights the way technologies are enabling new identities and multiple identities that change the way we think about the world and ourselves. Indeed, Crowe and Watts (2014) insist online identities are multiple and situated. Their extensive ethnographic research with young people and online game worlds has found that many adopted a different gender for their avatars in-world. The reality and authenticity of that identity were maintained until they logged out of the game, even when playing with friends who knew their true identity. Gee (2007) refers to this as ‘projective identity’ and being a kind of person in a given context, which is discussed in more detail under the avatar identity section above.

**Presence and immersion**

Presence and immersion are the sense of being there in a virtual space and have generated much interest in the diverse field of researchers of digital environments (see Steuer, 1993; Murray, 1997; Lombard, Reich, Grabe,
Bracken & Ditton, 2000; Pearce, 2006a, 2006b; Turner & Turner, 2006; Czaja, 2011; Champion, 2008, 2011; Sjolie, 2012). Existing theories on presence are driven primarily through VR discourses, where the user has a sense of being there in the virtual environment through a sense of immersion from a ‘first-person’ perspective. First-person immersion does not have an avatar representative, but the player views the environment through a head-mounted tracking device. The viewpoint is much the same as in a virtual world from the mouse camera perspective illustrated in Figure 3.

Virtual worlds also have this perspective when the participant detaches the camera and navigates the world without a body. Others (see Boellstorff, 2008; Pearce, 2009, 2010) argue for a different way of being present, insisting it is the avatar in the world that gives a greater sense of presence. This is experienced through the player being embodied in the world through their avatar; thus, being in a virtual world among objects and other avatars feels like being there. Seeing others and being seen create a strong sense of presence (Pearce, 2009).

Moreover, being able to do things like running, jumping and flying, and experiencing proprioception, which first-person perspective lacks, gives a strong sense of being there, as does the bond a player can feel with their avatar. Peace (2009) notes the strong connection players can have with their avatars, which “seems to create a deep connection both to other avatars and to the virtual world they share” (p. 123). Curiously, Pearce states that when players create new avatars, other players in the game miss the old avatars.
This is despite the player still being present with their new avatar. Identity for the avatar is built within the context of relationships and interactions with other avatars. Taylor (2002) concurs with the idea that presence is an embodied activity where bodily performance via the avatar connects the user with the virtual-world environment.

**Botgirl questi**
The identity of avatars can project beyond the confines of the virtual world. An example is *Botgirl questi*, an avatar in SL who was developed as an experiment by a professional male academic curious about presenting a different gender. It is uncertain whether the man’s identity is known, as everything published has come through the *Botgirl questi* persona. *Botgirl questi* is a digital artist and has an identity entirely of her own that includes her own Facebook page, LinkedIn site, Vimeo and YouTube channels. She is well known for her original comics, which are published both online and in SL (Novak, Luchs & Davies-Stofka, 2013), presents at online conferences and seminars, and is a highly regarded blogger with many followers. The significant point is that the person connected to *Botgirl questi*, the ‘real’ person, is to some extent insignificant; people respond to *Botgirl questi* as if she is a bot, an incarnation of artificial intelligence, but she is not: she is an avatar driven by her creator.

Following Ihde (1990) and Verbeek (2005), we might say that *Botgirl questi* has her own intentionality or “technological intentionality” (Ihde, 1990, p. 141). This is to say, the technology actively mediates or has agency in mediating the relationship that humans have with the world. Ihde uses the
example of the telephone co-shaping the way two people relate to each other – the way the world is experienced is mediated by the technology.

Intentionality is not used in the phenomenological sense, but is referring to shaping or purpose for how something is used. As Verbeek (2005) notes, things and technologies “are not neutral ‘intermediaries’ between humans and world, but mediators; they actively mediate this relation” (p. 114, original italics). *Botgirl questi* mediates a way of being (an artist, a different gender, fame) for her creator that is an emergent intentionality.

In this section, theories of embodiment have been presented to suggest ways that academics might experience a sense of embodiment and ‘being’ through their avatars. Theories of extended embodiment from Merleau-Ponty (1962) and Heidegger (1962), and Ihde’s (1990, 2002) human–technology relations provide a way of interpreting how academics might experience embodiment through their avatars, and the concept of proprioception has been examined in the context of the embodied avatar navigating the virtual-world space and contributing to experiences of being there or being present in the virtual space. This perspective for higher education presents a gap in the extant literature that this current research study addresses.

As stated earlier in this chapter, pedagogy is viewed as an embodied activity and I turn now to examining pedagogy from the perspective this thesis takes, with a view to interpreting how academics experience pedagogy through their avatars.
Pedagogy

Introduction
The term ‘pedagogy’ is used in many ways and it is a complex idea that is often difficult to define (Watkins & Mortimer, 1999) and its meaning can differ between contexts – primary or higher education and so forth. Watkins and Mortimer advise that “any conscious activity by one person designed to enhance learning in another” (p. 3) is a good starting point from which to examine pedagogy. Langeveld (1983b) refers to pedagogy in ethical experiential terms, as the science of experience where the pedagogical situation resides in human intent.

‘Andragogy’, a term first coined by Knowles (1980), is the adult form of ‘pedagogy’; however, it is not a term that is used broadly in higher education and I use ‘pedagogy’ throughout this thesis.

Pedagogy as being with
This section outlines the perspective on pedagogy that I take in this thesis. I do not provide an overview of the kinds of pedagogies that might be possible in virtual worlds; rather, I provide an understanding of how the idea of pedagogy is underpinned by phenomenological philosophies that weave a similar thread through this thesis. The perception of pedagogy I take in this thesis is ontological, rather than epistemological, and is a relational pedagogy inspired by phenomenological thinking that is being-with or to accompany students or learners. The ontological perspective this research follows is more in line with van Manen’s (1989, 1990, 2002, 2008, 2014) view of pedagogy, which is a way of seeing a student. It is a practice of tact, contact
and care, and what he calls “pedagogical reflection and pedagogical responsibility” (van Manen, 2012, p. 33), which is at the heart of being in the best interests of the student.

This viewpoint is more in keeping with pedagogy within the K-12 sector and would seem largely out of synch with university contexts given their class sizes and propensity for online learning. However, I suggest there are elements of this pedagogical approach that are beneficial in understanding the unique opportunities that virtual-world environments present in creating co-locations for academics and students that may foster a social framework (Brown & Duguid, 2000) for learning. As discussed in Chapter 2, LMS dominate online teaching and learning in higher education, but there are limitations to the capacity to build relationships between academics and students with these modalities. Virtual worlds may offer a significant pedagogical role within a more complex ecosystem of learning modalities that is a role of interest for this research.

**Embodied and relational pedagogy**

Chapter 2 signalled the role of the 21st-century university is being challenged by dynamics primarily brought about by globalisation but also through advances in technologies, which in turn affect pedagogies. A growing amount of scholarly writing voices concerns for what are seen as the limitations imposed on universities not only brought about by globalisation but also due to how universities see themselves in relation to what they might and should be in the 21st century (see Slaughter & Leslie, 1997; Barnett, 2005, 2009, 2011, 2012; Dall’Alba, 2005). Additionally, there is growing awareness that
although knowledge and skill acquisition is important, this perspective alone falls far short in preparing students for who they can become (Dall’Allba & Barnacle, 2007). Underpinning these concerns is the idea of a need for embodied and relational pedagogies, with the belief that knowledge has become disembodied through current university practices (Dall’Allba, 2005, 2009, 2012).

Relational pedagogy is most often thought of in terms of K–12 and particularly primary and pre-primary contexts (see Boyd, MacNeill & Silcox, 2007; Avenell, 2009). Relational pedagogies derive from the philosophies of Martin Buber (1878–1965), Paulo Freire (1996) and John Dewey (1990), and are based on the relational dynamics of trust, recognition and respect (Murphy & Brown, 2012). The relationships of teaching and learning, social learning and the social practice of learning are equally important for cognitive development (Boyd et al., 2007). While support is growing for relational pedagogies in higher education (see Murphy & Brown, 2012), this is an under-researched area in university contexts. McWilliam (2014) notes the propensity for viewing students as data flows. Analytics drawn from big data across university platforms and systems, particularly learning management systems, map student engagement and performance with the view for a more personalized and adaptive student experience. There could be a danger however of relating to student data rather than the embodied student. Pedagogy as a relational and embodied concept is particularly relevant for this current study, as these also relate to two dimensions of
experience, or what van Manen (1990) calls ‘existentials’, which is discussed more fully in Chapter 5.

*Dwelling pedagogically*
As stated at the beginning of this chapter, within the context of this study the *activity* that is place-making in the virtual world is pedagogical. This research study is orientated towards experiences of a pedagogical place; therefore focus is drawn to what Forun and Olson (2008) describe as “to dwell pedagogically in a place” (p. 25). Indeed Forun and Olson also note that a pedagogical place involves triangulated relationship between teacher, student and place. Dwelling in this context emanates from Heidegger’s (1977) being-in-the-world or “the way in which you are and I am, the manner which we humans are on the Earth” (p. 325). Dwelling brings the additional dimension of *place* to the relational pedagogy, bringing focus to the relationship between teacher and student bound within a pedagogical place.

Van Manen (2002, p. 23) describes pedagogy as “seeing” the student, and Forun and Olson (2008, p. 25, original italics) believe “seeing occurs in multiple locations”. However, expectations of traditional locations automatically being pedagogical, such as classrooms, lecture theatres, tutorial rooms and so forth, can make non-traditional places seem out of place pedagogically.

But different places may also allow teachers to *see* students differently. The virtual-world places that are the focus of this current study are significantly different spaces to traditional university teaching spaces and also
significantly different to the LMS most universities use for online learning. Each of these teaching and learning spaces offers specific affordances and in turn specific teaching and learning experiences. Physical university spaces are transforming into engaging spaces that afford a wide range of pedagogical (Hall, 2013; Fraser, 2014a, 2014b) and embodied practices (Kannen, 2012), as discussed in Chapter 2.

There are opportunities for LMS to augment face-to-face teaching and learning (Keppell & Riddle, 2012) and allow very large numbers of students to access classes in a fully online context from geographically dispersed places (Coates, James & Baldwin, 2005). The LMS affordance is ubiquitous access but it presents challenges for relational connected experiences for both students and academics, as Rose and Adams (2014) lament.

Virtual worlds sit in a space somewhere between physical space and the fully online LMS. The ubiquity of an LMS is an inherent quality of virtual worlds, albeit without the large student numbers. As de Freitas (2014) notes, virtual worlds facilitate experience-based learning with the capacity for empowering students and teachers. Savin-Baden and colleagues (Savin-Baden, et al., 2010) suggest teaching in virtual worlds requires engaging in “communicative practices and identity work that may arguably question ‘traditional’ pedagogic relationship” (p. 130). Understanding what kind of pedagogic relationship is possible between an avatar-teacher and avatar-student within a virtual-world place is a central interest for this current
research study. Through this thesis, I anticipate contributing new knowledge to this emerging area.

**Place**

In this section, I introduce established theories of place predominantly through the scholarship of human geography and environmental psychology. Human geography is the study of place (Cresswell, 2013) and, while this tends to be dominated by perspectives of physical places, environmental psychologists also explore place in terms of imaginary spaces. These perspectives serve to lay a foundation for some of the ways in which place is experienced. Other influences such as technology and globalisation are understood to be influencing new or additional ways for places to be perceived and experienced, particularly around mediated mobility (Gustafson, 2001, 2006, 2013), which has particular relevance for this current study, where geographically dispersed academics and students meet in one virtual place.

In recent years, there has been dispute among some place theorists around the role that globalisation and the rise of technologies are playing in making relationships with places and other people unstable (Gustafson, 2001, 2013). A familiar argument among theorists, Gustafson states, is that personal and social relationships with places are becoming mediated through ICT and thus disconnected with their local context. However, as Gustafson further points out, the human race is becoming infinitely more mobile.
The perspective I take for this research is influenced by many place scholars, especially Dovey’s (1985) concept of place as *assemblage*. This concept provides a suitable frame for thinking of place in terms of complex experiences of identity development, embodied activity, relationships, becoming and dwelling, where information technologies contribute in developing and augmenting connections both locally and globally.

**Overview of space, place and sense of place**
Firstly, the terms ‘space’, ‘place’ and ‘sense of place’ are littered throughout the literature of place studies and there are many ways in which popular media and people in everyday life also use these terms. Therefore, before commencing, I wish to state my position. I make the distinctions that space is something that flows around places, places are creating by being meaningful in some way for someone or some group, and a sense of place holds deeper meaning and connection for someone or some group. I do, however, follow Massey’s (1991) belief in a non-essentialist notion of place that is not necessarily bounded and static, that may be global and multiple, and where time or the temporal dimension is integral. This concept integrates the notion of place-making as relational and co-constructed, in turn forging spatially related identities that are both material and discursive in their construction (Massey, 2004, 2005).

The terms ‘space’ and ‘place’ are often used interchangeably and I do so at times in this thesis. As Champion (2011) points out, there is a long history of inconsistency over the meaning of a place and its usage. Therefore, while I
attempt to some extent to tease out the meaning of ‘place’ as opposed to ‘space’, I acknowledge that concise descriptions are problematic.

**Introduction to place**
Relph’s (1976) seminal work on place and placelessness identifies three components of place: the physical setting, activities and meanings. In reviewing the research question ‘How do academics experience virtual worlds as pedagogical places?’ I identify pedagogy as the key activity and meaning-making for academics that is place-making or place-forming for them. In saying ‘pedagogical place’ I am referring to a place that has a role in pedagogy.

In following sections of this chapter, I examine traditions of place and traditional forms of ‘place-based’ pedagogy. Pedagogy is a central dimension in the lifeworld of an academic and therefore it is the pedagogical activity through which this research seeks to understand how place is experienced. In other words, this research seeks to understand how academics experience virtual-world places through their pedagogical activity.

**Defining place**
Relph (1976) acknowledges the problematic nature of a succinct definition of place; however, he states “it is important to clarify the relations between space and place, and thus to avoid the separation of places from their conceptual and experiential context” (p. 2). Seamon (2014b) defines place as “any environmental locus that gathers human experiences, actions, and meanings spatially and temporally” (p. 203). The literature on place examined in this chapter sheds light on how place is perceived and
experienced by humans from a phenomenological perspective. While the embodied nature of these experiences may seem to have limitations for a virtual context, this part of the chapter demonstrates that phenomenological examinations of place through these disciplines is indeed useful for understanding virtual experiences.

Tuan (1991) insists language is often overlooked as an integral part of place-making, for language gives materiality to the abstract concept of place. Discursive approaches to place-making are examined in a later section entitled Embodied place and identity, but this differs to Tuan’s meaning. Tuan is referring to the everyday use of lived, experienced language.

Academics’ experiences of place in a virtual world are dependent on language and the ways in which they articulate their experiences through their embodied avatar. A phenomenological experience of place as demonstrated through the writings of the human geographers, environmental psychologists and sociologists briefly outlined in this chapter can be a complex mix of sensate, emotional, spiritual and psychological lived experiences.

*Rhythms and flows*  
Key thinkers on space and place, particularly Relph (1976) and Tuan (1979) but also Lefebvre (1991) and Buttimer (1972), are credited with influencing research and thought directed at the human dimension of place during the 1960s and 1970s which they felt was absent from the geographical concerns of that time. Buttimer contributed to the spatio-temporal experience of place that was firmly grounded in phenomenological thinking by highlighting the
idea that place is created through human experience of lived time–space rhythms.

Buttimer’s line of thought is analogous with those of other geographers such as Seamon (2004), who believes neighbourhoods and locales develop an identity through the temporal, rhythmic nature of groups and individuals going to and fro about their daily lives. Seamon refers to this movement as ‘place-ballet’ and I discuss this later in the chapter with reference to the materiality and motility of the avatar. Similar ideas of temporality, rhythms, flows, social spaces, critical and political theories of place, sense of place and so forth are permeating thinking around networked digital technologies (see, for instance, Goodson, Knobel, Lanshear & Mangan, 2002; Castells, 2005, 2010; Gee, 2005; Pries, 2005, 2013; Castells & Kumar, 2014; Harrison & Growe, 2014).

Place, according to Relph (1976), is an intensely human experience. He insists experiences of place can be examined through focus on the relationship between space and place, how people experience the components and intensities of place, identity of places and looking at the manifestations of sense of place and attachment to places. Tuan (1975) suggests that a place eventuates when a space becomes thoroughly familiar to us.

**Approaches to sense of place**
The interaction of humans with their environment and the importance of place have been well documented across a range of disciplines, particularly
through geography and human geography (Relph, 1976, 1981, 2007, 2008; Buttmer & Seamon, 1980; Casey, 1993, 1997; Massey, 1993, 1994), urban and social geography (Soja, 1989, 1996; Lefebvre, 1991), environmental psychology (Proshansky, Ittelson & Rivlin, 1976; Proshansky, 1978; Proshansky, Fabian & Kaminoff, 1983) and education (van Mannen, 1990, 2007; Sobel, 1996; Gruenewald, 2003, 2008). Many different ways of conceptualising space and place have been explored across these disciplines; however, as Tuan (1979, p. 3) insists, they are “basic components of the lived world”. Much of the discussion of place, however, makes reference to a sense of place.

Indeed, ‘sense of place’ is a term often used in the research and literature on place and there tends to be a distinction between ‘place’ and ‘sense of place’, as well as ‘space’. As mentioned, ‘space’ and ‘place’ are often used interchangeably; however, some key thinkers see a distinction between the two concepts and others such as Relph (1976, 1981, 2008) see space and place as symbiotically connected. Moreover, much of the literature on place and sense of place is underpinned or closely informed by Relph (1976, 2008) and Tuan (1975, 1979, 1991), whose works are inherently phenomenological in understanding place. Both scholars insist that it is the human associations, memories, activities, social interactions and so forth that create layering of meaning and contribute to sense of place.

An underlying assumption about sense of place is that the length of time spent in a place contributes to the depth of connection one feels for the place.
For example, Hay (1998) discovered this through his longitudinal study of both transient and permanent residents on the Banks Peninsula of New Zealand. Therefore, place becomes more meaningful once there has been some kind of investment by an individual or group. Hay concedesthe modern society is more mobile due to changing places of work, relationships and homes to suit different life stages, which may lead to a lack of time needed for deep connections to create a sense of place.

*The brain and body: experiencing place*

“The spaces in which we work, live, and learn can have profound effects on how we feel, how we behave, how we perform and can affect different people differently” (Watson, 2007, p. 260).

Although Watson admits his statement on the effects of spaces is not based on an exact science, his thoughts are supported through research on connections between neuroscience and built environments (see Eberhard, 2008; Edelstein, 2015; Robinson & Pallasmaa, 2015). Indeed, recent research is connecting phenomenological understandings of place with neuroscience, allowing comprehension of the cognitive processes involved in experiencing sense of place (Lengen & Kistemann, 2012). Lengen and Kistemann reviewed the neuroscientific literature against ten dimensions of phenomenological place experience they had previously identified from the phenomenological literature. Their evaluation of the neuroscientific literature indicated that specific parts of the brain are involved in functions “to perceive, memorise, link, assess and use spatial information” (p. 1162) that encodes places. They found that a number of elements interact to encode places with information
such as emotion and attention, navigating through places and spatial orientation. Moreover, they concluded that Bruckner and Carroll's (2006) work connecting brain regions for memory, navigation and spatial awareness is beneficial in connecting neuroscience with place-identity and sense of place. Indeed, Lengen and Kistemann acknowledge there are many cognitive processes involved in cognitive mapping and symbolic representation enabling the experiences of sense of place.

Connections between neuroscience and virtual-world experiences are beginning to emerge. Heeter and Allbritton (2015a), for example, insist neurological processes are at play when experiencing presence in virtual worlds. They link theories of meditation and mindfulness with a type of sensory input processing called interoception, insisting a deeper connection with one's body provides a stronger sense of presence in a virtual world (Heeter & Allbritton, 2015b). Interoception is explained by Farb and colleagues as “the sense of signals originating within the body” and is “critical for our sense of embodiment, motivation, and well-being” (Farb, Daubenhmier, Price, et al., 2015, p. 4).

While this line of investigation is beyond the scope of the current research to go into in any great detail, it indicates powerful consequences for the design of virtual and physical learning places. Furthermore, these connections being made between neuroscience, experiencing of place and experiencing of presence in virtual spaces is an emerging area of research with far-reaching
implications for understanding how people experience being in virtual places and experience a sense of connection with those places.

**Embodied place and identity**
From a phenomenological perspective, all places are embodied because a place does not exist without being existent for someone or somebody (as per Merleau-Ponty, 1962). Within environmental psychology, a dimension of a person’s identity is experienced through their cognition of the physical world they live in (Lengen & Kistemann, 2012). Place and the production of place are closely linked to identity, which includes identity of place and identity of the person in relation to the place. In some cases, particularly in environmental psychology, this is referred to as place-identity, a concept initially defined by Proshansky (1978).

Place-identity is the intersection of *who* we are and *where* we are in the world or, rather, *who* we are is often strongly connected with *where* we are (Dixon & Durrheim, 2000). Proshansky defines place-identity as “those dimensions of self that define the individual’s personal identity in relation to the physical environment by means of a complex pattern of conscious and unconscious ideas, feelings, values, goals, preferences, skills, and behavioral tendencies relevant to a specific environment” (1978, p. 147). Korpela (1989), a recognised as a leader in this field of research, insists emotional attachment to place is central to the concept of place-identity.

The idea of authentic experiences of place as embodied is an interesting dilemma for this current study, because the avatar only exists in its motile
sense within the virtual world and the academic only exists in the concrete world. This is unlike the 1982 science fiction movie *Tron*² and the more recent *Avatar*³ where the human merged with their avatar in the virtual space and experienced place in a realistic embodied sense. It is a dilemma made more interesting because in one sense the avatar embodies the participant’s identity but, as discussed earlier in this chapter, the avatar can have an identity that is recognised and exists independently of the participant or the participant’s identity.

One dimension of the place/identity nexus which Dixon and Durrheim (2000) bring to the discussion is particularly pertinent for this current study. While they acknowledge that threads such as a sense of belonging and the transaction of experience with place run through much of the research on human geography, environment and social psychology, and underpin human identity with place, they feel this perspective is limited. They argue that more emphasis should be placed on the discursive perspective, which can be both political and ideological and moves away from a subjective, deeply personal psychological experience. Moreover, they insist that the dominant narrative of the individualised nature of place-identity put forward by Proshansky and colleagues (Proshansky, Ittelson & Rivlin, 1976) and other social and environmental psychologists obscures “the collective nature of the relations between persons, identities and material settings” (Dixon & Durrheim, 2000,

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² Directed by Steven Lisberger, the main character in *Tron* is a computer programmer who is transported into a mainframe computer.
³ *Avatar* is a movie directed by James Cameron where the human main character is transported into a video game. Last accessed 23/11/2015. [www.avatarmovie.com/index.html](http://www.avatarmovie.com/index.html)
p. 29). A discursive perspective, they suggest, opens up identity with place beyond the confines of construction in the minds of individuals.

This discursive perspective of place is important for this current study because it links with the way I use Gee’s (2000, 2003, 2005, 2011) discourse analysis as an interpretive tool in Chapter 4 to understand identity construction and performance through avatars in virtual-world places. Furthermore, it aligns with Tuan’s (1991) notion that language has a central role in the construction of place and the ways in which place is experienced.

Home
Van Manen (1990) pays homage to Heidegger (1971) and Bollonow (2011) in proposing that the special feelings a home can instil in people and the intense connections people have with a home suggest it is not merely a shelter. Bachelard (1994, p. 47) echoes these sentiments in saying “A home that has been experienced is not an inert box”. As with place, it is the experiences and relationship with a home that make it meaningful. Understandably, not all places and not all homes hold positive experiences for everyone.

Consideration of home is raised because it is a term and a place that is pervasive throughout digital technologies; webpages have home pages, for example, and specific virtual-world places can be set as ‘home’ so that a resident can teleport to that location at any time and it is their landing place when logging in. This is not just a navigational device; from my personal experience, places in virtual worlds can be salient places. In Chapter 2, I
related the experience of how I felt being in a virtual world and the comfort I experienced in finally having a specific home in SL as opposed to just logging in and finding myself in the last place I had visited. Therefore home in a virtual world is a place that is significant in different ways to different people.

**Virtual places**

The preceding sections have discussed the ways in which places are constructed and experienced in physical contexts and began to look at the emergence of virtual places, providing an example of how one group experienced a sense of place in a virtual world. Champion (2011) notes that it is important to understand a place as a “complex and nuanced subject” (p. 29) before beginning to tackle what place means in a virtual environment. This section discusses how writers approach the challenge of a place in virtual contexts. Seamon (2014b) ponders whether virtual-world places will ever become salient experiences in the way of real places, but acknowledges that these technologies are in their infancy and may need different imaginations. He concurs with Relph (2007) in saying user autonomy to modify and create interactivity in virtual worlds coupled with a lack of commonly established design guidelines and cues makes interpreting how to use the virtual space problematic for other users.

Much has happened in the way of virtual places, particularly within the digital humanities and virtual heritage (see for example, Champion, 2008, 2011, 2014; Devine, 2014; Sanders, 2014). However, Turner and Turner (2006) identified the following key elements that contribute to a sense of place:
• “The physical characteristics of the environment;
• The affect and meanings including memories and associations, as well as connotations and denotations;
• The activities afforded by the place;
• The social interactions associated with the place (considered by some authors as a sub-class of activities)” (2006 p. 207).

Turner and Turner summarise place thus: “place results from our experience of space, our memories and emotional attachment to that space, and the meaning we attach to it” (2006, p. 207). They point out that despite abundant empirical research across a range of disciplines, this research is not able to be used readily in the context of VR for a number of reasons, but predominantly because of the sensorial nature of a real place which is (currently) difficult to emulate in virtual environments. This thesis argues that while virtual environments such as SL may be deficient in sensorial experiences, other ways of experiencing place may be equally powerful in different ways.

*Virtual-world places echoing concrete places*

The question is often raised as to why virtual-world places resemble the physical world when the options are only limited by the imagination of the designer. But as Relph (2007) points out, “imagined places have to bear resemblances to real places if they are to be comprehensible” (p. 3). However, some find it perplexing when the very learning environments that universities are endeavoring to transcend, such as classrooms and lecture theatres, are recreated using a 21st-century technology such as virtual worlds.
Norman’s (2013) well-known work on interface design prioritises a key design principle in order for the function of something to be easily understood. People search for cues and signs embedded in the design in order to interpret the meaning and purpose. Therefore, classrooms and lecture theatres, pathways and walls are all cues that draw on what is known in order to guide activity and interaction until such time, suggest Seamon (2014b) and Relph (2007), that a sign system for virtuality is commonly understood. Furthermore, Horan (2000a) suggests digital places need thoughtful design if they are to become meaningful places and should respect “functional and symbolic associations” (p. 15).

An interesting addition to this line of thought is that online game design is generally approached from the perspective of maintaining or engendering what Csikszentmihalyi (1991) refers to as ‘a sense of flow’. The experience of flow, according to Csikszentmihalyi, is experienced when the interaction between a person’s skill level in relation to the task at hand produces a specific cognitive and emotional state. Some of the key features of experiencing flow are extreme concentration, a sense of active control and also losing self-awareness. These two perspectives, in conjunction with the previous reference to neuroscience, indicate that the experience of a virtual-world place is a complex process.

**One group’s experience of a virtual sense of place**

Pearce (2009) describes an intense connection with virtual place in her ethnography of what she terms the “Uru diaspora” (p. 67). To briefly
contextualise, Uru, or to give it its full title Uru: Ages Beyond Myst, was a MMOG that grew out of Myst, another very popular video game in the 1990s. Myst was initially developed for the PC market and was the most popular video game for much of the 1990s. Cyan Worlds, the developers of Myst, capitalised on the networked affordances of the internet to create a game to meet a growing market of online gamers emerging from the MUD text-based games and virtual worlds. Many Uru participants, called Uruvians, were Myst players; however, Uru was plagued by problems and despite a healthy community of players closed in February 2004, roughly three months after it commenced.

Pearce’s ethnography includes the story of the development of a virtual world through its players and the anguish most felt when the game closed with little warning. The interesting feature of Pearce’s observations that has significance for this thesis is the strong sense of place that players developed with Uru and the sense of identity with the Uru spaces and with their identity, as it implies embodied experiences. Pearce uses the term ‘diaspora’ to signify the migration of the Uru community to different virtual worlds and other online spaces to construct “homes away from home” (Pearce, 2009, p. 93). It is not as if they say Uru was their home; they really did see it that way. The scene that unfolded at the moment when the company closed down the game’s servers at a particular time depending on the time zone was one of disbelief which led to an outpouring of grief through a community forum set up for the Uru diaspora.
Following the Uru shutdown, participants’ demonstrated signs that were not
dissimilar to those of refugees and, according to Pearce (2009), the Uruvians
referred to themselves as refugees. Some members sought out new places to
recreate Uru in the virtual worlds There™ and SL. Eventually a small group of
virtual artefact developers’ recreated spaces identical to a number of sections
of Uru on SL.

The Uru migration to There (see www.there.com) caused problems because
communities on There perceived Uruvians as invading their space. Thereians
– the original inhabitants of There – did not feel comfortable with Uruvians
because they wore their Uruvian clothing and sometimes greeted each other
in Uruvian language. Uruvians were different; many were in their 50s,
reasonably affluent and could afford to buy land, artefacts etc. They were also
outspoken about their expectations of the owners of There.

In addition, the higher numbers of avatars congregating in one place on
There meant that the servers had trouble keeping up with rendering and so
forth, and problems were encountered with lag which also caused rendering
problems. Lag is when actions happen a certain time after they are executed,
as when in walking somewhere or flying, this happens a while after the
action is initiated. Rendering is when the artefacts, including avatars, which
are data, are not able to be processed quickly enough and appear pixelated.
This would have impacted greatly on participant experiences of the virtual
Jerrworld. It would have resulted in what Ihde (1990) describes as the
moment when the technology (in this case the avatar or the virtual world)
becomes discordant and ceases to be part of the extension of embodiment. Moreover, the Uru diaspora highlights how the social and cultural norms and prejudices played out in the concrete world can carry over into virtual worlds.

**Virtual place metaphors**
There is a developing language of symbols, metaphors and images that draw on traditional understandings of space and place experience that is helping people make sense of emerging technology-mediated spaces and places (Adams, 1998). Adams calls these “virtual-place metaphors” (p. 88) and suggests it may benefit a digital world to be understood in geographical terms through the many symbols, metaphors and images as geosophies; this is to make sense of geographical knowledge from many disciplinary perspectives. This is a similar concept to Lombard and Ditton’s (1997) reference to media conventions adding to a sense of presence in VR.

Comparable perspectives on space and place metaphors are evident in more current observations of virtual environments in education. Simoff (2001), for example, notes that the many community-oriented virtual learning environments (VLE) use the metaphor of a place such as a university campus. These spaces follow the familiar spatial arrangement of a university, including buildings, laboratories, tutorial rooms and so forth, creating an intuitive interface for students and for structuring learning resources. An example of this kind of place metaphor is an avatar-based game designed to give young people from low socioeconomic backgrounds an understanding of what it is like to study at university (Scott, 2015).
The game, Campus Quest, requires users to create an avatar, negotiate around a fictitious campus and engage with a range of university-related quests (see Figure 5). Places in the game such as the finance building link the game content conceptually with what needs to be learned about finances.

![Campus Quest](image)

Figure 5. Campus Quest (Scott, 2016)

*Place pedagogies*

Discussion of place in relation to education is primarily within the K–12 sector and occurs within perceptual, sociological, ideological, political and ecological dimensions (Gruenewald, 2003); however, fundamental to all dimensions is the idea that “places are pedagogical” (p. 621, original italics). Place has an important role in education, particularly through place-based learning with its environmental focus integrating local environments and community with curriculum (see Sobel, 1996, 2004, 2005; Smith, 2002, 2013; Gruenewald, 2003, 2008; Gruenewald & Smith, 2014; Smith & Sobel, 2014;).
This kind of place-pedagogical approach has witnessed widespread adoption over the past decade, particularly in rural areas, as it is deemed successful in reconnecting students with their local place or community (Bartholomaeus, 2006).

So far this chapter has examined the literature, theories and practices associated with embodiment, pedagogy and place, but I now turn to briefly examining materiality as it has an intrinsic role in the experience of virtual worlds for academics.

**Materiality of place**
The notion of materiality is an important consideration for this research, primarily because, according to phenomenology, for someone to experience the world is to experience *something*. Van Manen (2014) refers to materiality as “lived things” (p.306) and insists the existential dimension of materiality guides reflection on how something is experienced. Through this thesis, I am endeavouring to understand how academics experience things in a virtual world, how virtual things are present for academics and how virtual things are interpreted and create meaning. Following the concepts explored in previous sections of this chapter of the extended body of the academic through the avatar in experiencing a sense of things being present in the virtual space, the embodied avatar is experienced within an awareness of spatial relationships with virtual things, artefacts or objects.

Material culture examines the relationships between people and things in their world and seeks to understand how things have meaning, practices and
interpretations. This field has undergone considerable change in the past few decades and is approached through many different disciplines (Tilley, 2006), and technology has a particular role in reshaping the ways in which materiality is created, consumed and theorised. A key element is that material culture is always in relation to the embodied subject and “the multiple ways in which the world is sensed and experienced” (Tilley, 2006, p. 5).

While materiality is often thought of in the context of a physical, tangible and tactile object, there is an alternative train of thought where these descriptors are not necessarily part of materiality, although a clear definition is often elusive. Leonardi (2010), for example, states that despite the notion of materiality becoming increasingly prevalent within the discourses of management, communication studies and sociology, there is little clarification of what materiality is. Sorensen (2009) agrees in raising similar issues of clarity within the field of science and technology studies and goes further to suggest there is a core trinity of time, space and materiality that needs fleshing out. Moreover, the extant literature conceptualises materiality in physical places in education (Ellsworth, 2005a, 2005b; Lawn, 2009; Roehl, 2012; Fenwick, Edwards & Sorensen, 2013) and design and architecture (Carpenter, Schropfer, Kennedy, et al., 2011), yet there is little scholarly writing on materiality in virtual spaces.
This thesis takes the stance that the materiality of the virtual world, the objects, buildings and so forth, forms a text to be (hermeneutically) interpreted by users in order for them to make sense of the space. This brings into focus the affordances of objects as per Gibson (1979) or, rather, the perceived affordances (2008, 2013) that are embedded in the properties of digital artefacts (Leonardi, 2010). Norman’s concept of the perceived affordance of virtual artefacts is concerned with how the design of digital interfaces signifies to the user how something may be used or interacted with – what its purpose is. Biocca (1997) notes that the perceived affordances of virtual environments rely to some extent on known constructions in the physical world. The virtual environments of SL often simulate real-world environments; there are buildings with windows, doors and furniture, pathways that meander through ‘natural’ landscapes, and fences with gates and walls that partition sections off from other sections or enclose areas. But there are also other imaginary things that are not replicated from real life and afford equally imaginative actions such as teleporting, flying and transformation.

Just as digital artefacts signify perceived actions, they can also have perceived affordances that create a feeling. Following the discussion earlier in this section, Pearce (2009) describes one of the Uru virtual-world community’s observations, that it is the artefacts creating a virtual-world place that count. Pearce describes how one member was so motivated to develop a space that looked like the virtual world Uru in another virtual world (There.com) that the member learned an entirely new set of skills in
scripting and 3D modelling to create the same ‘atmosphere’ or ambiance as on Uru. He was not happy with the ‘cartoonish’ look and feel of There.com. He went to great lengths, using Adobe Photoshop to create the textures that he wanted and even created a number of avatar skins that replicated the Uru avatars of friends. So for this person, the materiality of the virtual-world place had to have a certain look and feel that were important for his connection to the place and his sense of belonging.

*Material pedagogies*
As previously stated, this thesis positions pedagogy as the activity that is place-making for academics but, as Roehl (2012) states, classrooms and other learning spaces are not only sites for communication and interaction but are “material worlds” (p. 109). Furthermore, he suggests the role of objects and artefacts in education has been overlooked in extant research. Roehl and others (see, for example, Sorensen, 2009) draw on Latour’s (2005) actor network theory (ANT) in viewing the materiality of the classroom as assemblages of objects, actors and relationships where objects have an active role in learning. While Roehl takes into account Verbeek’s (2005) perspective on materiality in what things do, he notes that post-phenomenology differs from ANT’s focus on networks and takes a more specific look at the relations between humans, objects and the world. My research focuses on the post-phenomenology perspective of the relationship between academics and objects and the experiences that are mediated by technology.

*Place-ballet*
At the beginning of the section on embodiment, the extended body through the philosophies of Merleau-Ponty (1962), Heidegger (1962), Ihde (2002,
2011a, 2011b) and Verbeek (2005, 2008) was discussed. However, Seamon’s idea of our movements through space in what he calls “place-ballet; the space-time dimensions of the body-subject and the role this has of place making” (Seamon, 2002; Seamon & Sowers, 2009) is useful relation to the avatar’s movement through the virtual world. He describes place-ballet as the performative routine of everyday life, such as walking home from work at the same time each day and encountering people doing similar everyday things at the same time, such as walking the dog or also walking home from work. He insists this performative, everyday, familiar routine takes into itself the routines of others and creates an environment as sense of place through this space–time interaction. The interaction incorporates the body-subject that Merleau-Ponty (1962) insists is always enmeshed with the world while the world is always present to the body. Through this thesis, I argue the possibility for a place-ballet as place-making in virtual worlds through the embodied avatar as it performs daily, routine navigations and movements that are intrinsically pedagogical. I draw on Seamon’s concept to suggest the movements that contribute to a pedagogical performance that can be viewed as a place-ballet and inscribe or encode place as pedagogical.

**Architectural space of virtual-world spaces**
The general sense of virtual worlds is architectural and geographical. The architecture and geographical layout in virtual worlds is governed by different spatial qualities and requirements in order to make it feel like a pleasant place to be in or to experience. In the previous section, the role of artefacts as signifiers of specific affordances was discussed along with the propensity for virtual worlds to simulate real-world settings so as to draw on
known affordances. Watanave (2011), however, notes that the architecture, that is, the design of the representations of buildings and so forth, differs in virtual-world contexts from the real world. Watanave’s study found that when real-life architectural buildings were replicated to scale in virtual worlds, they were impossible for the avatar to navigate or use and caused considerable frustration and stress for the user. The spatiality of the virtual world needs to be considerably more extensive. When built to scale, the avatars experienced a sense of stress and difficulty in navigating doorways, hallways and so forth.

Watanave (2011) has developed a spatial model in order to discuss the physical architecture of virtual worlds, the buildings, objects and landscapes and so forth. He describes this model as “Contents Oriented Space” (p. 240) and it is based on two perspectives: “The contents are visible from the outside. The contents are directly accessible” (p. 240). Watanave insists that the contents become ‘spatial’ due to their quality of being directly accessible and points to a different approach to accessing the contents of the building – that is, contents referring to the purpose of the building.

A simple example is a lecture theatre, which is a pedagogical approach many academics start with early on with virtual worlds. A lecture theatre would house seats, a podium and a large screen for showing slides and videos etc. One enters a lecture theatre in the real world through a doorway to access the contents, which is the lecture presented by the lecturer and generally accompanied by slides or other media on the screen. In a virtual world, this
format or architectural approach is somewhat redundant, as it is not necessary to have a building and in many cases it is entirely done away with. This leaves the contents e.g. the lecture, to be immediately accessible, with a large screen and the lecturer standing in front or nearby; seating is sometimes provided, but this is more to do with maintaining the sense of attending a lecture and in some cases also to make sure the avatars are not moving about or getting in the way of the screen, although this is not always successful.

Watanave calls this open-air approach “making contents into space” (p. 244) and it is a “spatial experience” equivalent to experiencing architectural space in real-world contexts. In addition, interactive content objects become new spaces once clicked on – such as through teleporting (automatically moving) the avatar to another space or entering a ‘room’ inside the content object. He insists that while content can be a real world, spatial experience is unique to 3D virtual worlds.

Furthermore, Watanave raises an important point when describing the different spatial allowances that need to be heeded when developing architecture in virtual worlds. It is not possible to create buildings and rooms within buildings to the same specifications as in the real world, because this would impose limitations on the movement of avatars. It can have the effect of making the space or room distressing to be in for the avatar and difficult to navigate around – walls and objects such as furniture are bumped into and make the space cumbersome. In virtual worlds such as SL, the residents build
the architecture, so there tends to be a considerable difference between what works in relation to both aesthetics and usability, depending on the skill of the builder.

**Gaps in the literature that this study addresses**
This chapter has discussed the literature associated with the theories and contexts of embodiment, pedagogy and place that are the lenses through which I examine the experiences of academics using virtual worlds for teaching and learning. While this chapter predominantly serves to contextualise the current study within this literature, it has also identified gaps in this body of texts. Throughout the literature examined in this chapter, there is very little that relates embodiment, pedagogy and place to higher education contexts and scant reference to the experiences of academics.

**Summary**
In this chapter, I have introduced and discussed the literature of theories, disciplines and contexts for embodiment, pedagogy and place, which are the lenses through which I examine academics’ experiences of virtual worlds as pedagogical places. I have explored the idea of extended embodiment through the theories of Merleau-Ponty and Heidegger and the mediating nature of technologies through Ihde and Verbeek, in order to articulate the role of the avatar as embodied academic. I have introduced pedagogy as ‘being with’, dwelling and relational, which is a phenomenological pedagogy. Place has been traced through the phenomenological perspective of human geography to virtual contexts and materiality has been briefly covered to signal its role in the experiences of academics teaching in virtual worlds.
In the next chapter, I introduce the methodology and method that have guided this study.
Chapter 4: The research approach

Introduction
The aim of this chapter is to present the overarching theoretical and philosophical frames of the research and the methodology that have guided this study, in order to contextualise the research within these frames. The structure of this chapter is as follows. Firstly, the paradigm that has guided the research is established, along with the overarching philosophical frames of that paradigm and how these align with my role as researcher. Then the methodology and rationale for a hermeneutic phenomenology are presented, covering how they have guided the research and why they were chosen over other qualitative approaches. As phenomenology is a philosophy as well as a methodology with many variations and philosophical orientations (Henriksson & Friesen, 2012), it is necessary to articulate the pathway that I have followed and to contextualise my understanding of key phenomenological and hermeneutic concepts and how they are used in this research study.

Maggs-Rapport (2001) notes that many research publications lack methodological clarity. Therefore the intention for this chapter is to provide clarity around the choices made and to plot the path I have chosen in order to contribute to the rigour and validity of the study. Additionally, frames and insights from post-phenomenology provide understanding of the technology-mediated nature of experience, the notion of embodied extension into virtual
spaces and virtual materiality, and the ability to articulate pedagogical relationships mediated through avatars.

**Personal frames that have influenced the study**
This study could have focused on any number of perspectives on educational uses of virtual worlds; however, it is my previous research in virtual environments, my current employment in higher education associated with academic development and my personal interest in virtual environments for teaching and learning that have shaped my focus. I acknowledge this has had a bearing on the perspective from which I have approached this research and that my own personal view of the world, which is in turn influenced by my cultural and social background, has also shaped my choice of theoretical and philosophical frames.

Macklin and Higgs (2010) refer to these as “lenses” and insist there are “no ‘non-lensed’” (p. 65) perspectives in research and indeed that all researchers look through multiple lenses that provide internal, external and contextual frames of reference. Creswell (Creswell, 2013) alerts us to acknowledge that as researchers we each have personal beliefs and philosophical assumptions that we bring to the research. Moreover, Creswell draws attention to being aware of the complexity of the different realities for the researchers, for the participants in the study and indeed for the readers of the study.

**Research paradigms**
A research paradigm is the overarching belief system that represents a worldview, a matrix of beliefs and perceptions that guide a research study. Guba and Lincoln (1994) maintain that these beliefs and perceptions are taken on
faith “as there is no way to establish their ultimate truthfulness” (p. 107). In determining the paradigm that has guided my research, I began by addressing the three questions suggested by Guba and Lincoln (1994, p. 108) that relate to:

- “Ontology: what is reality;
- Epistemology: how do you know something; and
- Methodology: how do you go about finding out what you want to know.”

Applying these questions to my intended research study helped to clarify the nature of my inquiry and how to address the research through a paradigm appropriate for the study.

**Ontological position**
Ontologically, this thesis is an inquiry about the reality of being an academic in a virtual world. According to Guba and Lincoln (1994), a paradigm can be defined as “the basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways” (p. 105). The paradigm that has guided this research study is interpretive, which is also known as constructivist. An interpretive-constructivist paradigm follows a relativist ontology that assumes realities are socially and experientially constructed both individually and through shared meanings and understandings (Guba & Lincoln, 1994, pp. 108–109).

The goal of interpretive research is to understand the meaning of the lifeworld as experienced by a person in a given context or situation and time (Schwandt, 1994) and the meaning that people give to their own actions, intentions and interactions with others and the world around them (Given, 2008). Meaning is
inductively developed through the research (Creswell, 2003). Verbeek's (2005, p. 108) succinct definition of the world as “reality as disclosed by human beings” as they experience it is the position this current study takes.

Macklin and Higgs (2010, p. 65) insist that all qualitative research is “inherently a situated interpretation of a phenomenon” and there are no objective means for making any particular interpretation. Indeed, people construct meaning in different ways in relation to the same phenomenon and derive meaning through their engagement with the realities of their world (Crotty, 1998). What this means for my research is that the ways in which each participant academic experiences the virtual world as a pedagogical place are their reality and may not be the same or even similar to those of another participant. What can be known of that reality is determined by the epistemological stance.

**Epistemological position**
The epistemological position of an interpretive paradigm is transactional and subjectivist, and there is in a sense an overlap with the ontological position (Guba & Lincoln, 1994). Following this position, the epistemological assumption of this research study is that knowledge is relational, in that we cannot separate ourselves from what we know, and that the researcher and the object or phenomenon being researched are inextricably linked. Therefore what can be known about the reality of being an academic in a virtual pedagogical place lies with the academic who has experienced it.

Through this research study, an understanding of that reality can be reached through interpreting the experiences described by the participant academics.
Thus, findings emerge from the interaction between the researcher and the research participant (Crotty, 1998). Chapter 2 highlighted the lack of academic perspectives in the extant literature on learning spaces and virtual worlds in education, which is an oversight this research study addresses.

**Interpretive stance**

The interpretive approach I have taken in this study is guided by the hermeneutic development of writers such as Heidegger (1962) and Gadamer (1975), which is associated with knowledge that is derived from being-in-the-world and pre-reflective bodily ways of knowing, and that is ontologically oriented. The hermeneutic perspective of these writers does not follow early traditional hermeneutics, which theorised a critical explanation or interpretation in identifying the objective meaning of texts, assuming meaning is an “object-like entity waiting to be discovered” (Denzin & Lincoln, 1994, p. 121). Within this interpretive paradigm, the methodology for my research study is hermeneutic phenomenology, which draws predominantly on van Manen’s (1990, 2014) experiential phenomenology or phenomenology of practice, particularly through his writings on pedagogy, which is congruent with the research question and the context of my research.

In general, disciplines adhere to specific paradigms; however, it is not uncommon for research to combine alternative paradigms as a means of understanding ways of creating new knowledge, although it is more common to combine or mix methods, rather than paradigms. Guba and Lincoln (1994) state that ‘qualitative’ and ‘quantitative’ are terms often used in a way that replaces the concept of a paradigm, but these should be seen as methods. The social
sciences, the field of research within which the current research belongs, is not governed by a specific paradigm, methodology or method. Therefore, addressing the ontological, epistemological and methodological questions against what needs understanding through the research has helped to determine the appropriate paradigm and to clarify the research question.

Indeed, taking this perspective has influenced the structure and focus of the research question to enquire, ‘How do academics experience virtual worlds as pedagogical places?’ rather than, for instance, ‘What is the comparison between teaching in virtual worlds to teaching in real-world classrooms?’ Therefore, this research seeks to understand individual experiences and to look for similar themes that might arise from the data or from how participants have experienced similar themes differently.

Research methodology and context
As discussed previously, the focus of this research is to understand the ways in which virtual worlds are experienced as pedagogical places through the experiences of higher education academics. Understanding experience as it is lived is the primary and only focus of phenomenology (van Manen, 1990). Therefore, as I have outlined in the previous section, I have taken an interpretive stance and consequently the study draws on hermeneutics, which aims at understanding (Koch, 1999), rather than pursuing objective description. Adhering to the ontological and epistemological positions, the methodological position uses an interpretive approach relying on naturalistic methods of interviews.
Pedagogy in higher education, broadly speaking, differs somewhat to the way in which Van Manen (1990) describes pedagogy, as a thoughtful and caring commitment to a child’s education, growth and development. As outlined in Chapter 3, my use of ‘pedagogy’ in the context of higher education is a holistic understanding that incorporates embodied, performative and environmental elements that align with van Manen’s (1990) concept of it being a relationship between teacher and student, rather than an instructional model. I add place to this pedagogical mix and argue that pedagogical place can be anywhere the pedagogical activity is encountered.

The notion of place plays a significant role within the research because it provides a context for the experiences and it is where the activity determines the nature of the place and the depth of experiences. It also has significant influences on the pedagogy and pedagogic activity, as discussed in Chapter 3. Regardless of the specific focus, the subjective experience of phenomena was always important for this inquiry. Therefore a quantitative research method, which stresses a procedure of measurement and analysis of cause and relationship between variables, was not suitable, as it is unable to capture or articulate the rich data of human experience that this study required in order to understand the relation between academics and virtual place.

In choosing a suitable methodology, I have been guided by what I want to know through the research, which is to understand how a certain phenomenon is experienced. My research question therefore begins with ‘how’ as it is an inquiry to understand the meaning of an experience (Creswell, 2013).
Continually coming back to the essence of what the research question wanted to reveal helped with choosing a paradigm, as well as the methodology and method. In the following sections, I present the three qualitative methodologies that I considered possibly suitable and give my reasons for not choosing them, before explaining why I have chosen hermeneutic phenomenology.

**Consideration of alternative methodologies**
An interpretive paradigm generally has three theoretical perspectives, phenomenology, hermeneutics and symbolic interactionism (Crotty, 1998). Initially, two qualitative methodologies were explored for their suitability for this study and in doing so I was guided by the choices made by previous researchers of virtual worlds (see Hine, 2000; Boellstorff, 2008). Denzin and Lincoln (1994) caution the researcher to be aware of restrictions on the types of data that can be collected in certain settings. This research study needed to capture rich data of human experiences in a virtual-world place and there were two methodologies, which are outlined in the next section that I considered before deciding a hermeneutic phenomenology was the most suitable.

**Ethnography**
Firstly, ethnography was a possibility for my research, particularly the virtual ethnography that became an established approach for research in online spaces from the later part of last century and earlier this century (see Hine, 2000; Beaulieu, 2004; Bury, 2005). Hine (2000) suggests that although the ethnography practised by sociologists has moved away from its traditional anthropological roots to focus more on micro-fieldwork, these sites are still bounded by physical location, describing the life that occurs within that space, such as the school classroom, the hospital ward and so on. Bury (2005) insists
that research in virtual contexts follows similar procedures to those for physical fieldwork.

Others (see, for instance, Turkle, 1995; Hine, 2000; Leander & McKim, 2003; Bury, 2005) insist that there is not a significant difference between life in an online virtual world and life in the real world. They concur that virtual life is an extension of real life and experiences in virtual worlds are as real as experiences in the real world. Hine’s ethnography of Internet users (2000), for example, found offline identities and experiences were “woven into the fabric” (p. 144) of the online groups she was examining. There is no break between the online and the offline but more of a merging of the two, which is a position I agree with taking in relation to the virtual-world experiences that my research has examined.

Despite a number of different kinds of ethnographical approaches, the researcher is consistently identified as an active participant-observer in fieldwork that is characterised by in-depth inquiry, observations that yield detailed description and interviews that capture direct reference about people’s personal perspectives and experiences. Analysis involves the researcher’s own voice, which reflects their perspective, which is neither objective nor subjective but uncovered through a reflexive process the researcher is openly aware of, and so the researcher discusses their role in the study in a way that honours and respects the site and the participants and is balanced and credible (see Patton, 2015). An ethnographic approach therefore would have been suitable
for this research study; however, the following consideration caused me to reject this.

While ethnography provides insights into human experiences, it does not focus on the meaning of these experiences. Moreover, it is concerned with the behaviours of a culture-sharing group (Creswell, 2013) that has been “interacting long enough to have shared or regular patterns of language and behavior” (p. 123). Van Manen (1990) concurs in saying that while ethnographies can have phenomenological qualities, in that they can be interested in people talking about their experiences, the ethnographic intent is to “describe accurately an existing state of affairs or a certain present or past culture” (p. 22). As the focus for my research study is in understanding the meaning of the experience of a particular phenomenon by a group of individuals, ethnography was not the most suitable methodology.

Symbolic interactionism
During my initial examination of ethnography, the idea of including symbolic interactionism (Blumer, 1969; Denzin, 1992; Handberg, Thorne, Midtgaard, Nielsen & Lomborg, 2015) was also a consideration, as it may have provided a means of understanding how teachers make meaning of, or attribute meaning to, their interaction with objects within the virtual world and with other avatars. As I am particularly interested in how teachers interact with the ‘physicality’ or what I refer to as the ‘materiality’ of the virtual world as a means of place-making, this methodology was keenly explored for suitability.
Chapter Four

On one level, understanding how meaning is made or gained through this kind of interaction may have seemed possible for this study; however, symbolic interaction is more concerned with the social construction of self and is based on three core principles, meaning, language and thought, and it is the process of interaction by which individuals create meaning. Symbolic interactionism is also a similar methodology to ethnography in that it requires deep immersion in the field with keen observation and an understanding of the complex signs and symbols that make up the personal and social worlds of the participants. Social interaction requires the researcher to be as close as possible to the situation under examination and to see the situation from the different perspectives of those involved (Woods, 1992).

As I refined my research question and explored methodologies in more depth, I discarded this approach because symbolic interactionism is primarily associated with human behaviour and, while this may have been useful to my research, it is not sufficient in providing an understanding of the "personal perspectives upon experience" (Osborne, 1994, p. 187) that I wished to understand in my research study.

Symbolic interactionism requires observation of behaviour to link it with symbolic expression such as language, looks, body language, actions and appearances etc., in the contexts in which they occur, in order for meaning to emerge (Woods, 1992). Participants are represented in SL by avatars and the behaviours would have been displayed by the avatars. Currently, SL avatars lack
the technological capacity to convey the kinds of complex interactions that are analysed using symbolic interactionism; therefore this was deemed unsuitable.

**Phenomenology overview and origins**
While the origins of phenomenology can be traced back to the philosophy of Hegel (1770–1831) and Kant (1724–1804), it is Husserl (1859–1938) who is credited with developing the phenomenological tradition as a rejection of the prevailing scientific positivist paradigm, which theorised that all objects in the external world exist independently and knowledge of them is reliable (Groenewald, 2004). Ontologically, the positivist stance is of a single reality that is identifiable (Denzin & Lincoln, 2011), while in comparison phenomenology contends that there are multiple realities dependent on the individual experience.

Husserl's phenomenology is ontologically and epistemologically at opposites with the positivist paradigm that dominated the philosophies of the time. LeVasseur (2003) insists traditional science has avoided the lived experience of individuals primarily because experience is considered immeasurable and cannot be generalised in the way that scientific knowledge is said to be able to be. Moreover, LeVasseur suggests traditional science privileges knowledge that is separate from the association with being.

Having struggled with an original work by Husserl (Husserl, 1977) to get as close as possible to the original ideas of phenomenology, I consulted secondary sources more widely to broaden my understanding (for example, Beyer, 2013; Behnke, 2014). Phenomenology, broadly speaking, is the study of structures of
consciousness or the contents of experiences (Woodruff Smith & McIntyre, 1982). It is widely agreed by phenomenological researchers that a succinct overview of phenomenology as a methodology is problematic, because there are many different research methods, variations and techniques that come under its banner (Finlay, 2005, 2009; Sharkey, 2001). However, Streubert and Carpenter (1995) define phenomenology as a science that aims to describe particular phenomena or the appearance of things as lived experience. Barnacle (2001) reminds us that not all phenomenological research has human subjects at the centre of the inquiry and that true to its etymological roots, the word comes from the Greek combination of ‘phenomenon’ and ‘logos’, meaning the study of phenomena.

**Descriptive and interpretive**

While there are two main phenomenological traditions, descriptive after Husserl (1859–1938) and interpretive after Heidegger (1889–1976) (Maggs-Rapport, 2001), as van Manen (1990) attests, there are a number of phenomenological orientations or movements, including transcendental, hermeneutic, linguistic, experiential, existential and ethical. Moran (2000) concurs in saying there are a number of themes that characterise phenomenology and adds that Heidegger insisted there was no *one* phenomenology.

As a cautionary note, Finlay (2009) alerts novice researchers to the difficulties of using a phenomenological approach because there many different perspectives within philosophical positions and methodological approaches can be confusing. She insists that researchers should state what philosophical
and/or research traditions they are following in order to prevent any confusion and
to ensure the study is conducted using the appropriate techniques and
methods. Maggs-Rapport (2001) further notes that research must be grounded in
a methodological discipline in order for its rigour to be defensible in the face
of criticism of methodological misuse.

The objective of phenomenological research is to understand the meaning of
human lived experience of a phenomenon that is not bounded by time or
location. Seamon (2000) states that while it can be simply put that
phenomenology is an interpretive study of human experience, this
oversimplifies what phenomenology really is and, he insists, does not reveal the
complexity of phenomenological inquiry. He adds (Seamon, 2014a, p. 1),
“phenomenology works to understand phenomena – i.e., any experience, thing,
action, event, or situation that a human being can experience” with an aim of
gaining “more accurate, comprehensive knowledge of human experience” (italics in original).

Regardless of being descriptive or interpretive, the philosophical underpinnings
of phenomenology are humanistic and constructivist, and it is a qualitative
inquiry. As a research method, phenomenology can provide an understanding of
the human factors involved and how transferable the responses may be for
others of a similar circumstance or background. It can also help in predicting
the responses of people to similar phenomena. Phenomenology has a number of
key terminologies that require fleshing out and situating of my position in
relation to these.
**Bracketing**
The concept of bracketing has caused much contestation among phenomenologists. As Given (2008) suggests, bracketing “is a beguilingly simple term grounded in a profoundly complex concept” (p. 63). Husserl insists on the researcher suspending all preconceived ideas, assumptions, biases, theories, beliefs and previous experiences about the phenomenon (Husserl, 1977). Husserl uses several terms to mean this, including ‘epoche’, ‘eidetic reduction’ and ‘phenomenological reduction’, which mean that the phenomenon should be pared down to its essence through this phenomenological method of reduction. There should be no trace of the researcher, so that the phenomenon can be examined and described through new eyes, which ensures the phenomenon under study can be seen more clearly (Powers & Knapp, 1995). This perspective was problematic for followers such as Heidegger (1962) and Ricoeur (1974), who believed phenomena are part of a lifeworld that is already described within a language system influenced by social norms, culture, history and so forth.

The philosophers following Husserl, particularly Heidegger (1962), Gadamer (1975) and Merleau-Ponty (1962), and writers including van Manen (1990) and Ihde (2002), insist that it is impossible for the researcher/writer not to be involved as there is always a level of interpretation, whether it is purely about description of the phenomenon or interpretation. Indeed, the very act of putting the description into language automatically assigns a level of interpretation to it (Grace & Ajjawi, 2010).
I have taken the interpretive stance and followed van Manen’s (1990) advice in not trying distance myself from what I already know but, by acknowledging my assumption and biases, I have been able to put them to one side and to also draw on my own experience, knowledge and understanding throughout the interpretive process. As I have mentioned previously, I am familiar with virtual worlds through having been an SL user for some years and, while I have acknowledged my experiences, which the participants, may have similarly experienced, I have never taught in SL and therefore I have not experienced teaching in these environments.

**Intentionality**

Intentionality is the phenomenological description of the way humans experience and interact with the world around them. In phenomenological terms, consciousness is being conscious of something (Beyer, 2013). The way we experience the world is not something that just happens in our minds, but is always about something or always directed at something. As van Manen (1990) points out, when we think, we think of something; when we imagine, it is to imagine something; to hear is to hear something and so forth.

Verbeek (2005) insists that to fully understand the concept of intentionality, it is important to first understand that it arose out of tension between the two prevailing movements of the time – idealism and realism. Each movement has its own perspective on the relationship of subjects with the world and the nature of reality and how reality is or can be known. Thus idealism on one hand privileges the mind in that what can be known and experienced in the world presents itself to consciousness, whereas broadly speaking, realism believes
that reality mirrors an already existing world. Building on Brentano's idea of 'intentional', Husserl developed the concept of intentionality, which is described as the principal theme of phenomenology (Spear, 2014). As Smith and McIntyre (1982, p.1) state, it refers to the “fundamental property of consciousness” and how we are conscious or aware of something; being conscious of something refers to consciousness “of physical objects and events, of our own selves and other persons, of abstract objects such as numbers and propositions, and of anything else we bring before our minds” (p. 1). Thus, the concept of intentionality “is something we know about first and foremost from our own, ‘first-person’ knowledge of our experiences and their ‘internal’ character” (p. 5). Consequently, they insist, this precludes any possibility of explaining intentionality from a ‘third-person’ viewpoint because each experience is determined subjectively and therefore experience has a subjective property.

This raises an interesting dimension for the participant experiencing the virtual world through their avatar. In a sense this is generally a third-person perspective, which means a user views and interacts with the virtual world while looking at the back of their avatar’s head. This perspective should instil a third-person perspective or experience, but calls forth the mediated nature of experience through technology, which is discussed in the post-phenomenology section of this chapter.

According to the phenomenological tradition of Husserl, our experience of the world is an intentional act. This intentional act is temporal, in that something is experienced through or within a temporal setting (Kelly, 2013). Sense is not
made through a one-millisecond snapshot, but through what Husserl refers to as ‘retention’ and ‘protention’ (Husserl, 1991). Retention is not referring to memory but to the temporary holding of a phase of an intentional act, whereas protention is the intending of an intentional object (Kelly, 2013) or the anticipation. The term ‘noema’ refers to the intentional act's content, the object that we are conscious of, although strictly speaking it is not an object as in a physical or concrete object. Noesis is perception in the mind – the interpretive act that is “directed at the intentional object” (van Manen, 1990, p. 183).

This research study is particularly interested in the intentional act mediated through technology, the technology being the virtual world and the avatar. For instance, it queries how the experience of a particular place in SL is experienced through or via the avatar. This could mean the position of the avatar in the virtual-world environment, the experience of proprioception (one's body in space), the action, motility, activity, materiality and so forth that includes the interaction with other avatars as performed by the avatar and experienced by the corporeal user. The avatar/user connection has been explored extensively through VR, particularly around the psychological influences of the avatar on real life and on in-world behaviour (for instance, see Yee & Bailenson, 2007; Yee et al., 2009; Blascovich & Bailenson, 2011; Yoon & Vargas, 2014).

Verbeek (2005) states “intentionality can work through technological artifacts, it can be directed at artifacts and it can even take place against the background of them” (p. 389, original italics). Ihde's (2002) alterity relationship is the only human–technology relation where intentionality is not mediated by the
technology but rather is a direct relation to the technology. The hermeneutic perspective of being in the world, or the way in which the world is revealed to someone, is through perception and experience (Verbeek, 2005). This thinking has framed my interpretation and understanding of the experiences of the virtual world for participants.

**The lifeworld**
The lifeworld (*Lebenswelt*) is central to Husserl’s phenomenology and refers to the lived experiences of everyday life (van Manen, 1990), the “taken-for-grantedness that is normally unnotic and therefore concealed as a phenomenon” (Seamon, 2010, p. 3). The lifeworld is a concrete world that is always there for us as pre-given and shows itself as immediately meaningful “without its meaning being made explicit, reflected on, or conceptualized” (Brand, 1973, p. 150). It is the implicit context, mood and pace of daily life to which normally people give no reflective attention and is being-in-the-world (Heidegger, 1962). The lifeworld includes the routine and the unusual, the mundane and the surprising, and is the world of “lived experience” (van Manen, 1990, p. 182), which is the taken-for-granted, transparent everydayness as experienced in the mostly spatio-temporal patterns of a person’s or group’s everyday life (Seamon, 1979).

The academics in this study have experienced virtual pedagogical place within a specific context, point of view and point in time. The context is academics engaging in their professional work associated with teaching and learning, and therefore the experiences are from the points of view of academics within this context. Consequently, the experience of virtual place is examined through the
lifeworlds of a group of academics in a particular place and time. The lifeworld of this study is the academics’ world of teaching and learning and in particular teaching in the virtual environment of SL.

As mentioned in Chapter 4, van Manen (1990) cites four key dimensions of experience or what he calls ‘existentials’. Existentials, simply put, refer to or relate to the experience of existence. The existentials van Manen names refer to space, time, body and relations. These have provided a structure for the interpretation and meaning-making of the data for this thesis, and I have used these four existentials as an organising structure when examining the data for evidence of experience. In a later work van Manen (2014) refers to materiality or lived things, which I draw upon in my understanding of how virtual artefacts are experienced.

**Hermeneutics**

Hermeneutics is a branch of philosophy that is said to go as far back in history as Aristotle and it applies to the rules and principles of interpreting texts (Stewart & Mickunas, 1990). Hermeneutics remained this way until the mid-to-late 19th century, when Wilhelm Dilthey (1833–1911), a German philosopher, developed it further as a way of interpreting culture through cultural artefacts, including the ways in which human beings respond individually to the epoch of their time. Heidegger (1962) and Gadamer (1975) progressed this idea or concept, building on Husserl’s (1977) transcendental phenomenology to an interpretive stance. Heidegger’s hermeneutic phenomenology has an ontological focus and, while Gadamer’s hermeneutics focuses on a way of being,
his emphasis is situated in “historical, social and ethical contexts” (Taylor, 1993, p. 61).

As Malpas (2014) notes, a fundamental concept of hermeneutics is the circle of understanding, known as the hermeneutic circle. Within the context of Heidegger’s hermeneutic circle, it means “if we are to understand anything at all, we must already find ourselves ‘in’ the world ‘along with’ that which is to be understood” (Malpas, 2015, para 9). The hermeneutic circle is a progression towards meaning that incorporates prior knowledge with the endeavour to expand into a horizon of new meaning (LeVasseur, 2003). This is a reflexive process where interpretation is a cyclical motion that never really arrives at a complete and final interpretation. It is a dialectical in nature that is often explained as cyclical and as an upward spiral that is continuously arriving at new levels of meaning through openness to possibilities. The spiral is a useful metaphor because, while a circle may insinuate repetition, Taylor (1993) points out that the hermeneutic circle is indeed not an endless repetition but a continual progression towards unity.

The researcher, therefore, is located squarely within the analysis process and engages with the data, the literature in the field, and in some cases the research participants and experts in the field in order to come to an interpretation of the data. An additional key concept is the fusion of horizons, where the researcher’s horizon of understanding merges with that of the participants. Horizons of understanding (Gadamer, 1975) or meaning, implies everything is situated within a historically determined cultural context, which is not static.
Understanding comes about through the fusion of horizons, where the researcher’s horizon or the extent of their understanding through a process of mediation moves closer to a new understanding of a phenomenon.

Someone’s description of their experience of a phenomenon is the essence of a phenomenological study and interpreting that description while maintaining the integrity of what was originally described is crucial. Understanding or determining what is essential to a description and what is not is required (Hammond, Howarth & Keat; 1992, p. 75 [reprint]) is of equal importance. As Crotty (1998, p. 91) describes, the hermeneutic mode of understanding is a means “of transmitting meaning – experience, beliefs, values – from one person or community to another”. This research study is concerned with experience in a virtual world – essentially, this is asking how the person sitting at a computer in a physical location experiences the 3D world of objects and avatars which are essentially made up of pixels or dots of light and therefore not tangible to the full spectrum of sensorial experience. The person is experiencing the virtual world both as first-person user and as an avatar. This study seeks to understand the nature of this experience.

**Lived experience**
The word ‘experience’ has a number of meanings, can be a noun or a verb and its usage is dependent on context. For example, it was a prerequisite of this research study for participants to have had experience teaching in virtual worlds; therefore they must have used virtual worlds in their teaching and learning. Tuan insists experience “is a cover-all term for the various modes through which a person knows and constructs a reality” (Tuan, 1979, p. 8).
Chapter Four

Lived experience, which is at the core of phenomenology, differs substantially to general interpretations of experience in that it is pre-reflective and exists in the moment that it is experienced.

Van Manen acknowledges Gadamer’s (1975) concept of lived experience as comprised of two elements, the “immediacy of the experience and the content of what is experienced” (van Manen, 2007, p. 580). As van Manen notes, the German word for experience is Erlebnis which “contains the word Leben, ‘life’ or ‘to live’. The verb erleben literally means ‘living through something’” (p. 580).

For Husserl (1977), lived experience is applied to anything that presents to one’s consciousness. Therefore it is not the experience but what is experienced that is at the core of the inquiry. Phenomenology describes lived experience as the essence of the phenomenon; however, van Manen cautions on the interpretation of the term ‘essence’ and to think of it more as good description of the phenomenon that allows us to “grasp the nature and significance of this experience in a hitherto unseen way” (1990, p. 39). According to van Manen (p. 79), the analysis of experiences of a phenomenon is done through the structure of themes. Therefore if the question ‘What is the nature of the experiences of virtual-world places as experienced by teachers?’ was asked, each teacher’s experience of the same phenomenon – the experience of a virtual-world place – would be a unique lived reality for each teacher. As Verbeek (2005) points out, lived reality is always specific.
Chapter Four

This research is not simply interested in the subjective experience of participants, which Crotty (1996) insists many phenomenological research endeavours mistakenly fall into. Rather, the object of the participants’ experience, the content of the experience, can describe the underlying structures of the experience (van Manen, 1990). As mentioned, van Manen identifies four dimensions of experience, what he calls ‘existentials’, by which we might investigate experience of a phenomenon. These existentials are place, time, body and relationships. They are also referred to as spatiality, temporality, rationality and embodiment. A fifth existential of materiality (van Manen, 2014) relates to the experience of lived things. Lived experience is a certain kind of givenness, an unawareness of a state of being.

_Developing the phenomenological question_

“Phenomenology asks, ‘What is this or that kind of experience like?’” (van Manen, 1990, p. 9). This research endeavors to understand what the experience of a virtual pedagogical place is like for an academic. Therefore it needs to ask how a virtual place is experienced and how the experience is pedagogical, what makes it a place and what makes it pedagogical. It is sometimes difficult to ask a phenomenological question because “we may have forgotten what lies at the core of the question” as van Manen (1990, p. 44) suggests. The research questions outlined in Chapter 1 ask how the phenomenon of embodiment, pedagogy and place are experienced and an additional sub-question asks how materiality is experienced.

Chapter 3 discussed how place is experienced through, or is a result of, the activity and relationship with and within a particular space. Pedagogy is an
embodied activity that happens somewhere – in some place – therefore I argue through this thesis that pedagogy is integral to the experience of place in the context of this research study. In addition, it is pedagogical activity within the virtual space that is the foundation for the relationship between academic avatar and student avatar and therefore I suggest that pedagogy is an activity contributing to place-making for academics.

So far this chapter has presented the focus of the study, the research paradigm and the ontological and epistemological positions taken for this research study. It has also presented the philosophical underpinnings of the methodology and examined alternative methodologies, providing reasons for the suitability of the chosen methodology over the alternatives.

I turn now to post-phenomenology, which is grounded in phenomenological traditions and brings into focus the role of technology in lived experience that frames the perspective this research takes for the experiences mediated via the avatar.

**Post-phenomenology**
A central phenomenological understanding is that the world is experienced through the lived body (Toombs, 2001; Finlay, 2005; Seamon, 2014b), although Seamon (2014b) notes this is not necessarily restricted to physical corporeality but is a mode of being in the world, a way in which the world is engaged with, interacted in and responded to and so forth through embodied consciousness. Post-phenomenology and the human–technology relations of Ihde (1990, 2002,
2011a, 2011b) bridge the gap with traditional phenomenology to build an understanding of experiencing the world through an avatar.

This research study examines how academics perceive experiencing avatars, practices and things in a virtual learning place. I draw on post-phenomenology in order to understand the nexus between the mediating nature of the technologies that enable the academic to experience the things that make up (what I refer to as) the materiality of the virtual world and the relationship with other avatars. Thus post-phenomenology, as Verbeek (2005) attests, is concerned with the way technology mediates the relations between human beings and the world, while phenomenology is concerned with understanding how humans experience their world.

What Verbeek is describing is that post-phenomenology augments phenomenology; phenomenology posits the relationship between the object and subject as intentionality – the subject understands or recognises reality via the intentional relationship with the object. So it is the bit between subject and object that is at the heart of phenomenology. Post-phenomenology posits that technology mediates, or can mediate, this experience – technology fits into that in-between bit and is part of the relationship: it is part of the intentionality or has a role in intentionality. Post-phenomenology focuses on intentionality from a pragmatic viewpoint and in doing so provides alternative access to human-world relations (Verbeek, 2005).

Hermeneutics is essentially concerned with interpretation and the ways in which reality can exist for human beings (Verbeek, 2005). On this basis, I argue for a hermeneutic-phenomenology methodological approach following the tradition of van Manen (1990), which also draws on Ihde (1990, 2002) and Verbeek’s (2005, 2008) post-phenomenological understanding of technology and the body, and human–technology relations.

**Method**

**Introduction**

Hermeneutic phenomenology is the structural framework of this research and has guided what it is I want to understand or to know through this study. Reflexivity has been an integral dimension of the entire research process and, as Ajjawi and Higgs (2007) assert, it is an important dimension to research design and implementation. Indeed, the process of continually going back to the research question to determine whether it would help to find what I wanted to know has been an intensely reflective experience.
Chapter Four

As I have stated earlier in this chapter, a number of associated perspectives were considered and discarded, such as ‘What does it mean to be in a virtual world?’ and ‘What does it mean to be a teacher avatar?’ but through the reflexive process I finally came to understand what I sought or, rather, sought to clarify, because in a sense I have returned to my original query. That is, to understand how place is experienced by teaching academics being teachers in the environment of a virtual world. This may seem inconsequential but, as I have shown in Chapter 3, place matters to a teacher’s pedagogy, identity and wellbeing, and it is an embodied activity; in these times of great change, this is of importance for academics as well as the institutions that employ them.

Research methods

The research method used one-to-one interviews, which ran for approximately 30 minutes, with participants who were predominantly in a different geographical location to my own. Although 30 minutes may seem relatively short for an interview to gather rich data I was mindful of the time difference for international participants and that interview time impinged on their work and family commitments. For these reasons I keep the interviews for all participants to 30 minutes to be fair. In the case of participants being in another country or another part of Australia, I used free online conferencing software to conduct the interviews. Three interviews were conducted face-to-face. There were 10 interviews in total and all interviews were recorded using audio-capture software on my computer, whether online or face-to-face. No video was captured, as this would have been inequitable because only 3 participants in the online interviews used the video option.
Participant recruitment
A research problem suitable for a phenomenological methodology is one that seeks to understand the shared or common experiences among a group of people (Creswell, 2013). The participants in this study had a commonality in that they were all higher education academics and had all used the virtual world SL for teaching and learning. As noted in Chapter 2, the literature relating to virtual worlds in education positions academics and teachers as early adopters. The participants in this research study tended to be innovators or early adopters, although this was not a criterion for selection.

A hermeneutic phenomenology seeks thick description of a phenomenon and therefore Creswell (2013) suggests that the selection of participants is purposeful and it is essential that all participants have experienced the phenomenon. The criteria for selecting subjects first and foremost were that they were higher education academics who had used virtual worlds in their teaching and learning practice to the extent that they were able to give a comprehensive description of their experience. They could not be just knowledgeable in an academic sense of having researched virtual worlds or knowing of them, or having used virtual worlds in social contexts, although it could have been helpful to some extent for participants to have been familiar with many aspects of virtual worlds. I did not stipulate a length of time as a gauge of experience, but left this to prospective participants to decide. They made their decision based on how experienced they felt personally and this was no shorter than one semester, with most measured in years.
Although there are many different virtual worlds, for instance OpenSim and Kitely, for the following practical reasons from my perspective, only academics who had used SL were invited. Firstly, SL was well established across a range of sectors and was the virtual world of choice for the majority of educators. Secondly, I wanted the virtual world I chose to have customisable avatars and some virtual worlds either have non-customisable avatars or none at all. The ability to customise the avatar is identified in the literature as providing a deeper sense of immersion and presence in the virtual world (Pearce, 2006a, 2006b) and, because this research is concerned with embodiment, having an avatar was deemed necessary. Thirdly, a number of electronic mailing lists (listservs and email lists) have formed that reflect the specific interests in SL of ‘residents’ (see www.secondlife.com). In particular, the Second Life Educators (SLED) electronic mailing list is a very active listserv for educators and attracts large numbers of participants particularly from higher education. This provided an opportunity to approach a broad range of participants via the listserv.

Estimating how many participants are needed when developing a research design is a difficult task and, while the methodology should provide guidance, in phenomenology there are differing viewpoints among researchers. Dukes (1984) recommends between 3 and 10 as suitable. The amount of data needed is another contentious issue in qualitative research. To have enough data is to have reached saturation point, when no new information is emerging from the data. However, Guest and colleagues (Guest, Bunce & Johnson, 2006) found very little in the way of guidelines for estimating sample sizes, which they found supported Morse’s (1994) observations with the same conclusion.
Despite the disparity among phenomenological researchers regarding suitable participant numbers, a consensus is that large numbers are not required. I was confident of obtaining a suitable number of academics via the listserv. I am also a member of this listserv and, in keeping with listserv protocol, approached the administrator to ask permission to post an invitation to members to participate. I then posted an invitation explaining the nature of my research project and invited participants to email me. The final number of participants was 10 after 2 withdrew prior to the interview due to other commitments.

Although my numbers were fewer than the 12 to 20 I had originally anticipated, Morse (1994) recommends a minimum of 6 participants and Creswell (Creswell, 2013, p. 81) points out that phenomenology is important in relation to understanding “several individuals’ common or shared experiences of a phenomenon”; therefore 10 was deemed a satisfactory number. Participants came from Australia, Portugal, the United States of America and the United Kingdom. There were 8 male and 2 females. Six of the participants had had experience in using online games or virtual worlds prior using SL for teaching and therefore were confident in their skills using the virtual-world interface and navigating the 3D space, while the other 4 had steep learning curves in order to teach in SL.

**Ethical considerations**

Ethical approval was sought and gained under the reference of HEAG 09/88 from Deakin University Human Ethics Advisory Group. All participants were provided with a plain language statement that clearly detailed the aims of the
research and the process that would take place. A consent form was included and this was signed, scanned and emailed to me. Participants were informed of their right to withdraw from the research at any stage without explanation. Participants were offered a $50 Amazon™ voucher in appreciation of their time. These information sheets were emailed to participants who had responded to the open invitation on the SLED electronic mailing list. These documents are attached as Appendix C.

*My role as researcher*
Moustakas (1994) suggests beginning with the researcher describing their own personal experience of the phenomenon. He considers this contributes to setting aside the researcher’s experience but is something that cannot be done in its entirety and indeed, as others such as van Manen (1990) and Finlay (2005, 2009) insist, it is not desirable or even possible to set this aside. Van Manen also suggests that a good place to start analysis is by examining your own experiences of the phenomenon.

As I have mentioned previously, I have been involved with designing learning scenarios in SL and conducted research in other forms of virtual worlds, and therefore I have both an interest and an insight into using these technologies. I have not used virtual worlds in a teaching and learning context, but I acknowledge that through my previous experience I have brought my own perspective and assumptions to this research study. My experience and understanding of virtual worlds in education contexts enabled me to develop rapport with participants early in the interviews and my insights meant I did not need to continually interrupt the interviews to ask for clarification and so
forth. Ajjawi and Higgs (2007) suggest this insider position is beneficial when interviewing, but note van Manen’s (1990) caution for the interviewer to remain hermeneutically alert by stepping back and reflecting on the meanings of contexts, rather than “accepting their preconceptions and interpretations at face value” (Ajjawi & Higgs, 2007, p. 620).

While early phenomenologists following Husserl required a complete bracketing out of the researcher so that the pure essence of the phenomenon was made clear, as mentioned earlier in this chapter this is not the case in current times. Indeed, later hermeneutic phenomenological theorists (Heidegger, 1962; Gadamer, 1976; Ihde, 1998) and researchers (see Barnacle, 2001; Sharkey, 2001) insist the researcher should be visible and indeed that the researcher is integral to understanding the phenomenon, with a deep connection existing between the two.

In Chapter 1, I have described my experience when first using a virtual world. In that description, I discussed the sense that I had of being in a place and the affinity I felt with certain places. I continue to use or, more accurately, to visit SL for seminars, conferences, meetings, demonstrations and so forth. Some years ago at one of the first seminars I attended on SL, there were a number of avatars I knew but a lot that I didn’t know. One avatar was very impressive, an attractive female with impressive clothing that followed her movement in a flowing manner. She had beautiful hair that fell about her shoulders in a realistic way. Her name was also quite unusual and I felt rather intimidated and thought my own avatar was dull and uncreative in comparison. I felt like an
inexperienced newbie who couldn’t create an individual look for myself. Other
people whom I knew there had avatars that looked somewhat like themselves
and I knew mine looked nothing like me, not even a very younger version of
myself.

As the seminar got underway, everyone (all the avatars) were standing in front
of the slide screen; usually you would be seated somewhere and I tend to prefer
this, but we were expected to move between some large screens so we all
remained standing. As we moved to the different screens, I became rather
stressed trying to walk properly and not bang into other people or objects or
stand too close to other avatars. I certainly felt my personal space was being
invaded if someone stood too close to me.

I began to wonder who the others were and where they were from. SL has a
function whereby you can right-click on an object to see information about it:
who built it, whether it can be reused or customised, and so forth. This function
also applies to avatars: a right-click reveals details about the avatar such as the
real name of the person, the groups they belong to and so forth. I began right-
clicking on avatars and reading their information, thinking I was the only one to
see this action, even feeling a little smug that I could do this covertly. To my
dismay, many people started clicking on my avatar and I realised this action was
not as covert as I had thought and they could all see me looking into their
information. I felt embarrassed at having been intrusive; however, this gave me
a very clear insight into the very real sense of ‘being there’ and the depth of
connection one can have with their avatar.
The personal experience and sense of embarrassment I have just outlined are not unusual, and the transferability of cultural norms across real and virtual spaces has been well documented (Yee & Bailenson, 2007; Blascovich & Bailenson, 2011) and utilised in training scenarios (Hinrichs & Wankel, 2011; Kapp & O’Driscoll, 2010). A study by Blascovich and Bailenson (2011) found that the distance between avatars was automatically adjusted in very real ways depending on the familiarity of the avatars. They insist the rules of proximity in virtual environments are grounded in physical-world rules and cues. Unfamiliar avatars were given more space by others, for instance, and the behaviour and visual appearance of avatars were perceived in similar ways to real life. An avatar without clothing or acting against cultural norms, they note, was given a lot more space.

**Conducting online interviews**

Van Manen (1990) reminds us that not all interviews are the same. For example, he insists that a hermeneutic phenomenological interview is either intent on obtaining a narrative of a lived experience that may provide a deep understanding of the phenomenon or it may be more of a conversational exchange between the interviewer and the participant in order to examine the experience together. In both types, the interviews must be governed by the research question. Van Manen (1990) also cautions against being too open-ended, because this can cause the interviewee to go off on tangents, taking them away from the research question; on a practical note, this can result in reams of pages to analyse. An added caution from van Manen is that in some cases the
researcher is not absolutely clear about what they want to know and they mistakenly think the interview will reveal the research intent.

Interviewing was a relatively new experience for me and doing so online added another dimension of complexity. I was conscious of the importance of getting it right and therefore I had a couple of trial runs with friends to make sure the technology did what it was supposed to do, and all seemed to work well. I had a schedule of times and dates for the overseas interviews and, because of time zone differences, I was often interviewing at approximately five or six o’clock in the morning. At the commencement of each interview, I gave a brief overview of the procedure.

As the interviews were the principal means of my data gathering, I needed to develop rapport with participants to enable the interviews to be as rich as possible. Cohen and colleagues (Cohen, Kahn & Steeves, 2000) insist an interview is inter-subjective and is not simply about collecting data, but is a social encounter. I felt that seeing the interviewee would make it easier to establish an atmosphere that would encourage them to participate in the conversation, and there are many nuances that can be missed when only an audio exchange takes place, as with a telephone conversation. I wanted to be able to capture what Ruthrof (2007) discusses in terms of the nonverbal dimension of language, which refers to the body in language and is associated with embodied linguistics, rather than the common understanding of ‘body language’ (see also Ruthrof, 1999; Brenzinger & Kraska-Szlenk, 2014). Ruthrof insists language is empty without this bodily dimension of language.
Interviews as intercorporeal experiences
Cohen, Manion and Morrison (2000) suggest that you need to be well prepared for interviews as how one presents in the interview is important. For my first interview, I took a lot of care with my appearance and with the backdrop that would be visible through my webcam. I rose early so as to be ready and to present a professional image. I conducted the interview at my home, as was the case for most of the online interviews. I was conscious of the backdrop and therefore situated the laptop so that I had a neutral background, which I felt had a more professional orientation with no framed family photos etc.

Although it was very early morning for me, it was the end of the day for my first participant due to the time zone difference. While I had endeavoured to achieve an impersonal backdrop, I was caught unawares by the domestic scene that was the backdrop for my participant. There was an obvious air of end-of-day domestic activity happening, with family members coming in and out of view. I experienced a feeling of discomfort and intrusion and was somewhat distracted by the experience, although the participant did not appear to be. What took place through my feeling of discomfort was my intuited perception of a cultural or social etiquette transgression that was unmediated, but felt directly. One or two subsequent interviews engendered similar experiences and I did not become accustomed to seeing domestic scenes, with other family members coming into the picture, and was startled when this happened. Each time I experienced a similar sense of intrusion. I also felt awkward on several occasions when I had to quickly reschedule an interview and I did not have time
to prepare my appearance and backdrop that would be visible to the interviewee.

This problem with protocol and being caught unawares is reflected in Ihde’s (2002, p. 81) discussion of a campaign by the Philips Corporation to introduce video-enabled telephones, which, surprisingly to them, was unsuccessful. The Philips market research team found that people did not like the idea of being caught unawares and wanted to be able to present themselves at their best, which often takes preparation with grooming etc. An acceptable alternative to video-enabled telephone calls was having a suitably presented image or avatar that stood in for the real-time video. This is the same concept that Skype employs: a photo or avatar can represent the person, which in many cases is preferable to real-time video anyway because there is often a lag with Skype that means the audio does not sync with the video and so is off-putting, as was the case with one or two of my interviews.

The interviews without video were similar to telephone interviews and, as Opdenakker (2006) notes, although visual cues are not available as an additional source of information, it is still possible to discern voice and intonation cues. It is my perception that the interviews with the video function activated were more successful in creating rapport with the participant and I gathered more data during these interviews by observing nonverbal communication through the body postures and actions of the participant.
While I had experienced that sense of projected self into another space during Skype video calls, I had never previously thought about the intercorporeal aspect in using this medium. I could see into a location that went beyond my physical location (Sakr, 2013) and it was as though my bodily experiences were extended into another environment. Kim (2001) believes digital environments provide opportunities for intercorporeal practices and this did indeed add another dimension to my interviews. This is an important consideration, not only for research interviews but also for other forms of communication using visual technologies, and is an area that would benefit from further research.

Data transcription, confidentiality and storage
All interviews were transcribed verbatim by a third party and checked for accuracy by me through reading the transcripts and listening to the recordings. All data, including original recordings, have been anonymised and stored in a folder on a password-protected computer. In SL all avatars have a name and, while it is generally not the same as the user, the avatar name could identify participants, so I do not refer to avatars by name. Using specific SL placenames belonging to participants might also identify them. Instead, in order to maintain participant anonymity, all virtual-world placenames and avatar names have been replaced with XXXX. All participants’ names have been omitted and replaced with codes. For example, I have assigned RP1 to research participant 1 and so on to maintain anonymity. The data will be stored for the required seven years in a locked filing cabinet and then destroyed.

Limitations of the study
In my research project, I have imposed the limitation of looking at the perspective of higher education academics, rather than including all education
sectors using virtual worlds. Additionally, focusing on participants who had used SL rather than other forms of virtual worlds has served to make the study manageable and concentrated the focus. An additional limitation is use of the lenses of place, pedagogy and embodiment to focus on academic experience, rather than looking more broadly at teaching and learning, which might include student perspectives, assessment and so forth.

Criteria for trustworthiness
Regardless of approach, research endeavour is required to provide validity and reliability; however, as Stenbacka (2001) notes, for qualitative research the concept of reliability can be misleading. Generally reliability refers to the capability for a piece of research to be reproducible under the same conditions and achieve the same results. Traditional positivist paradigms have internal and external validity, reliability and objectivity (Guba & Lincoln, 1994) as their framework for rigour; however, this is inadequate for qualitative research, which is dependent on an ethical and respectful relationship between the researcher and the researched.

Guba and Lincoln (Guba & Lincoln, 1989; Lincoln & Guba, 1985) are credited having developed during the 1980s a framework of criteria for demonstrating qualitative rigour that replaces validity and reliability with trustworthiness. This framework contains four dimensions: credibility, transferability, dependability and confirmability. In the following section, I outline the audit of this research study against these four criteria for trustworthiness.
Chapter Four

**Credibility**
Establishing credibility in qualitative research is gained through confidence that through the efforts of the researcher, the reality of the participants is represented with authenticity in the research (Guba, 1981; Lincoln & Guba, 1985) and through the adoption of a well-recognised research method (Shenton, 2004). Lincoln and Guba (1985) provide techniques for establishing credibility. The techniques that have been used as suitable for this research study, following Lincoln and Guba, are noted below.

Prolonged engagement refers to devoting sufficient time for the researcher to understand the phenomenon of interest and to develop rapport and trust with the participants. My experience using virtual worlds provided background knowledge of the phenomenon, allowing me to build trust and rapport with the participants. In traditional phenomenology, validity is established through bracketing (Chan, Fung & Chien, 2013), which has been discussed earlier in this chapter. But as has been mentioned previously, my own preconceptions are stated up front in this thesis and, within the hermeneutic phenomenological tradition, the researcher’s pre-understanding cannot be eliminated (Koch, 1999; Kahn, 2000) and indeed is part of the interpretive process (see LeVasseur, 2003).

Peer debriefing is another technique that I have incorporated into my approach. This involved discussing initial findings with other PhD students, with academic colleagues at work and with my supervisor. This was particularly useful with fellow PhD students who were also using hermeneutic phenomenology, but
others using different methodologies posed questions or raised issues from differing perspectives that were equally useful.

Transferability
In positivist research, transferability is concerned with the ability of results of a study to be applicable to wider populations (Shenton, 2004). This refers to the ability of findings to be transferable to other times, situations, settings and people or groups, through detailed descriptions. The paradigm guiding this current study, Constructivist research, does not seek findings that can be generalised across populations (Shenton, 2004). Therefore, the findings and conclusions drawn from this current study are applicable to a specific group of higher education academics in a specific context that may or may not apply to others.

Confirmability
Confirmability refers to the transparency of the research process that clearly demonstrates the findings are shaped by the participants and not from the researcher’s bias or interest (Lincoln & Guba, 1985). I state in this chapter in careful detail the process by which I conduct the data analysis and report my findings and, although I cannot provide raw data for general scrutiny, I have inserted data extracts within the presentation of my findings in Chapter 5 so as to include the reader in the process. This approach is founded on claims that the reader can directly validate, or leave as indeterminate, without invalidating the researcher’s findings.

Additional evidence of rigour
Throughout this thesis, I have maintained hermeneutic and phenomenological congruence through coherence between the research paradigm, the
methodology and method, the philosophical frames, the analysis and the writing-up of the research. Congruence extends to the research question, which should match the method, data and analytical procedures (Morse, Barrett, Mayan, Olson & Spiers, 2002). Four qualities are offered by Polkinghorne (1983) to help the reader ensure phenomenological accounts are trustworthy: vividness, accuracy, richness and elegance. These qualities amount to the way the phenomenological writing draws the reader into a greater understanding of someone's experience of a phenomenon.

**Analysing the data**
The data analysis for this research has employed phenomenological and hermeneutic analysis methods, and guidelines for qualitative analysis from the literature. Not all transcripts were good examples of phenomenological description. For example, some participants lapsed into describing a process of teaching in the virtual world rather than how they experienced teaching. There was however, still much to be gleaned from a closer hermeneutic reading of these texts. Others gave very rich phenomenological descriptions that have added great depth to the analysis.

To some extent, the data analysis began at the time of each interview. I kept a notebook handy and jotted down my thoughts and observations as the interview transpired, and also my responses to certain things that happened during the interview. Indeed, in keeping with the hermeneutic phenomenological tradition as espoused by van Manen (1990), the analysis starts at the data gathering stage. While I followed Creswell’s (2013) suggested protocol, with headings to include participant details, a list of questions and
space for research notes as a guide, I did not follow this in a strict sense but rather noted the date, created a code for the participant and left space between the loosely structured questions to make notations.

The following steps for analysis are Creswell’s (2013, p. 193) modification of the process originally developed by Moustakas (1994):

1. Researcher’s description of their own experience of the phenomenon
2. Development of significant statements
3. Grouping of statements into themes or “meaning units”
4. Textural description – a description of what participants experienced with the phenomenon
5. Structural description – a description of the context within which the phenomenon was experienced
6. Composite description – a description that combines both the context and what was experienced with the phenomenon

Keeping in mind that Moustakas (1994) followed the descriptive phenomenological tradition while the current research study follows an interpretive model, I followed Creswell’s (2013) steps listed above using interpretive analysis, with emphasis on the first four items. I have included my own experiences of virtual worlds where this seemed relevant, and each of the steps outlined by Creswell allows the data to be broken down into parts so as to inspect and interpret these.
Chapter Four

To save time, I had the interviews professionally transcribed. This was beneficial timewise, but disadvantageous in that the familiarity with the interviews that would have been availed to me through close reading during the transcription process was lost. I conducted a quick read-through of each transcript to grasp an immediate impression and checked them against the recordings for accuracy. As Lukaitis and Cybulski (2004) note, this initial reading creates the first cycle of the hermeneutic understanding.

A key part of the hermeneutic phenomenological analysis process is the ‘hermeneutic circle’ (Heidegger, 1962; Gadamer, 1975) or what van Manen refers to as the “validating circle of inquiry” (1990, p. 27), which draws the researcher into the interpretive process and reflexively moves between phenomenological scholarly texts, data themes and the whole dataset. The hermeneutic circle is known both as a circle and a cycle, and is an ontological process asking of the texts how and why we can know something and what constitutes this knowing (Benner, 1994). This questioning serves to reduce the distance between the researcher and the text, and is a process referred to as ‘blending horizons’ in order that greater understanding and deeper interpretation are possible. Gaps between the researcher and texts can be influenced or increased through time, language, culture, intention and social milieu (Lukaitis & Cybulski, 2004). The gap between the text (data) and me as the researcher is not substantial because I have used virtual worlds and there is not a great distance culturally or socially.
Chapter Four

_Dwelling with the transcripts_
Following both van Manen’s (1990) and Creswell’s (2013) advice, I ‘got to know’ each interview thoroughly by listening to the recordings and reading through the transcripts. At this early stage of analysis, road trips to the country to visit my elderly mother were taken advantage of by listening to interview recordings and, because the transcripts were easily portable, I was able to read and re-read them whenever I had a spare moment and make brief notations around the margins. Finlay (2005), among others, refers to this as ‘getting a sense of the whole’ and states that the subtleties of the recordings, such as the voice inflection and emphasis, the pauses and so forth, are just as important as what is verbalised. Indeed, getting a sense of the whole before looking at the parts is a strategy shared among phenomenologists regardless of whether they follow an interpretive or descriptive approach. In listening over and over to the interviews on my long drives, I was able to gain a broad-brush understanding before beginning to identify the ‘meaning units’ (Giorgi, 2009) that formed the emerging themes, and I made my initial interpretation based on this first reading and listening process.

_Developing broad themes_
The development of the broad themes was almost like an unconscious reading that allowed these very strong themes to naturally bubble up on their own. I was not consciously bracketing preconceived ideas and so forth, but feel the almost meditative state of driving down country roads while listening to the interviews allowed bracketing to occur of its own accord. I was simply listening to the participants in an open way, not trying to understand or knowingly interpret, and when I arrived at my destination I wrote down the themes I felt
had arisen in a very broad sense. These initial themes are still the strongest and some very distinctive elements are apparent. When examining the transcripts to identify meaning statements that describe the experiences of the phenomenon of being an academic, I have also looked at what language was used and how it was used to describe being an academic.

While Giorgi (2009) maintains a rigorous fixed method of steps to analysis, which I drew on to some extent, I leant towards van Manen’s hermeneutic approach, which is more flexible, reflective and reflexive. Van Manen (1990) suggests three ways of isolating meaning statements:

“(1) the wholistic or sententious approach;
(2) the selective or highlighting approach;
(3) the detailed or line-by-line approach” (p. 92).

Essentially I followed each of van Manen’s three suggested approaches as noted above. The initial broad-brush approach is like van Manen’s ‘wholistic or sententious approach’. This approach, he states, looks at the whole text and determines what “sententious phrase may capture the fundamental meaning or main significance of the text as a whole” (p. 93, original italics). These sententious phrases formed the first draft of my significant statements, which connect back to Creswell’s (2013) six steps.

Selective approach
The next phase adopted the ‘selective or highlighting approach’. Having gathered together my initial broad-brush observations into a loose structure and formulating three phrases which captured the essences of the whole texts, I
then went through the transcripts by hand, underlining meaning statements and applying an initial coding or ‘first impression’ (Saldana, 2012) style. Meaning statements are made up of textural descriptions of what the experience is and how it is experienced (Creswell, 1998). They can be words, sentences or phrases that relate to the phenomenon in some way. According to Saldana (2012, p. 3), code in “qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing and/or evocative attribute for a portion of language-based or visual data”.

This first pass sought to grasp the core meanings of sections of texts and the codes were descriptive of these core meanings. Coding is part of the analysis process and, as Richards and Morse (2007) note, it is a process that links codes to ideas. Barritt and colleagues (Barritt, Beekman, Bleeker & Mulderij, 1984) suggest that in many cases themes do not emerge from text but, rather, from the gaps between the lines. Therefore, themes are not necessary words that come directly from the transcript texts, but emerge more through sensing a theme. For example, ‘to care’ and ‘to dwell’ were never overtly stated by the participants but presented through the ways in which the participants described an action or the way something was built in the virtual world.

**Materiality of analysis**
The printed copies of the transcripts became like a dialogue between the data and me. They were covered in scribbled coding in the margins and short notes about interpretations and connections with other coding. Although I had started to use Nvivo, the qualitative analysis software, I found the printed copies easier and more engaging to work with than the electronic Nvivo transcripts, which
tied me to my desktop computer. I felt this also had something to do with the embodied nature of working with them. I was able to take them out into the sunshine to work on or into the living room to sit in a comfortable chair; I wasn’t tied to a computer in the office. There was also a certain feeling of physical materiality about them that I did not experience with the Nvivo transcript versions. I recognised this as a phenomenological experiencing of analysis. There is something significant about the tangibility of reading on hardcopy as we read very differently to the way we read onscreen.

This first pass resulted in 20 themes, which were groups of coded texts that had shared characteristics. This stage of the process is sometimes referred to as the formation of categories, but I have called them themes.

**Close reading of data**
My next step correlates with van Manen’s (1990) third approach, which is to look at “every sentence or sentence cluster and ask, *What does this sentence or sentence cluster reveal about the phenomenon or experience being described?*” (p. 93, original italics). It also correlates with Creswell’s (2013) grouping of statements into themes and textural descriptions. I used Nvivo to record the codes and meaning statements I had created in the printed transcripts and to conduct a closer reading. Additional meaning statements were selected from the electronic transcripts and then grouped into either existing themes or new themes.

The number of meaning statements attached or allocated to each theme varied from 1 to 45. I continued to refine the themes by going back over the individual
meaning statements interrogating them to ensure they aligned with the themes they were allocated to. NVivo allowed me to ‘move around the data’; by this I mean I could oscillate between the granular meaning statements and the whole interview transcript and each of the transcripts or the dataset as a whole. This process relates to two key hermeneutic strategies of the hermeneutic circle and question-and-answer dialogue. The question-and-answer dialogue is a key aspect of Gadamer’s (1975, 1976) hermeneutic approach whereby meaning arises out of continual dialogue between the researcher and the text (Koch, 1996).

I continued to gradually refine my themes by excluding a few that I found did not seem to relate directly to my research question or did not reveal anything significant about the experience. I did not delete them, but colour-coded them so as to review them again later. Van Manen (1990) suggests that while themes give order and control to research and writing, they can ultimately be irrelevant. The development of themes helped me to structure the analysis and provided a degree of confidence in my analysis but I remained open to further interpretation during the reflective writing process.

As I conducted the detailed line-by-line approach, it helped to examine the themes against the dimensions of experience that Merleau-Ponty (1962) suggests are fundamental to experiencing lifeworlds. Van Manen (1990) refers to these as space, time, embodiment and relationships. In doing this, I went back and forth through the sections of text or meaning statements I had coded to each theme; in many cases text sections were coded against two or more
themes. For instance, I found that embodiment is experienced or expressed as being experienced in a number of ways. Firstly, it can be experienced through the avatar’s appearance, the motility of the avatar and the sense of being in a place and being with others (through the avatar). Therefore the academic felt a sense of embodiment through the avatar. Embodiment can also be experienced through artefact modality or the particular mode in which the artefact is experienced. By ‘artefact modality’ I mean when a participant referred to beautiful flowers or particular trees: these were not real flowers or trees but 3D digital representations which were spoken about in realistic and experiential ways.

Themes were then grouped against the three lenses I have used in this study: embodiment, pedagogy and place. The additional dimension of materiality was included and, while it incorporates or is evident through each of the lenses, it addresses one of my sub-questions relating to materiality. Van Manen (1990) cautions a lived-description account is not necessarily a phenomenological description (p. 55). Lived-experience descriptions are phenomenological data. What the researcher must do is examine the data to glean from them the meaning of the experience. This stage was conducted as part of the discussion of the findings because, as van Manen further insists, writing is part of the analysis process.

**Drawing out key themes**
I began with the reality of being an academic in a virtual world. I commenced with my interpretations of key themes and sub-themes, which led me to make my overall interpretation and to draw out the phenomenological description. I
did not examine sub-themes one by one, but wove them into the overall thematic interpretation. Findings unfolded through moving between textual analysis and phenomenological description.

The table below (Table 1) demonstrates the themes grouped against the lenses. Materiality and artefact has been included in the lens column as it addresses a research sub-question.

**Table 1 Themes grouped to lenses**

<table>
<thead>
<tr>
<th>Lens name</th>
<th>Themes</th>
</tr>
</thead>
</table>
| Embodiment – corporeal academic and avatar | Academic agency  
Academic engagement  
Action  
Authority  
Care  
Create  
Cues  
Identity  
Motive  
Liness  
Skills |
| Pedagogy                         | Affordances  
Experiential  
Freedom  
Fun  
Motive  
Places  
Safe  
Teaching style |
| Place                            | Activity  
Belonging  
Global/local  
Geography  
Feeling  
Landscape  
Meeting place  
Teaching Spaces |
| Materiality – artefact           | Adaptive  
Animate  
Building  
Cues  
Doing |

**Discourse analysis**

A brief description of discourse analysis is that it “examines patterns of language across texts and considers the relationship between language and the social and cultural contexts in which it is used” (Paltridge, 2012, p. 13). Typically language is used in certain ways in certain situations and so discourse analysis is primarily interested in meaning that arises from the connection of
language and context. While there are differing views of discourse analysis, I have drawn predominantly on Gee’s (2011, 2014a, 2014b) approach to assist in the analysis of professional identity in conjunction with phenomenological hermeneutic analysis, because embodied academic identity is bound within discursive dimensions of identity, performance and agency that are mediated by technology (the avatar). Furthermore, these discursive dimensions are within a given context – that of being an academic avatar in a virtual world.

Gee makes the distinction between discourse as verbal interactions and identity as Discourse, which he distinguishes with a capital D. Discourse (with a capital D) describes the different ways of being and ways of signifying a way of being in a given context. As a way of understanding the concept of identity as Discourse, Gee (2011) suggests thinking of it as a “sort of kit made of words, things, clothes, values, attitudes and so forth ... that allow us to ... live out our social lives as different and multiple kinds of people, for different times and places” (p. 40). Furthermore, Gee (2014a, 2014b) suggests an avatar is a Discourse – an identity that can be assumed just like one of the many identities people assume throughout their daily lives. I rely predominantly on discourse analysis (Fairclough, 1992; Gee, 2005, 2011, 2014a, 2014b; Johnstone, 2008; Paltridge, 2012) for my analysis of professional identity because discourse does not describe identity but constructs it.

In Chapter 3, I note how Tuan (1991) highlights the important role that language has in the making of places. This has a similar connection with the
making or constructing of and living of an identity, which in discourse analysis terms is language-in-use (Gee, 2005). Language-in-use, according to Gee, builds:

- significance
- activities (practices)
- identities
- relationships
- politics (the distribution of social goods)
- connections
- sign systems

I have drawn on the toolkits that Gee (2011, 2014a, 2014b) provides based on the above list in order to analyse professional identity, and on Holland and colleagues’ (Holland, Lachicotte, Skinner & Cain, 2001) concept of figured worlds and the role of artefacts and materiality in the construction of worlds. I also use hermeneutics and phenomenology to understand experiencing identity as in the lived space of academic activity.

**Figured worlds**

In this section I provide a brief overview of the theory of figured worlds, which provides a framework for the materiality of the virtual world, which is addressed through a supporting question in this research. As mentioned, this research examines the lifeworld of participants in a specific context. The specific context for this study is being an academic in a virtual world.

The concept of figured worlds was first introduced by Holland and colleagues (Holland, Lachicotte, Skinner & Cain, 2001) and they “rest upon people’s ability
to form and be formed in collectively realized ‘as if’ realms” (p. 49). Figured worlds are constructed through artefacts that are the “means by which figured worlds are evoked, collectively developed, individually learned, and made socially and personally powerful” (Holland et al., 2001, p. 61). Artefacts must be read and interpreted by others associated with a particular figured world in order to enter that world and to be recognised within that world. Therefore a figured world provides a context of meaning within a virtual world.

**Summary**

In this chapter, I have discussed the focus of the study and the research paradigm, including the ontological, epistemological and interpretive positions that have guided this research. I have given my reasons for choosing the methodology over other similar approaches, which contributes to my endeavour to achieve and demonstrate rigour in the research. I have described the methodology and method I chose and provided background in the key concepts of this methodology and how it relates to my research. I have introduced the philosophical frames for technology-mediated experience, which is a key structure in understanding the research question and has guided my data analysis.

I have also detailed the design of the research: how I chose the participants, the ethical considerations I employed and the intricacies of online interviewing, with recommendations for future research in this area. I have outlined the measures I have taken in order for this research to be ethical and trustworthy and have finished with a detailed outline of my analysis process and procedure. In the next chapter, I present my research findings.
Chapter Four
Chapter 5: Findings

Introduction
This chapter presents the findings from a hermeneutic-phenomenological and interpretive analysis of the research data. There is no attempt to generalise these findings to other groups or populations, but instead this thesis presents the findings for these particular participants within their own contexts. As I have stated in Chapter 4, this approach is founded on claims that the reader can directly validate, or leave as indeterminate, without invalidating the researcher’s findings.

In following a hermeneutic approach, many lenses are applied to the analysis from the researcher’s inescapably subjective position as an embodied social, historical and cultural being, a point raised by many writers within this tradition (e.g. Heidegger, 1962; Merleau-Ponty, 1962, Gadamer, 1975). As also discussed in Chapter 4, the inclusion and integration of personal experience from the researcher’s perspective is a key component of the hermeneutic-phenomenological tradition.

Qualitative research often presents findings grouped into the themes that have emerged from the data analysis or through the research question; however, consistent with the structure of previous chapters, I have arranged this chapter in a similar way against the three lenses of embodiment, pedagogy and place. This serves also to group the findings against the research questions, because
each lens relates to a supporting question. As I have stated in previous chapters, although I have created separate sections for each lens, they are for the most part integrated with each other and overlapping. As in other chapters, I begin with the lens of embodiment.

**Embodiment**
The avatar in a virtual world is central to the experience of place because it represents dimensions of embodiment. Participants often spoke of their avatars in the first person (‘my’ body) and also in the third person (‘that’ body) and switched back and forth between these two modalities with little sense of a disconnect between the avatar and the person. Consequently, the analysis often switches between the two modes throughout the findings. In presenting my findings in relation to embodied identities, I begin with being professional because, regardless of the academic identity the participants adopted, the majority wanted to project a professional look.

**Embodied professional identity**
Professional identity is discussed through the lens of embodiment as the cultural and discursive dimensions of being an academic. Ihde’s (1990) two main human–technology relations of embodiment and hermeneutics frame the analysis in conjunction with Merleau-Ponty’s (1962) perception of embodiment and van Manen’s (1990) phenomenological-existential dimensions of lived time, embodiment, spatiality and relationship in the academics’ experiences. In particular, Gee’s (2011) discourse analysis is used as an analytical tool to interpret participants’ descriptions of professional identity, and this helped in suspending my own presumptions and biases so as to focus deeply on what the text was saying.
The professional academic attitude of the academics in this study was expressed from two perspectives: through the embodied avatar and the corporeal academic, the real person at the computer interacting with the virtual world. For the majority of participants, presenting a professional academic persona (in both appearance and behaviour) was crucial. This was achieved through creating an avatar that looked like them to some extent but, most importantly, looked and acted like their perceptions of what is meant to be an academic.

Two of the participants taught professional development courses for other academics or other adults and these participants did not strive for a specific academic look but, rather, a more general professional appearance. Each participant wanting a specific academic appearance had his or her own perspective of what an academic appearance entails and each strived for that look. The embodied identities emerged from the data with three specific identities:

- the authoritative academic (AA)
- the collegial academic (CA)
- the collegial authoritative academic (CAA).

Of the 10 participants, 2 primarily demonstrated AA identity attributes, 5 demonstrated CA identity attributes at various intensities and 3 exhibited a mix of authority and collegiality. This breakdown could reflect the academics’ attitudes in face-to-face or online modalities; however, there was no research that I could find that approached inquiry of this nature. Of the latter 3, 2 taught
with others in a team environment and the third was in a support teacher role. Two of the participants in the CA category taught non-traditional university classes to adults and both the nature of the class and the student demographics could have influenced their attitude to be collegial rather than authoritative. Overall, a sense of collegiality between academics and students seems to dominate other identity attributes.

In the following sections, quotes from transcripts are indented and presented as extracts in order to highlight the participants' voices so as to ground the findings in the data and also to allow the reader to join in the process of interpreting and making meaning. Where necessary, I have inserted small sections of transcript extracts within my discussion so as to include the participant's voice and these are presented as indented texts. At the end of each quote, a reference is included with the participant identification number, transcription page number and paragraph. When I refer to isolated words or short sentences from transcripts to emphasise my analysis I enclose them in double quotation marks within the body of text.

**Embodying, negotiating and shaping identities**
Participants in the study embodied, negotiated and shaped their identity as an avatar in several ways. For example, one participant had this to say about creating their avatar:

> For starters I always want to look professional, that's always my aim in real life or in Second Life, so as soon as she looked professional, a bit
similarish [sic] to me. Some people say she looks like me. I mean she doesn’t, she’s a lot younger (RP1, p. 6, para 2).

The word “always” is used twice in the sentence in relation to the act of looking professional and therefore being professional and being seen as professional, so this is a continuous way of being – it is never not looking professional. To look and to be professional was valued by the majority of participants; therefore ‘professional’ is a social good (Bourdieu, 1997) for these participants. The idea of social good forms part of Bourdieu’s concept of Habitus, where power is a socially constructed process that has its own social norms and behaviours: it is the way someone addresses the world through lifestyle, taste, prejudices, values and so forth. Social good can build someone’s social capital, which contributes to their standing in society or community. A social good is something a person or group in society wants and values (Gee, 2014a). The earnestness of “always” here creates an identity of being proactive and responsible, of being a professional academic (a social good) that carries from real life into virtual life.

In this transcript extract, there is no elaboration by the participant of what it is to be professional; therefore this implies an assumption on the part of the participant of a shared understanding between them and me, the researcher. The participant does not feel the need to elaborate and in doing so constructs an identity for me (an academic who is professional) consistent with her own. Identities as Discourses, as discussed in Chapter 3 and above, are identity kits for doing, being, valuing and believing (Gee, 2000, 2003). Discourses are common beliefs, feelings and ways of thinking and being and, in being a member
of a Discourse, others are seen as either ‘insiders’ or ‘outsiders’. Therefore RP1 viewed me as a member of the Discourse of academics. RP1’s text can be interpreted as both belonging to a profession (higher education academic) and adhering to the conduct expected of an academic through the activity of always being professional.

The way in which RP1 projects her professional academic identity through her avatar is to encode or build the appearance of her avatar to contain visual cues that conform to a specific appearance and dress code. Appearance codes and visual cues are symbols that communicate a specific message within an affinity group. While there has been little scholarly attention paid to academic dress codes, Abbasi’s (2013) small study on women academics found that attire was important in shaping professional identity and cultural (academia) membership, and that structured clothing such as skirt suits was an accepted norm.

The following transcript extract demonstrates both the strong intent for RP1 to look professional and the commitment and means for doing so – the choice of clothing that conveys that specific message:

It took me a long time to find the outfit. I didn’t know what I wanted but I knew I’d know it when I saw it and so when I eventually found that, that was it, but it took me ages because I knew I wanted a black jacket, a white shirt and black skirt or pants (RP1, p. 6, para 2).
Chapter Five

In SL, clothing, bodies and body parts including hair, eyes, mouths etc. can all be created, purchased or customised in the standard avatar toolkit. SL users often purchase clothing and body parts from the many shops operated in-world; however, most of the bodies and clothing outfits (particularly for women) are highly sexualised and inappropriate for presenting a professional academic image. When RP1 states that it took her ages to find the right look, she is referring to the many hours she spent searching the SL shopping arcades for suitable clothing. One male participant even eliminated this level of time commitment by hiring an SL image consultant. “I actually had a Second Life image consultant who took me into these locations and we found the right skin and we gave it the right pallor to show a bit more age and hair” (RP9, p. 4, para 3). Others sought help from experienced SL players to procure suitable attire and body parts, rather than using the standard options.

An incongruous addition to RP1’s professional wardrobe was a pair of sparkly shoes. These were a talking point and RP1 finally exchanged them for a plain black pair because the shoes became too distracting for others. In saying ‘too distracting for others’ RP1 meant other avatars and, because the point of view of each participant/user is from a camera positioned just behind their avatar, they do not see what their avatar looks like unless they adjust the camera view. RP1 was very taken with a pair of sparkly shoes but because she could not see them easily, she did not quickly realise they had become such a focal point or point of interest to others:
Chapter Five

They were free and they were sparkling and I realised it was always ‘Wow, you have sparkly shoes’ so it was always a point of conversation, but I decided to ditch them ... I thought ‘Let’s get some proper decent ones’ so she went and lashed out and got some shoes, because she’s way richer now (RP1, p. 5, para 2).

RP1 switches between first-person perspective in saying “I thought” and then refers to her avatar as another person in saying “so she went and lashed out” and “she’s way richer now”. Sparkly shoes seem incongruous with the professional identity RP1 endeavours to portray, but the choice highlights a playful aspect of RP1’s in-world persona, blurring professional, public and private spaces. It seems highly unlikely that RP1 would attend face-to-face university classes in sparkly shoes; therefore being in SL brought out a playful aspect that was later overcome by a more serious, conservative side.

**Visual cues**
The highly customisable avatar appearances in SL are aesthetic in nature, rather than functional as in gameworlds, where avatar appearance can signify certain powers or abilities; therefore the image, the visual representation of the avatar, including the attire and artefacts it carries, the represent power and skills of the player (Doye, 2015). While a range of pedagogical affordances, actions and abilities can be built into an SL avatar using Linden scripting, the programming language that SL is built through, this is generally outside academics’

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4 In SL, avatars accumulate a certain amount of Linden dollars (the SL currency) for free. This money can be spent in SL shops but continues to accumulate if not spent. My avatar has over $185,000 Linden dollars because I have not spent much in the 9 years I have been a resident.
capabilities. It is an advanced skillset and most academics rely on known, socially inscribed visual cues to project their desired identity.

The clothing chosen for RP1's avatar mentioned in the previous section could be considered conservative business attire and would probably be interpreted as professional by other avatars, students and colleagues. A number of researchers over the past decade have found the appearance of the avatar, the clothing and so forth, can influence their cognition and behaviour, and how others behave towards them (Yee & Bailenson, 2007; Merola & Pena, 2010; Blascovich & Bailenson, 2011). By presenting their avatar as a professional-looking academic, they are participating in the practice, or Discourse, of being an academic and additionally they are building the identities of their students' avatars to be serious students. They are building what Holland and colleagues (Holland et al., 2001) and Gee (2011) describe as a ‘figured world’ where ways of being are socially and culturally constructed through identities, actions and activities.

**Building cues**
Some participants relied on traditional devices and conventions in creating a certain look for their avatar. For example, when asked whether their avatar had changed much over the years and how it looked now, two participants replied:

Yes, a little. I must say I am very conservative about my avatar. Now he wears a tie (RP7, p. 3, para 2).

And:
The last one and the one that I’m using currently is constructed to look as close as possible to a real-life professor. There are always a lot of jokes about the fact that he seems to have more hair than me and less body weight than me so when people make the comparison, they go ...! But he’s built to be a researcher and an academic and a person you listen to when you say ‘Hey, stop that!’ (RP9, p. 4, para 2).

These two participants are both professors; however, for RP7 a tie is a suitable device or artefact to create a more professional look while RP9 has a specific look that he feels reflect a professor identity. In this example it does not seem to be discipline-specific, as one professor was associated with sports and the other with marketing. Just as there was no additional information provided for what is considered a professional look, there was no further information of what a “real-life professor” looks like. Given the wide variety of shapes, sizes and ethnicities and different genders of real-world professors, it is difficult to visualise a generic image or look that has a certain quality that, among other things, signifies the authority of the professor.

These findings suggest that the projection of body image mediated by the avatar has consequences for how academics hope to be perceived by students. RP9’s avatar was carefully crafted to carry its own identity as a real professor but also to bear some resemblance to RP9 in order to mediate the identity of the corporeal professor in the virtual world. RP9 refers to his avatar in the third person and has had a number of avatars or avatar looks. He tends to view the avatar as a tool that mediates the discursive domain of a professor in the virtual
world. The privileges of that discursive domain for RP9 are respect and authority.

**Signifying a profession**
One participant was conscious of looking like a type of professional for specific occasions in SL. In this extract, RP10 is explaining that as a medical professional, he needs to look professional in a certain way that is consistent with his profession:

If I need to be a little more professional, if I'm giving a demonstration to folks who don't know anything about Second Life, I try not to show up in shorts and a jersey, so I have a number of scrubs that I've bought (RP10, p. 3, para 2).

Scrubs are generally baggy, cotton, informal-looking clothing that is a uniform worn by medical practitioners in and around operating theatres. They are not professional in a formal sense of business wear, but signify a certain type of professional in a particular situation or context. The notion of professional therefore is also as multiple as the notion of academic identity. When the aim is for RP10 to project a medical identity, scrubs are professional looking because they belong within the Discourse identity (Gee, 2014a, 2014b), as discussed in Chapter 3, of a medical professional associated with an operating theatre. It is quite specific, because a suit and tie would be suitable for a doctor to look professional but not if they are associated with an operating theatre. To look professional either in wearing the scrubs associated with his profession or as an academic in a shirt and tie was not overly important for RP10:
I do change into scrubs sometimes for the students, but most of the time the students appreciate the fact that at least my avatar is dressed in shorts and a jersey, because at school every day I have to wear a shirt and tie and I have to look a little more professional (RP10, p. 3, para 2).

Contrary to other participants seeking a professional look, RP10 goes to some effort to appear casual when not in his professional medical attire. He speaks of his avatar in the first person, it is always “I”, and there is no differentiation between RP10 and his avatar. Moreover, the everyday wear for RP10 in the concrete world of being a professor at a university is a shirt and tie in order to be more professional, while for RP10 being a professor in the virtual world is to be more casual and collegial.

These examples represent the two main identity categories that have emerged from this study: the Authoritative Academic and the Collegial Academic, which are examined in greater detail next in order to understand the ways in which academics construct and perform their professional identities in the virtual world. These two categories also signify two sub-groups within the Discourse of an academic.

**The Authoritative Academic**

For two of the participants, to be perceived as ‘serious’ and to have a sense of authority were important aspects of the identity they wanted their avatar to project. For these participants, it was significant for their avatar to have the referential power and authority of their corporeal professional identity. This
was also important in managing student behaviour, which was not an issue for all participants but this does signal that it can be an issue. Although the notion of authority was not central to the focus of this research, it is a finding that came out strongly in the data from two participants, while one other participant had issues with student avatar behaviour that was challenging for the academic’s authority.

The focus I have taken in this analysis is to concentrate on the embodied authority that is mediated by the avatar, thus extending the corporeal body of the participant beyond its corporeal place; in some cases, this also has a temporal quality. The corporeal nature of teaching and learning, that is, that teacher and student bodies are an integral part of the teaching and learning process, for some participants in this study, but not the majority, is a challenge for avatar mediation.

The notion of authority in the avatar-mediated process is more complex than the traditional educational understanding of authority, which Bingham (2008) insists is often thought of in terms of being a ‘thing’ which people in power wield over others. Rather, the notion of authority in these findings is associated more with what Bingham and Sidorkin describe as ‘relational authority’ (2008). The first part of this finding concentrates on how an authoritative identity is constructed and performed in relation to others. In the second part, it examines authority through relationships. While I focus this section on the avatar, there is slippage between ‘I’ as corporeal person and ‘I’ as avatar.
Creating identity through contrast and social good

As discussed in Chapter 4, according to Holland and colleagues (Holland et al., 2001) as well as Gee (2011, 2014a, 2014b), there are many ways that identity is constructed and performed. Also discussed has been that identity as a social and cultural construct is never constructed and/or performed in isolation. In the following transcript extract, the academic constructs his authoritative identity in opposition to, or through contrast to, another person who does not have authority in an academic sense:

I brought in a Second Life designer, somebody who could actually build objects in Second Life, and got her to run a class with my students. The feedback was fascinating. I stood at the back and watched. She constructed a platform once again above an area, mainly so that it didn’t slow down the resolution refreshment rate, with nothing around it so just the students, her talking to them and creating objects. In a very short period of time, she had my class of students running wild, creating objects, throwing them at each other and dropping them out of the sky. She was absolutely exhausted afterwards. In discussing it with her, she had no sense of control. She had never been a teacher before (RP9, p. 3, para 2).

The relevant discourse-analysis question to examine this text is to ask, “how this piece of language is being used to make certain things significant and others not and in what ways?” (Gee, 2011, p. 17). The first part of the first line, “I brought in”, creates a sense of ownership, agency and authority over the class but also over the action. The text that follows, “a Second Life designer,
somebody who could actually build objects in Second Life”, indicates the person is an expert or a highly skilled person. This person would have ‘expert’ power and authority in terms of French and Raven’s (1958) theory. Expert power is a positional identity (Holland et al., 2001) that is dependent on one’s position in relation to others. An expert holds a high position, especially in relation to students; therefore the SL designer is held in high esteem.

The final part of the sentence returns to a sense of ownership, agency and authority for RP9 in saying “got her to run a class with my students”. Using the term “my students” implies a proprietary sense of ownership – it is not ‘the’ students but “my” students. The next sentence, “I stood back and watched”, indicates two things. Firstly, RP9 is standing back and watching, is handing over authority and responsibility for the class to the designer. Secondly, there is a sense of observation but still an air of authority and also one of anticipation, as if something was going to happen. This language (in use) is being used in a way that makes the authority of the academic significant as a specific professional and a member of the academe, such as a professor. This academic’s identity is built through (what he sees as) the lack of academic authority of the designer, who is highly skilled in design (she has expert power) but not in the ways of an academic.

The designer fails to “control” the class because “she had never been a teacher before”. This line reinforces the identity of authority over the expert designer, but what it is also doing is sending a signal to the students that an academic is the person of authority and reinforces this too for the academic. The concept of
control is at the forefront of this passage of text; it indicates that for this academic, to be an academic is to be in control and therefore an academic avatar must convey authority. This is somewhat out of step with contemporary views of university teaching, with student-centred pedagogies, but as Bingham (2008) insists, “all relation entails authority and all authority entails relation” (p. 15). When the extract below is examined more closely, it reveals that RP9 is aware of the importance of context in shaping and performing identity not just for himself, but also for his students. The text below continues from the first extract analysed above:

She had shown people how to build things, but she’d never controlled a class and feedback from the students and from her and some other debriefing that I did, I came to realise that without the classic clues where the students know that they’re students and behave as students and the lecturer is the person controlling, that sort of thing could be an issue, so I start off most classes bringing them into the lecture theatre in the sky (RP9, p. 3, para 2).

Examining the first sentence indicates the SL designer is skilled and can “show” people how to do something, “but she has never controlled a class”. Again, RP9 is reinforcing his identity in comparison to the designer. The way this sentence “makes one thing relevant or irrelevant” (Gee, 2011, p. 19) is through indicating the designer had never controlled a class and in comparison “the lecturer is the person controlling”. This continues to reinforce the significance of control and authority vested in this particular academic’s identity. The classic clue that RP9
is referring to is the standard teacher-focused pedagogy of a lecture theatre. While he does not use this form of pedagogy when teaching in SL, he capitalises on the shared understanding of the meaning of tools for traditional university teaching and uses them as a device in creating a figured world. This is discussed in more detail later in this chapter, under the heading of Pedagogical figured worlds.

Revisiting Gee’s (2011) concept of Discourse discussed in Chapter 4 as a way of “combining and integrating language, actions, interactions, ways of thinking, believing, valuing and using various symbols, tools, and objects to enact a particular sort of socially recognizable identity” (p. 29) reveals the way RP9 harnesses digital artefacts embedded with cues to enact his identity. It is not a tutorial room that is used but a lecture theatre; therefore this avatar is someone who lectures, not tutors. Gee (2014b) insists that part of what language is used for is to build something. In this case it is building identity for RP9 and for the students. Furthermore, the identity of the students is built as ‘proper’ university students who behave in an expected way. Moreover, the ‘proper student’ is enacting a social good, being proper as opposed to being a disruptive student who throws things around and is not ‘proper’.

Applying Gee’s Discourse analysis to this text reveals how identity is developed as a proper academic through contrast with the identity of the SL expert, who is not proper and not in control, as well as contrasting the out-of-control students ‘belonging’ to the SL expert and the ‘proper’ students belonging to the proper academic. Gee notes, “we use language to build and sustain relationships of all
different kinds” (2014b, p. 120). Therefore, in saying “where the students know
that they’re students and behave as students and the lecturer is the person
controlling” (RP9, p. 3, para 2), RP9 is building the relationship between his
academic avatar and the student avatars in a way that is authoritative. It is
interesting to note, therefore, that despite going to considerable lengths to
create an authoritative identity for his avatar, RP9 seemed to enjoy engaging in
playful and even irreverent silliness, as demonstrated in this extract below:

95 per cent of the students will stand in front of the railing looking over
into the pen where the giraffes are, so I fly up and sit on the giraffe’s back
and say to them ‘What the hell are you doing? Why are you all up there?’
and suddenly they break through and you can see a sense of delight and
they just then from that point on fully immerse themselves (RP9, p. 3, para
2).

This silliness and playfulness are achieved through the relational dimension of
authority. In the passage above, RP9 is engaging in playfulness with the
students which is available to him through first being restraining and
authoritative. So RP9 establishes his avatar authority through constructing
avatar authoritative identity by contrasting himself with the SL expert who was
unable to control the class and by immersing student avatars in the figured
world of constrained academia through taking them first to the skybox. In doing
so, he is able to pursue a more imaginative and playful pedagogy, as
demonstrated in the extract passage below.
Chapter Five

So it’s kind of a discipline to start with and then open up your minds and imagination to get really into it to follow through and with that combination the classes tend to be pretty successful (RP9, p. 3, para 2).

Whether or not RP9’s students could have been engaged in an imaginative and playful way without the dimensions of imposed authority is inconclusive, but clearly it was important for RP9.

*The Collegial Academic*
At the beginning of this chapter, the idea of a professional identity was examined through the analysis of a transcript extract. To recap, RP1 went to considerable time and effort to create a professional look through suitable business attire. To look professional was a critical issue for RP1; however, when responding to a question regarding the relationship between teacher and student avatars, she acknowledged one of her students as saying: “You’re not like a lecturer to me, you’re a friend” (RP1, p. 4, para 3).

Identity is always in relation to someone or some group or some place and so (as per Gee, 2011) it is as much about social identity, how others see you (Tajfel, 1981; Brewer & Roccoas, 2001) as self-concept, how you see yourself (Stryker, 1980; Neisser, 1993). Moreover, as Gee (2006) suggests, identity is situated and therefore to be perceived by students as a professional academic when in a virtual world would seem to be important; however, some participants placed value on different aspects or dimensions of being professional.
Chapter Five

For RP1, the fact that students saw her more as a friend than a lecturer was more to do with her pedagogy enacted via the avatar than her identity, and also she constructed student identity differently to those under the Authoritative Academic. RP1 had created an atmosphere of collegiality with her students and did not see the need to stamp her authority as a professional academic. Pedagogies of collegiality transcend conventional relationships between teacher and student, and power and authority are shared (see Chavez & Soep, 2005; Chavez, Turalba & Malik, 2006). Furthermore, Gee (2004, 2005) discusses collegiality in virtual-world and online games spaces in terms of ‘affinity spaces’ where traditional hierarchical relationships such as between student and teacher are either non-existent or more equitable. Spaces that do not sit within expected or traditional spaces or sit within the overlaps, margins or liminal spaces are also known as Third Spaces (see Oldenburg, 1991; Soja, 1996). Peachey (2010) considers virtual worlds Third Spaces that provide comfortable, active places for learning communities.

**Conducting avatar student identities and relationships**
Participants identified as Collegial Academics constructed identities for students differently from Authoritative Academics. Most significant was the relationship between Collegial Academics and students, where students were more equal in power and agency. The following two extracts compare a CA with an AA:

1. I don’t really know who they are in real life. I’ve had a few of them drop in when they come for re-schools or graduations, so I don’t know them, have never met them. I know their avatar’s name. I had four drop in earlier
in the year and I said ‘So what’s your avatar’s name?’ because when we’re in-world, I never look at their real names. I don’t see the need (RP1, p. 4, para 3).

2. Well, I know who they are. Part of what they have to do is they have to send me a picture of their avatar so that I have their avatar name and the picture of the avatar, so whenever I’m running a class I know who the avatars are (RP9, p. 4, para 2).

These extracts were selected from responses to the interview question, ‘How do you find the whole experience of being a teacher avatar, teaching student avatars?’ In the first extract, RP1 is fully immersed in her identity as an avatar and therefore sees the students as their avatar – not as a person behind an avatar. The line “I don’t know them, have never met them” indicates RP1 does not identify with the corporeal student but in saying “I know their avatar’s name” she is indicating she recognises or identifies with the avatar student. RP1 is indicating here that she fully identifies with the student avatar as being her student. There is not need for face-to-face/corporeal contact to legitimise a student; the avatar is the student.

In comparison, RP9 needs to know the student avatar in the context of the corporeal student and, while he acknowledges the strong connection between a person and their avatar, he treats them as separate identities. Using a hermeneutic phenomenological lens, I interpret this separation as associated more with maintaining control, in keeping with RP9’s authoritative stance; however, the two response types reveal how each participant views SL. Both
RP1 and RP9 are good examples, because each is strongly oriented to being a specific kind of academic but also gives insight into their perspective on the role of SL in their pedagogy. For RP9, SL tends to be a pedagogical tool with many immersive and pedagogical affordances, whereas RP1 dwells as an academic or dwells pedagogically in SL.

To clarify this finding, the tone of these texts was reviewed by listening to the original recordings from all participants to get a sense of the whole interview and to hear the way in which each participant spoke, the tone of voice, the pauses and so forth, so as to gain an understanding of the lived relationship between academics and students. This methodological process reflects the hermeneutic circle of moving back and forth between the individual parts and the whole in order to gain a deeper understanding of the meaning of the texts (Gadamer, 1975).

There was more warmth and humour in RP9’s voice than can be read in the transcript text and there was emphasis on certain words that to some extent changed the timbre of certain statements. It did not change my interpretation of RP9’s perception of SL as a pedagogical tool or artefact compared with the embodied immersive world that is evident with RP1 and some other participants. However, the sense of academic agency, creativity and pedagogical delight or fun that emerged as subthemes of Pedagogy came through more strongly when listening to the interviews. The Pedagogy section below examines this further.
Evidence of a collegial and more informal relationship between academic avatar and student avatar is demonstrated in extracts from other participants:

There definitely were differences. It was something that my co-instructor and I in the English class commented on extensively. It was much more egalitarian; even though neither of us is very authoritative in personality in the classroom, there is a lot more joking around. What we found was it was a three-hour seminar and our virtual sessions like 2½ hours, so much more egalitarian humour between us and the students, which was actually interesting (RP3, p. 3, para 3).

But even participants interpreted as authoritative admit their relationship with student avatars is less formal. RP9, for example, notes that this relationship is “a little freer given the circumstances” (RP9, p. 5, para 1).

**Transient identities**
In some instances, participants adopted different avatar identities for given contexts within SL. An extract from RP2 demonstrates the transient nature or fluidity of identity that is a conscious construction of specific cues signifying different kinds of being:

Identity is really at the centre of shaping your avatar because when you go into role-play ... you’re shifting away from the identity of authority into the identity of diversity (RP2, p. 3, para 1).
In a teaching context, RP2 tends to view the avatar as a practical tool for achieving something, while according to RP2 it is a tool for participating in an activity, a cue to be read by students, and is not a state of being. The following extract occurs after discussing a role-playing scenario on diversity and, while RP2 once again utilises purposefully constructed identities, he slips into a sense of being there through extended embodiment:

If you've ever done this before, gone around in Second Life as a person not of your demographic, things happen that you weren’t expecting to have happen to you and I use the wheelchair on purpose, because I offended a lot of people by running around in a wheelchair in Second Life because they were angry at me whether I was really in one or not so – is my identity handicapped?

And:

You don’t necessarily have to convey yourself all of the time, especially when you get into role play (RP2, p. 3, para 2).

The use of language by RP2 is consistent with the ways in which other participants talk as if they are doing something in SL rather than the avatar doing something. There is an extended embodiment through the avatar and the experience of motility by “running around in a wheelchair”. For example, the first part of the first sentence is directed to me, the researcher, asking if I have done something similar to the participant: “gone around in Second Life”. RP2 does not pose the question in terms of my avatar, but to me. Firstly, there is an assumption that my avatar and me are one, just as RP2 and his avatar are one.
Secondly, “gone around” is a very casual term meaning both to physically move around a space but also to assume a persona or identity with an intention. RP2’s use of it encompasses all of these definitions; therefore he is signifying a geographical navigation of a space in an assumed persona with intent. The intent was to challenge others’ perception of a given persona and identity – a person of diversity. It is not the regular persona or identity of his avatar, the one that represents RP2, but a new persona and identity embodied by his avatar.

Moreover, this passage creates a sense of avatar agency and intentionality, which contrasts with phenomenological or philosophical intentionality and simply means having a reason and purpose. The line indicating RP2 “offended a lot of people” by “running around in a wheelchair” suggests others in SL place value and trust in avatars as being authentic identities and agents. RP2 concludes with “You don’t necessarily have to convey yourself all the time”, indicating there is a genuine sense of self at times other than in this case, specific learning scenarios that require different personas for role-play. The ability for RP2 to quickly switch the identity of his avatar to incorporate a new body shape, colour and so forth is for authenticity in the pedagogic activity, but this also indicates there is a ‘true self’ for the avatar. The avatar’s ‘true self’ is the avatar identity that RP2 and the other participants perceive as their real avatar identity.

Furthermore, RP6 contributes to the idea of the virtual world being a liminal place of non-identity until one is established. RP6 said that when providing
professional development for adults who were teachers and academics wanting
to learn how to use SL:

One of the things that really strikes you when you first go into a virtual
world is the loss of your physical-world identity and reputation, and so
you have to actually re-establish yourself from scratch and that’s very
challenging for staff, because their knowledge base is so low in the
environment and they can’t work out how to carry their expertise in, and
so they feel silly and they feel dumb and they don’t want to spend
hundreds of hours to get their skill levels up, so it’s a real challenge for
staff (RP6, p. 6, para 3).

The loss of identity and reputation in this context relates to a number of Gee’s
(2000) conceptions of identity, which were discussed in Chapter 3. It is relating
to a combination of Institution-identity (I-identity), the identity that is imposed
on someone via an institution, Affinity-identity (A-identity), which is their
broader identity among their professional networks, and Discourse-identity (D-
identity), which is being a specific kind of person in a given context.

Establishing oneself “from scratch” (RP6, p.6, para 3) in an avatar suggests a
clean slate for a new identity. However, academics do bring their existing beliefs
and values into the virtual world in order to construct their avatar identity, as
evident in RP1 saying:
Chapter Five

I always want to look professional, that’s always my aim in real life or in
Second Life (RP1, p. 6, para 2).

So perhaps in some ways it is a clean slate, but with existing beliefs and values
that must be sorted and refined into the new identity. Having to construct a
virtual identity could be an unsettling experience for some people, but from the
extract and from a thorough reading of RP6’s interview, there is a sense of grit
and tenacity shown by her students, who, as I have mentioned, are mainly
teachers and academics undergoing professional development in order to teach
in virtual worlds. The determination demonstrated by her students is also a
reflection of the intrinsic motivation and level of commitment shown by all
participants in this research in their approach to developing new skills to use in
the virtual world.

**Being an avatar academic requires a specific skill set**

Five of the 10 participants either fully created the virtual-world space they
taught in or had some kind of input into the creation of its objects and artefacts.
One was an experienced programmer, while 4 had no experience in coding or
scripting (in order to build and create interactivity) and 3 had no experience in
any way with this kind of technology. When creating their avatars, most
participants were content with a look that resembled their usual professional
appearance. Even when everything was created for the academic, specific skills
were required to navigate and communicate in the virtual world and new skill
sets were needed for being a teacher in these spaces.
Participants who were active in building the spaces that they taught in and/or developed skills in building through other SL activities seemed to have deeper satisfaction with their SL teaching experiences. These participants also came under the Collegial Academic category. Academics who made the commitment to build the space they were to teach in demonstrated a level of creative agency that appears to have been rewarding, but also brought them into contact with many other people they may not have the opportunity to engage with if not for their building role in SL. While some were afforded time and funding from their respective universities, others were motivated primarily through curiosity and interest. Regardless, the time and commitment was substantial.

RP10, for example, revealed an intrinsic motivation in spending his lunchtimes for many months learning new skills so he could build the environment and teach. Applying the Discourse analysis ‘building task’ of significance – what makes something significant and something else not – reveals a relaxed kind of tinkering attitude, but one of quiet determination:

So I decided that I would spend every day during my lunch hour in Second Life trying to learn how to build things, so I just brought my lunch in every day, logged into Second Life at lunchtime, spent an hour or two going to any kind of building or scripting class that I could, meeting people, like I met a few key people who gave me space on their island ... helped me with building, connected me with people who knew how to build and how to script ... I think I took about 6–8 months just every day, an hour or so during lunch,
poking around just learning how to build and learning how to script (RP10, p. 2, para 1).

The word “just” is used as an adverb that underpins considerable commitment and persistence: “I just brought my lunch in every day”, and while it also serves to downplay the significance of commitment, its use in the last sentence reinforces the almost dogged persistence of the academic. This commitment and persistence are demonstrated in all other participants who assumed the role of developer and learned to build and script the digital artefacts that make up the (hermeneutic) virtual-world space. The virtual space can be classified as hermeneutic because, for users to experience it as a particular place, they must interpret it as such. From a phenomenological perspective, this passage has a sense of relaxed, meditative atmosphere in the comfort of RP10’s office. Using lunchtimes further emphasises his taking time out from the activity of the university to be in SL, to learn new skills and create something in the process. This is an enjoyable use of time that also enabled RP10 to meet others. Meeting others was through their avatars and there was a sense of community, and learning from peers – a community of practice. So the act of building things in the virtual world is also about building connections and networks, as well as skills that benefit a 21st-century academic; for example, an attitude of commitment to learning new skills and a sense of self-efficacy among participants:

I set up an avatar and went about trying to learn how to function in a virtual world ... I went to lots of building and scripting classes. I did everything to try
and learn how to function in there, but set up my own space for my students (RP1, p. 1, para 2).

And:

I taught myself the skills along the way. I taught myself how to build very basic coding within the space ... Those simple things I learnt how to do myself (RP4, p. 3, para 3).

The previous two extracts demonstrate the participants’ personal agency and self-efficacy in learning something new on their own. More broadly, however, their learning involved engaging with others in order to learn. The following example drawn from a participant’s transcript illustrates how a community of practice evolved through the agency and motivation of one academic to learn skills from others who were experts and, in so doing, drew in others to create a thriving learning community whose members supported each other to become skilled:

I started a group called XXXX Club and a whole lot of the early XXX people who were programmers joined the XXXX Club and they used to get together and meet on the island and show all the different tools that were made, so there was this community of toolmakers around there, so a lot of people had a start on [island name] (RP6, p. 6, para 1).

This extract implies a sense of collegiality among these users of SL, who help each other to learn and become experienced. In this case, some were programmers and experts in their fields; however, they were willing to give up
their personal time to help others. This enabled new users to develop capability in new skills, self-efficacy and motivation in being an academic teaching in a virtual world. “Perceived self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives” (Bandura, 1994, p. 2). Forming a club that brought together experts and learners intersects other dimensions of Bandura's sources of self-efficacy, namely, modelling through experts and social persuasion.

**Lived experience: time, place, relationship and embodiment**
The existential dimensions of phenomenological lived experience are being an academic in a virtual world through an avatar, as well as being a corporeal academic. The avatar here is an extension of what Ihde (2002) calls the here-body (the all-sensing corporeal body) and the over-there-body (disembodied).

In the following statement, RP1 is describing a typical class in SL that is held at 7.30 in the evening, Australian Eastern Standard Time. Most of RP1’s students are in the Asia-Pacific region, but many are also from Europe. None are from the Americas, because the time difference makes synchronous interaction difficult:

> For most of them, they’ve probably had their meal, they’ve put their young kids to bed if that’s what they’ve got. Actually that’s another thing that I’ve noticed is the conversations, they go ‘Oh, my child’s sitting on my lap’. You can’t do that even in a real workshop, or ‘Hold on, my child’s just awake, I’ll just go and settle them’. You couldn’t do that, you wouldn’t even know
they were unsettled, but you can do that in those circumstances (RP1, p. 9, para 1).

The lived time for the academic and students is different. Lived time and space are two phenomenological existentials (van Manen, 1990). The lived time of the academic involves an hour of time set aside in the evening that for her would normally be the time for domesticity; preparing and eating a meal with her family, relaxing and winding down from the day’s academic activity, reading or watching television. However, in order to have a class time to suit off-campus students, this normally domestic time is instead an hour of professional academic activity. The students’ lived time overlaps domesticity and mothering, with lived time for being a student and the activity of academic lived time. RP1 acknowledges this in pointing out the uniqueness of this overlap for students. This overlap of lived time and lived space, and indeed the other existentials of lived relationship and lived corporeality (embodiment), is experienced by the academic in the following extract:

I do find that there is a group of students who are more willing to come up and ask me questions in Second Life than they are willing to line up at the end of class and come up and ask me questions in real life, so it’s a nice opportunity for them to log in and they can ask me questions. I do usually have most of my slides that I teach during the day loaded in Second Life, so I can quickly pull those out and we can look at a slide and I can explain a particular topic or something like that (RP10, p. 3, para 3).
What I do is generally every evening after I go home, I just simply open up the laptop, log into Second Life and am just there every evening while I’m sitting on the couch watching TV or whatever, and can help students answer questions and help them with particular things that they’re doing (RP10, p. 1, para 4).

The lived time and space for RP10 is overlapping professional and domestic time and place. The lived space is both a comfortable couch in front of the TV and also “there” which refers to the material space of SL that is inhabited by his avatar. The lived relation is in this case between academic and student and is one of caring. The lived embodiment or corporeality is experienced in the following ways:

- Through the motile, emotive and perceptual body (the here-body) (as per Ihde, 2002)
- Through the extended here-body that is the avatar.

These two entities are not entirely separate and, just as Gee (2011, 2014a, 2014b) states that there is a melding of identity between the corporeal body and the avatar, so too do the here-body and the extended here-body overlap. An interesting dimension of this finding is the double mediation through which this relationship is experienced; this is not to be confused with a similar term used in family law courts as a means of dispute resolution. I use the term ‘double mediation’ to make sense of the relationship between academic and student, which is mediated by each avatar via the corporeal academic and the corporeal student. This interaction is demonstrated in the graphic below (see Figure 6.).
Figure 6 Double mediations (Irving, 2015)

**To care**
The nature of the relationship between academic and students can be one of caring. In the two extracts above, RP10 shares lived time with his students that is mediated through their avatars. The relaxing, contemplative corporeal lived space and time for RP10 creates a quiet, caring way of being with his students. He is there for his students, being “just there every evening” to help them work through problems they may have had understanding something during class.

In a phenomenological sense, this time contrasts with the time after a class, which may be a time full of activity and movement, of students jostling to find a place in the line to ask a question, milling about or perhaps rushing out to another lecture or tutorial. Some students who ordinarily would not line up after class to ask questions find that the relative anonymity of being an avatar student in a virtual-world space gives them more confidence to approach RP10’s avatar than RP10 in the concrete world. The formality of being a figured world of the university setting (in a class with possibly many students) is displaced with the less formal and quiet space of the virtual world, where the time is less rushed and possibly less competitive.
**Academic agency**

RP9 describes a similar lived time and space experience, only it does not convey the same calmness and quiet sense of caring that been has described in RP10’s extracts or the domestic/academic time space overlap of RP1; however, it highlights the sense of academic agency RP9 experiences through the freedom SL affords his academic commitments. RP9 is employed and resides in Australia, but being an avatar academic allows him agency to attend a conference on the other side of the world and still teach his class:

I’ve been at a conference in Orlando in the States, stopping over in New York on the way through. Getting away for the conference would have been impossible because I had teaching commitments, but I had the classes come into Second Life, so the first one, I was in a hotel room in New York City on my computer at two in the morning with my class and we ran the class, and on the Friday I had the postgrads and I was in Orlando on the computer in my hotel room. I ran the classes and then I was back to what I had to do (RP9, p. 5, para 1).

The extract above reveals a time/space collapse between the participant and his students in addition to an overlap of the lived time and space for RP9, which is very early in the morning in New York in a hotel room, which is either sleep time or entertainment time, and a significantly different lived time to his regular academic face-to-face class in Australia. At 2 am in New York, RP9 is conducting a class which collapses the temporal dimensions of the geographically dispersed locations and the lived space for RP9 is being in a hotel room for the here-body
(corporeal academic) and the shared space and time of the virtual-world space he shares with his students via his extended here-body (academic avatar) and their extended here-bodies (student avatars). The agential element is the agency to attend a conference that would not normally be possible and to fulfill his academic commitments in teaching his class.

The capacity to move beyond the strictures of a university semester timetable, where rooms and lecture theatres are booked well in advance and there is generally no room for deviation, was felt by the majority of participants. The pros and cons of this are discussed in more depth in the next chapter; however, it is a finding that is highly relevant in the context of the future of universities. The experience for RP9 is one of pedagogical and professional freedom. In the following extract, RP1 is describing the need to create more classes because only 50 students can be managed for an in-world class and more had signed up for the course:

I didn’t want that many and then certainly I’ve got to work out how to do this, so I put on another session of an afternoon but that only drew about ten people, so it still wasn’t getting (RP1, p. 10, para 2).

Question from researcher: So you can actually swap your curriculum time around, can’t you, you’re actually developing your own timetable?
To suit me! So Wednesday evening, that’s okay, because that’s what I do. I wanted it during work hours because I didn’t want to give up another night (RP1, p. 10, para 2).

Using the virtual world as a learning space allows RP1 to negotiate a timetable that suits both students and academic. RP1 has agency in making decisions about the day and time of day for her teaching, but also has some agency in being more responsive to student needs. The changing nature of academic identities and roles was examined in the review of the literature in Chapter 2; research about being an academic avatar adds another dimension to extant research and I bring this into the discussion in the next chapter. The blurring of work/leisure lived time can also have the effect of being ‘always available’ and work life can infiltrate leisure time if not managed. RP1 recognises this and does not want to give up another evening; however, the day class was not well attended. There is a sense of handing over one lived time for another – RP1 is handing over her leisure time to her work commitment – but there is no indication this returned. Pedagogical and professional freedom comes with consequences.

**Pedagogy**
Pedagogy permeates the findings on embodiment and with place because, as I have argued previously in Chapter 3, the three are inseparable because they are all are interdependent and can’t be understood in isolation. In this section, however, I focus predominantly on pedagogy. Each participant had his or her own unique pedagogical experience. The findings that are discussed in this section indicate that having control or input into the design of the learning
space provided pedagogical experiences for participants that were fulfilling and agentive. Participants who did not build or have input into the learning space design had a mix of experiences that were predominantly unfulfilling pedagogically; however, it is not conclusive that design input equals fulfilment.

Half of the participants (5) created the space in SL in which they taught. This involved the act of building and scripting, which is a creative process and provided an additional dimension to their pedagogical experience. The act of creating with a specific pedagogy in mind meant that the learning spaces supported the pedagogical intent. While some academics have a desire to create, others are content to use the spaces already created, particularly if they fit with their intended pedagogy.

**Creating pedagogical places**

Having control over or input into creating a specific virtual-world place provided academics with academic and pedagogical agency. Learning places are also ‘figured worlds’ (see Holland et al., 1998; Urrieta, 2007; Gee, 2011) where identities, behaviours, actions and so forth are expected and interpreted in a certain way. In this study, participants either used existing places in SL or designed and built their own. There were also two overarching design models: simulated concrete world environments like universities and associated teaching spaces like tutorial rooms and hospitals; and imaginative spaces that used the affordances of SL to make creative and interactive spaces. The simulated spaces had limited pedagogical affordances and served mainly as devices to situate a figured world by signifying a kind of place through artefacts with known cues:
Chapter Five

It had several different meeting rooms that people could use, mock campus buildings and so on, and it creates a more professional attitude than if we had them sitting at a beach or something (RP5, p. 3, para 2).

Several participants explored more creative and imaginative options to create places for a specific kind of pedagogy that did not conform to simulating university buildings and so forth, which is one of the affordances of a virtual world. In the following extract RP6 describes just such a place:

The design of the environment of the Island of XXXX was designed around the specific pedagogy that is the action learning process, so it had lots of small group meeting areas, it had a large meeting area with a breakout room system that I had scripted into an object that managed breakout rooms for doing content which is called program knowledge in an action learning purist sense, and the entire place then had resource centres and things (RP6, p. 2, para 1).

And:

Everything on the island has specific designs in it to actually support that particular methodology of teaching (RP6 p. 2, para 2).

This island was not designed to simulate school or university. It did not have buildings that signify a learning institution and was in fact quite the contrary, with an eclectic mix including teleporters, tiki huts and forests etc. It was designed by RP6 to facilitate a specific kind of pedagogy that required focus on
ways of learning, rather than learning something somewhere. The island consisted of artefacts created and scripted to be interactive in order to afford a specific kind of pedagogy – to facilitate action learning (see Revans, 1982; Schumacher, 2015). The educational focus for students was to learn about action learning in combination with learning how to operate in a virtual world as an avatar in order to teach their own students. The experience for RP6, the academic (participant), was a more hands-off kind of approach that was not instructive – it gave RP6 the freedom to step back and let students pursue learning in a self-directed way.

**Agentive pedagogical artefacts**
Artefacts were utilised for student learning through embedded pedagogical affordances. In this respect, artefacts were agentive; they had a purpose and were directed at students to be interactive in a certain way. In this example, the entire island is a technological artefact mediating intentionality – the experience mediated for students was an action learning pedagogy that gave students agency in their learning and engagement with the virtual world in a self-directed way. The mediated intentionality for RP6 was academic agency:

It had an orientation area that was built specifically for the action learners to not only learn about Second Life, but it was always done as a synchronous event, even though the tools can be used asynchronously – it was done as a synchronous event because the intent was for them to teach a child how to use the tools, so I would just teach one person and then they would teach each other and they would interact with each other because it’s a play deck of games (RP6 p. 2, para 1).
The pedagogical lived experience for RP6 was that she was able to dwell with her students. This afforded a collegial pedagogy where the participant was able to engage with students in a participatory rather than instructional way.

**Pedagogical figured worlds**

When virtual-world spaces are not designed for a specific pedagogy or do not signify a specific figured world (the world of being a student), then attempting to get students to behave as students was not always successful despite the environment. Tuan’s (1979) observation that the “built environment clarifies social roles and relations. People know better who they are and how they ought to behave when the arena is humanly designed rather than nature’s raw stage” (p. 102) seemingly applies to the built environment of virtual worlds.

In the following extract, RP5 was using a simulated university campus, but this was not a strong enough signifier to make students cooperate or operate as students:

> It is certainly easily distractible. They went off exploring all kinds of tropical beaches and similar things. There’s a university that has a mock campus set up in there. It might be Indiana or somewhere like that and we were using their buildings as meeting rooms for the interviews and so on and that’s where I wanted them to go, but they kept going off (RP5, p. 2, para 1).
Chapter Five

The practice of sharing SL spaces that other institutions provide was not perceived as having the same level of pedagogical focus or sense of being a specific learning place for students. Despite the SL place having the visual cues of a formal learning place through a simulated university, students did not conform to being students. RP5’s pedagogical experience was one of frustration and ultimately a feeling of inability to engage students in learning in a meaningful way. Behaviour management, therefore, can be an issue for some academics and while this is not a universal finding, it does signal the need for consideration in any professional development for staff.

Two other participants had similar experiences and found ways of working around issues of classroom behaviour. In the following extract RP3, who is an experienced 3D gamer, experiences a loss of control of his class and in the face of a guest speaker is embarrassed:

One thing I found in both classes which really surprised me was something that I would definitely take into account before teaching again in Second Life, was giving students a chance to basically blow off steam as avatars, because in both classes, it was in a class session for the first time that the groups had really – while we’d encouraged them to make their avatars on their own, the first time they really experienced the space was in class session and I found [with] the law students it was like having middle schoolers on a field trip. They were just running amuck. We had a guest speaker and I was like ‘Oh my gosh, this looks terrible’ (RP3, p. 2, para 3).
RP3 taught this class face to face as well as in SL and, while it is unclear if he experienced trouble with face-to-face classroom behaviour, his shock and consternation at their behaviour in SL indicates this was not his usual experience with this class. There appears to be an inability for students to move beyond their concept of a virtual-world space as an informal, fun place where they can display behaviour consistent with how they act in informal virtual spaces:

They just needed to get it out of their system, to jump in the fountain and splash, swing off the chandeliers and all that stuff (RP3, p. 2, para 3).

Being a kind of person (a [well-behaved] student) in a type of context (a university class) can be problematic when figured worlds collide, as in the following extract:

In the grad class, we had one student who chose a tiny non-human avatar who was constantly disruptive and just talking smack and running around. It came up every week that we met in session. I was having to call down his behaviour and literally had to threaten to throw him out of the graduate seminar. He was a gamer and used to being in those spaces in a very playful way and wasn't really making the bridge to 'We’re in class here. You’re a grad student; you’re not a smart-arse kid' (RP3, p. 2, para 3).

Firstly, in the above extract, the student assumes the persona of a non-human for his avatar. As discussed in Chapter 3, an avatar’s appearance has wide-
ranging consequences for how people see themselves, how others see them and how this affects behaviour, attitude and ways of being (Yee et al., 2007; Yee et al., 2009; Blascovich & Balienson, 2011). Additionally, the ways in which virtual environments allow people to play with multiple identities and express different and often unexplored aspects of themselves has been researched in great depth (see, for example, Turkle, 1995, 1999, 2011; Boellstorff, 2008).

Having an avatar that is a little non-human character (known as a ‘tiny’) represents a modality of being in the virtual world for this student that is playful and troublesome. The above passage of text transcript indicates RP3 feels the student has not made the transition to being in a learning space in the virtual world because the student is a gamer and identifying the virtual-world space as comparative to a game space.

Using a phenomenological lens, my interpretation is that in using a tiny non-human, the student is not projecting an identity consistent with being a student and this is influencing how he sees himself, which is not as a student but as a small, playful non-human. Moreover, because of this, the student has not made the transition to the figured world of being a student in an academic setting. Having disruptive students in a university setting is not a new phenomenon (see, for example, Seidman, 2005) and academics teaching in a virtual world may encounter behavioural issues that could need to be managed in different ways from face-to-face classroom management.
Chapter Five

As I have discussed earlier in the Authoritative Academic section, RP9 overcame the issue of figured worlds dictating behaviour and ways of being without losing the geographical freedom that SL affords. Before taking his class to playful and less formal parts of SL where he spends most of the class time, he established the figured world of a university learning space by using specific artefact cues:

I came to realise that without the classic clues where the students know that they’re students and behave as students and the lecturer is the person controlling, that sort of thing could be an issue, so I start off most classes bringing them into the lecture theatre in the sky. We’ve got ponds in there and black swans swimming around, but I’ve got a PowerPoint projector that I can use on slides. I’ve got a podium in the centre and they’ve got seats to sit on and I tend to use that, not for long periods of time, but just to set the tone that they’re university students here. That we are pursuing an academic objective and that their role is to learn, rather than just to play. But saying that, one of the things I found out is you start off with that and then you teleport down (RP9, p. 3, para 2).

RP9 utilises the semiotic value of perceived artefacts such as a projector, slides, seating and a podium, which directs attention to the academic. The simulation of the lecture theatre establishes the figured world of being in a learning setting in a university and the associated behaviours and identities expected within that setting.
**Performative pedagogies**
While the majority of participants devised ways of building or maintaining their academic identity in a virtual environment, others struggled with the limitations of the virtual world when relying on the ways in which they performed their identity and their pedagogy in real-world contexts. For example, RP3 was frustrated with the limitations of transferring real-world actions and motility into the virtual world:

As a teacher, I’m very kinaesthetic. I move around a lot. I talk with my hands a lot. I manipulate eye contact and gesture quite a bit and even as we are here now sitting in my office, there’s a bit of a disconnect in affect and when it’s mediated again through an avatar who isn’t displaying any of those behaviours, I found the disconnect frustrating. I was neither teaching the way I’m accustomed to teaching nor behaving in Second Life like I’m accustomed to behaving in Second Life (RP3, p. 2, para 2).

This extract demonstrates the embodied performative nature of teaching for RP3. The three short sentences in the first line create rapid movement that serves to underpin RP3’s claim to performative pedagogic activity. This modality is limited in a virtual world due to the restricted actions currently available for avatars. Although it is possible for many actions to be scripted for the avatar in order to extend their communication capacity, these actions are not spontaneous, naturally forming movements and therefore they are not reflective of an academic’s natural teaching and/or pedagogical performance.
For RP3 the problem lies in relying on established ‘concrete world’ ways to perform pedagogy that were not suitable in this new context without leveraging other cues that may have been available. RP3 did not feel using SL for teaching was a successful experience for him. Furthermore, he was caught between two identities that did not coalesce in the SL teaching space. He was unable to transition his academic identity into SL because of his existing identity in this space. His gamer identity was much more confident and self-assured, and his avatar academic identity did not measure up to this for the reasons already outlined. Therefore his usual confidence teaching was not reflected in his avatar and he did not make a connection with his avatar as an academic in a learning space.

**Scaffolding old practices in new spaces**
Other participants used established practices as a form of classroom control but also employed new strategies to scaffold the old. In the following extract, RP2 is discussing how being in-world allows him to control what student avatars see and do by using the programed affordances of his avatar as a focal point:

> From the locational point of view, the avatar is quite useful in being the cursor, so if I am running a YouTube video on a flat screen and I want all the students to watch it, I will move my avatar directly to the right of the video screen and I’ll use gestures to point to it, so that there’s no misunderstanding of what the student is supposed to be doing at the time (RP2, p. 3, para 4).
The ‘avatar as cursor’ is a technology device that directs focus just as the computer screen cursor holds our attention. This is a curious combination of the agency of the avatar – technology-in-use (Delaney et al., 2008) as agential – and the theory of gesture (see Alibali & Nathan, 2007; Alibali & Kita, 2010) as a pedagogical device. In these two passages, there is a presumption that students do not know what they should be doing and need specific cues in order to be students – they need to be moved into a figured world that signifies not just being a student, but being an attentive and engaged student.

Conversely, others found SL provided opportunities for exploring pedagogies they would generally find difficult within a face-to-face class. These findings are explored in the following sub-section through the freedom of spatial movement.

**Geographies of pedagogical freedom, fun and playfulness**

The virtual-world space afforded geographic motility, a freedom to move through space and in some cases different time zones and lived time, and to navigate a digital landscape by recognising landmarks, objects and the appearance of places. Not all participants used the virtual world in this way; some used one space in the virtual world and did not venture much beyond that either pedagogically or as a motile experience. Freedom for some participants also came from shaking off the confines and restrictions of being an academic in a physical lifeworld. This is evident in reports of delight in flying to different places in the virtual world. A dimension of this geographic freedom is that local and global places are experienced at the click of a button.
The following scenario describes how an academic might enter a virtual pedagogical place, which involves a merging of the spatial domains of physical space and virtual space, just as the avatar is a merging of the corporeal academic and the virtual academic. The academic using a virtual world for teaching and learning sits in front of their computer screen, clicks on the SL icon and initiates the program. The SL login screen appears with the login details already there, remembered from the last login. The academic clicks the button to log into their home location (if this is the default or the last visited location) and within a few seconds a scene fills their computer screen: some buildings to the right, trees dotted around and pathways leading to another building.

It is at this point that the corporeal academic becomes the avatar academic. Their avatar is just in front, with the back of their head visible in a combination of first and second-person point of view. This gives a sense of being there in first person and seeing others in relation to their own avatar. Other avatars are mingling about; a quick tap on the forward arrow and the avatar moves to join the others. The transition from corporeal academic to avatar is almost seamless and a normal occurrence. RP6 describes such an extension:

[We had a] meeting there today and we were able to say ‘Oh we’re meeting at XXXX peak’ and it was like ‘Oh yeah, that’s the gazebo, isn’t it? That’s up on top of the mountain that’s near the unicorn’ and people were arriving on the island and flying to it because they could remember where that was. They’ve only been there twice and only one time to XXXX peak and they’ve only been on the island twice, but there’s a big map where the
teleport is so they’ve got a mental picture from the aerial photograph and they know that it’s in this direction from where they’re standing and they’ve got a name for it. They know that you go past the village to get there and they describe it in those geographical terms (RP6, p. 5, para 2).

This passage from RP6’s transcript describes a somewhat fanciful or whimsical event or activity that is an accepted way, a norm, for something to happen. The place and object descriptions are fanciful or whimsical as well – “the top of the mountain” and “near the unicorn”. Once again the avatar is referred to in the first person, as if the corporeal person is actually flying and traversing the digital landscape. There is a sense of fun and an almost carefree attitude and joy in traversing such a landscape. Similar experiences of pedagogical freedom and fun are expressed by RP1 and RP9 in the extracts in the next two sections below:

Then we go on virtual tours. We go to the Sistine Chapel, NASA, science areas, art areas, health areas. We go looking at lots of different things and we always have some theme park too, because we’ve got to have fun also (RP1, p. 2, para 2).

In each of the above transcript extracts, a participant is discussing their students and their own movement through a landscape as part of their daily teaching. The first extract is discussing the geography of the island used for teaching. This has a sense of a geographical location and of being local. The capacity to fly is a taken-for-granted motile experience. The participant is
describing the motile nature of students arriving at a destination where they are to meet. Therefore there is a sense of motility, as well as a sense of specific location.

I interpret two modes of understanding at play. In the first instance, saying they are meeting at “XXXX peak” indicates a shared understanding of a specific location. Therefore the digital landscape, which is a collection of 3D computer graphics that make up the artefacts of the landscape, must be interpreted for their meaning. This incorporates Norman’s (2013) concept of ‘perceived affordance’ of digital artefacts, where known cues facilitate interpretation.

The second mode of understanding is what Verbeek (2008) describes as technology-mediated intentionality, which means the intentionality of the person is mediated by the technology as “intentionality that is partly constituted by technology” (p. 390). Verbeek builds on Ihde’s (1990) human–technology relations, which have been discussed in Chapter 4. As I have mentioned, I have interpreted my findings of the person/avatar relation through the lens of Ihde’s (1990, 2002) human–technology relations of embodied-relation and hermeneutic-relation, where technology provides representations of reality. The hermeneutic-relation is used for the interpretation of virtual-world artefacts (graphics and so forth) by the participant. Ihde has not applied these relations to virtual-world contexts, but has delved briefly into virtual reality and video games although he is inclined to view these in terms of technofantasies, which he states are a part of a person’s lifeworld just as real life is (2002).
The following extract has been examined in a previous section, where I discussed it in relation to authority and academic identity under the Authoritative Academic heading. I bring this extract forward for examination again, firstly to demonstrate that multiple things are present in texts and therefore multiple layers of interpretation are at play. I also stated earlier that the three lenses of embodiment, pedagogy and place are impossible to separate and the data were coded against multiple themes. This transcript extract is used to demonstrate the intentionality that is mediated by the avatar, but also to consider the intentionality of the avatar (technology).

A visit to the zoo takes on a whole new perspective in this extract, but what is mediated by the avatar or avatars, as in academic and students, is a unique pedagogical moment that is at odds with perceptions of higher education pedagogies. The interpretation from this extract is that a virtual-world pedagogical place can be fun and even perhaps liberating from the norms of everyday teaching. It provides opportunity for academics to engage with students in a fun and even silly way:

Virtual Dublin has the only all-giraffe zoo in the world, so I take the students down there and we talk about what this adds to the whole virtual Dublin scenario and the fascinating thing is 95 per cent of the students will stand in front of the railing looking over into the pen where the giraffes are, so I fly up and sit on the giraffe’s back and say to them ‘What the hell are you doing? Why are you all up there?’ and suddenly they break
through and you can see a sense of delight and they just then from that point on fully immerse themselves (RP9, p. 3, para 2).

This is a shedding of the sensibilities and formalities of being an academic which curiously flies in the face of the extent to which academics went to achieve a professional serious look for their avatar. The extract from RP9 above demonstrates that the students found it (momentarily) difficult to behave in ways dissimilar to when they attend a zoo in the concrete world, but RP9 is playful and displays what can be interpreted as out-of-context behaviour for an academic. The virtual world creates a context for the academic/student relationship, which is mediated via avatars, for playfulness and a less formal relationship, which is also supported by the following short extract:

When we’re undertaking tutorial visits and things like that, I don’t insist on that formal relationship and even in the lecture theatre in Second Life (RP9, p. 4, para 4).

And:

When asked by the researcher if there was any difference in the relationship with students in SL and face-to face, RP9 responded with:

It [Second Life] is a little freer given the circumstances (p. 5, para 1).
It is important to note that it is a dimension of being [an academic] and a
dimension of the academic/student relationship that are mediated by the
avatar. These dimensions are informal and playful.

**Place**
I turn now to presenting findings of place as experienced by the participants;
however, as I have stated previously, place is also woven through the findings of
embodiment and pedagogy. As I have discussed in Chapters 1 and 3, I view place
in this thesis as an assemblage (see Dovey, 2010) with multiple layering of
activity, relationships and processes, rather than as something that is bounded
and physical. The argument is made that *place-making activity* within the virtual
world is, for academics, a fundamentally *pedagogical experience*, which is a
significant conception arising from this research and a departure from
traditional pragmatic conceptions of pedagogy as the goals and techniques of
transmitting knowledge. Furthermore, the experience of both pedagogy and
place are *embodied*, which means that the academic has a lived experience in the
virtual world that fulfills the same criteria for learning-by-doing as faced in the
real world.

In order to extend this scope to include the experience of place in a virtual
context via an avatar, I draw on the ideas of Ihde (1990, 2002) and Verbeek
(2005), who have built on Heidegger's (1962) and Merleau-Ponty's (1962)
notion of human–technology relations and extended embodiment. Place is both
a lens through which I am examining virtual pedagogical place and an
existential or dimension of experience. In Chapters 3 and 4, I have discussed
how van Manen (1990) describes a way of understanding experience through
dimensions, which he calls ‘existentials’. These dimensions (existentials) are associated with corporeality, spatiality, temporality and relationality. They also translate as embodiment, space/place, time and relations.

**Place-making**

In Chapter 3, the literature from human geographers has indicated that physical setting, activities and meanings are integral for place-making. Using these three elements as a starting point, I here examine the sub-themes and meaning statements associated with those themes grouped against the place theme.

Firstly, participants described some kinds of places as:

- an outdoor type area
- a beach
- a whole village
- a breakout room
- a poorer part of town
- a giraffe zoo
- education headquarters.

Each of these examples indicates a place where certain kinds of things might happen. These descriptions have affective and effective qualities that create a feeling or indicate an activity or action. ‘A poorer part of town’, for example, emotes a downtrodden, not-so-nice place to be in. ‘An outdoor area’ on the other hand signifies something more pleasant and indicates certain kinds of activities might take place that would be different to those in ‘a breakout room’ or ‘education headquarters’.
Academics’ avatars engaged in specific activities that were afforded by the artefacts (digital objects) that define or make up certain places which I call ‘built pedagogies’, drawing on Monahan’s (2002) concept. The following participant excerpt is an example of built pedagogy, because the artefacts were designed to teach users certain functions of operating and coordinating an avatar. However, it is the activities, which are somewhat fanciful but designed to be experienced in a fun way, that helped create this island as a place that people became attached to:

Scattered all through the places were little fun things that they could do or they would interact with, but if you wanted to go out to one of the islands to have a meeting, you could teleport there or you could take a motorised boat or a float tube and there were canoes that you could paddle in pairs, so if you wanted to meet with someone, you could go and paddle around the island (RP6, p. 3, para 1).

The language used in this passage is once again from a first-person perspective, as if the person is the avatar. "If you wanted", “you could teleport”, “you could take a motorised boat” and “if you wanted to meet with someone”: each of these extracts refer to “you” and “someone”, not the avatar. This indicates a sense of presence or sense of being there through an enactment. Spending time participating in activities is a mode of dwelling.

Whereas a number of participants used the virtual world SL as a pedagogical tool, RP6 used it as a location for teaching and learning, so her sense of dwelling
comes through more strongly than with others who used it in ways such as with the geographies of freedom discussed earlier in this chapter. Reading back through the entire transcript for RP6 and listening to the recorded interview, there is a strong sense of deep connection with the virtual-world island for her, for the people in her class and for others who helped to build the island.

**Belonging and dwelling places**
The island that RP6 created, which had specific pedagogies embedded in the design, was the place that her class remained located in rather than always travelling to other SL locations. Spending time in a place is a contributor to place-making (Relph, 1976, 1981; Tuan, 1979), so the time spent on the island could have given RP6’s class a deeper sense of being in a place or a deeper connection with the place. This connection continued and was reinforced outside of the island (in-world) and flowing over into the concrete world, as displayed in the following transcript extract:

You always wonder how much of it gets used and I actually extended the island at one stage because someone wanted to put up a site for their school and they didn’t have anywhere to put it, so I extended the island and gave them a bit of land to use and I got all these irate emails and instant messages and things saying ‘Do you realise that you’ve extended the land and that we can’t get the canoes around the island anymore?’ There’s a land block right next to the edge, so people were obviously using those tools to make working a more pleasurable, fun experience and using the natural beauty of the place, and lots of people would send me photos
that they had taken, saying 'Did you see that beautiful sunset on XXXX today?' (RP6, p. 3, para 1).

The above data extract captures the sense of fun that comes through clearly in the transcript as a whole. The learning activities undertaken by her class were collaborative group work and required them to interact with the virtual environment and artefacts within it. Thus strong engagement with the space was encouraged through the pedagogical approach, which was learning embedded in the virtual environment. This approach could have contributed to the deeper connection her students seemed to have with the space. People engaged with the aesthetic of the virtual space in a realistic way; in the extract above, RP6 talks of the “natural beauty” of the place and her students commenting on the sunset.

In addition to students developing a connection with RP6’s island, a collection of people formed across the world in an ad hoc way to help RP6 build the island in preparation for running classes. In Chapter 1 I gave a brief overview of the process for owning land in SL and building objects to create an environment. The island comes as a blank slate and buildings, landscapes and so forth must be created by the user. There was a strong reaction from people who helped RP6 build the island, who then developed or used the space for their own projects from time to time, and from students when RP6 was going close her account and decommission the island. They had developed a deep connection with the space:
I was going to decommission it and I was asking around with people that I knew if anyone wanted to take it over and people were just horrified. It was like ‘You can’t! You just can’t! XXXX can’t not be there’ (RP6, p. 5, para 4).

And:

They have amazing attachment to it and not necessarily people who have been in the program either – just lots of people who have been to events there and lots of people who learnt how to use Second Life there (RP6, p. 5, para 5).

These findings indicate that virtual-world places have the capacity to evoke feelings that are not dissimilar from certain kinds of experience possible in physical or concrete worlds. For example, they can be experienced as private places. RP1 described a particular place within a larger part of her virtual world island:

I still take them there because it’s private and they can only get in if they’re members of my group, so if they want somewhere private, that’s a good spot for them. XXXX is quite big, even though it’s open, they know spots that they can go that are very private, that a casual visitor wouldn’t find (RP1 p. 3 para 1).

There is also a correlation with embodied comfort, as described by RP7, who did not build the learning space but used a number of different places others
had developed. When asked if there were changes he would make to the
learning spaces he used, he responded:

   Definitely, because there are some things in the space that I use that I
don’t like. Sometimes because of the colours, I think they are not so
comfortable. Well, sometimes also the space where they can sit or where
they can stand, I don’t like it either, so if it were me, I would make it a lot
different (RP7, p. 4, para 3).

RP7 discussed the comfort of his student avatars: there are certain places where
they must sit or stand which were not suitable. He discussed the virtual space in
terms of the effect the space had on the avatars. Indeed, research by Blascovich
and Bailenson (2011) found that the proximal space for avatars was not
dissimilar to the personal (culturally specific) space for the human body and
that avatars mimicked human behaviours, such as moving away from an
unfamiliar avatar when they were too close. Additionally, it is unclear how the
colours made RP7 uncomfortable, but in understanding the avatar as the
extended embodiment of the corporeal participant, the discomfort (or comfort)
of the virtual space is experienced as the extended here-body.

**Materiality and virtual-world artefacts**
In Chapter 2, the materiality of learning spaces was examined, bringing to
attention the relative lack of literature that examines the role of objects and
artefacts in discourses of materiality in learning. This is discussed in more detail
through the discussion of the findings in the next chapter; however, the
materiality of the virtual world, which consists of artefacts, influence the ways
in which participants experience the virtual world, are intrinsic to place-making and help in constructing figured worlds. Much of the extent literature focuses on physical or concrete notions; however, my understanding is framed within post-phenomenology’s notion of mediated experiences, where artefacts become a hermeneutic dimension of the relations between participants and the virtual world.

Academics (and students) must read and interpret digital artefacts in order to experience them in a way that provides context for a place (a learning place, for example, or a fun park) or a specific pedagogy as in action learning. Just as artefacts in everyday life must be interpreted in order to understand their use, such as a coat to keep warm, a pen to write with, a mobile phone to communicate with, so too do digital artefacts need interpreting in order to understand their use. As Vaesen and van Amerongen note (2008, p. 779), “failing to understand the purposiveness of manmade objects comes close to failing to live in an environment that is pervasively artifactual”. The designer of the artefact may have a specific intention; however, this is not to say that it will be used only in this way or indeed in the intended way at all, as I discuss in the ‘Artefacts of different realities’ sub-section below.

**Artefacts as signifiers of identity and identity praxis**

Curiously, as Twining and Peachey (2009) point out, in virtual worlds, rooms and buildings and so forth are not necessary for shelter from the elements; they have no function in this sense. Therefore, the materiality of virtual worlds, the buildings, artefacts, objects and so forth, are signifiers for something. They are used in ways such as to set a scene or invoke a feeling but, because virtual
Chapter Five

artefacts can also be interactive, they are actionable and agentive. In the next interview extract, the sign systems of simulated digital artefacts are plumbed so as to establish the backdrop of a figured world that has an expected code of behaviour. The materiality of the virtual space in this case is used, therefore, as a device to support expected behaviour and an expected way of being for students:

I’ve got a PowerPoint projector that I can use on slides. I’ve got a podium in the centre and they’ve got seats to sit on and I tend to use that, not for long periods of time, but just to set the tone that they’re university students here. That we are pursuing an academic objective and that their role is to learn, rather than just to play. But saying that, one of the things I found out is you start off with that and then you teleport down (RP9, p. 3, para 2).

When new practices are built, we often draw on old or established practices (Gee, 2011). Artefacts are drawn from the concept of ‘lecture theatre’. The podium references institutional academic power and authority. The lecturer at the podium is the focus of the student mass, the expert divulging knowledge. In virtual worlds, almost anything is possible: people fly, teleport to other lands or places and morph into different forms, but in most cases things in SL replicate or simulate real-world scenes and practices. That virtual worlds are still in their infancy and practices specific to a virtual world have not yet been fully developed could be influencing people relying on old practices and known cues.
The transcript extracts used in this analysis are but one section of the transcript as a whole and, while it strongly orientates towards an identity of control and authority, the whole transcript from this participant comes across more as an academic who is highly innovative and creative pedagogically. RP9 did not conduct his virtual class in one place but took students to many places throughout SL and was extremely innovative in his pedagogy; therefore, he used known cues, for example, the simulated lecture theatre, so as to establish identities for himself and his students in order for appropriate behaviours to be adopted.

**Artefacts of different realities**
Not everyone uses virtual worlds the same way and not everyone has deep connections with virtual worlds as places. As I have mentioned at the beginning of this section, there are two ways that the participants in this study used virtual worlds for teaching and learning:

- as a pedagogical tool; and
- as a place where one dwells pedagogically.

In a post-phenomenological sense, this is understood as multi-stablility, which means that a technology can be used or indeed experienced and perceived in different ways by people and for different purposes (Ihde, 2009, 2012, Hasse, 2013). Ihde insists that technologies are multi-stable “in the sense that they can be used in multiple ways intended as well as unintended ways” (Ihde, 2011, p. 8). Furthermore, Verbeek (2005) insists that technologies “constitute a new reality” and “make possible new modes of access to reality that would be impossible without mediation” (p. 135). For RP6, the reality of pedagogical
activity or engagement was one of dwelling and dwelling in a place. As I have mentioned in the previous section under the heading of To care, to dwell for RP10 is to do so pedagogically through an overlapping of concrete and virtual worlds.

The following extract shows that artefacts can also be out of context in a playful and unexpected way:

There are beach towels you can lie on. You can have a meeting in a set of floating tubes on the water; there are fireplaces with logs that if you sit on a log it makes another seat, so that you get automatically larger tables the more people you have. There are little forest-based tables and chairs cut out of timber (RP6, p. 3, para 1).

While there are recognised artefacts such as beach towels and floating tubes, these are out of context for their general everyday use and particularly in an educational setting. RP6 has drawn on the general understanding of the intentional use of artefacts (a beach towel to lie on and soak up the sun or dry oneself after a swim), which signifies relaxing, fun and leisure. The incorporation of these artefacts into the design of the learning space is to create a certain kind of experience. Floating tubes are not often recognised as a place for a meeting in concrete-world contexts, for instance, so participants need to learn how something is used for a different context – in this case, how to sit on and manoeuvre floating tubes for meetings. Indeed, they must learn to interpret these artefacts as meeting devices. In an action learning pedagogy, one person
Chapter Five

may be shown how to use the tubes for a meeting and they in turn show others and it builds from there. However, as stated previously, this does not discount the possibility (and probability) that the tubes may be used in entirely different ways.

Furthermore, the log seats that automatically create a longer table is another out-of-context and unusual function, but it is also agential in that it responds of its own accord to a specific need of it. There is a sense of playfulness that makes this place engaging, as is evident in RP6’s further comment:

In fact I couldn’t get people to go home after orientation (RP6, p. 2 para 1).

‘Going home’ actually meant logging out and leaving the island on SL and returning to the concrete world. This passage introduces once again the notion of two spaces: the space of being in the virtual world and being with others (avatars) and the space of the concrete world that must be returned to. Having said that, as I have mentioned previously in this thesis, the virtual world and concrete world are enmeshed synchronously. The virtual world does not exist without the concrete world and the academic inhabits both at the same time when the virtual world is engaged with.

**Academic creativity and fulfilment through making**

Using SL for teaching and learning afforded creativity for participants on a number of levels. Creativity is notoriously difficult to define; however, Kleiman (2008) notes there is general agreement among researchers of creativity that it “involves notions of novelty and originality combined with notions of utility and
value” (p. 1). Much of the creativity research in relation to higher education tends to focus on creativity in the curriculum or development of a creative curriculum (McGoldrick, 2002; Fryer, 2006; McWilliam & Dawson, 2008; Shen, 2012); however, experiencing creativity for academics is a little researched area. While Kleiman’s (2008) phenomenography on creativity is curriculum-focused, it examines it from academics’ experiences in teaching and learning, identifying five main categories, two of which have been useful in my analysis of creative experiences in SL. The categories Kleiman (2008, p. 211) identifies are:

- constraint-focused
- process-focused
- product-focused
- transformation-focused; and
- fulfilment-focused.

While process and product are possible categories that could apply to academics’ creative experiences through teaching and learning in SL, it is the last two categories, transformation-focused and fulfilment-focused creativity, that are most significant for my analysis:

The waterfall I’ve got in is more like cascading waters, which we’ve got [in real-world landscapes] but it’s a little bit prettier because they are cascading waters around the gum trees and all of that, and I’ve got purple and red plants all around. I’m trying to make it really pretty and it is, it’s nice, so I do walk in it thinking, what can I change, how can I make this
better? and stuff like that. I’m proud of the land. I really like it (RP1, p. 11, para 1).

In a broad-brush examination, this extract is initially about a creative product where RP1 has discussed creating a pleasant landscape; however, this is more about creative fulfilment. RP1 explained in an early section of this chapter that she went to many tutorials and workshops to learn how to build in SL. As with the majority of participants who built things in SL, RP1 had no previous experience and it took many hours to gain the necessary skills to build but also to interact with the SL interface. The line “I’m trying to make it really pretty and it is, it’s nice” indicates RP1 has invested a sense of care in how the place she has created looks and feels. Apart from making the environment look attractive, RP1 has gained a sense of creative fulfilment because she was able to do so: “I’m proud of the land. I really like it” – she was feeling proud of accomplishing something new. Furthermore, RP1 had a sense of being immersed in a motile experience of this space: “I do walk in it thinking, what can I change, how can I make this better?” In using the phrase “I do walk in it”, RP1 is referring to her avatar walking through the 3D space, but she says it in the first person, indicating she is experiencing walking in there.

The following provides a different perspective on creativity:

I’m not really sure how many hours I put into planning and developing the whole thing. It probably was more than I expected but because I was so engrossed in what I was doing, it just seemed to happen. I had the
flexibility of time to just sit up at night-time and create it. I built the bulk of things by myself or I just dragged them out of freebies and then modified them to suit the space (RP4, p. 3, para 2).

In the above transcript extract, this participant appears to have entered into what Csikszentmihalyi (1991) describes as a ‘state of Flow’. The creative process of building the SL space was all-consuming for this participant whereby he was completely engrossed in what he was doing and his skills made possible, where time stood still and his motivation was intrinsic. Csikszentmihalyi describes key components for experiencing Flow that include: challenging but achievable tasks, concentration, immediate feedback, effortless involvement that blanks out worldly intrusions, agency, self-concern disappearing and the sense of duration of time being altered. As Flow was not part of my inquiry, I did not structure questions or the interview process in a way that would enable the possibility of greater depth in relation to these data, but this is an area that is important for future research. Csikszentmihalyi describes Flow as the secret to happiness, the concepts of which I expand on when discussing the findings in Chapter 6.

These two examples demonstrate the creative experiences and sense of fulfillment, which other participants who built the spaces appear to have experienced as well. However, there was also a sense of creativity experienced by some participants who did not build the spaces that manifested in a pedagogically creative way, as discussed in the pedagogy section. Creativity and what I refer to as ‘pedagogy of care’ and ‘dwelling pedagogically’ are unexpected
findings from this research study that would benefit from deeper understanding through future research.

**Summary**

In this chapter, I have presented my findings using a hermeneutic-phenomenological approach informed by van Manen (1990) that has been directed at my research question, ‘How do academics experience virtual worlds as pedagogical places?’ I have used Gee’s (2000, 2011, 2014a, 2014b) Discourse analysis toolkit to assist in the analysis of professional identity, which is a strong theme that has emerged from the data analysis. A hermeneutic-phenomenological approach has proved to be a suitable methodology in gaining understanding of participants’ lived experiences of virtual worlds.

The research question has been viewed through the three lenses of embodiment, pedagogy and place and, while the findings have been structured under these headings, they cannot be entirely separated. The concepts of materiality and digital artefacts relating to my fourth sub-question have been incorporated into the section on place, but are also woven through other lenses at different points, because these too are intrinsic to how embodiment and pedagogy are experienced.

My findings show virtual pedagogical places to be a complex layering of experiences for academics. They are places where academics endeavour to create a professional identity through the projection of body image mediated by the avatar, which has consequences for how academics expect to be perceived by students. Two key identity types have emerged: the Authoritative Academic
and the Collegial Academic, which influenced how academics perceived their relationship with students.

For some participants, virtual worlds are simply a pedagogical tool, whereas for a larger proportion of participants, a virtual world is a place for dwelling pedagogically. Care, dwelling and thoughtfulness comprise a finding in both pedagogy and place. The findings indicate that when academics build the virtual learning place or have a significant input into the design, it is done with care and thoughtfulness. Coincidentally, academics who built and/or designed their learning spaces also enacted caring pedagogies.

Furthermore, these academics were more inclined to experience creativity and fulfilment and displayed high levels of intrinsic motivation and grit. For some academics, virtual-world learning places were difficult places for performing pedagogies in a professional academic way. Across all domain lenses, a key finding is a sense of playfulness and fun.

A summary of the key findings and the significance and originality of this research are discussed in the following chapter, alongside suggestions for future research.
Chapter 6: Discussion and conclusion

Introduction
As outlined in Chapter 1, the purpose of this research study has been to understand how academics experience virtual worlds as pedagogical places. In this study, I have used the virtual world Second Life as a lens to examine the ways in which virtual spaces influence ways of being for academics; however, in light of my findings from this study, this may be reconceptualised as ways of becoming. Indeed, virtual-world learning spaces present spaces for becoming an avatar academic in ways that are influenced by virtual embodiment, avatar-mediated pedagogies and the interpretation of digital materiality and artefacts as places. This in turn shapes academics’ teaching and learning experiences.

The review of the literature in Chapter 2 has found that there is an abundance of published research examining virtual worlds for their pedagogical affordances, the benefits for learners and the implications for educators. However, I have argued that prior to this thesis, very little attention has been paid to the experiences of academics negotiating the new learning spaces of virtual worlds, which is the gap this thesis has addressed. In Chapter 5, I presented the findings I have reached through an interpretive approach to data analysis, drawing on discourse analysis to assist in my analysis of data relating to professional identity. This final chapter provides a discussion of the key findings, the implications of these findings and future
directions. It also provides a conclusion to this thesis and suggestions for further study.

The findings have been presented through the lenses of embodiment, pedagogy and place, and the discussion of these findings in this chapter is structured in a similar way. Importantly for this thesis is that embodiment, pedagogy and place have provided specific lenses through which to examine how academics experience virtual worlds as pedagogical places. These lenses have directed the supporting research questions in asking:

- How do academics experience embodiment in a virtual world?
- How do academics experience pedagogy in a virtual world?
- How do academics experience a (learning) place in a virtual world?

This chapter presents a synthesis of the findings developed through this thesis based on these questions and my additional supporting question, ‘How do academics experience the materiality of a virtual learning place?’

Overall, my findings reveal that pedagogical places in virtual worlds encompass a complex layering of embodied identity, modalities of pedagogical creativity, playfulness and agency, and of dwelling pedagogically in a caring, thoughtful and sometimes difficult way. It has been found in this research that a virtual-world pedagogical place is a figured world where digital materiality and artefacts shape ways of being and influence ways of feeling in spaces, and there are overlaps between corporeal being and virtual being.
Van Manen (2014) insists writing is an essential part of phenomenological research because it “is closely fused into the research activity and reflection itself” (p. 364). Key findings drawn from the data outlined in Chapter 5 are discussed here in more detail and elaborated on through a reflective process.

**Virtual world as pedagogical tool or to dwell pedagogically**

An overarching finding is that virtual worlds can be a pedagogical tool and a place to dwell pedagogically. Although this finding involves each of the three lenses, it is not specific to any one of them. The finding does however reflect Ihde’s (2002) concept that technologies are multi-stable, meaning technologies have different uses for people and therefore are used by people in differing ways. For academics in this study, there are two key ways of engaging with virtual worlds: 1) as a place for dwelling pedagogically; and 2) as a pedagogical tool.

As noted in Chapter 2, while considerable literature on educational research in virtual worlds refers to virtual worlds in terms of being learning or educational tools (see Baker, Wentz & Woods, 2009; Lybeck, Bruhn & Feyissa, 2011; Duncan, Miller & Jiang, 2012), very little literature approaches virtual worlds from a dwelling perspective. The literature I did find that discussed dwelling was related to the immersive experience of presence and from a student learning perspective (see Houliez & Gamble, 2013). Although the findings for virtual worlds as tools are not the focus of my research it is an area that may benefit further research.
Moreover, the literature referring to virtual worlds as tools tends to be a choice of words or perspective by the authors and does not appear to be based on the research. My findings indicate that academics using virtual worlds as a pedagogical tool are more likely to be aligned with what I have termed the Authoritative Academic identity modality. Those aligned with the Collegial Academic identity modality are more inclined to 'dwell' pedagogically in the virtual-world learning place. Dwelling pedagogically is discussed in more detail in the Pedagogy section. I begin with a discussion of findings for embodiment.

Embodiment

Introduction
The nature of this study is phenomenological and so aims at understanding how a phenomenon is experienced as it is lived. As discussed in Chapter 3, a central theme of phenomenological lived experienced is embodiment. The phenomenal body is the perspective from which the world is experienced as bodily being-in-the-world (Merleau-Ponty, 1962). Therefore, for this research study, embodiment was a central focus for understanding how virtual-world phenomena are experienced by academics.

Historically, the body has been central in the teaching and learning experience until recent technological developments enabled distance education on a massive scale through online learning. Although many higher education courses are either wholly or partially online these days, the body is still seen by many as a central element of the teaching and learning process (see, for example, van Manen, 1990; Bresler, 2004; Latta & Buck, 2008; Perry
& Medina, 2011; Nguyen & Larson, 2015). Latta and Buck (2006), for example, insist that “embodied teaching and learning is about building relationships between self, others, and subject matter; living in-between these entities” (p. 317).

New haptic and tangible technologies mean the body is increasingly becoming an interface (Facer, 2011) and advances in virtual reality (VR) allow a more tactile, sensorial experience such as those demonstrated through dental education simulations (see Kolesnikov, Zefran, Steinberge & Bashook, 2009; Bakker, Lagerweij, Wesselink & Vervoorn, 2010). Embodied technology experiences of this nature however, are the future more so than the present. Moving towards a more sensorial embodied experience will be incremental and part of these incremental steps is avatar embodiment in virtual worlds, which allows academics to insert their body back into pedagogical relations in online learning environments. Understanding the experiences associated with being an academic avatar will be of benefit in preparing future academics for teaching in these kinds of environments.

**Embodiment shaping identity and being or dwelling**

This section addresses my research question that asks, ‘How do academics experience embodiment in a virtual world?’ In this study, embodiment was experienced by academics through their avatars in a virtual world in two main ways. It was experienced through the shaping of academic identity projected by the avatar and through experiencing *being* or dwelling in the virtual world.
These findings reveal an intrinsic connection between the corporeal academic and their avatar, supporting similar claims of human/avatar connections (Yee & Bailenson, 2007; Yee, Ellis & Ducheneaut, 2009; Blascovich & Bailenson, 2011). However, whereas Yee and colleagues take a psycho-behavioural perspective in understanding this connection, my findings are framed by post-phenomenological concepts of technology mediation (Hlde, 2002; Verbeek, 2005) where experiences of reality (e.g. the virtual world, relationships with students, teaching) are mediated by the avatar through an embodied extension of the academic.

**Avatar embodiment and academic identity**
The findings of this research indicate there are (at least) three essential elements for professional identity embodied by the avatar: avatar appearance, co-construction with other avatars and the connection or relationship academics have with their avatar. Moreover, the materiality of the avatar signals a reconfiguration of professional identity for academics. The avatar augments their professional identity in the concrete world to some extent, but is also a separate academic identity specific to the avatar. Academic avatar identity is governed by the structures of the virtual world, which is a figured world that has different modalities of signification and offers opportunities for different kinds of professional identity and agency.

**Avatar appearance**
A key finding of this study is the genuine need for an academic’s avatar to project the appropriate professional identity. As the findings in Chapter 5 attest, it was critically important for the academics’ avatars to look a certain way, even though each had a different concept of that look and what the look
meant. To look professional was the aim, but ‘professional’ to a large extent was a subjective interpretation, albeit drawing on shared social and cultural cues. It took considerable time for most of the academics to be satisfied with their avatar’s appearance. Finding a professional look was not an easy task for many and generally a conservative look with business attire was the favoured clothing style.

While it was not important for an avatar to look exactly like the academic participant, it was required to look similar to them. Virtual-world research indicates that the look of the avatar, including the body shape and colour and the clothing, has significant consequences for how others see the avatar and how the corporeal person sees it (see Yee & Bailenson, 2007; Merola & Pena, 2010; Martey & Consalvo, 2011). This current study’s findings demonstrate that research participants were acutely aware of how their students saw them and their attire influenced how they saw themselves as professionals.

I avatar
It is difficult at this current time to obtain a close facial resemblance in an SL avatar, although some highly skilled digital artists achieve impressive results. A reasonable body resemblance, however, is relatively easily achieved even for beginner users. It was important for the academics in this study to have their avatars bear some physical resemblance to them. This was not so the students would recognise them, because many students did not ever meet the academic in the concrete world. Therefore it was of personal importance to the academics for their avatars to look like them and this had a bearing on building a connection between the academics and their avatars.
Chapter Six

There is a significant distinction between the academic seeing themselves as the avatar and seeing themselves represented by the avatar. I have interpreted this as an important element of teaching in a learning space that is unfamiliar and new. Teaching in a virtual world was a substantial shift for all the participants of this research study regardless of their technical ability, because the medium is an emerging area. Confidence is critical to the success of teaching in any capacity, especially where technologies are involved (see, for example, Cunningham & Harrison, 2011; Courneya, 2011), and for academics to connect with their avatar was also connected with their teaching confidence.

Martinez (2011) found in her first foray into SL that it was important to have her avatar look like her; however, as she developed a need for different identities for her research, likeness became less important than other characteristics that were equally important to her sense of identity. This included being a certain kind of dragon avatar.

**Co-constructed identity**
Identity is a co-construction with others and, as Blommaert notes, “a lot of what happens in the field of identity is done by others, not by oneself” (2005, p. 205). We are aware of our body as others see it and experience it (Merleau-Ponty, 1962), which shapes our own understanding of ourselves. Others see the avatar as the extended embodiment of the academic, which shapes how the academic sees himself or herself. The avatar, as Pearce (2006b, p.1, original italics) notes, has “the dimensions of both seeing oneself
and *being seen* by others”. Furthermore, Pearce states avatar identities are emergent and co-constructed with other avatars through social feedback.

This level of co-construction was not evident in my findings, because it was not a focus of this research. However, while Pearce is referring to the context of massive multi-user online games (MMOGs), which have expanded communities through social media networks, SL has similar networks, particularly around education, and so networks may play a role in co-constructing academic identities.

What *can* be interpreted from these findings is academic identity can be co-constructed through the behaviour of student avatars. When student avatars are behaving in an out-of-control way that disrupts the class, they are shaping the academic’s identity as someone who is not in control and possibly unprofessional, because the academic see his or herself in that way. Therefore the co-construction of identity operates through how the academic perceives that the student sees them (their avatar) as played out through the student’s behaviour. Similarly, students who are engaged in learning and are not disruptive co-shape the academic’s identity as professional.

It is only in recent years that SL membership has come with a library of avatars to choose from that can be modified for personalisation. Previously, SL residents needed to have technological skills associated with building and scripting in order to create a professional-looking avatar that went beyond using the rudimentary avatar created via the customisation toolset.
‘Professional-looking’ in this context refers to being a competent and experienced user of SL – not a newbie. Academics did not want to come across as a newbie and also wanted to present a professional look consistent with being an academic, in order to be seen in-world as an academic and as a confident user of SL. Just as it is important for academics to be confident in the lecture theatre or classroom, it is important for their confidence as an academic being in-world to be technically competent with the virtual-world interface and their avatar, and for the physical look of the avatar to signify professionalism. Therefore, to be professional is to be a competent user of the virtual-world technology (that of SL) and for the avatar to have a certain look that reflects the academic corporeal look to some extent in a professional signification.

While the corporeal academic is always enmeshed or melded with their avatar in what Gee (2014a, p. 94) calls the “projective identity”, in post-phenomenology it is not so much about identity but more about being-in-the-world in a way that is mediated by technology through a certain kind of human–technology relation. This analysis reflects my interpretation of my data using Gee’s (2000, 2004, 2008, 2011, 2014a, 2014b) Discourse analysis in order to fully understand the dimensions of professional identity, and hermeneutic phenomenology and post-phenomenology, so as to understand the sense of being in a virtual world in an experiential, interpretive and technology-mediated way.
Chapter Six

Relationship between academic and avatar
For the most part, participants readily identified as their avatar and, while it took considerable time and effort for some to get the right professional look, it cannot be assumed that this is always the case for everyone. One participant had difficulty finding his ‘academic identity’ in his avatar and the experience of teaching in SL was uncomfortable and insecure for him. The performative limitations of the avatar restricted this academic’s ability to project his preferred way of teaching, which was very kinetic.

The ability of the avatar is not consistent with the ability of the person operating it. Therefore, although the avatar is an extension of the corporeal academic’s embodiment, it does not encompass all the abilities of the academic. This can present a problem if an academic is an experienced virtual-world user and confident in the identity of his avatar in contexts other than being an academic, such as social or gaming worlds. This can lead to avatar identity being inadequate and consequently teaching experiences in a virtual world are frustrating and unsuccessful.

These findings on avatar identity development signal the complex nature of being an academic avatar. Warburton’s (2008) mapping of avatar identity development: technical competence, threshold of care, schism, managed instability and multiple avatars, is useful to some extent in understanding the identity disruption that academics may experience. According to Warburton, there are a number of critical points in what he describes as developing a relationship with your avatar. Technical competence is one of the first critical
elements needed to start to connect with the avatar, and ‘threshold of care’ is a process of building social and cultural capital in building friendships and connections and so forth and actually coming to care about your avatar.

What may have been an issue for the academic in this study who experienced frustration through the restricted ability of their avatar is a combination of Warburton’s next two elements, schism and managed instability. ‘Schism’ refers to the tension between the multiple roles (or identities) the avatar engages in, and ‘managed instability’ is the “flux between playful and professional modes of in-world existence” (Warburton, 2008, para 6).

The conclusion can be drawn from this discussion of academic identity that there is a need for academics to be aware of the intricate nature of academic avatar identity and that, if academics have an existing avatar, there may be conflicts between that identity and the one they are trying to portray as an academic. Although having multiple avatars can be a solution (Warburton, 2008) academics would need to be aware of other issues this could raise such as how they connect with each of their avatars and how authentic the different identities are for them.

**Extended body and proprioception**
The findings in Chapter 5 suggest that extended embodiment was experienced by academics through their avatars, which contributed to their experience of identity and heightened their sense of being there, of co-presence with others and being socially present. As stated previously, conceptualising of extended embodiment is here framed by Merleau-Ponty’s
(1962) perception of extended body schema and Ihde’s (2002) embodied human–technology relation, which underpin this thesis. According to Ihde, the technology must become more or less transparent, retracting from the person’s consciousness so they do not see or feel the technology.

My findings indicate that in many cases it is possible for the technology of the virtual world to recede in consciousness to the extent that the virtual world is experienced as a sense of Flow, as described by Csikszentmihalyi (1991) and brought to attention in Chapter 5. Flow was experienced more strongly when participants were building and developing in the virtual world, which is discussed later under the heading of place. However, Flow was also experienced through the avatar engaging in activity with artefacts and other avatars, and this demonstrates the depth of engagement that is possible. Flow has several features and, according to Csikszentmihalyi, is defined as heightened concentration where someone is fully immersed in a process or activity and through which the goals and actions of that activity are challenging but achievable, and involve creativity.

The state of Flow is dependent on the sense of embodiment the academic has with the avatar, which is in turn dependent on experiencing proprioception. Proprioception brings in the human–technology relation theory underpinning the understanding of embodiment in a virtual world presented in this thesis. Proprioception is sensing the perimeters of the body in space and its position and movement through space. The avatar becomes the embodied periphery, the external perimeter of the body schema, for the
corporeal academic and mediates their experiences of teaching, dwelling pedagogically and their pedagogical relationship with their students.

My study contributes to an emerging interest in the avatar-player relationship within games research. Indeed, extended embodiment viewed as phenomenal body and proprioception is gaining increasing interest as an area of research within the philosophy of games. Martin (2012), for example, discusses the game avatar as a phenomenal extended body after Merleau-Ponty’s (1962) theory but also in terms of being a prosthetic, which is not a direction I take in this research. Peachy and Childs (2011) approach avatars from the prosthetic perspective also; however, this would account for the deep connection and sense of identity the participants in this current study had with their avatars. The perspective I take, which is a perspective shared by Norgard (2011), is that the avatar is taken into the player’s body schema not as a prosthetic extension.

Others have researched avatar embodiment but in different contexts and from different perspectives than this research study. Puvirajah and Calandra (2015), for example, used a case study approach to examine the embodied experience of a teacher as part of a teacher preparation program. The student teacher enacts being a teacher through role-play scenarios in a virtual world. Puvirajah and Calandra approach the extended body as embodied cognition and associate it more in terms of a Cartesian mind body/split, where the mind is projected into the 3D space and into the avatar. This perspective, where the avatar is a projection of an identity, is also pursued by others,
particularly within the context of video games (see Filiciak, 2003; Hutchinson, 2007) or cyborg-like extensions (Cleland, 2010) and prosthetics. These examples differ from this current research study’s perspective, which argues that the avatar is embodied by the corporeal person and is part of the academic’s body schema.

**Embodied skills**

Experiencing embodiment through the avatar allowed the academics to interact with artefacts in the virtual world and experience pedagogic activity. Most of the literature on extended embodiment is in a corporeal, concrete-world sense; however, I have argued in Chapter 3 that theoretically these concepts also apply to the avatar in the virtual world, being the extended embodiment of the corporeal academic.

Brey (2000) offers an observation on Merleau-Ponty’s (1962) embodied relations and artefacts that is useful in understanding the ways in which the avatar, as the extended body, engages with the virtual world. Brey notes that artefacts can mediate two kinds of motor skills that are taken into the body schema as “a medium through which motor skills are expressed” (Brey, 2000, p. 9): navigational and interactive motor skills. Merleau-Ponty’s concept of the body schema is described in terms of the way in which a feather on a woman’s hat is taken into the body schema; the woman navigates her environment without damaging the feather in her hat through sensing the feather as part of her body schema, as described in Chapter 4 of this thesis. This is a navigational motor skill according to Brey.
Chapter Six

The ability of the avatar to manoeuvre about the virtual-world 3D landscape and architecture involves proprioception – and is akin to the feather in the woman’s hat, in that the academic knows the spatial relations of the avatar as if it were their own body. *Interactive motor skills* are generally used with handheld tools, and Brey uses examples such as hammers, remote controls and so forth when interactive and navigational motor skills are used in corporeal contexts.

My findings around embodiment suggest the avatar is an embodied artefact in that it allows the corporeal person to navigate the virtual world and interact with virtual-world artefacts so as to experience that world in a certain way – mediated through the avatar. Embodying an avatar incorporates both navigational and interactive motor skills in order for the avatar to operate in an unencumbered way through the dextrous use of input devices – keyboard and mouse, for example. The input devices control the spatial and sensorial motor skills that are experienced by the corporeal academic via the avatar.

For an embodied human–technology relation after Ihde (1990), the technology must become more or less transparent, retracting from the person’s consciousness so they do not see or feel the technology and so forth. My findings indicate that in some cases it is possible for the technological apparatus of the virtual world to recede in consciousness so that the avatar and engagement in the virtual-world space are heightened and can be experienced as a sense of Flow. The avatar became the periphery, the
external perimeter of the body schema for the corporeal academic and
mediated the academics’ experiences of teaching, dwelling pedagogically and
their pedagogical relationship with their students.

**Dwelling as an extended, intentional being through one’s avatar**

Dwelling is a key theme of phenomenological study. To dwell is to be fully
immersed, to dwell in a place and to dwell in a specific state: to dwell in the
state of pedagogy, to dwell in the state of creativity, to dwell in the state of
caring. I use the concept ‘to dwell in a place’ in the phenomenological sense of
a state of being, as in Bachelard’s (1964) ‘human space’, rather than
dimensional space. Dwelling in a virtual place as an avatar is an experience of
extended embodiment, which I argue can be understood as a combination
consistent with Ihde’s (2002) embodied human–technology and Merleau-
Ponty’s (1962) alterity. Briefly, the human–technology relation is embodied
in that the technology is taken into the corporeal body, not as a concrete
technological artefact, but as a digital artefact that is taken in on an emotional
level. Ihde (1990) asserts that it is not possible (at the moment) to have a
fully sensorial embodied experience in virtual environments; however, I
argue that, just as Ihde states that when certain technologies mediate
experience, one aspect of the phenomenon is heightened at the same time as
diminishing other aspects, so also the limitations of a virtual world work in a
similar way. Dwelling is integral to experiencing the extended body and,
therefore, to dwell pedagogically and to dwell in a virtual place, which is
discussed in later sections, is seemingly not possible without the connection
with the avatar as the extended body.
Chapter Six

*Modalities of academic identity: authority and collegiality*

The academics in this research were predominantly orientated towards one of two distinct ways of being an academic and this shaped their avatar identities through artefacts as signifiers, in juxtaposition to other identities and in their relationships with students. It is not clear whether their virtual orientation towards authoritative or collegial identity was different to that of their face-to-face approach, but the findings indicate that the relationships with students in the virtual-world space were more collegial than they experienced face-to-face regardless of orientation. My analysis of these findings is that there are several factors that are facilitating or providing contexts for a more collegial virtual relationship between academics and students:

- Virtual-world space is more informal than face-to-face university – a possible Third Space (as in, Peachey, 2010; Peachey & Childs, 2011)
- Being an avatar academic does not always afford familiar ways of being an academic – there is a shift in *being* for an academic that is more collegial, even for academics who have an authoritative identity.
- The inherent figured world of a virtual-world learning space is more open to creativity and playfulness.

In my study, pedagogies of collegiality have been seen to transcend conventional relationships between teacher and student, and power and authority are shared, which is a perspective not strongly evident in extant educational literature. Chavez and colleagues (Chavez & Soep, 2005; Chavez, Turalba & Malik, 2006), however, coined the term ‘pedagogy of collegiality’ to
describe the sharing of power and authority that characterises successful youth–adult collaborations. Furthermore, Gee (2004, 2005, 2007) introduces virtual-world and online games spaces in terms of ‘affinity spaces’ where traditional hierarchical relationships such as between student and teacher are either non-existent or more equitable.

Unlike other online learning platforms such as learning management systems (LMS), SL involves synchronous (simultaneous) engagement with students. Moreover, it facilitates being with students through avatars. The sense of being there in a virtual environment and being with others is a central concept of presence studies and, although there has been some research from students’ perspectives, there has been little room for the perspective of the academic.

**Pedagogy**

The findings of this study demonstrate that academics are able to incorporate a thoughtful, caring pedagogy into a virtual-world learning space and that being an academic is a central and essential role without being teacher-centred. Unlike online learning that is dominated by asynchronous LMS, where connecting pedagogically with students is difficult, the virtual world provides a synchronous learning space which academics cohabit with students, moreover in a collegial way. The ‘double mediation’, a term I use to describe the academic mediated by their avatar interacting with the student mediated by their avatar, creates closeness through distance. The distance is being together, twice removed.
Therefore, while much of the literature examining virtual worlds in relation to teaching and learning is focused on learning design and pedagogical approaches (see Kamel Boulos et al., 2007; Esteves, Bonseca, Morgado & Martins, 2009; Stoeger, 2012; Whitton & Moseley, 2012), this is generally from the perspective of students or learning affordances, and academics do not feature strongly. This is not to advocate for teacher-centred pedagogy, but to caution that we should not lose sight of the significant role that academics play in the pedagogical process, which can be supported by virtual worlds.

**Care and why is it important for higher education today**

Caring consists of two states, to care about and to care for, according to Noddings (1984) and it has often been framed within existential philosophy (May, 1969) and humanist psychology (Erickson, 1968) perspectives. Heidegger (1962) considers care (sorge) as fundamental for Dasein – one’s being-in-the-world – and Noddings (1984, p. 7) insists “as human beings we want to care and be cared for”. Noddings introduced care within educational contexts in the early 1980s and has written in great depth on the theory of care that grounds education in ethical and moral relationships and practices.

It is this perspective that has guided my interpretation and understanding of academics’ caring towards student avatars. Care, however, is not a common concept within the discourse of higher education teaching and learning and, as McShane (2006) notes, does not form part of institutional policy. With the increase of massification and online learning, it would appear to have
become an almost impossible concept; however, the findings from this study suggest otherwise.

Rose and Adams (2014) share concerns for a pedagogy of care within the push for greater use of technologies such as LMS in higher education, as does McShane (2006). The disembodied nature of these kinds of technologies tends to distance academics from students. A significant difference between LMS and virtual worlds is synchronicity. LMS are asynchronous, which is useful for distributed learning across different time zones, but the connection with students is made more difficult because they are not only faceless but not located in the same space.

On the other hand, virtual worlds are synchronous, which enables being there and being with in the same space for academics and students, which is a key to the criterion that both sets this current research apart from other research associated with online learning and creates a context for care. While the possibility exists for care in asynchronous environments, as Rose and Adams (2014) and also McShane (2006) demonstrate, this current study shows the capacity for virtual worlds to foster care in a lived time and space, which I argue is more meaningful and context specific.

**Pedagogy of care and dwelling**

The opportunity that some academics in this study found to engage in a caring pedagogy was an unanticipated finding of this research. As stated in Chapter 1, the position on pedagogy this research takes is not so much the instructional aspect or pedagogical strategy but, rather, the performative and
Chapter Six

embodied being in pedagogy that is exemplified by van Manen (1990, 2000) as phenomenological pedagogy, which links to my philosophical frames and methodology.

The pedagogical act of caring is often aligned with social work and the social pedagogies influenced by Jean-Jacques Rousseau (1712–1778), Johann Heinrich Pestalozzi (1746–1827) and John Dewey (1859–1952) and later by Paulo Freire (1921–1997) (Smith, 2009). Van Manen (1990) often writes of caring as pedagogy in a relational way and Soto (2005) writes of caring pedagogy as caring by adapting pedagogies to cultural sensitivity.

The findings in this research are oriented more to caring as pedagogy in a relational way. The caring is directed towards the student avatar from the academic avatar. There were three academics who were strongly oriented towards a caring pedagogy; coincidentally, these academics had each built their virtual learning spaces and engaged with virtual worlds in the modality of dwelling. My study makes an original and potentially significant contribution to knowledge of caring pedagogies and the emerging role of academics in technology mediated learning environments. There is little research that examines caring and dwelling pedagogically in higher education contexts and even less in relation to online contexts, although Rose and Adams (2014) do pursue this line of research. To dwell pedagogically in a virtual world is to be with student avatars.
Pedagogical freedom, playfulness and academic agency
What is surprising about the findings for virtual-world pedagogies is the
sense of freedom and playfulness they evoked. The ability to move to
different places, almost like visiting different countries, and new motile
experiences through flying and teleporting added to a sense of freedom and
fun, and sometimes a playful silliness. This level of irreverence and
playfulness is somewhat opposed to more formal perceptions of academia
and it may be that the virtual world has a significant role in returning some
means of pedagogical freedom and pleasure to academic life.

The corporeal academic agency I have found was experienced through the
ability to meet teaching commitments and be somewhere else at the same
time as teaching a class. This is not a significant feature in itself, because
other digital technologies such as LMS and webinars enable this kind of
geographically dispersed connection between academics and students. The
significance of findings of my study is the virtual world provides the ability to
be with students from any location and [almost] any time frame. This level of
flexibility has its pros and cons. While a virtual world affords academics the
physical freedom to be in other places, which might contribute to
professional identity such as attending overseas conferences while still
meeting teaching commitments, it also signals the increasing propensity for
merging work and leisure time for academics. This is an important issue for
further research given the rise in interest more broadly about work life
balance for health and wellbeing.
Health and wellbeing among staff and students are a priority for universities, particularly in Australia where many services that promote health and wellbeing are available on campus and support programs are implemented. These services and programs, such as mindfulness, counselling and so forth, are not always available for staff and students who are not physically located at the main university campus. There is growing awareness of the health and wellbeing benefits of playfulness for adults (see Guitard, Ferland & Dutil, 2005; Barnett, 2007; Proyer, 2010, 2012, 2013; Van Vleet & Feeney, 2015), and the connection Csikszentmihalyi (1975) draws between playfulness, imagination and creativity is well known. It is beyond the scope of this current study to expand beyond its findings around how the academic participants were playful and the ways in which they experienced playfulness in the virtual world, but this does signal a significant direction for future research.

Place
Place has a meaningful role in academics’ work life. Hall (2013, p. 5) notes, “the spaces in which we work, live and learn can have profound effects on how we feel, how we behave, how we perform”. As previously stated, this research has been guided by notions of place as multiple layering of activity, relationships and experiences within the context of concrete locations. It has made assumptions that virtual places can be experienced in ways that are also multi-layered with relationships, activity and so forth, albeit in ways that may differ from experiences of concrete places. The findings have indeed demonstrated that virtual-world places can be salient places for academics, particularly when they have contributed to designing and building them, but
this is not conditional for virtual world places to be meaningful. This finding is significant because online teaching and learning has become a core activity for universities, as noted by Tucker, Halloran and Price (2013), virtual places therefore are becoming academic’s predominant workplace.

**Creating pedagogical places**
Some academics had a specific pedagogy in mind when they built their virtual-world learning space and so they designed the space to support that pedagogical intent. Designing for a specific pedagogy enabled self-directed learning and academic roles were then more as facilitators or co-partners in learning, which encouraged collegiality between academics and students. When designing learning spaces, the embedded cues of artefacts were important as signifiers of pedagogical intent and perceived action. In other words, digital artefacts have meaning.

In Chapter 2, Monahan’s (2002) concept of ‘built pedagogy’ was discussed in terms of new learning spaces currently being developed in universities. According to Monahan, space configurations and artefacts within learning spaces influence pedagogical affordances. However, cues in virtual worlds are more in line with Norman’s (1999, 2008, 2013) notion of ‘perceived affordances’, which are signifiers of perceived action. It would seem that the design of learning spaces in virtual worlds and the embedded cues are of equal importance as they are in concrete learning spaces, but virtual worlds are more malleable and can be designed for specific pedagogies.
Creating a learning place with care
The sense of care that the academics in my study experienced happened in two ways: in building a learning space with a caring intent and in caring for students when dwelling pedagogically. During the coding process outlined in Chapter 4, the theme ‘Create’ was interpreted from the perspective that through the act of creating something, the virtual world was made a more meaningful teaching place for the academics and, while this is so, my findings reveal that a great deal of thought and sensitivity has gone into creating a pedagogical environment.

For some participants in this study, creating a welcoming, comfortable, engaging and active learning space in the virtual world for their students was important. They went to considerable trouble, time and effort by learning how to script and to build and create a space. That only one participant had a technology background in 3D environments, while others had no experience or very little experience in this field, indicates the deep level of commitment to building and customising the virtual world to their own requirements and the needs of their students. This is a significant finding, because I have stated elsewhere in this thesis that I advocate a learning-centred (see Samuelowicz & Bain, 2001) approach, which is more inclusive of all agents in the learning process, rather than the often-used student-centred approach, which tends to eliminate the teacher altogether.

Two of the five academics who built their own learning spaces did so with caring intent; they created a space that they wanted their students to enjoy
being in. Although creating a welcoming and comforting feel to a classroom is not unusual in primary school contexts, where students spend their entire year and dwelling in place is constant, it is not a common phenomenon in higher education. As mentioned in the literature review, new-generation university learning spaces are beginning to incorporate elements of physical comfort and privacy nooks, and aiming to be aesthetically pleasing as well as functional. It is interesting, therefore, to find some academics thinking along a similar vein when creating a virtual learning space.

While the consideration of pedagogically relevant or sympathetic learning environments aligns strongly with the development of new learning spaces, as discussed in the Chapter 2 literature review, there is an additional element of caring that is evident in the virtual-world context. In keeping with the hermeneutic-phenomenological approach, these findings are interpreted as being relational, as in the relationship between academic and student, that is, the relationships created through academics being responsive to the perceived needs of their students when designing the virtual environment. Additionally, being empathic by creating aesthetically pleasing and engaging places to make students comfortable and welcome is a way of being attentive to building a relationship with students. Secondly, I interpret building environments as a form of place-making. Relph (2007, p.1) states that “a life without places is as unimaginable as a life without other people”.

Others have also identified the importance of creating a learning space that fosters caring intent. Bankert and Kozel (2005), for example, found that
creating a caring learning environment for adult learners was dependent on a number of descriptors for valuing, genuine dialogue, relations and connectedness. In order to conduct their research with participants from an undergraduate nursing research class, they moved the location from a regular classroom, which they thought cold and uninviting, to a faculty conference room, because it had a more welcoming and caring feel than the classroom. The material artefacts of the room, such as textured wall coverings, prints on the walls, comfortable furniture and so forth, represented this welcoming and caring feel. So although their findings are affective in nature, the physical environment was equally important.

The lay of the land
In Chapter 3, place was discussed in terms of layers of experience through activity, connections and so forth. Temple (2008b) and also Temple and Barnett (2007) insist that not enough is known about the influence that physical university places have on academic work. According to Temple (2008b), university space becomes place in university contexts through a transformative progression from physical capital to locational capital and into social capital.

In the current study, the findings indicate that places in the virtual university spaces of a virtual world are figured worlds, made so through the materiality of digital artefacts. As noted, digital artefacts are socially and culturally inscribed and are accessed hermeneutically by academics and students as figured worlds. As stated in Chapter 3, the spatial materiality of higher
education is an under-researched area; therefore, the current study makes a contribution to this area.

**Materiality, place, building and dwelling**
The academics in this study were describing their experience of the virtual-world places in material ways. Descriptions were mostly given in the first person, but in some cases the third person. Ihde (2002) refers to this as the ‘here-body’ and the ‘over-there-body’ or the body as spoken about from the ‘I’ first-person perspective and the body as spoken about from the third-person or over-there perspective. The majority of the description in this study by participants was through the first-person perspective and this tended to coincide with Collegial Academic identities and those who were associated more with dwelling in the virtual world pedagogically.

Leonardi (2010) argues for the interpretation of materiality as “practical instantiation and the significance of an artefact” (p. 1, para 6) over the interpretation of materiality as matter. It is these two interpretations: instantiating ideas in practice and significance, together with a hermeneutic post-phenomenological perspective, that frame the perspective of this thesis on materiality and the material properties of virtual-world artefacts. In the virtual world SL, everything can be considered artefacts: the avatars, buildings, landscapes and so forth. Encounters and interactions with artefacts were described in terms of buildings and objects, as well as a sense of motility, such walking, flying and teleporting. Artefacts were referred to as specific objects, such as ‘tiki huts’, ‘logs’, ‘waterfalls’ and ‘flower’.
Chapter Six

Essentially, SL places are made up of ‘prims’, or simple geometric primitives, which are then transformed and skinned with textures in order to create landscapes, cityscapes and so forth. These geometric primitives are seen as material artefacts that signify something in particular. In keeping with the methodological framework of hermeneutic phenomenology, I view materiality as hermeneutic. This means that artefacts can be read just as texts can be, so as to interpret their meaning, and they can be experienced in a phenomenological way suggests van Manen (2014) as ‘lived things’.

The artefacts in a virtual world are visual representations (practical instantiation) of something but they also do something (significance). In most instances, they are 3D objects that can be walked around (by the avatar) and, using different camera views, can be examined in close detail and rotated. Right-mouse clicks reveal the author or maker of an artefact and other information about it. If the artefact is another avatar, this can reveal their concrete-world name, professional affiliations, groups and organisations the person belongs to, their friends and a host of other information, and this signifies identity in a way that augments the visual identity of the avatar. In this sense, the avatar has its own identity.

Artefacts are not simply images or visual objects, but can interact with other artefacts (particularly avatars) and can mediate an experience or a perception. For example, a building in SL can replicate a particular hospital, which is a practical instantiation of a known activity and known ways of being. The activity could be something to do with being in a hospital, like
interviewing a patient if you are a doctor, or being a patient. You would not
be playing football and would most likely not be cooking meals unless you
worked in the hospital kitchen, and you would not be a formula-1 racing-car
driver unless you were a patient or visiting someone who was a patient, and
so forth.

As discussed in Chapter 4, in a post-phomenological sense, artefacts mediate
human–world relations (Verbeek, 2005) in a composite intentionality.
Embodied human–world relations and hermeneutic human–world relations
are mediated by the virtual world as a whole technology, and things
(artefacts) within the virtual world mediate or embody experiences and
actions. Avatars are artefacts that mediate experiences of being an academic
or being a student. This is what I have termed ‘double mediation’, meaning
both student and academic are each mediated by their avatar, see figure 6 on
page 216. They become student avatar and academic avatar. The avatar’s
engage with each other in pedagogical activity in the virtual world. An
example is discussed in Chapter 5 when RP9 took his students to visit a zoo
in Second Life. The place of the virtual world becomes the site of double-
mediated pedagogical activity.

**Virtual-world places as figured worlds**
Virtual-world learning spaces are figured worlds that are similar in many
respects to concrete learning spaces, but can be contested areas. The
freedom to create almost anything in a virtual world could make for a chaotic
environment; however, specific cues help people make sense of it. The
relative newness of virtual worlds, as Relph (2007) notes, means that there
are few established guidelines, rules, cues or so forth for guidance in using and being in the virtual world, and this is particularly so for educators.

In some instances, the academics found that students had difficulty in adapting to being in a university learning space, where student expectations and responsibilities are governed a student charter. Some academics had great difficulty in engaging student avatars in appropriate behaviour, which led to disruptive classes and unpleasant teaching experiences in-world. One approach was to steep student avatars in virtual places where artefacts were embedded with known university learning-place cues such as podiums, projectors, seating and so forth. Introducing student avatars to the figured world of a familiar university learning space established modes of behaviour and expected ways of being before moving to other places. Virtual worlds are new learning spaces that bring new possibilities and ways of being for students as well as academics that are still being negotiated. This is a curious finding that would benefit from further research.

**Place-making and creative fulfilment**

'Creativity' is a term common across a wide range of academic discourses and the popular media, but it is particularly strident in within education discourses. Although the consensus seems to be that creativity is difficult to define, most agreed notions of creativity are built on Csikszentmihalyi's (1996) concept of it as “any act, idea or product that changes an existing domain, or that transforms an existing domain into a new one” (p. 28).

Creativity and innovation are at the centre of a knowledge economy and creativity is considered an essential dimension of higher education. Indeed,
creativity is a central theme across a number of strategic reports in Australia, the UK and Europe on the future of higher education (see Bradley, et al., 2008). As Philip (2013) notes, creativity is listed as a common attribute expected of graduates, with most Australian universities listing creativity as a graduate attribute (McWilliam & Dawson, 2008). Therefore while creativity is an expected outcome of higher education student experience, it would seem that academics should expect creative experiences from academic life in order to be able to teach creatively.

The findings from this study indicate that virtual-world learning spaces can be creative, imaginative and playful spaces for academics. Indeed, the activity of creating a place in the virtual world was important for some academics. However, creating requires specific skills and knowledge and not all the academics had the time or inclination to develop these skills and dedicate time to building. Just over half of the participants were creators and invested the time to develop the skills to build, and expressed creative fulfilment in doing so. The academics who built their own virtual-world spaces had some form of funding or time for this activity allocated from their institutions. These participants developed strong attachments to the places they created.

Relph (1976) points out that the amount of time spent in a place influences the depth of connection; therefore the deeper connection felt by these participants could have been because creating and scripting take considerable time. However, I interpret these findings as being due to a combination of spending the time and the creative fulfilment in doing
something that is new and difficult but achieving the goal of building
something that was a pleasing place to be in (through the avatar).

It would appear from the findings of this study, however, that place matters
for all participants in virtual worlds to some degree, as fondness was
expressed for certain places even when not built by the academic. I have
experienced this many times in SL and have my own favourite place, called
Melbourne Laneways and built by Deakin University in Australia. It is a
beautiful, artistic place that feels nice to be in (see Figure 7).

Figure 7: Second Life - Melbourne Laneways (Hayes, 2007)

**Summary of discussion**
Through this discussion of the findings, it is clear that virtual worlds are
places that are experienced in multiple ways by academics and can be salient
teaching places. Key findings were discussed in relation to the three lenses of
embodiment, pedagogy and place in addressing the research question, 'How
do academics experience virtual worlds as a pedagogical place?" The need for
the avatar to project a suitable professional identity is a key finding. There
are three essential elements of the ways in which professional identity was
embodied by the avatar: avatar appearance, co-construction with other
avatars and the relationship between the corporeal academic and their
avatar. The two key modalities of professional identity are Authoritative
Academic and Collegial Academic, which influenced how a virtual world was
used for teaching and learning: as a pedagogical tool and as a place for
dwelling pedagogically.

Embodiment is conceptualised as the extended body schema of Merleau-
Ponty (1962) and the embodied human–technology relation of Ihde (2002),
where experience of an environment is mediated by a technology. The
extended body is experienced as proprioception, where the interactive and
navigational motor skills (Brey, 2000) are mediated by the avatar, thus
contributing to the sense of *being there* in a virtual-world environment.

The existence of pedagogy of care is a significant unanticipated finding and
demonstrates that virtual worlds provide opportunities for caring
pedagogies, which may be facilitated by the nature of the academic–student
relationship through double mediation. While extended embodiment through
the avatar enhances the sense of being in a virtual place and experiencing
that place, the corporeal academic is separated from the corporeal student
through the double-mediated nature of two avatars interacting. The
interaction (academic/student) is twice mediated via their respective avatars.

Furthermore, virtual worlds provide the opportunity to dwell pedagogically. ‘To dwell’ is here used in the phenomenological sense as a state of being that is described by Bachelard (1964) as a ‘human space’ rather than a dimensional space. Therefore, to dwell pedagogically is to dwell as an academic and to dwell with the students. The significance of this finding lies in the fact that much university teaching and learning today occurs in online contexts but to date these have been somewhat unsatisfactory in developing meaningful pedagogical relationships. Dwelling in a virtual world through the extended embodiment of their avatar gave academics a keener sense of being there and being with their students, so creating a collegial experience.

A virtual-world place was experienced pedagogically in a number of ways: through designing and developing to facilitate a specific pedagogy, developing the learning space with caring intent and being creative. Virtual-world learning places are experienced as material worlds where artefacts have embedded cues linking to concrete-world practices. Furthermore, they are figured worlds that at times rely on the artefacts of concrete figured worlds to instantiate social and behavioural norms. The virtual-world learning space is a hermeneutic space, in that it is continually read and interpreted by academics and students as part of the pedagogical process.
Chapter Six

The surprising finding that academic freedom, agency and creativity are being experienced in virtual-world places through the designing and building of them suggests these kinds of technologies are much more than learning spaces. Furthermore, the finding that virtual worlds foster playfulness has consequences beyond the expectations of this study. As discussed earlier, emerging research on adult playfulness has indications of benefits for health and wellbeing, and is an area strongly suggested for future research.

**Conclusion**

As I have stated in Chapters 1 and 2, universities are increasingly moving towards learning landscapes that are complex mixtures of multiple online spaces, compilations of face-to-face and online interaction, and concrete spaces that are spliced with other times, spaces and inter-corporeal experiences, echoing Horan’s (2000) ‘recombinant design’. The findings from this research study, therefore, have important implications in understanding how academics can be best supported in adapting to this changing environment. These findings suggest that within this eclectic mix, virtual-world learning spaces are places where academics might dwell pedagogically with care, creativity and agency – but also that virtual-world technology shapes ways of being an academic.

It is not difficult to imagine a future world where academics will never have face-to-face contact with their students. Indeed, this is a realistic scenario for many academics even today in most universities in Australia and across the world. Significantly large numbers of courses or units within courses are currently being taught exclusively online through LMS, massive open online
courses (MOOCs) and so forth, and the trend is towards increased online access. A pressing issue for moving learning online, especially for whole courses, is that technology platforms such as LMS and MOOCs make it difficult to provide experiences that are similar for practical components such as teacher education practicum, healthcare worker practicum and other forms of real-life or real-work experience.

The future directions for higher education indicate the university norm will be online and the exception will be face-to-face; therefore, it is not far-reaching or fanciful to imagine that virtual worlds or 3D virtual environments in some form will be necessary to augment practical experience. Indeed, it is not a far-fetched concept to imagine an academic, a schoolteacher or a healthcare worker never having practical human-to-human experiences in their professional work life. For example, the advances in telemedicine, the rise of home schooling, particularly in the US and Europe but also increasing in Australia, and the ‘internet of everything’ means that less professional human-to-human contact will be essential for teaching and health-related care.

Given this scenario and the prospect of increased online learning in higher education, virtual environments will become an integral part of an academic’s workplace, if not their only workplace. How they shape and perform their professional identities, how they build relationships with students and colleagues, and how they dwell creatively and become fulfilled in these environments are key issues.
Chapter Six

**Aim of the research**
The main goal of this study has been to understand how academics experience virtual worlds as pedagogical places. The focus was through the dimensions of embodiment, pedagogy and place, because these elements have provided perspectives on academic experience that are complex but that have also narrowed the focus and made the study manageable.

While there is abundant research on virtual worlds in higher education, there is very little that considers the perspective of academics, as noted by Gregory and Tynan (2009), and none that I could find at the time of this study that considers this within the frame of human–technology relations. This study has shown that pedagogical places in virtual worlds are indeed multifaceted layerings of identity practices, extended body experiences, material figured worlds and affinity places that foster collegiality among staff and students.

**How the research has been conducted**
This research has been conducted using a hermeneutic-phenomenological methodology and has been framed by theories of post-phenomenological human–technology relations. The participants were academics from Australia, the US and Europe who were experienced in using virtual worlds for teaching and learning. The research approach was appropriate for obtaining the rich, descriptive data needed in order to understand the complex nature of the phenomenon. Phenomenology has provided a means for understanding this experience as it was lived by the academics.
Chapter Six

Significance
This research study has provided some insights into how academics can manage their online professional identities in a creative and fulfilling way.

Four overarching ‘take-home’ findings can be encapsulated as playfulness, creativity, dwelling and care. As Temple (2009) notes, “we do not properly understand how the university’s physical environment contributes to its academic work” (p. 209).

What has been presented in this thesis is a picture of what this means for a group of academics who have sought new and innovative ways to engage with students in academic endeavour. These academics are innovators and early adopters and therefore are not a sample of what is currently happening broadly across universities today, but a sample the future. Technologies are developing at such a rate that the capacity for immersive, multi-sensorial experiences in virtual environments already exists. At some point in time, teaching in these spaces will become the norm and the question will be whether universities have prepared their academics sufficiently to teach in these spaces.

The findings in this thesis are significant in that they present a snapshot of academics’ experiences that will contribute to other academics’ understanding of the challenges of working in virtual-world environments and so contribute to future professional development for staff and possibly policy around staff working in virtual spaces, which is seriously lacking at this point in time.
Chapter Six

**Limitations and directions for further research**
As with all research studies, there are inherent limitations in this study that could affect the outcomes of the research. This study has focused on academics using the virtual world SL and therefore the findings are not necessarily transferable across all virtual worlds. Furthermore, the participants in this study could be considered ‘innovators’ within Rogers’ (1962) theory of the diffusion of innovation, and therefore they may not represent the majority of academics teaching in universities today. Consequently, their experiences may not represent how academics who are not innovators experience virtual worlds.

The findings of this thesis should be used as a guide for academics who are thinking of working in this way and for universities that are designing professional development for academics. In Chapter 2, I presented a conceptualisation of a future perspective on higher education learning spaces as multifaceted, multimodal combinations of face-to-face and online interactions and spliced with other spaces, consistent with Mitchell’s (1995) ‘city of bits’ and Horan’s (2000a, 2000b) ‘recombinant design’. This perspective is the near future, rather than distant, and is in some cases current practice.

It should be acknowledged that this thesis presents findings supporting just one dimension of this complex ecosystem of learning spaces and one aspect of this dimension – the experiences of academics. It does not examine all aspects, such as student experiences, policy considerations, systems
management and so forth. Having stated this, these findings are significant and present a springboard for future research into what it means to be an academic in the 21st century.

The concept of being an academic is being challenged and changed by the new possibilities offered in virtual-world pedagogical places. The changing nature of being an academic is perceived as a progression already underway across universities, on which the influences are many and complex. In terms of change through engaging with new learning spaces, which is the focus of this thesis, a level of complexity has been added through the notion of pedagogic engagement through the double-mediation of avatars. This thesis provides an understanding of the experiences some academics have encountered in virtual-world pedagogical places and how they have engaged with students in pedagogical activity.

A significant area for future research into virtual worlds within the context of higher education is to examine the legal implications. As I have noted previously, there is little policy and procedure guiding the use of virtual worlds in education environments. Legal issues for virtual worlds have arisen over the years; most significant is the virtual rape case that Dibbell (1993) raised, which actually took place in a 2D MOO. The nature of the ways in which social and cultural norms carry over into virtual worlds highlights the complex issues that may surround their use in higher education. Therefore, policies should be put into place in order to guide protocol for academics and universities in using virtual worlds.
My observations
When I set out on this journey of inquiry, I had made an assumption that
place was the significant area of this study, based on my own experiences of
virtual worlds and my previous research on 2D virtual worlds. I did not feel
that there would be significant findings for pedagogy; therefore, to find a
caring pedagogy and a sense that academics dwelled pedagogically has been
a surprising and welcome finding. I believe this study has uncovered a richly
experiential way of being an academic in the 21st century that provides
opportunities for academics to be creative, to be playful, to develop caring
relationships with students and to be fulfilled through dwelling as an avatar
academic.
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6


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List of Figures

Figure 1  Verbeek, P.-P. (2004). Beyond the human eye: Mediated vision and posthumanity Human-technology relations after Ihde, 1990. p.2.  P.82

Figure 2  Irving, L. (2016). Second Life default camera view Screen Capture from Second Life. P.89

Figure 3  Irving, L. (2016). Second Life mouse view Screen Capture from Second Life. P.90

Figure 4  Irving, L. (2016). Avatars Screen Capture from Second Life. P.90

Figure 5  Scott, K. (2016) Campus Quest. Screen Capture from https://campusquest.com.au/ P.119

Figure 6  Double mediation (Irving, 2016) P.216

Figure 7  Second Life – Melbourne Laneways (Hayes, 2007) P.285

List of Tables

Table 1  Themes grouped to lenses P.178