

A PHENOMENOLOGICAL STUDY OF SIX DOCTORAL STUDENTS NEGOTIATING EARLY CANDIDATURE

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Abstract

This thesis describes a small-scale qualitative phenomenological study of the experiences of six doctoral students in the early part of candidature. The focus was on their learning to become researchers. In the study, the participants' experiences of candidature were investigated in the context of their extended lives or Lifeworlds, with the goal of locating the meanings attributed to their experiences. There appeared to be a lack of published research about and understanding of what doctoral students experience when they enter into training as apprentice researchers: their specific concerns, needs, issues and ways of coping with the demands of doctoral study and the regulatory framework of doctoral education.

This narrow and deep case study aimed to identity and describe the concerns and experiences of six doctoral students in their early candidature over a period of one month. The study paid attention not only to their research and academic work but also to aspects of their lives that impinged on their candidature. It also aimed to describe and analyse how they negotiated their way through the early part of candidature, including how they deployed digital technologies as part of their strategies of coping and dealing with the complexities of life. Finally, the research aimed to identify their core needs by considering their embodied and authentic experiences and the emergent concerns they expressed.

Four women and two men participated in the study. Two were international students, who wanted to complete doctorates to gain credentials to become academics, while the other four were experienced Australian educators interested in exploring doctoral study as a personal transformative experience or as an extension of their practice as educators.

Using a set of ethnographic and qualitative research techniques, each participant completed two semi-structured interviews and kept an online journal over one-month. The transcripts of the interviews and journals were analysed using a systematic four-step phenomenological approach devised by the researcher, which included ontological experiential content description, phenomenological reduction, hermeneutical analysis and synthesis.

Philosophical concepts which informed this systematic analysis were derived from the phenomenology of Edmund Husserl, especially his notions of consciousness, *reduction* to

essences and Lifeworld. The idea of a unified self and adaptation to change from *Gestalt* theory and the concepts of narrative, memory and identity from the work of Paul Ricoeur were deployed as interpretive lenses. These ideas, as part of hermeneutical analysis, were important to understand the meanings embedded in the interviews and reflexive journals.

From analysis of the data from participants, 15 findings were identified. These findings included the following:

- 1. Participants' lives as full-time doctoral students were complex and thus they needed to adapt and find strategies of survival as they strove to find a balance between their studies and the rest of their lives, including their domestic circumstances.
- 2. The affective states of uncertainty and doubt were foundational to participant experiences of being early stage doctoral students.
- 3. Issues of belonging, including developing meaningful collegial connections and positive and consistent supervision relationships, as well as issues of wellbeing, were pivotal in the formation of these six doctoral students, especially in early candidature.
- 4. Points of life transition and change were essential to the experiences of all participants and necessitated considerable negotiation in order to move through these points. These points included the transition from other careers into probationary doctoral study and confirmation as the first milestone of doing a doctorate, as participants began to construct bourgeoning narratives of becoming researchers.
- 5. Digital technologies played an important, though sometimes ambivalent, role in how participants negotiated early candidature and coped with its demands.

The project highlights the value of investigating personal experience, internality and consciousness in order to understand the learning in and the strategies of coping with early doctoral study. The study also points to the early period of candidature as one that requires more research and this study is generative of ideas about early candidature that may be taken up by other educational researchers. Finally, the study introduced a distinct approach to phenomenological research that may be deployed in a range of other educational and learning contexts.

A glossary of terms

This glossary provides short elaborations of key terms used in the thesis. A detailed explanation of some of these terms, including relevant literature, is given in the body of the thesis. While there are different ways that these terms might be defined, or understood, the definitions given below reflect the phenomenological orientation of the study and the ways that the researcher thus understood them.

Affective/affectivity

As relating to the gamut of felt states, attitudes and moods experienced by a person.

Agency

The capacity to act or have voice or influence in a given situation.

Analysis

A systematic investigation of a phenomenon by breaking it into its constituent parts to uncover meanings and identify the significance of the inter-relationships between parts.

Awareness

The ability to know though perception, thought, feelings and embodiments in the world.

Bracketing

Identifying and selecting that which is central to experience or to the core meanings identified by a person.

Case/case study

A study of a selected group or cohort that have affinity or common characteristics that connect them. This common understanding is not defining case study research.

Cognition

The mental processes and actions associated with the acquisition of knowledge, which include sensory input, memory and experiences.

Consciousness

The tacit sense of being aware in all its forms, including sensory forms.

Coping

The manner of dealing with life problems and issues that may affect wellbeing.

Deep

Getting to the core or essences of human experiences.

Description

A mode of discourse that provides a detailed concrete account of a person, object or event based on observation.

Digital technologies

A global term that encompasses the digital devices, applications and software that are associated with the contemporary online modes of communication and production.

Embodiment/s

The expression of something in tangible form, often to do with the appearance of the human body and its representations in the world.

Epoché

Another name for the process of phenomenological reduction.

Essence or Wesen

A transcendent core meaning structure in consciousness.

Ethnographic/ethnography

Recording and exploration of meanings in society, groups and individuals through written and/or oral accounts.

Existential/existentialism

The nature of human existence and the related attempts at the finding of meaning or purpose.

Experience

The totality of embodied states, thoughts, feelings, interactions, feedback and actions in the world

Externality

The observable embodied actions of a person

Felt/feeling/s

Internal and experienced emotional state/s or arousal distinguished from thinking and perceiving.

Formation

The explicit or implicit processes of developing the capacities needed to fulfil a role or position, or to take on an identity.

Gestalt

A form, pattern or discrete construction, often associated with perception and the construction of the human self.

Gestalt theory

A theory that suggests that humans perceive the world in wholes and seek patterns in order to make meaning, and that this seeking of wholes also applies to construction of an adaptive self.

Given/givenness

The way a thing is presented in consciousness.

Hermeneutical phenomenology

The movement within phenomenology that is about interpretations of human experience, especially as seen in the texts produced by humans.

Heuristics

The practical approaches and shortcuts used to solve problems and deal with issues

Holistic

Seeing a phenomenon through the disposition of its whole, as well as the interconnectedness and nature of its parts.

Identity

A gestalt or schema of self, composed of embodiments, self-beliefs, interactions with groups, expressions, attitudes, language use and capacities, that is presented in the world and to others.

Intentionality

The imputed sense that is brought to the world and to objects in the world as a human engages with them. This sense connects internality with externality.

Internality

The totality of what is experienced as an internal state of being.

Learning

Acquiring capacities based on adjustments to change or the gaining of skills that support personal or corporate goals.

Lifeworld

The totality of a person's sphere of engagement with the world or a holistic understanding of what constitutes a person's life.

Liminal/liminality

The condition of being in-between or in a state of ambiguity.

Materiality

The substance of a thing in the world, including its composition and dimensions

Memory

The recall of the past and its significance in the life and identity of a person.

Metacognition

Self-awareness and understanding of one's own thinking and the processes and content of it.

Modernism/modernist

An aesthetic, cultural and philosophical movement of the Twentieth Century that was about a departure from earlier traditions and involved creative explorations and new ways of representing reality and human culture.

Narrative

A connected sequence of meaningful experiences or events, and often linked to memory and imagination.

Need

What is required to sustain wellbeing, fill a deficit or fulfil the obligations required of a person.

Negotiation

The finding of ways through the needs and demands of life or the mechanisms of coping.

Ontological/ontology

Concerning the description and analysis of the constitution of being in all its parts and connections.

Phenomenological/ phenomenological approach

The application of ideas from phenomenology to a range of human research contexts, or using phenomenology as the theoretical basis for a research investigation.

Phenomenological reduction

The process of bracketing out and bracketing in what is essential or core to experience

Phenomenology

The discipline within philosophy that concerns the description, analysis and interpretation of embodied human experiences and the related structures of consciousness.

Post-intentional phenomenology

An approach to phenomenological analysis and qualitative research that recognises that all analyses of phenomena, intentionality and experience are post-factorial and embedded in the fluid constructedness of the research process itself.

Postmodernism/postmodernist

A comprehensive artistic. literary, technological and philosophical movement that represents a shift away from certainty and totalised narratives about society and knowing to more localised and less certain expressions of personal meaning.

Representation/s

The ways that a person(s) is portrayed in meaning-systems and signs according to traits, observable characteristics or embodiments, which may include associations with certain groups, communities or categories.

Retroductive/retroduction

Highly fluid and interactive weaving together of research data, academic literature, interpretations and conclusions that reflect constant backtracking.

Senses/sensory

Relating to the perceptual ability to see, hear, taste, smell and touch.

Somatic

The experiences of body and the sense of being a body in the world.

Strategies

Problem-solving actions and plans used to deal with problems or issues.

Synthesis

The cohesive bringing together of the totality of the textural and structural meanings and essences from a person, as ascertained from the disclosed experiences.

Temporal/temporality

Existence located in space and time, especially about the present, or the now.

Text

The personal expressions of experience and self as given in writing that has limited formatting.

Thick

Richly detailed and layered data derived from human contexts and/or highly detailed descriptions of human contexts and individual experiences.

Thinking/thought

The internal forming and processing of impressions and ideas to different levels of complexity.

Transcendental phenomenology

The phenomenological approach of Edmund Husserl in which the transcendent self (of the researcher/s) locates the essences in consciousness.

Uncertainty

The experiential state of being in the unknown or not located, or being between states of certainty that leads to disorientation.

Volition

A person's active expression of will from internality to externality.

Wellbeing

The level of satisfaction with life, including the ability to cope with the demands of life, the degree of health and the sense of happiness experienced.

Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Signature:

Print Name:

Date:

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Second, my six participants were exceptionally generous with their time and with the honesty of their responses to the questions I posed to them. It is a truth that human research depends very much on the deep support of human participants. I feel privileged in being given so much of their lives and listening to their research stories.

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CHAPTER ONE

INTRODUCING THE STUDY

This research project examined the candidature experiences of six early stage doctoral students in an education faculty at an Australian university. The qualitative and phenomenological study focused on describing and analysing these experiences and locating essences (or *Wesen*), or deep structures of meaning, within the experiences of participants over a period of one-month. This exploration of experience is aimed at establishing what matters for these students, including the issues that surround doing candidature, formation as an academic and balancing doctoral study with the complexities of life. The role of digital technologies within these candidature experiences is also examined.

This chapter is an introduction to the study, including the context of and background to the project's creation, the central research questions, the theoretical underpinnings, including the philosophical tradition of phenomenology, and some of the important metaphors and concepts of the study, especially the notion of *negotiation* or the strategies of finding ways through candidature.

Section 1.1 Genesis of the research project

This educational research project developed out of two abiding personal explorations. The first concerns the nature of how humans experience and adapt to the world, especially as these experiences relate to situations that demand peculiar forms of cultural expressiveness and presence in the world. This exploration has emerged from my practice as a teacher and from my involvement in community theatre where I worked with hundreds of actors and musicians over the last 25 years.

Actors, directors and musicians regularly told me narratives about their rehearsal and stage experiences, about their adjustments and improvisations and about how such experiences often intersected with their lives in ways that were serendipitous. These experiences were substantially about both internal states (felt, somatic, perceptual and

cognitive) and external embodiments, which intertwined into complex corporeality. Experience thus became about knowing and embodying intentionality and action.

In 2007, this interest in the experiences of performers led to doctoral research in drama and theatre studies, where I employed a phenomenological approach to understand what actors experience during theatrical performance. My PhD thesis was completed in 2011. As part of this research work I spent several weeks in the UK studying the training methods of theatre director and performance academic, Phillip Zarrilli, and I interviewed several of his students and witnessed their theatrical performance projects. In 2010, I published a journal article about Zarrilli's pedagogy of actor training (Creely, 2010). It employed a phenomenological approach to explore his method of working with actors and his views about the internality and externality of the work of actors.

As well as practitioners in the performing arts, teachers, including trainee teachers, frequently discussed their classroom experiences with me and ruminated about their praxis. I took a keen interest in these teachers and interpersonal exchanges of trust developed as the details of their practice stories emerged. Many of these ruminations and expositions of experience, by actors, musicians, directors and teachers, seemed to encompass differing degrees of dissonance and resistance about institutional policies and discursive practices promulgated within the organisations in which they worked.

Within their experiences, teachers, actors and musicians appeared to be engaging in an existential journey they conceived as part of a future they were dynamically constructing. The personal stories of these creative individuals included an active and strategic proclivity to adjust to the systems and networks in which they were embedded.

As a tentative generalisation, based on my observations and interactions, experience tends to comprise an internal core of authentic consciousness and self-awareness and an external set of conceptual and physical systems to which consciousness becomes attuned and self-adjusts. The linchpin between the internal states and the external embodiments is language, which becomes a way of articulating and communicating both. The second exploration is of my own experiences of university doctoral study, including candidature and thesis writing, in comparison with the anecdotal evidence of the experiences of other doctoral students, with whom I have had quite detailed exchanges over many years. As with the previous discussion about teachers, actors and musicians, it appears that doctoral students share with me the sense that experience as an internal reality is contiguous with the circumstances external to experience.

Indeed, shifting circumstances and needs seem to provoke strategic adjustments and reframing which become essential to the experiential substrate of graduate students, and this phenomenon becomes an important aspect of their learning. In my own personal experience, these strategic adjustments and the ability to deal with change became embodied in digital technologies and in digital devices, especially the iPad, which, from 2010, became my device of choice for my academic journey. Digital devices and online communication spaces afford a virtual place in which I can think, imagine and create. I thus became curious about the extent to which other students shared my experiences of doing research in the milieu of the digital.

Both these explorations, of teachers, musicians, directors and actors, and of doctoral students (including my own narratives of coping, adjusting and developing an academic presence), framed my interest in designing a small-scale, qualitative educational research project that considered the experiences of doctoral students and their strategies and negotiations of finding their way through the candidature process. What became especially of interest was the early probationary period of candidature, up to and including confirmation, which is the first milestone to pass in gaining a doctorate in most Australian universities. This interest emerged from my own experiences of early candidature and of the difficulties that I faced in conceiving a viable research project. It was also instigated from what early candidature PhD students related to me anecdotally about the struggles they faced as beginning doctoral researchers and how they employed digital technologies as part of negotiating the demands of being a doctoral candidate.

Section 1.2 The research context

Postgraduate students, especially doctoral students involved in the process of candidature, have been the subject of considerable research attention in the last 10 years. This literature is reviewed and critiqued in Chapter Two. This research interest is not only evident in education research publications but also in journals and books from disciplines as far ranging as economics, psychology, philosophy, sociology, medicine and computer technology, and includes interdisciplinary research projects (Golde & Walker, 2006; McAlpine & Norton, 2006; Nerad & Heggelund, 2008; Ehrenberg, 2010; Gardner, 2010; McAlpine & Amundsen, 2012; Ampaw & Jaeger, 2012; Stubb et al., 2012, 2014; Crawford et al., 2014; Pratt et al., 2015).

The reasons for this research focus may stem from the considerable investment of finances, resources, reputation and personnel that universities make in their expanding doctoral programs (Chatti et al., 2007; Neumann & Tan, 2011; Shin et al., 2011; Sauermann & Toach, 2012; Parker, 2013). Indeed, the financing of PhD programs, within the funding arrangements of universities in Australia, is dependent on student completion. As such, the issue of attrition and the expenditure on labour to supervise and manage doctorates are critically important for the economic viability of university doctoral programs (Halse & Mowbray, 2011; Naylor et al., 2016).

However, increasing research about doctoral education may also be due to the changing learning and communication environs of research students, fostered by globalisation, internationalism and the digitisation of education. PhD students operate as agents in a tertiary educational environment apparently characterised by change, transformation, as well as dislocation (Arvanitakis & Hornsby, 2016; Neubauer & Buasuwan, 2016). In this setting, there is interest in new pedagogies and alternate forms of graduate education in the wake of the impact of digital technologies, mobility and the advent of personal digital devices, including online communication in professional virtual communities, information seeking and the use of social media (Jones & Healing, 2010; James, 2011; Glazer, 2012; Beetham, 2013; Bell & Federman, 2013; Yadav & Singh, 2016). In sum, the changing environment of doctoral education appears to have provoked a renewed interest in exploring this distinct student cohort, one that

constitutes a significant part of the research output of universities and thus involves issues of funding and the global ranking of universities.

Given these changes and developments, it appears reasonable to assert that the use of and access to information and communication technologies (ICT) might be one fundamental constituent element of doctoral students' strategies of coping with current tertiary learning environments and dealing with the complexities of balancing research with living life, as I earlier suggested was my own experience of doing a doctorate. Such an assertion, however, requires systematic research to establish its veracity and the extent to which it is indicative of experience *in situ*.

Investigations about the role of digital technologies in the study lives of students is not new. Early quantitative research by Kennedy and his colleagues at the University of Melbourne (Kennedy et al., 2008) suggests that, for the Y-generation of students at least, there is not only extensive use of ICT to support their studies but also growing use of mobile phones as organisational devices. These researchers conclude that there are overwhelmingly positive attitudes by tertiary students to using ICT to negotiate academic studies.

Their study is supported by the research of Eriksson et al. (2009) on non-traditional tertiary students (including distance and mixed-mode students) for whom ICT and digital technologies serve a critical role in connection, socialisation and access to information. Both studies were in the pre-tablet, pre-cloud era, before the release of the current generation of mobile smart phone and tablet devices, and both studies present an essentially optimistic view of the role that technology can play in the education of tertiary students. However, I wondered if this optimistic view of the affordances of technology in the lives of students reflected the views and experiences of contemporary graduate students, especially doctoral students.

I speculated to what extent doctoral students, who may be from different generations and cultural backgrounds, viewed digital technologies as useful, helpful or essential for their work and practice as apprentice academics. The question of the place of digital technologies in the lives and experiences of doctoral students is one issue, among a range of issues, addressed in this study of the extant experiences, attitudes and narratives of a small group of beginning doctoral students.

Section 1.3 Research questions in the study

This research project comprised a deep and narrow qualitative case study, using a phenomenological approach, which examined, analysed and interpreted the voiced experiences and narratives of six PhD students in the early stage of their candidature in an education faculty, up to and including the confirmation milestone.

My close look at the embodied experiences and stories of these six students brings attention to the processes of learning and adaptation, socialisation and communication that are pivotal to progress through and just beyond the probationary phase of candidature. I argue that examining the minutiae of experience is essential for understanding learning, especially about how doctoral students adapt to their circumstances and form an academic identity. These adaptations are revealed in the critical existential boundaries of change and growth that a person recognises in consciousness and can then offer in language through a structured research process.

Recently, I published the methodology of the study and the nature of this structured research process, in an article in the British Journal, *International Journal of Research & method in Education* (Creely, 2016). This article drew considerably from material in this thesis and especially emphasised the place of close phenomenological research in understanding learning and its links to the affective in human experience.

The research focus was built on four inter-related research questions:

- 1. *What do early PhD students experience in their candidature?* The study focused on the ontology of what is present in experience as recalled by participants. This ontological description became a necessary first inductive step in understanding such experience and its significance in terms of early stage doctoral candidates.
- 2. *How do PhD students negotiate early candidature?* The study was concerned with the strategies, processes and mechanisms that accompany the existential

movement through the early stages of candidature. It included adaptive behaviours, feelings and thinking related to this negotiation.

- 3. *What is the role of digital technologies in how early candidature is negotiated?* The study examined the role of digital technologies in the beginning processes of negotiating candidature and evaluated the extent to which such technologies were centralised in or shaped experience. The study also engaged with a critical examination of the usefulness of digital technologies in the lives of doctoral students.
- 4. What are the needs of students in the early phase of doctoral candidature? The study focused on the core needs of doctoral students as suggested from what they articulated from their experiences. The detailed investigation of experiences undertaken in the study provided the basis for getting to the authentic views about what participants believed they needed in their candidature and more broadly in their lives during candidature.

The study focused on *how* these early stage doctoral students negotiated their way through and managed their research, adapted to the strictures of candidature (including confirmation), formed significant inter-personal collegial relationships, wrote with cognizance of the expectations of doctoral candidates and adopted an academic persona and set of professional academic practices.

The study considers the meanings that the PhD students attached to these negotiations and expectations, and the attendant experiences, including affective experiences, which accompany meaning formation. The negotiations of the doctoral students included the heuristics, strategies and schema that are positioned as part of this negotiation process or utilised as ways of meaningfully organising academic and personal worlds.

Attention is given to the role of digital technologies in negotiating candidature, which includes the use of digital devices (such as laptops, smart phones and tablets) that may be employed as part of research, communication and writing, and as a means of accessing virtual communication spaces and other forms of online interaction, including social media. While there has been some research about the experiences and

attitudes of doctoral students in terms of candidature, there has been little research examining how the use of digital technologies (including mobile digital devices) can mediate or affect the conduct and experience of early candidature (see Chapter Two).

The research project is informed by the following key ideas:

- 1. The difficulties and adjustments needed in early candidature;
- 2. The support that doctoral students need to optimally negotiate their probationary doctoral period and resolve difficulties through strategic adjustments; and
- 3. The role of digital technologies, including mobile digital devices, in the learning, adjustments and negotiations of doctoral students related to their research needs.

In regard to the third point above, the research examined the use of digital devices as a means of negotiating requirements and accommodating change. As intimated above, I was interested in examining how flexible and useable students believed digital technologies to be in facilitating learning and enabling the meeting of early candidature requirements. Was their involvement with digital technologies fundamentally positive? In a range of other educational contexts there is evidence that digital technologies lacked usefulness or were disruptive for some students; perhaps their experience of them, as part of their learning, was substantially negative or inhibitive (Geist, 2011; Wilson & Boldeman, 2011; Baker et al., 2012, 2013).

This third research question needs further examination and clarification. Despite the claims about the educational potential of technologies in graduate education, more systematic research is needed to investigate how doctoral students employ, experience and interact with digital technologies. There also needs to be greater consideration of the implications of their usage for meeting academic goals and the ability to effectively communicate and write.

Furthermore, given the conditions of living as doctoral students - with families, work responsibilities, financial commitments, friends, community, cultural considerations and personal needs - the complexity of students' lives can be viewed as woven together

with their learning, study programs and use of technologies, in what amounts to a holistic Lifeworld.

Section 1.4 The theoretical orientation of the study

The term *Lifeworld* is used extensively throughout this thesis, and is derived from phenomenological and sociological thought (Rosen, 2006). It is conceived in this research as being the immediately experienced totality of a person's embodied and situated existence, constructed in personal narratives, and lived with a potent affective or felt component (Husserl, 1970; Sellin et al., 2016). It could also be understood as the tacit sense of all that constitutes the identity of a person in the topologies and systems of being in the world. It is the entire sphere of experience of the world, including with other beings in a social realm (Sokolowski, 1988). A person apprehends this sphere through the senses, and the sphere becomes structured in consciousness and then imbued with meaning.

As part of the research focus on participant experiences (see 1.3), I set out to investigate the *entanglement* between the Lifeworld of the participants and the early candidature process, including the institutional requirements of candidature and the existential experiences of meeting these requirements. The study explores the core meanings of being a doctoral student and attempting to find agency in a university research environment replete with expectations.

However, to engage fully with the ideas and the questions about the experience of being a doctoral student in early candidature, I needed a cogent theoretical position that incorporates the notion of Lifeworld and includes a supportive methodological approach. It needed to be one that could suggest how to gather, describe and reveal the significance of embodied experiences, strategic thinking processes and the use of technologies that are part of negotiating candidature. The theoretical position that I selected to facilitate this aim is phenomenology, a philosophical approach to understanding experience and knowing that I explain in Chapter Three.

Suffice to say at this point that phenomenology is a discipline within philosophy that is concerned with the structures of and meanings in first-hand human experience and embodiments as revealed in consciousness (Moran, 2000; Sokolowski, 2000; Gallagher, 2012). It centres on intentionality: the core or essential structure of consciousness in which objects in the Lifeworld of a person are accorded sense or meaning-content related to what is ascribed to them by a person, and thus a person interacts or is embodied with such objects (including technological and educational objects) in ways consistent with the sense ascribed to them (Dennett, 1987).

Phenomenology is a philosophical approach to knowing in which the substance of discourse is orientated to the body, to human experience and consciousness, and to the existential disposition of living in the world. As a point of clarification in this study, *phenomenology* refers to the discipline within philosophy, while the term *phenomenological* is about the selection or appropriation of ideas or approaches from phenomenology for use in a range of disciples outside philosophy (Lindseth & Norberg, 2004; Dahlberg, 2006).

The utilisation of phenomenological concepts is valuable in this study because it enables the researcher to explore internal (unseen) human experiential and thought states, as well as external (seen) corporeal outcomes of those states. In interpreting the experiences and corporeal states of the doctoral participants, both the external manifestations of early candidature and the internal states that accompany these manifestations are equally important to consider.

In sum, doctoral students' experiences of learning and negotiating candidature are personal and involve non-observable states of internality as well as external actions. As such, the phenomenological focus on first-hand human experience seemed most apt for understanding what the students reported about their experience of negotiating candidature.

Three distinct phenomenological perspectives were employed to understand the nature of the experiences of the six doctoral students who participated in this research. These perspectives, explicated in detail in Chapter Three, serve as hermeneutical lenses to facilitate detailed textual analysis of experience. The first of these lenses derives from Edmund Husserl, a German philosopher, who is foundational for phenomenology, especially in concepts to do with intentionality, the structure of consciousness, the Lifeworld and the essences in experience.

The second perspective or lens on experience is derived from the German psychologist Max Wertheimer's *Gestalt* Theory (King & Wertheimer, 2005). Wertheimer argues that humans tend to see the world and the self in terms of wholes or gestalts, but these gestalts are subject to renewal and change that form, through adaptation, new gestalts. Wertheimer's theory is appropriate because it provided a theoretical frame for conceiving the link between change, identity and learning in the experiences of the beginning PhD students.

The third theory selected as an interpretive lens is Paul Ricoeur's hermeneutical phenomenology (Idhe, 1971). Ricoeur is an important philosopher in the field of hermeneutics. He connects hermeneutics with phenomenology, and in doing so associates language, human experience and consciousness. According to Ricoeur, humans are bounded in their experience of being in the world, but through narratives that depend on the nuances of language they can create meanings that transcend their boundedness. His hermeneutic lens is important for conceiving doctoral candidature as a bounded, temporal frame of human existence, but one also with the potential for sponsoring idiosyncratic narratives of identity and self.

Section 1.5 The key concept of negotiation

Learning and *negotiation* have been presented as the key concepts in this investigation of the experiences of beginning PhD students and how they transacted their candidature. These concepts share commonalities, such as being constituted in change, but are not the same. According to *Gestalt* theory, learning is about functional adaptation of the unified self in response to change in the world and the consequent growth in skills and understanding (Koffka,1963; Smith, 1988). However, I understand that the term *learning* is contested and its usage can be quite discipline-specific and specialised, depending on the context (Barron et al., 2015). In this study, I conceive learning to be the processes of adaptation and acquisition that ensue from encountering change and meeting expectations based on personal or corporate goals. I take *negotiation* to be about the *mechanisms, processes* and *strategies* of this adaptation that are formed in the intentional engagement of a person with the world, as well as the constituency of the journey through change. This understanding reflects the phenomenological basis of this research, as introduced above and explicated in Chapter Four.

There is an extensive literature on the use of the term *negotiate* in education. From this literature three uses of the term resonate with the concerns and methodology of this study. One use of the term concerns the idea of *learning how to learn* or what Cobb (2000) regards as negotiation pedagogy. This involves strategies and heuristics of learning and awareness of these processes.

Another use of the term concerns *negotiation of meaning*, which suggests the language mechanisms of learning in social relationships, often involving situations of dispute, different viewpoints and collaboration in both face-to-face and virtual communication environments (Burato & Cristani, 2009; Koohang et al., 2009; Lai, 2011; Koohang et al., 2014).

Finally, the term can be understood as *a form of reflexivity* in which a person is involved in self-dialogue, as well as dialogue between self and texts, in both their creation and interpretation (Alvesson & Skoldberg, 2000; Finlay & Gough, 2003). In sum, the term *negotiate* is used as a trope for a set of personal reflexive transformative processes (Caetano, 2017).

Drawing on this set of ideas, the term *negotiate* is deployed in this study to explore how the PhD participants strategically coped with and moved through early candidature. This form of negotiation might include: various forms of collaboration and intersection with other colleagues and supervisors; dealing with life in an educational institution; problem solving related to research and writing; accessing and reading online texts and other digital materials that generated insight or new perspectives. Negotiation might also incorporate the supervising and assessment of academic progress, the completion of practical day-to-day tasks needed to finish academic work, balancing diverse aspects of life, as well as learning research skills and participating in tertiary life, to name but a few. The concept of negotiation, as described above, and its application as an interpretive metaphor in this study, can also be understood through consideration of three explanatory frames. These frames are employed throughout the study.

Frame One: Spatial

To negotiate involves *finding* what is needed to complete a task in terms of a spatial act. This could be conceived literally in the sense of physically locating resources and learning spaces within a tertiary context or educational system, or as an abstraction in locating ideas, retrieving resources or people in online, digital or cloud environments, including social media such as Facebook (Liaw & Huang, 2003; Thomas, 2011; Brown, 2016; David & Consalvo, 2017). Perhaps it could also refer to finding spaces or terrains of the mind that are given form through imagination and assist in problem solving or conceptualisation. In this sense, spatial becomes a form of reflexivity.

Frame Two: Environmental

Using the notion of adaptation, negotiation can also be conceived in an environmental or biological sense of *adjusting* to conditions, in this case a tertiary learning or education environment (Munro & Pooley, 2009). Conceiving negotiation in this sense would include *the processes of adjusting and accommodating* the circumstances and demands of early candidature and the broader research environment, and involves the part that a range of factors play in these adjustments. Included in this sense of negotiation are the strategies and heuristics of learning, action and knowledge making and efficiencies or short cuts that concern task completion in study programs or achieving learning outcomes (Bannert et al., 2009; Holcomb, 2009). In a broader sense, this metaphor suggests cognition about or a meta-awareness of change, the meaning of this change, and adjustment to change.

Frame Three: Social

Negotiation also includes the co-corporal and inter-subjective constructed world of people and how participants *negotiate collaboratively* and learn to work effectively in

this social world, including through virtual and digital communication (Dillenbourg, 1999; Stornaiuolo, 2016; Reaburn & McDonald, 2017). This frame implies the *creation of meaning with others*, the adjustments and compromises that are made in terms of others and the role of digital technologies and personal devices in social mediation. Thus, it involves a symbiotic community of being, belonging and becoming together that also might include resistance and protest.

This study investigates the lives of six doctoral students and examines their adaptive, coping and strategic experiences of candidature through spatial, environmental and social frames of negotiation. Through the use in the study of these dimensions of the term *negotiation*, the scope and texture of how the participants experienced early candidature could be explored.

Section 1.6 The structure and content of the thesis

This section presents an overview of the study's structural features and development. This overview is schematised in Figure 1.6.1 below. The central spine of the diagram indicates that phenomenological ideas are core to every aspect of the research, from its methodological design and limitations, to the ways of working with participants and conducting the textual analysis of transcripts. It also presents a summary of the chapters.

Chapter Two comprises a critical examination of the academic literature concerning doctoral students. Several distinct themes and threads are considered as part of this review. This range of literature is important to scrutinize because it provides scope regarding the factors that may be at play in the candidature and personal experiences of PhD students. An examination of the themes in the literature also offers an understanding of the context in which doctoral students operate, thus enabling greater perceptivity about the threads of meaning in their experiences.

Chapter Three establishes the theoretical frame for the study; it discusses the core philosophical ideas that are used to describe, analyse and interpret the data drawn from the participants. The philosophical lenses are derived from theorists within phenomenology (as introduced in this chapter) and includes the use of phenomenological ideas as hermeneutic tools for analysis based in the specific educational context of the doctoral students. The goal in this chapter is to establish the conceptual basis of the study.

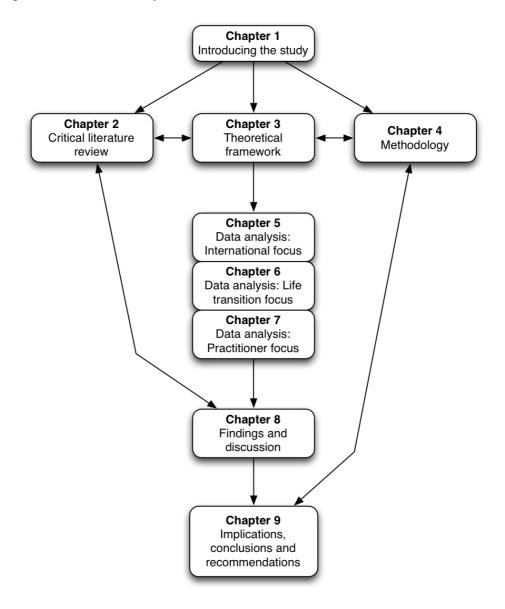


Figure 1.6.1: Structure of the thesis

Chapter Four describes the methodology of the study. The chapter frames the research as a case-based, qualitative and ethnographic study, and then describes a set of qualitative tools, the semi-structured interview and the personal journal (in the form of an online textual entry form), as the instruments for gathering data from participants. The mechanism of ontological and phenomenological textual analysis of the transcripts from the interviews is then discussed. Chapters Five, Six and Seven are the data analysis chapters. Each chapter considers two of the six participants in the study. The participants are grouped according to a focus or thematic quality that was evident from the data produced by each participant and in the conversations and exchanges with participants. Chapter Five considers two international doctoral students and their experiences of studying in Australia, including issues to do with language and the liminality of being in a different culture, which often includes that experience of feeling in-between or being in a nether region between one state and another. In Chapter Six the two participants who identified themselves as participating in PhD education because of a sense of personal or life fulfilment, or transition, without an obvious tangible goal, such as pursuing an academic career. Chapter Seven has a practitioner focus in examining the experiences of two participants who pursued doctoral study to enhance or develop themselves as a practitioner: one being in the field of art and graphical communication education, the other in the field of mathematics teaching.

The structure features of the data chapters are discussed in detail in Chapter Four. Each chapter introduces participants, followed by an ontological content analysis, which is an examination of the core essences in experience, including intentionality, and the meanings that participants ascribe to the objects in their lifeworld. Finally, a hermeneutical analysis of the data is undertaken, employing ideas from Husserl, Gestalt theory, and Ricoeur to explore the possible meanings and interpretations of participant transcripts. From the beginning of Chapter Five to the end of Chapter Seven there is some progressive or incremental comparison of the experiences of each participant, such that similarities and differences between the experiences of the participants are also identified.

Chapter Eight presents 15 findings of the study, and theorisations drawn from these findings are examined in terms of the academic literature explicated in Chapter Two. Integral to the chapter is consideration of what the results of analysing the data can offer in terms of understanding how early candidature is experienced and negotiated by doctoral students, including the place of digital technologies in those experiences and negotiations, and the consequent needs of doctoral students.

Chapter Nine offers a series of implications and conclusions drawn from the study as a whole and based on the specific discussion of the findings in Chapter Eight. These conclusions include a discussion of the implications of the research project for understanding doctoral education and a reflective critique of the study and its limitations, together with an evaluation of the study's contributions to knowledge and the possibilities for further research.

CHAPTER TWO

CRITICAL LITERATURE REVIEW

To establish the current concerns of and thinking in the research literature about the PhD and early candidature, the sections that follow explicate literature that ranges in scope from economic, social and philosophical themes to interpersonal, technological and cultural concerns, including examination of the place of technology in candidature. It could be argued that the scope is too extensive as the focus of the study is on embodied human experience. However, experience is always framed within larger social, economic and political discourses. Such discourses are substantive to experience, being part of the Lifeworld that constructs experience. It is important to understand experiences within these broad frames as well as within the micro contexts of each participant's immediate temporal experiences.

In the subsequent sections of this chapter, relevant themes in the literature are considered. In Section 2.1, the concept of the PhD is explored. The survey of the research literature covers four threads of understanding about the PhD: it is an induction program to the academy with antecedents in scholasticism; it is becoming part of the formation of partnerships with commercial enterprises; it reflects the movement towards the internationalisation of doctoral education; and finally it is subject to change and diversification, even transformation, in the context of the online digital landscape of contemporary 21st century graduate education.

These four threads are understood in the light of the cultural and philosophical ideas of modernism and postmodernism, which are positioned as being, at once, in tension and in juxtaposition, forming a complex postmillennial epistemological landscape for doctoral education. These four threads also suggest the larger ideological, technological and institutional milieu for the personal narratives and experiences of beginning PhD students, as part of the content in and dynamics of their experiences. This section also considers the expectations of PhD students at an institutional level, including practices and policies and the broader social landscape of communities of practice in research education.

In section 2.2, the discussion shifts to the research literature concerned with the realm of social relationships, social connection and networks that are, or potentially are, a part of the formation of early doctoral students. The notion of a PhD as an apprenticeship that is dependent on peer, supervisory and critical relationships is explored in the light of current thinking about pedagogy for graduate students. The significance of cultural background is also considered in the research on the importance of inter-country graduate programs.

In Section 2.3, scholarly literature concerned with the thesis writing process and academic publishing is considered. Since writing and developing material for publication is core to the PhD as apprenticeship, it is also core to experience and to the negotiations and strategies employed by PhD students. Indeed, there appears to be a discernible gap in published research about the specificities of what students experience when writing, especially when it involves the range of digital technologies and digital devices now on offer for PhD students.

In Section 2.4, the literature that addresses the role of digital technologies, the Internet and a range of communications modalities in the research programs of graduate students, including PhD students, is explored. The focus is on current views about how these technologies are affecting the ways students experience, negotiate and organise their candidature programs and assemble their lives around becoming a researcher. There appears to be a trend in the literature that digital and communication technologies are having a profound effect on the approaches and strategies that graduate students employ in their learning and research programs. This study aims to add to the body of empirical research about technology and graduate study by offering a perspective on the benefits or otherwise of technology from the point of view of close human experience.

In Section 2.5, academic research and literature about the needs of PhD students, such as wellbeing, balancing life and study and deploying technology effectively, is considered. This section examines research about the affective and personal domain of research students. While such literature is closest to the concerns, methodology and focus of this study, the differences between this literature and the approach of the present study are identified, most especially regarding the place accorded digital technologies, social media and online communication spaces in the ways that PhD students obviate their perceived needs and personal difficulties.

Finally, in Section 2.6, the important themes in the research literature, as explored in this chapter, are synthesised and key conclusions about these themes are offered through the perspective of conceiving research phenomenologically, that is, out of the essences of and structures in human consciousness. This elaboration of themes and conclusions provides a discernible set of frames within which the research focus embodied in this study can be understood. The section concludes by positioning this research project within the landscape of current thinking about PhD candidature, especially the early candidature period.

Section 2.1 Conceptualising the PhD

It is important to frame and contextualise an investigation of experience within its milieu. This is consistent with the phenomenological approach adopted in this study. One contextual frame pivotal to this study is the idea of the PhD as an historical and educational phenomenon or as a conceptual category or object, which incorporates the notion of candidature as a self-contained process of formation. A research doctoral degree (typically, but not always, the Doctor of Philosophy) as the pinnacle of university education is a category of educational achievement that has an extensive history dating back to medieval European universities and embodies both the control of knowledge making and the continuity of knowledge institutions (Makdisi, 1981, 1989; Simpson et al., 1993; Noble, 1994).

In the twentieth century, the PhD came to symbolise, according to Simpson (1993), the increasing systematisation, diversification and specialisation of research training linked to unfolding political changes and technological developments in Europe, the US, England and Australia, post-World War One. Consequently, the university as a generative institution developed a significant focus on the PhD in its research life, pedagogies, policies and practices. In simple terms, for universities the PhD was an investment in the future, especially in its modern iteration. Critically, however, the PhD could also be conceived as an entry point into a self-protective academic caste system

based on the privileging of certain knowledge within the hierarchy of discrete academic networks (Burris, 2004; Crawford et al., 2014).

Menand (2009) describes the self-replicating system of producing PhD graduates in the following way:

Since it is the system that ratifies the product - ipso facto, no one outside the community of experts is qualified to rate the value of the work produced within it—the most important function of the system is not the production of knowledge. It is the reproduction of the system. To put it another way, the most important function of the system, both for purposes of its continued survival and for purposes of controlling the market for its products, is the production of the producers.

Menand's economic market conceptualisation of the PhD points to both the forces outside the academy that foster change and adaptation and the counter-force of maintaining the PhD's closed system of specialisation and privilege. He suggests that a PhD is as much about the creation of a type of professional person who is inscribed within the system, with a set of transferable skills as it is about the production of knowledge (Hodge, 2010; Fiske, 2011). PhD students in the early stage of the degree can thus be conceived as being introduced to a hierarchical system of replication and privileging of knowledge. However, this notion of the PhD is now subject to transformation in the face of digital trends and globalisation, as well as employability and transferable skills (Nerad, 2006; Taylor &Cantwell, 2015).

It is important to recognise that how a PhD is conceptualised may be discipline-specific, just as the value ascribed to a PhD is industry-specific in areas such as science and engineering (Roach & Sauermann, 2010; Cox et al., 2013). It could be argued that while there are common elements that demarcate a PhD as a discrete phenomenon or entity across disciplines, its reception within the academy, industry and the wider community may be quite diverse. In the case of this study the PhD is conceived within the milieu of a faculty of education.

Within the research literature and the professional literature that examines the nature of a PhD, there are at least four discernible thematic threads that include assumptions about outcomes, completion processes and the communication systems and networks that undergird it. These threads are not mutually exclusive and are likely to interact in patterns that may vary for different cultural contexts, research fields and institutional settings.

The interrelationships between these threads are schematised in Figure 2.2.1. The diagram is designed to illustrate the concept that the 21st Century PhD, as a program of research training, is a product of a dialectic between change, diversification, localisation and transformation (or a postmodern tendency) on the one hand and part of a deeply rooted historical frame for facilitating the accreditation of researchers and knowledge-makers (the scholastic and modernist tendency) on the other. The nature of this dialectic may be shifting because of the incursion of digital technologies and online communication systems, which are shifting the mechanisms of knowledge making, altering the nature of academic communication and revolutionising the ways that information is accessed (Bargh & McKenna, 2003; Raschke, 2003; Boud & Lee, 2009; Greenhow et al., 2009; Neumann & Tan, 2011; Khurana & Rana, 2013).

2.1.1 Induction into the academy

In the first thread, the PhD is positioned as an induction to the research community that contains a discrete research-training program with an internationally recognised set of skills and practices embodied in that induction (Hill, et al, 1974; Bowen & Rudenstine, 1992; Cullen, 1994; Holloway & Walker, 2000; Green & Powell, 2005; Nightingale, 2005; Nerad & Heggelund, 2008; Standing, 2009; Petre & Rugg, 2010; Williams, 2010; Waring & Kearins, 2011).

According to this literature, PhD students participate in what amounts to a specialised guidance program, with a defined pathway and milestones, a program of training designed for each student to become a researcher and a proficient writer in academic discourses (McWilliam & Singh, 2002; Goodson, 2013). It is, in effect, a rite-of-passage or an initiation into an academic fraternity, signified by the production of a coherent body of research work that becomes embodied in a thesis in the form of a monograph or thesis-by-publications (Dunleavy, 2003; Blair, 2016).

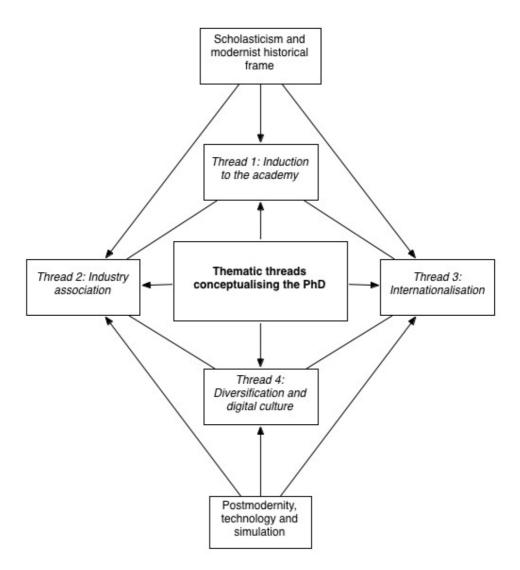


Figure 2.1.1: Thematic Threads in the PhD

It is expected that from this primary body of initial research, further research and publications will ensue and that the PhD program is the beginning of a publication pathway. From this time of formation, the PhD student can pursue a research or teaching career and become what is often referred to as an early career academic (Bazeley, 1996; McAlpine & Akerlind, 2010). It is interesting to speculate how this conceptualisation of the PhD would affect early candidature students and what they want from their doctoral research. East et al. (2017) have recently critiqued this perspective that is more-or-less based on the PhD as an apprenticeship model and suggest that new pedagogies for doctoral education need to form in light of distance and online digital forms of delivery and the changing notion of what a PhD provides internationally.

It seems that there is an overt teleological blueprint that constructs the way that PhD programs can be conceived and thence experienced. There is an imbued sense of design and an implied drive to a destination that are integral to candidature. This might be experienced, for instance, as an intangible sense of being impelled along by the sign posts that construct candidature, including goals, milestones, expectations and policy frameworks. Part of the parameters of this study is to examine the temporal experiences of early stage PhD students as they consider how this teleological frame functions for them. The question remains, then, whether a PhD is a process, a journey or a set of work goals and practices (Wright & Lodwick, 1989; Hughes & Tight, 2013).

Some of the research literature cited above appears to conceive this induction program or process as more-or-less linear, with clear modes of entry into the academy and then a discrete process of working through becoming a researcher, with the goal of exiting to take up an academic career (Perry, 2011). This linear program is punctuated with a set of markers or transitions points that are constructed through articulated procedural and policy positions published by universities (Gatfield, 2005; Boud & Lee, 2009; Kiley, 2009; Bansel, 2011). As a critic of what could be conceived as an arbitrarily structured approach, White (2013) argues that this orientation to tight timelines, milestones and work outcomes in candidature, driven undoubtedly by the overlay of funding, may have adverse effects on the quality of doctoral research and supervision.

In Australian universities, these markers or transition points are generally located around three distinct phases or milestones of candidature, each of which is linked to an academic review panel's assessment of a candidate. My reference to the structural features of candidature in the analyses and discussions to follow are positioned in terms of this Australian experience.

First, there is a period of probation in which the PhD student becomes familiar with and adapts to being a research student, including developing and structuring a viable project. This is generally the period up to the confirmation of candidature, where a candidate's status is affirmed by an academic panel. Second, there is the middle period when the research is consolidated, including significant writing and drafting of work which may or may not reflect data collection. Finally, there is the finishing of the project and the writing ready for thesis submission and examination. One ostensible purpose of this process and panel review system is to provide a level of risk management that is not only about the wellbeing and progress of students but also about the efficient management of university resources (Delamond et al., 2000; McWilliam et al., 2002; Martinsuo & Turkulainen, 2011).

One of the concerns of this study is how the six early stage PhD students experienced, and negotiated this overt structure and what role digital technologies played in how the individuals dealt with the underlying operational features inherent in candidature.

The PhD is also an academic qualification imbued with historical connections. These historical links are embedded in values and practices that reflect both Twentieth Century modernity, with its capitalist, nationalistic, progressive and rationalist tendencies, and the origins of the doctorate in the medieval scholastic tradition, with educational practices such as the method of disputation (Giddens, 1990; Gilson, 1991; Eisenstadt, 2003). This historicity also reflects the transformative relationship between the past and the present in what the PhD becomes or is conceived to be in contemporary academic institutions. It also points to a potential tension between positioning the PhD as a stable and unitary symbol of scholastic achievement that affords privilege and viewing it as anachronistic. This idea of it being anachronistic is conceived in terms of the fluid setting of the contemporary e-commerce and e-learning world comprised of shifting knowledge skills sets orientated to commercial outcomes and the convergence of traditional disciplinary boundaries (Frank, & Liebowitz, 2011; Khan & Anwar, 2013; Brooks, 2016; Dabby et al., 2016).

Part of this tension might also be about, as Johnson, et al (2000) suggest, a questioning of the modernist notion of the autonomous scholar and the production of a particular type of professional knowledge-maker. They suggest that the pedagogy conceived on the basis of such autonomy should be questioned in the light of broader social, economic and intellectual changes in society, and the idea that knowledge is formed in teams and networks often mediated by digital technologies across a global landscape (Deyrup, 2009; Säljö, 2010; Weller, 2011; Beetham &. Sharpe, 2013).

In this study the relationship between the autonomous scholarly self in juxtaposition to the collective construction of knowledge afforded in virtual digital spaces and through digital, online communication is part of the investigation of how learning to be a researcher and to form an academic identity are evident in the experiences of the participants.

2.1.2 Industry association

According to the second thread, the PhD as a training program can be regarded as fitting the needs of industry through formal and informal links between industry groups and universities in mutually beneficial partnerships (Borrell-Damiand et al., 2010; Derycke et al., 2011; Lind et al., 2013; Mitra, 2015; Boh et al., 2016). Increasingly, according to Malfroy (2005, 2011), with the formation of such university-industry partnerships, the PhD can be aligned to the demands of industry as part of a knowledge economy in what amounts to non-academic employment pathways that have operated in some disciplines for decades but are becoming more profuse (Carayannis et al., 2000; Neumann & Tan, 2011).

Adkins (2009) suggests that with the new knowledge economy there is potential for the knowledge developed in PhDs to be translated into domains outside universities but that such translation requires a level of skilling that crosses discipline boundaries. He suggests that this translation comes, at least in part, from pedagogical changes to the supervisory relationship with PhD students and the widening of what constitutes research. Ahrweilerm et al., (2011) propose that such innovative partnerships have a range of benefits, including making companies in such arrangements more attractive, increasing the diffusion of innovation and enhancing collaboration, not to mention the greater employability of graduates. However, Morandi (2013) suggests that the management of such partnerships is the key to their success. Links between universities and private companies may also have the benefit of seamless movement from study to industry-based employment with the capacity for reversibility or combinations of university and company employment (Mangematin, 2000; Cruz-Castro & Sanz-Menéndezm 2005; Neumann, R. & Tan, 2011; Panci et al., 2013).

The formation of partnerships between university and industry has its origins in the modernist concept of progress and capitalist endeavor. In this conceptualisation, the university has an authoritative and totalising place as a primary knowledge producer,

which is made available to industry and the commercial world (Etzkowitz, 2013). The university is thus positioned as being in a more-or-less hegemonic relationship with industry, since it acts as both a place of expertise, training and research and as a purveyor of new knowledge and innovation.

The authority and status of the university is also maintained, in part, by its credentialing of those who participate in its programs, with the PhD seen as one of the highest credentials for research work (Petre & Rugg, 2010). The university may thus be conceived, drawing on ideas about society and power from Foucault (Kelly & Foucault, 1994), as a type of social order that acts as a guardian of knowledge making, knowledge distribution and knowledge status. Being a type of social order, agents within that social order are in power relationships with other agents, such as supervisors, peers and colleagues, that both enable and constrain what counts as knowledge making and research. This social order is regulated by sets of discursive practices that determine how knowledge is organised, distributed and produced.

At the same time, with the global emergence of the digital age, which comprises virtualisation, complex information systems, cloud computing and networks, including social media, together with the increasingly disparate knowledge economy and the diversification and specialisation of industry through an online presence, the ways in which new knowledge is formed, stored, used and positioned could be described as having a postmodern character (Lyotard, 1994; Ashley, 1997; Barney et al., 2016; Brabazon, 2016a).

Postmodernity is taken to mean a philosophical, artistic and linguistic set of conceptualisations centred on the understanding that knowledge is socially and culturally constructed, fluid and subject to change, characterized by patterns of intertextuality and hybridity, and that overarching meta-narratives of progress, cultural and intellectual dominance, patriarchy and universality should be treated with incredulity, even resisted (Lyotard, 1984; Jameson, 1985; 1; Brown, 1995; Malpas, 2005).

If postmodernity is indeed an apt way to describe the shifts in knowledge making of the late twentieth century and the early 21st century, then it is likely that the power

relationships between and the reciprocity of university and industry partnerships could be transformed in response to such shifts. The increasing decentering of education and the provision of training that is needs-based, locally-oriented and digitally delivered, are part of the repositioning of the ways universities are seen and see themselves (Raschke, 2003; Strain, et al., 2009; Gurukkal, 2014). It is not unreasonable to suggest that given the diversification of education and the variety of provisions for delivery of education and training that are now available, including provision by commercial enterprises, that the primacy of universities is subject to challenge and contestation. One possible consequence is that the power relationships between universities, governments and commercial organisations are subject to adjustment, perhaps affecting the independence of universities, especially in relation to the funding of research and the ownership of knowledge.

In sum, doing a PhD and selecting the focus of a research project can be positioned within contemporary ways that knowledge is created, funded, owned and distributed in what I have characterised as a digital and postmodern shift that is still ongoing.

A corollary of this apparent change in the doctoral education landscape revolves around the idea of problematising what research is or what counts as research. At the forefront of this consideration of what PhD research should do is the long-held demarcation between what is considered *basic* research, as opposed to *applied* research (Ceci, 2011). The question remains whether relationships between universities and industry will have the effect of changing the emphasis in research towards the needs of industry and thus be driven by an economic imperative.

According to Martin (2012), there is a cogent argument from scholars that the recent economic rationalist push in selecting research projects is a troubling phenomenon and could adversely affect the character of research activity in universities, directly impacting the sorts of projects that PhD students select. He counters this by suggesting that the relationships between universities, the state and industry are in a process of transition and evolution, spurred by, among a number of factors, the open and global nature of digital communication. Martin suggests that new species of universities and approaches to research are emerging which could be conceptualised as the emergence of universities with a postmodern bent, universities that are open to hybrid research projects and the formation of knowledge in disparate ways.

2.1.3 Internationalisation

In the third thread, the internationalisation of university doctoral programs is seen as part of the globalisation of doctoral education. According to Nerad and Heggelund (2008), in the postmillennial era there has been a strong impetus towards the globalisation and internationalism of doctoral education. They argue that transnational forces are moving doctoral education to a primary position as the vehicle for knowledge producers in international corporations as well as in educational institutions. Such a force for internationalism may be promulgated by the various university ranking systems and the notion of transferability across universities from a significant range of nations, as well as the momentous increase in international students coming especially to western English-speaking universities. Narad (2010b) goes as far as to suggest that the future PhD will be increasingly part of an international context.

However, Pearson (1999, 2005) observes that this trend towards globalisation and internationalism in graduate education that has emerged in the last 15 years is complex, and that its implications for doctoral education are yet to be fully realised. Cambridge and Thompson (2004) have suggested that the terms themselves are problematic and open to a significant variety of interpretations. Chan and Dimmoc (2008) propose that the term *globalist* best describes this transnational movement in education which is linked with marketing education as an international product.

The term also reflects the increasingly collaborative environment of research and innovation that is pervading universities, and knowledge communities; and it is facilitated through the Internet, digitisation and the networking of communication. It reflects the entrepreneurialism of knowledge making in an era where the modernist tendency towards uniformity, progressive education and internationally measurable outcomes is in tension with the postmodern inclination for localisation, fragmentation and the decentering of how knowledge is created and distributed.

2.1.4 Diversification and digital culture

In the final thread, there is a tendency to see the PhD as part of a diversification of education, considering digital culture and postmodern ideas about knowledge. Diversification is conceived as a propensity to fragment and to shift knowledge making into forms and territories that have hitherto been little explored. According to Holley and Joseph (2013), the PhD, internationally, is becoming progressively diverse, in both content and delivery, and this diversity appears to be linked to the emergence of digital culture with its pervasive fragmentation and transgression of the boundaries between disciplines and between the academic and popular culture. In the education faculty in which I conducted this research project, anecdotal evidence of this inter-disciplinary movement and broadening of the base of knowledge making is palpable.

Part of this diversification involves the plethora of ways that knowledge and practice communities can form, exchange information and communicate, including shifts to interdisciplinary perspectives in PhD research programs (Holley, 2015). The process of doing a PhD in the milieu of digital culture, with the tendency towards diversification, was a concern of this study, a concern that requires considerably more research.

The modern PhD has been forged in the tension between the postmodern tendencies of digital contemporary culture and the modernist progressive agenda. It is also formed in the shifts between localisation, globalisation and internationalism that have significantly emerged in the 21st century. The PhD is at once an edifice for academic and research training and a commodity that is part of the knowledge economy. The embodied experiences of the PhD students who were part of this study were understood tacitly within this context as part of their Lifeworlds.

Section 2.2 Candidature, formation and relationships

PhD candidature is a period of formation in which discipline-specific competencies and broader skills as a researcher and proficient academic writer are part of a suite of communication potentialities that constitute the skill base of an academic in all its multiplicity. While this skill base is developed in the searching, researching, reading, thinking, experimenting and writing processes that accompany candidature, arguably the most critical element of candidature is the set of social exchanges, constituted in peer alliances, friendships and professional interactions. It is, to put it another way, a means of developing academic practices and of becoming part of a practice community (Boud, & Lee, 2006; Zahl, 2015). There is a substantial body of research that suggests that academic formation in a PhD program, including the early period of candidature, is as much constituted in critical or transformative human relationships as it is in individual engagement with a specialised research project (Phillips, 2000; Abawi et al., 2011; Coromina et al., 2011; Mewburn, 2011; Taylor & Cranton, 2012; Mantai & Dowling, 2015).

There also appears to be a fundamental interpretive process or critical exchange experienced by students between the policy conditions and expectations of candidature on the one hand and on the other the critical dialogue and reflexivity that are fostered in the various professional and collegial interactions and networks that accompany candidature (Baker & Pifer, 2011; Hickson, 2011). According to Shacham and Od-Cohen (2009), the role of student associations, communities of practice and other bodies that provide both critical feedback and support is pivotal in the perceptions and attitudes of PhD students and ultimately the progress of students in their candidature programs. In practice this may mean both contestation as well as support: discourses of critique as well as facility for care, friendship, partnering and co-writing. This meaningful set of social, intellectual and personal engagements is vital in the early period of candidature.

The formation of an academic in a doctoral program can be viewed as a collocation of complex human interactions, socialisation, individual existential engagement, delimited by the prescribed conditions that accompany candidature (such as policy frameworks), and typically facilitated through digital forms of communication. It is a high-order engagement in praxis. Formation is an individual process based in internality and action in the world; but it is also sponsored in human relationships, in socialisation, that move the individual towards fulfilling candidature requirements and forming an academic identity.

Another way of conceptualising this notion of formation is to employ Bourdieu's terms *habitus* and *doxa* (Bourdieu, 1977, 1990). Habitus refers to values, attitudes,

dispositions, and lifestyle factors that are acquired in living life together as community. Doxa means those deep-seated beliefs and unquestioned assumptions that undergird action and thought. In Bourdieu's thinking consciousness and action work together to create this complex collocation. The habitus and doxa of early stage PhD students are important concerns in this research in conceiving what it is that happens in terms of academic formation in the temporalities of that period of candidature up to confirmation, and in the liminalities and disjunctures that may attend the candidature experience.

In one Finnish study of PhD students and their well-being, Stubb et al. (2011) found that there was a strong positive correlation between the scholarly community of PhD students, with its substantial capacity for mentoring, friendship and affirmation, and the consequent sense of wellbeing experienced by PhD students in dealing with fatigue, alienation and other personal issues within candidature. The community surrounding these students fostered experiences of inspiration and empowerment. According to the researchers, this formation in community led to improved transitions within the milestones of candidature and better outcomes after completing the PhD, in terms of the postdoctoral transition to academia. The authors covered a spectrum of relational forms from the supervisory dyad or triad to collegial and scholarly associations and networks within and outside universities.

Notable about the present study is its focus on affective states of being and individual existential concerns, which differentiates it from other social and policy research on graduate students. The study is supported by the earlier work of Goodlad (1998) who highlighted the formative role of peer relationships, mentoring, tutoring and the wider academic community in the lives of graduate students. Mercer et al. (2011) take this further by suggesting that student-led experiential engagement with research and networks, including conferences managed by the students themselves, is as significant for the development of research students as is the supervisory relationship and formal programs offered by universities. Burford (2015), using a queer framework for analysis, suggests that there is a movement to a more complex way of seeing affective agency and positioning this within the politics of doing doctoral education.

Likewise, Mewburn (2011) affirms the import of relationships in the formation of subjectivities related to the PhD. The author contends that the talk about troubles in the everyday interactions between fellow students in the academic community, including, and especially, online interactive networks and spaces, is critical to identity formation as an academic. She found that the various subjectivities that constitute a student were not always clear-cut and there was a blurring of boundaries between academic subjectivities and other subjectivities, including ones related to family and work life. Mewburn's research suggests that identity formation is not a singular or one-dimensional aspect of candidature but is related to a range of communication experiences that are part of the practices of everyday doctoral life. These practices may include the increasingly important place of digital technologies and online communication spaces and networks in forming the scholarly subjectivities that are pivotal to becoming an academic.

What these and other studies also identify is the gravitas of interpersonal connection within the candidature experience of PhD students and that the whole of students' lives are part of the figuring-out-of-self-as-academic (Pearson, et al, 2004). Problems of interpersonal connection in candidature have received some attention in the research literature (Kember et al., 2001; Evans, 2002). Such issues have the potential for deleterious effects on the performance and longevity of research students, including increased attrition rates or prolonged candidature (Bourke et al., 2004; Beck, 2016; Boone et al., 2016). Furthermore, as Gopaul (2011) suggests, the very processes of socialisation for PhD students can also be the same processes that can create and maintain inequities. It is not unreasonable to suggest that social connection for PhD student is a pivotal factor in the way a PhD is completed by a student and the extent to which this program is viewed as positive or negative.

The manner of negotiation through a sometimes difficult and complex process of candidature is circumscribed by a set of explicit policies within Australian universities, including the length and prescribed milestones within candidature and what constitutes satisfactory progress. Such policies are now published online and form an obligatory set of rules that cover the period from acceptance into candidature to the final examination process and the granting of the degree. Yet, unlike coursework degrees, the narrative of each PhD student's progress appears to be less definitive or less subject

to the defining structures afforded by the periodicity of demarcated semesters which include assignments, tests and exams. This open-endedness brings a unique set of challenges for PhD students, especially in the early part of candidature when the nature of a research project is still being formed.

On the one hand, there is a set of regulations that govern the disposition and completion of a higher degree by research and on the other there is the human experience of individual students, as well as the socialisation experience of becoming part of the academy, an experience that can, for some candidates, be troubled. PhD students negotiate their way through these regulations to create a work that is meant to satisfy the specificities of university regulations at an *ipso facto* level, but there is also the human story and experiences that operates as an existential outcome of the process and include experiences of socialisation (Gardner, 2010; Schneider et al., 2010).

Thus, doing a PhD is an emergent and profoundly human and social enterprise, juxtaposed with the exigencies of living, and in tension with the formal, structured and prescribed research program orientated to achievement not only for the student but also for the university and the reputation of its staff.

However, apparent in the academic literature about socialisation and the formation of an academic in the candidature process is little focus on the complexity of PhD narratives, the power differential implicit in intersubjectivity and differences in student experiences of candidature, including the formative role of socialisation in learning communities. Indeed, Zhal (2015) found in her research on part-time PhD students that the students thought that they were not really a part of the full-time PhD student community and were also not as well regarded by academic staff in terms of being part of their research projects. This research perhaps suggests that the ameliorative potential of social connection and community support for doctoral students is more complex and sometimes less positive than some academic research would have us believe (Ford et al., 2016; Rockinson-Szapkiw et al., 2016; Davis et al., 2017).

There are implicit and explicit expectations about being a student in a PhD program, built on a set of attributions and discursive practices which construct an idealised notion of how PhD students should behave and what they should do as graduate students in university life (Malfroy, 2005; Mowbray & Halse 2010; Gardner & Mendoza, 2010; Thomson & Walker, 2010; Mahmud & Bretag, 2013). Such an idealisation could be viewed as running counter to seeing candidature as a highly individualised and differentiated process which reflects the unique circumstances, needs, aspirations and skills base of each candidate.

This idealisation may also point to the performative nature of candidature. Candidature could be viewed as a role that is performed and as a persona or academic identity (or a set of identities) that is embodied (Green, 2005; McWilliam, 2009; Barnacle & Mewburn, 2010; Bansel, 2011; Cotterall, 2011; Sinclair et al., 2013). The *performative* is taken to mean utterances through which the speaker performs an act that has clearly defined meanings in a given social or cultural context, and which often constructs social class, gender and status (Austin, 1962; Butler, 1988, 1997; Grewendorf & Meggle, 2002; Loxley, 2007). These performative utterances, according to linguists and language philosophers, create identity and social reality, and position individuals within a certain socio-cultural setting.

However, the linguistic notion of performativity is too narrow. It does not account for the embodied experience of taking on a role and the place of internal affective and cognitive states in the ways that social reality is constructed. Nor does this notion of performance account for resistance to social and institutional expectations associated with performing a role.

Indeed, an early PhD candidate can be understood as being inculcated into performing certain roles and doing specific speech acts, but such roles and speech acts are intermediated through the embodied experience of being a PhD student as a highly localised and individualised phenomenon that can include contestation, transgression and resistance (Marchant et al., 2011; Bosanquet & Cahir, 2015; Silk et al., 2015; Stanley, 2015). Performing candidature is about both embodied experiences as well as performing through utterances that are contextually positioned. Moreover, such roles and utterances are also mediated and constructed through disembodiment: through the construction of virtual identities and virtual communities in social media and other digital and multimodal modes of being (Warburton & Hatzipanagos, 2013; Wills, 2016).

2.2.1 Socialisation and international students

Awareness of both the idealisation and normalisation of candidature and its performative nature would seem important when considering the cultural background of candidates. Given the internationalisation of PhD education (see 2.2), and the phenomenon of non-native English speakers coming to English speaking universities through scholarships and other means of sponsorship, consideration of cultural background has become critical in the last decade in Western countries, including Australia. Cultural differences to do with socialisation, group norms and the navigating of critical relationships are pivotal to the success in and the experience of candidature (Robinson-Pant, 2009; Ting-Toomey & Chung, 2012).

According to Harmon (2003), international PhD students coming to Australia generally experience satisfaction with their programs but language issues and the apparent less formal working relationships typical of supervision are problematic for some students (Tananuraksakul, 2012). However, a later study of international students by Sawir, et al (2008), which presumably included PhD students, found that two-thirds of the cohort of 200 students selected experienced problems of loneliness and isolation, often linked to the lack of a preferred linguistic or cultural environment. The study found that the strategies of connection with local students and with same-culture networks were important for at least ameliorating some of the issues with coming to study in a new country.

Tananuraksakul and Hall (2011) claim that for international non-native English speaking students, their confidence and thus their dignity as students is directly related to proficiency with spoken and written English. This proficiency includes information literacy (Han, 2012). But it is likely that this level of confidence is also related to the extent of personal and cultural connection and reflexivity that are afforded by the institutions in which they complete their studies (Holliday, 2016). Confidence and dignity, indeed fitting the idealisation of a PhD candidate, seem to be associated with the level of cohesion within the social group.

One US study of international students found that the level of perceived discrimination (exclusion from the group) increased the level of homesickness and decreased the

ability to complete studies (Poyrazli & Lopez (2007). Zhou, et al (2008) used the idea of cultural synergy as a framework for understanding such feelings of disconnection, cultural shock and adaptation. By this term they mean a sense of being a part of the cultural whole as an integrated set of connections. The extent of cultural synergy can be a predictor of the success or otherwise of adaptation within a cultural setting.

In terms of the research focus of the study reported in this thesis, the experiences and practices of negotiation of overseas doctoral students in their adaptation to (or their cultural synergy within) Australian cultural and language conditions were of interest, including the ways that digital technologies were employed as part of that cultural adaptation and negotiation of candidature. Two of the participants in this project were from South America and so the concept of cultural synergy and first-hand experience of Australian culture(s) was especially relevant.

2.2.2 Socialisation and supervision

Arguably, one of the most significant aspects of formation in candidature, especially in its initial stages, is the supervision relationship/s. The research literature about candidature is extensive and appears to have expanded considerably in the last five years. It is not within the scope of this study to examine this literature comprehensively, especially given that the focus of the study is on the first-hand, embodied experiences of early doctoral candidates. What is important here is to view the literature in terms of its implications for formation and the experiences of PhD students.

Supervision arrangements exist within and reflect the shifting requirements of research degrees, the nature of critical spaces and the broader landscape of global higher education discussed above (Walker & Thomson, 2010; McCallin & Nayar, 2011; Morris, et al, 2011; Berry & Batty, 2016; Johnston et al., 2016). Given epochal changes in the educational landscape in the last 20 years, it seems reasonable to suggest that shifts in supervision relationships have ensued. One group of scholars see this relationship as about progress through what amounts to an apprenticeship (Falchikov, 2005; Sadler, 2010; Walker & Thomson, 2010). With this notion comes the attendant issues of evaluating learning and progress, the nature of feedback and the pedagogy that should support a student as an apprentice academic. This construct for seeing the

supervisory relationship has an implied power relationship (master-disciple construct) in which autonomy and dependency become poles around which effective exchanges are mediated. (Moses, 1984; Lee, 2008; Mainhard et al., 2009; Derycke et al., 2011; Moxhan et al., 2013).

Problems in this power relationship may be an impediment to the positive experience of candidature by PhD students, and may even mitigate against an early stage doctoral student continuing candidature. Such problems can be exacerbated in the case of crosscultural situations, where language, cultural differences and different understanding of the hierarchy in supervisory relationships are in play (Winchester-Seeto et al., 2013).

However, other models for conducting the relationship have been proposed and researched. For example, Nordentoft et al. (2013), in a study of Danish research students, assessed what he calls a collective academic supervision (CAS) model for supervision. In this model the one-to-one, dyadic, supervisory relationship is challenged by including not only the student as a more autonomous agent in the research and writing process but also a range of voices that form a collective in the experiences of the student researcher.

A similar Swedish study by Linden et al. (2013) positioned supervisors and others as specialised mentors in the life and study programs of research student or as evaluators of their students and their own learning. This metacognitive approach appears to isolate learning, however, from its context in the social world of the institution and the student. These studies suggest that part of the changes to supervision might surround the nature of the critical and collegial relationships that form students as academics. Given the pervasiveness of virtual networks and the distributed learning possible in virtual communities and in online social and critical spaces, the influences that form students in juxtaposition to the accepted idea of supervision provide possibilities for further research (Maor et al., 2016).

Brabazon (2016b) takes a more critical view of the recent shifts in the function of supervision by positioning it as driven by globalised economic imperatives and lacking an emancipatory perspective. She also suggests that the increasing shifts to more deembodied, virtual modes of engagement are potentially counter-productive. Brabazon writes: "Doctoral candidates are more than the fees they pay to a neoliberal, globalizing economy. We need to summon counter-narratives to create alternative and contested models of excellence and achievement" (p. 30). For her, a PhD is much more than just an regulated output of a university. It has a thoroughgoing transformative function and supervision needs to support this transformation.

Lee (2008), in her evaluation of the literature about supervision up to the time she published, concluded that there is a strong focus on the functional nature of supervision: that goal posts must be met in what amounts to project management, skills developed and writing completed. Yet, she argues, the role of a supervisor is far more complex and all-encompassing since it also includes developing thinking skills, enculturation, and personal nurturing, as well as the development of self-determination and enthusiasm in students (Satariyan, 2016). These latter roles of a supervisor move into the territory of the existential and the affective and would most likely impact directly on the experiential and the internality of students. More recent work by Boehe (2016) suggests that there is no one right style and that there are many factors that are contingent on selecting an appropriate style for the candidate and the supervisor.

Both studies differ in perspective from Halse and Malfroy's (2009), who argue that what a supervisor does is professional work that includes a learning alliance, a focus on habits of mind, scholarly expertise, and the bringing of contextual expertise. To what extent PhD students experience their supervision as a work relationship is an interesting matter for research.

However, what seems to be important in terms of student experience of supervision is the power relationship exercised and the level of relative autonomy that is developed as part of a pedagogy that fosters independence or dependence. At the same time, the balance between the surveillance and professional role of a supervisor (monitoring progress and the like) and the supportive critical friendship fostered is significant for how the supervision relationship is received (Baker et al., 2014; Smith, et al., 2016). In addition, the range of critical voices that PhD students experience within their learning communities in juxtaposition to the voice of the supervisor/s is of interest because of its potential impact on student formation during the early part of candidature. To what extent all these facets of supervision shape the way a student navigates and experiences candidature is part of the research focus of this study.

Section 2.3 Candidature and writing experiences

Writing with a suitable academic discourse, and following conventions and stylistic features accepted by a specialised academic community and institution, is core to academic formation and thus to the candidature experience of writing a thesis (Lee & Murray, 2015; Lindsay, 2015). The writing is not only about the research and the writing of a thesis but also about a range of other activities, including seminar and conference presentations, blogging, journal article writing, and effective communication with supervisors and other academics.

While academic writing may be a core literacy skill necessary for the successful completion of a thesis, it is also the source for anxiety and apprehension among PhD students (Riffe & Stacks, 1988; Riffe & Stacks 1992; Huwari & Hashima, 2011; Maringe & Jenkins, 2015; Azkah et al., 2016). A qualitative study by Al-Shboul and Huwari (2015) examined the writing apprehension and anxiety experienced by Jordanian PhD students at the Universiti Utara, Malaysia, especially regarding written academic discourse. The writers identify four themes about the causes of writing apprehension. These are a lack of knowledge about structure, negative attitudes toward writing, previous negative writing experiences and a lack of knowledge about academic writing. The researchers conclude that writing apprehension was a widespread phenomenon among the students. Their conclusions are supported by Jenkins (2015), especially in regard to international doctoral students, whose struggles with English or with a second language mitigated against their writing success.

In this body of recent research investigating apprehension and anxiety about writing, the issue of self-efficacy in academic writing appears to be a critical factor (Pajares, 2003; Mewburn et al., 2012). Beliefs about capability tend to translate to productivity in terms of writing, and in turn this has significant emotional effects on students. In particular, there are issues of lack of focus, procrastination and feeling overwhelmed by the drive towards finding success in writing (Fritzsche et al., 2003).

Proficiency and aptitude with writing within the candidature process is viewed by the literature in this research area as being integral to success (Kamler & Thomson, 2006, Kamler, 2008; Catterall et al, 2011; Jones, 2016). This proficiency has elements of performativity (with awareness that it is designed and should be convincing for its intended audience), discourse cognizance (with a focus on language features that accord with the expectation of the academy) and research scope (in framing the research focus within a field and within a literature).

Any of these three areas of proficiency can be the basis for difficulty, especially for a beginning or early candidature PhD student; but, ironically, they are also the basis for successful publishing and networking that lead to an academic or another career. The PhD is thus conceived by many researchers as a voyage through writing (and rewriting), feedback, with certain negative experiential outcomes, and a networking and publishing journey that is connected intimately to the demands of the writing process (Coromina et al., 2011; Hill, 2011; Bienkowska & Klofsten, 2012).

Understanding the writing experiences of PhD students, including their experiences of anxiety, writer's block and apprehension, and developing proficiency can be part of a research approach in which human embodied experiences, including experiences of learning, cognition and reflexivity, are foregrounded and form the substance of the research (Clark, 2007; Ku et al., 2010; Petre & Rugg, 2010; Platow, 2011). This could include an understanding of strategic approaches that early PhD students use in navigating the PhD journey and writing (Moxhan et al., 2013; Brodin, 2016). These strategic processes could include support from peer writing groups or thesis writing circles, retreats and specialised writing seminars to foster core academic literacies (Aitchison & Lee, 2006; Aitchison, 2009; Carter, 2016; Hyland, 2017). This might include, for instance, the use of writing groups connected through social media and decentered in terms of its meeting places or use of virtual spaces of interaction (Chatterjee-Padmanabhan & Nielsen, 2016; Roulston et al., 2016).

While core academic writing proficiencies or competencies, literacies and discourses are important, digital and online means of writing, publishing and communicating have problematised what proficiencies are now needed by doctoral students. Publishing information, new knowledge and opinion, for instance, is now available for anyone connected to the Internet, so that there is a challenge to the notion of the expert writer and a diversification of the means of creating a writer's profile in this post-print era. According to Durette et al. (2016), however, consideration of the core competencies for doctoral education, including those in academic writing, has not figured prominently in educational research but is needed to understand the changing nature of the demands of being a doctoral student.

This amounts to a new rhetoric, one that is as much performative as it is writerly (Agger, 1990; Soffer, 2012). Indeed, Arnold (2012) suggests that this postmodern rhetoric of the digital age has tended to shift academic discourses away from patriarchal and linear modes of expression, towards a more personal and subjective academic narrative that acknowledges agency.

To sum up, the ability to write in a set of appropriate academic discourses is viewed as critical to the successful output of a PhD student. At the same time these academic literacies are now situated in virtual, digital spaces and online communities that require a diversification of writing and communication proficiencies. These academic and digital literacies should also be conceived in terms of what the literature identifies as the felt needs and experiences of doctoral students. Doctoral students may have difficulties with anxiety and focus regarding the task of writing satisfactorily in an increasingly demanding university environment.

Section 2.4 Candidature and digital technologies

The literature appears to be conclusive that tertiary students, including PhD students, face a range of issues, including anxiety, uncertainty and personal stresses, in navigating their educational programs in the context of the significant social, technological and educational change of the last 15 years (Devlin, 2002; Ramsay, et al, 2007; Williamson et al., 2008; Marginson & Sawir, 2011; Cvetkovski et al., 2012; Stiasny & Gore, 2012; Reavley, 2014; McAllister et al., 2014). One of these issues is how students accommodate and navigate the complex mix of digital online learning materials, technology-driven administrative processes and virtual e-learning environments in juxtaposition with face-to-face educational delivery or what could be

termed a hybrid or blended tertiary educational environment (Ally, 2013; Lee et al., King & Boyatt, 2015; Bidder, 2016).

What appears incontrovertible in the research literature is that much of the higher education sector internationally and in Australia, including doctoral programs, have and continue to experience changing methods of delivery, ones that embrace the cloud, online information retrieval systems, e-learning, blogging, virtual communication and networks and the proliferation of dispersed online research tools (Godwin-Jones, 2003; Ward & West, 2008; Nerad, 2010; Melhuish & Falloon, 2010; Sursock & Smidt, 2010; Frank & Liebowitz, 2011; Garrison, 2011; Snyder & Beale, 2012; Beetham & Sharpe, 2013; Archer, et al., 2014).

The integration and linking of personal digital devices (tablets, smartphones and the like) through cloud storage services and the sharing of resources through such services, between individuals and teams, is a phenomenon that is influencing the ways information and knowledge are now created and distributed, commercially and educationally.

For PhD students, their experience could also take the form of diverse digital and online modes of engaging in academic communication related to candidature, supervision and completing a thesis (Conole, et al., 2008; Russel, 2010; Weller, 2011; Hayles, 2012; Brabazon, 2016b). In other words, shifting patterns of connection and interpersonal communication, juxtaposed to varied intervals of off-campus (including virtual) and on-campus time, appear to be related to increasing dependence on the Internet, social media, virtual academic networks and the provision of digital information in the cloud, often accessed through apps built for a myriad of digital communication devices, including smart phones and tablets.

PhD students now operate in a global digital information economy that is unlike that which existed a decade previously. This economy is characterised by both the apparent convergence of technologies, especially as seen in mobile communication devices (such as smart phones and tablets), and the virtual and geographical mobility of students across traditional boundaries of nationality, cultural background, academic work, paid work, family life, also reflected in the mechanisms of publishing and promulgating

information (Nerad & Heggelund, 2008; Simoes & Borges Gouveia, 2008; Jensen, 2010; Gürüz, 2011; Tran & Gomes, 2017).

Such changes are creating new spaces for critical engagement and knowledge practices. Willems et al. (2011), for example, propose that for distance PhD students virtual world technologies, such as Second Life, could have significant potential. Such technologies can create critical spaces for academic engagement that shift the usual notions of time and space and fashion ways of connecting that are not possible in real world space and temporality. Ferri et al. (2012) suggest that Facebook is now becoming the professional tool of choice in the commercial world and that this shift is also reflected in the realm of education. The emergence of social media online platforms is affecting the means of navigating research, writing and communications for PhD students (Haneefa, 2016). As such it is a question worthy of further research attention and is thus a concern in this study.

While, acknowledging the speed of technological change and the movement to cloudbased computing, information distribution and storage, and its possibly positive effects on the disposition of candidature and the mechanisms of learning for PhD students, it is also important to scrutinise claims of the benefits to learning, access to information, ease of communication and rapid completion of tasks.

The advent of digital technologies has been represented in utopian terms in some research and professional literature, in what Njenga and Fourie (2010) describe as techno-positivistic ideology. Idealised or techno-positivist depictions of digital technologies, and the educational by-word of *E-learning*, are especially evident in globalised corporate discourses that are often associated with new and innovative technologies (Buckingham, 2003, 2007).

A critical perspective on the benefits of the digital shift in education and research is relevant to an inquiry into the experiences of beginning PhD students as digital devices and technologies are now ubiquitous in graduate education and thus are likely to affect ways in which students navigate candidature. However, there is only limited literature that gives doctoral students' perspectives about the benefits or otherwise of the use of

digital devices and technologies, and, most importantly, how students use technology to navigate through candidature.

By examining the experiences, attitudes and impressions of individual PhD students, there is an opportunity to explore critically connections between the broad economic and social discourses about technology, including ones that tend to the utopian, and user experience. Put simple, one of the concerns of this study is how, and in what ways, digital technologies were employed in the candidature of participants.

However, the literature is not definitive in terms of the benefits or otherwise of technologies in learning and navigating academic study. The review of the literature by Nguyen et al. (2014) about the benefits of iPads for academics and students suggests that at this stage while there are some benefits, such as being an effective vehicle for dissemination of information, these benefits did not appear to translate to clear learning outcomes. There appears to be a need for further research regarding the strategic use of digital technology as part of students' negotiations of their courses (Cameron & Webster, 2005; Greenhow, 2009; Munkvold, 2012; Beetham & Sharpe, 2013).

In his book, *The digital scholar: How technology is transforming scholarly practice*, Weller (2011) concludes that there is a growing impetus for change within higher education wrought in part by changes in society at large due to the Internet, social media, distributed knowledge and digital technologies, facilitated through multiple generations of digital devices. According to Weller, students now learn differently, communicate in alternate ways and, importantly, are behaving differently.

The premise of Weller's argument is that the ubiquity of online and digital technologies in society is a powerful causal factor for change in the way scholarship is conceived and conducted. The question remains, however, whether PhD students, who are important in university research output, view and experience technology in this way. This study is positioned to generate further ideas about the efficacy of digital technologies and devices in the conduct of candidature.

There are scholars who regard this proliferation and promotion of online and digital technologies, and the notion of e-learning, with skepticism (Buckingham, 2007;

Livingstone, 2011; Selwyn, 2002, 2011, 2013; Bayne, 2015). The argument of these scholars is that the supposed benefits of digital technologies and the call for new pedagogies and a re-conception of learning for the digital age, are merely echoing the advertising discourses and educational imaginings of the commercial world in what amounts to techno-capitalism and the commodification of learning (Clegg, 2008; Suarez-Villa, 2012, 2016).

Kirkpatrick (2004, 2008) argues that technology can be used or deployed poorly or can reflect the interests of certain power groups. He builds his case for a critical examination of technology on the work of Feenberg (1991, 1995), who argues that people are orientated to technology through the social realm and that all technology is substantially about hermeneutics. Of importance in Feenberg's critical analysis of technology is the idea of the *hegemony of technology*: that technology can and does reflect dominant visions and powerful interests that control its perception in society, as with the case of Apple Corporation (Belk & Tumbat, 2005). Manovich (2001) also contributes a critical perspective on technology. He proposes that "new media objects" (p.15) are cultural objects in which a physical or virtual object is ascribed certain cultural meanings. Consequently, digital devices can be ascribed a layer of meaning that does not necessarily match their actual affordances and learning potential (Orr, 2010; Cheung, et al, 2011).

Don Ihde's post-phenomenological approach to technology, humanity and science provides an alternative perspective in this debate. According to Ihde (1971, 1990 1993, 2002, 2009), technology can be conceived in terms of embodied technics. In other words, technology has been, through much of human history, core to human embodied existence. He conceives the idea of technology in terms of embodied relations between technologies and human bodies, implying that throughout human history our embodiment as humans is also a technological embodiment.

Importantly, in regard to this present study, Ihde defines embodiment in terms of what is *experienced* of technology. Ihde argues that human agency and the embodied experience of being in the world includes and is co-extensive with technology in a polymorphous sense of body. Our bodies are thus technological bodies. Ihde also engages with the notion of *transparency*: our bodies are capable of being unified with

technology. This is a state in which there is transparency between internality (or inner states of experience and consciousness) and externality (or physical engagement) in terms of the connection between technology and the body. Part of this transparency is the desire to have power, the transforming power that technology makes available.

Inde's work resonates with the central concerns of this study by focusing on the *body* and what is experienced of technology through the body. For a user there is a consciousness of technology (in the form of digital devices, for instance) and its import for candidature and, simultaneously, a physical/tactile engagement of technology with body mediated through touch, and both work in synergy. There is an intentional loop that constructs this connection: from awareness of the technology and its affordances to volition and cognitive processes to intentional physical action with the device that has consequences in the world. Digital devices thus have an overt materiality which is part of this loop and offer feedback to the user. If a researcher is to understand what technology does for a user, then cognizance of the strategic use of technology as an embodied process of engagement that involves volition, cognition, sensory engagement and material connection would seem to be important.

One example of this possible transparency of technology with the body of the user is the case of the digital tablet device. The materiality of the tablet can be conceived as a core feature in thinking about its phenomenology as experienced by a user. The tablet is a portable and highly mobile physical device that is touched and held in the hand close to a user's body (almost having a visceral property), such that it has an affinity with the body of a user unlike that experienced with a laptop or desktop computer, which seems more remote and separated from a user.

It could thus be described as a tactile personal e-device. Part of this haptic engagement is the facility for multi-touch gestures now available with tablets, by which is meant the use of the fingers to perform a range of functions as shortcuts on the screen (Kurdyukova et al., 2012). According to Feng et al. (2011), these gestures have a range of applications on a tablet (from gaming to content creation) and tend to evoke interaction from a user in non-conventional gesture-intensive ways that have a distinctive embodied quality.

Given the likelihood that many PhD students use tablets as devices for reading online information, making notes, consuming media materials and engaging in social media (to name but a few uses), in other words as both research and personal tools, it is important to garner both the internality and externality of what this usage of tablets potentially means for participants.

However, in much of the technology and education literature reviewed there is more emphasis placed on the socio-cultural, educational and political ramifications of technology, *ex situ* and not as much consideration given to the *experience* of the user of the technology, especially *in situ*. This represents a looking from the outside and an epistemological approach of externality through theorisation, categorisation and observation. So, the discourse is about the effects of technology on society and in educational settings. This study, by contrast, is designed to bring the focus back to the person: to the individual and how technology affects the individual, and looks at experience rather than just social and educational impact.

There are a few published studies that, to some extent, explore the significance of technology from the perspective of the interiority of users. For example, Lim (2011) employed a phenomenological (or experience-centred) approach in order to understand the experience of tertiary instructors who used Microsoft Windows-based Tablet PCs (TPC) within their teaching practice. The study focused on the lived experiences of 28 faculty members from a College of Engineering and utilised qualitative techniques such as one-on-one interviews, classroom observations, and an online discussion board. The researcher focused on the question: What is it like to use a TPC to teach a course? Several themes emerged in terms of the use of these digital devices, including: the experience of writing on a screen, becoming comfortable with technology, and the enjoyment involved in using the technology in teaching practice. The use of *affective* language, such as "comfortable" and "enjoyment", certainly differentiates this study from other studies that seem to rely on externality.

Loch et al. (2011), also used a seemingly experiential approach to understand learnercentred mathematics education using netbooks and tablet PCs. Importantly, this study explored both the educational and the personal realms of students' *experiences*. Chalmers (2004) argues for the importance of context awareness, including, significantly, the experiences and history of the user. In terms of digital technologies and software development, awareness of the internality of the end-user is not only important but may well be critical (Vrenenburg et al., 2002; Lieberman et al., 2006).

Anna Ståhl and her colleagues (Ståhl et al., 2009), in their study of users' interaction with a computer-based personal diary system (or what they called an Affective Diary), explored the internal and bodily experiences of users. Their aim was to link embodied experiences with the potentiality of the software interface and development of the interface through research and feedback. Her study suggests the possibilities in researching the affective in considering how individuals encounter, experience and employ technology.

So, while the emphasis in the literature has been on perspectives about technology that are external to user experience, a growing range of studies over the past 10 years has shown concern for the importance of personal experience of and embodiment with technology. In most of these studies, however, despite a focus on experience, the emphasis remains substantially *ex situ*: outside of the immediate temporality of internality in all its volitional, cognitive and affective dimensions that can reveal the strategic and conflictual aspects experiencing technology. Direct lived experience may be too difficult or problematic in terms of conducting verifiable research (Prus, 1996; Varela, 1996; Van Manen, 2016b; Le Roux, 2017). It may well be the case that temporal experiences and internality are conceived as too ephemeral or not so easily accessible to analysis when it comes to technology.

In this section I have argued that digital technologies are ubiquitous and that they have affected the conduct of graduate education, including doctoral studies and how PhD students navigate through candidature. I also noted the debate about whether the developing technology base for learning in higher education has the benefits that are often claimed. Additionally, I positioned this study as bringing emphasis to embodied user experience and to understanding the efficacy of digital technologies for individual PhD students within their Lifeworlds.

Section 2.5 Student needs

A final theme in the research literature concerns the specific needs of early stage PhD students. This is a relatively short section, since exploration of issues that emerge from doing doctoral study have been dealt with in other sections. The term *need* has a complex array of semantic meanings (Glass, 2016). It is often associated with a hierarchy from biological to existential needs, as in the schema of Abraham Maslow (Cabanas Díaz & Sánchez González, 2016). The notion of *needs* is taken to mean, in the context of this study, that which brings constraint to fulfilling professional or personal goals, as perceived by a person who experiences the constraint. It is about the capacity to be fulfilled or an affordance that should be available. Needs are linked to motivation and thus internal understandings of what is important for a person, including the emotions which drive need and wellbeing (Morrison-Saunders et al., 2005; Turenne & Pomerolm, 2013).

This research project, with its phenomenological theoretical foundation, is about researching the experiences of beginning PhD students holistically, including their motivations in the early stages of candidature, considering their Lifeworlds and the place of digital technologies in constructing these Lifeworlds. Part of students' Lifeworlds, and central to experience, is a set of needs. These range from the financial, emotional, technological, to those that are centred on personal issues and family. Need is a holistic term, in that a need, as it remains unsatisfied, affects every area of a student's life, including the outlook of academic work and progress. However, there is currently only a small body of literature that examines need in terms of the requirements of doctoral programs (Kebritchi & McCaslin, 2017)

According to Juniper et al. (2013), understanding need is an integral part of the wellbeing of PhD students and is strongly linked to the way students experience candidature. Need is also linked to the voice of participants and the existential concerns that drive them to change, such that while there are several research perspectives used in evaluating need, a more incisive approach is gathering first-person perspectives (Brooks, 2011). Certainly, there are unifying categories and thematic groupings that are useful for an analysis of need. However, as part of a consideration of need can be an analysis of the personal and the experiential dimensions of the individual. In looking at the personal and experiential dimensions of a PhD student, need is also about the vulnerabilities and personal issues that impinge on academic outcomes. McCormack (2005), in his study of four research students, looked at how they positioned their research and noted the clear link between failure to complete their studies and what was happening in the rest of their lives. His research suggests the indelible connection between success in graduate study and the meeting of life needs. The research of Templeton (2015, 2016) further suggests that the original intrinsic motivations that led to graduate study can be significantly affected by the influence of factors external to the study itself.

There is also a need to for learning coping skills in doctoral study, given the length and the intensity of the doctoral journey. In their qualitative study of a group of 16 PhD students that focused on experiences of stress and anxiety related to completing research and writing work and balancing these demands with the demands of personal, social and family life, Bazrafkan, et al. (2016) found that PhD students experience stress and anxiety from a diversity of sources. The authors also found that PhD students deploy different methods of coping that can be both effective and ineffective ways of dealing with stress and anxiety. The researchers concluded that resolute supervision and direction can reduce the causes of stress and anxiety, as can thoughtful and well-designed strategies for coping.

Their research, and that of other scholars, points to the importance of seeing coping as part of a larger focus on the need for wellbeing and mental health for doctoral students (Conley, et al, 2015; Prince, 2015; Larcombe et al., 2016). Given the demands, financial status, shifting balances in life and dislocations that are often experienced by doctoral students, and especially early stage, probationary doctoral students, this need would appear to be a primary one (Waaijer et al., 2016). Moreover, the issue of exhaustion for PhD students is one that, according to Devine & Hunter (2016), needs more consideration in the management of doctoral education and can be part of for supervision arrangements and wellbeing programs.

One coping and wellbeing strategy that is emerging is the use of mindfulness or meditative techniques (Barry et al., 2016). According to Fasching (2008), meditation is

a mental technique that brings the person to awareness of consciousness itself but inhibits mental activity in what is claimed to be an apparent suspension of both thought and ego at a moment of time. Given the wellbeing issues associated with candidature, especially ones related to stress and anxiety, mediation appears to be a promising tool for inclusion in wellbeing programs for doctoral students.

Section 2.6 Research themes and the positioning of this study

The PhD and candidature continue to be a focus of significant research interest, as evidenced by the literature cited in this chapter, which reflects a variety of approaches to framing research and interpreting research data. There are at least six broad themes evident in the research literature about the PhD, candidature and the experiences of PhD students that are directly relevant to the present study.

The first of these, and a central concern of this study, is the changing nature and demands of doing a PhD in the milieu of dynamic work arrangements, digital technologies, and shifts to online educational and virtual provisions afforded by contemporary digital communication systems.

The extent to which technology affects change and fosters new ways of learning in regard to graduate education is a matter of debate, and certainly appears to be an important area of research. This study offers viewpoints about technology based on the narratives and experiences of actual PhD students, communicated from a first-person perspective. The research focus of this study has the potential to ground beliefs about the apparent effects and benefits of digital technologies and the efficacy of change in experiential data from participants. Such data can be content rich because it is derived from those who exercise agency in relation to technologies. This study is thus positioned to explore the usefulness of technology from the existential and experiential, whilst also being cognizant of cultural, policy and economic perspectives.

Second, and an extension of the previous point, there is a compelling argument in the literature that the nature of learning and doing a supervised research program has been and will continue to be changed inexorably by digital technologies and online communication regarding the ways that knowledge is held, produced and distributed.

This includes the role of social media in forging collegial, social and knowledge networks which afford not only scholarly communication but ameliorate issues in candidature. The movement to social media with an academic and research focus is a phenomenon that is a more recent manifestation of what has been described as a virtual communications revolution. This study is situated to generate understandings about this phenomenon from the point of view of six doctoral students.

Third, there is considerable research literature about the complexities of candidature in inter-cultural contexts and across countries and language barriers. With the apparent commercialisation of education, including doctoral education, in Australia and the provision of scholarships and other grants, there is a growing number of overseas students who require policy and administrative frameworks based on the needs of such students and reflecting their unique circumstances.

The literature suggests that PhD students from different cultural contexts, and especially from different language backgrounds, experience issues of marginalisation, disconnection and difficulty with accessing appropriate resources. An important focus in this study is how such dissonant experiences are constructed when considering changes to the ways knowledge is consumed, communicated and stored and to the ways human interactions are mediated through digital technologies.

Fourth, there are significant social, financial and emotional consequences of candidature that can be researched by looking at large cohorts of students through survey methodology and the like. Arguably, of equal importance, and perhaps offering a complementary perspective, is a small-scale research approach where individuals can be investigated holistically as part of a phenomenological and qualitative research approach, an approach explicated in the chapters to follow.

While there is substantial literature that focuses on the attitudes and experiential categories relevant to graduate students, as identified in surveys, interviews and other qualitative and quantitative research studies, there appears to be less work that considers first-hand, embodied experiences, especially as emerging from the perspective of conceiving a doctoral student's life holistically. There is a place for research that is based on individuals and their existential research journeys as a contrast

and supplement to research as based in social, political or economic categories that have little or no focus on the individual.

Within this study a central part of this phenomenological conceptualisation is understanding the structures of experience. In this regard, the notion of intentionality (as explored fully in Chapter 3 below) is especially pivotal. For the case of early stage PhD students recruited for this study, the import accorded to technologies as part of their navigation of candidature, including the strategies of learning and completion, is a concern of the research. It has the potential to contribute to knowledge about how or to what extent existing and emerging technologies potentially and essentially constitute the formation of these students.

Fifth, and a qualification of the previous point, some of the research literature about candidature explores the *attributions* about the PhD and the PhD student: what a PhD program is supposed to do and expected to be, including the sorts of professional and personal outcomes that it should create for the students that emerge from the program and the sorts of characteristics or qualities expected in a PhD student.

There exists an *idealisation* of the PhD student as engaging in a process of formation and unfolding that is built on a set of prescriptive categories, which are given concrete expression in policy documents. In effect, such attributions and this idealisation process are imposed on students. Of course, such attributions are external to the immediate experiences of an individual PhD student but nevertheless are fundamental to the disposition of that experience as objects in consciousness. This study engages with both the attributions themselves and, most importantly, the individual and idiosyncratic personal experiences that are a response to these attributions.

Finally, there is significant and growing literature that investigates the recent shifts in doctoral education in Australia and globally. These shifts include intra-university connections, which are often international in scope, and significant associations between universities and industry/commercial interests. These transformations, now mediated by digital technologies and practiced in virtual spaces and online knowledge communities, have the potential to reframe knowledge making and decentre sources of basic research away from the bastion of university doctoral programs. Such a shift is

not new but is given impetus by the movement to globalised education, the influx of international students and the emergence of the so-called knowledge economy and techno-capitalism. The key issues are, first, how knowledge is formed in the wake of global transformation in research and education, and second, who owns the knowledge produced. PhD students operate and conduct their research in the milieu of this global educational environment, so it is important to place their experiences and agency within this global frame.

Doctoral candidature is predominately conceived in terms of policy, the changing knowledge economy, shifts in communication modalities and access, as well as intracultural and gender issues. However, there appears to be only a small body of research published about candidature as an existential, strategic and experiential learning journey, though most recently some of this research is beginning to emerge, as I cited above. There is also a lack of research about the impact of digital technologies on the disposition of this journey, which is another focus of this research.

In Figure 2.6.1, the disposition of the research literature and the emphases of published research about doctoral education is schematised as a series of concentric circles, with each concentric circle embedded within others, suggesting the deep interconnectedness and possible substantive influences. A direct causal relationship is not suggested, however. The diagram represents the way that I am positioning this research project in terms of the broad research themes that I have identified in the chapter prior to analysis of data.

The outermost circle is the PhD as a conceptual, philosophical and historical frame which encompasses all the considerations of this chapter. The next two circles represent research that conceives the PhD and PhD students within the frame of internationalism, economic change and the global education market. This macro-contextual level of understanding doctoral education is well represented in the literature and constitutes an important area of research.

The next concentric circle signifies the effects of digital technologies on educational delivery and communication systems within society at large and within tertiary educational institutions. In terms of this research, this forms an important milieu for

consideration of the experiences of early PhD students. This macro-contextual frame is conceived as part of technological globalisation whose effects may be seen at international, national, regional, local, institutional and personal levels. It is a key aspect of contemporary human experience and is a nexus between such experience and larger social, economic and political themes.

The micro-contextual circle of socialisation and social networking is that human interactional realm that is in juxtaposition to the personal lives of PhD students. There is a considerable body of research about the socialisation of postgraduate students, and an especially significant body of scholarly work about supervision as a core relationship within candidature. This study is conceived as part of this literature and reflects concern with socialisation, networking and supervision, but from the perspective of the first-person experiences of the participants in this study.

The final two concentric circles are shaded in grey to suggest the specific areas of research interest and the key focus of this study. The experiences of navigating candidature, including the learning strategies, heuristics and approaches therein, as discussed in Chapter One, are foregrounded in this research. However, the embeddedness of this experience and process of navigation within the wider frames of digital technologies and socialisation is pivotal to the distinctiveness of this study.

The deepest of the concentric circles is about the essential core of experience and the structures and processes that constitute this core as revealed in the research transcripts that disclose the embodied experiences of research participants as they navigate their candidature. The themes represented in the other concentric circles form, more-or-less, the ontological content for this the deepest core.

The ontology of the PhD and the nature of early candidature, as conceived in this research project, with its phenomenological theoretical framework, has its primacy in the essences of the experiences of the students themselves, clearly represented as the core circle in Figure 2.6.1. However, such experiences are inextricably framed within ideas, policies, technologies and processes external to experience. Consideration of these frames and the wider research literature that explores these frames, as explicated in this chapter, is essential for contextual understanding and for grasping the

particularities of experience that have been articulated by the participants in this research. This is especially so, given the significant economic, social and technological changes that have and are still ensuing from the digitisation of society.



Figure 2.6.1: Positioning the study

In the data chapters that follow (Chapters 5-7), references to these larger themes are identified and analysed as part of a phenomenological consideration of the structures of experience. Put simply, the PhD participants in this study are understood phenomenologically in terms of experiencing their candidature:

- Within a globalised world of education and the internationalism of doctoral study;
- In the context of emergent digital communications and the maintenance of the PhD as historically emblematic of research education;
- Through the shifting of identities and communication patterns possible in online communities and social media as part of a connected world;
- Within the complex socialisations and performativities imbued in the formation of an academic, including cross-cultural and intra-language settings;
- Within the normative attributions attached to candidature that are explicit and implicit within universities;
- In their strategic use and adoption of digital technologies and digital devices as part of their navigation of the requirements of candidature and the forming of an academic identity;
- In the frame of personal need that links experience and attitudes to affordances within a study program;
- As a writing and publishing journey with patterns of work activity that are being shifted in the wake of digitisation of education and changes to the mechanisms of publishing.

By way of concluding this chapter, it is evident that there is an extensive and growing literature that explores the PhD, doctoral education programs and the shifting economic and digital context of doing doctoral research. However, there appears to be less emphasis given to the personal embodied experiences of doctoral students, including how they navigate through the complexities of doctoral education and use digital technologies as part of this navigation. There is especially a lack of literature about the early or probationary period of doctoral candidature. This study is positioned to engage with both these areas of doctoral research.

CHAPTER THREE THEORETICAL FRAMEWORK

A phenomenological approach to research is the fundamental theoretical position in this study. It is articulated in three ways. First, it seeks to understand the embodied experiences and negotiations of PhD students as they engage with their early research and writing. This suggests that the processes and procedures of doing the research are orientated to the phenomenological, and that there is a holistic approach to understanding and working with participants.

Second, a phenomenological approach or typology is implied in the methods of textual analysis of transcripts and other texts produced as part of the data gathering. The analysis of research materials is thus consistent with its gathering and the circumstances of its collection.

Third, it is evident in the framing of the research problem. In conceiving the research as being about experience as the core of the investigation and about consciousness as the ground for such experience, the problem is shifted to human existential questions in education, rather than concerns with policy, language, curriculum, politics and the like, although I am not suggesting that such concerns are unimportant. These ways of articulating a phenomenological approach are discussed in more detail in the methodology (see Chapter Four).

Before applying phenomenological ideas to the research project, it is necessary to examine the nature of phenomenology and the philosophical tradition out of which it springs. The purpose of this chapter is thus to elucidate what is meant by the phenomenological and to elaborate in detail the constituent elements of a phenomenological approach to knowing.

The chapter begins with an elaboration of the meaning of the term *phenomenology* as Edmund Husserl (Melle, 2002). understood it, so that phenomenology as a philosophical tradition and as an inclusive term for a set of philosophical positions is explicated. It then moves to examining phenomenology critically, noting the issue of the veracity of exploring human lived experience as captured in text.

Next, three discrete but related phenomenological perspectives are offered as hermeneutical lenses for understanding the experiences of participants in the research: the *Gestalt* theory of Max Wertheimer and other *Gestalt* psychologists; the hermeneutical phenomenology of Paul Ricoeur; and the notion of Lifeworld, as enunciated by Edmund Husserl and developed by sociologist, Alfred Schütz.

An overview of the theoretical framework of this study, and the key ideas in that framework, is schematised in Figure 3.1 below.

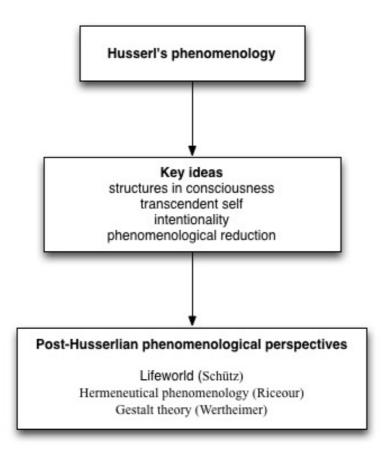


Figure 3.1: Husserl's phenomenology and phenomenological perspectives

The diagram locates four key ideas from Edmund Husserl's extensive corpus of writing that are relevant to this study and are explicated in the sections that follow. These are: intentionality, the sense that accompanies the movement from inner (thought, feeling, volition) to outer (embodiments) in experience; the transcendent self, that facility to be

aware and understand experience at a meta-level; structures in consciousness, the core structural feature of internality that form meaning; and phenomenological reduction, the technique of locating the deepest and most essential parts of these structures.

In addition, the diagram identifies the three key post-Husserlian phenomenological perspectives that are utilised as lenses in analysing the textual material collected from participants, the specifics of which are discussed in the chapters that follow. As suggested by the arrow in the diagram, these three perspectives emerged out of the historical context in which Husserl wrote and reflect many of his ideas and approaches to knowing, even if those that followed him did not accept all his philosophical propositions.

Section 3.1 Phenomenology and phenomenological research

The phenomenological approach to educational research and learning adopted in this study is taken from the philosophical field of phenomenology, and especially phenomenology as conceived by German philosopher and mathematician, Edmund Husserl. The Continental or European phenomenology movement developed out of or had its origins in his ideas and methods (Lauer, 1965; Pettit, 1969; Smith, 2009), so his foremost place in the history of Twentieth Century philosophy is more-or-less undisputed.

The goal of Husserl's philosophical enterprise was to return philosophy to human experience and consciousness: to all that impinges on a person and to the body as an inextricable presence in the world (Behnke, 1996; Zahavi, 2003; Wertz, 2016). As such, he attempted to move philosophical discourse away from the rationalism and the idealism that had characterised the concerns of philosophy in the previous two centuries, though these movements influenced his work (Melle, 2002). Husserl's work can, arguably, be considered a crisis point in philosophy because of its refocus on human experience. It led to the Continental Philosophy tradition of Europe, to the fields of existentialism and contemporary humanism, and to the current academic literature that involves the application of phenomenology to real-world contexts (Dowling, 2007; Tweed, 2011; Dall'Alba, 2016; Vagle, 2016).

Husserl's approach to knowing, his epistemology, involves identifying and interpreting a phenomenon as *experienced by a person in consciousness* and investigating its manifestations and structures in consciousness as an event, object or process (Vandevelde & Luft, 2010). Happenings in the world exist for humans only as they are constructed and formed in consciousness.

It is important to note the crucial connection and unity between corporeality (the body) and consciousness (the mind) in phenomenology, as Husserl understood it, since experience and action in the world are integrally connected and as such there is no duality or binary categories in phenomenology, and since consciousness and action from the body are different aspects of the one unified experience of embodiment. That is why throughout this thesis I have used the term *embodied experience*, as experience is in a body and a body actions experience.

Phenomenology is based on the formation of knowing from an embodied and conscious person who experiences, and a phenomenon is the nexus between this embodied consciousness and the objects in the world that are at the margins of a person's body and at the horizon or the sphere of the senses (Welton, 1983, 1998, 1999; Smith, 2009). Phenomenological philosophers who followed Husserl, including Maurice Merleau-Ponty and Paul Ricoeur, developed this holistic aspect of phenomenology, though they differ in rejecting the idea that the self is transcendent. For them self (or the ego) is a construction of intersubjectivity and of relationships with objects in the world (Durfee & Rodier, 1989).

The core of Husserl's phenomenology, and indeed the whole range of phenomenological views since he wrote in the early twentieth century, is *intentionality* (Horgan & Tienson, 2002; Pautz, 2008). This term should not be taken to mean an act of the will, which suggests a highly self-aware state of volition. Intentionality is, rather, *the* essential structure in consciousness and refers to both the *act* of interacting with objects in the world and the content or *sense* that is brought to objects in the act itself (Dreyfus & Hall, 1982; Hopkins, 1993; Byers, 2002). Intentionality implies a doing or an acting or a performing and a sense in this doing, with both action and meaning experienced together, tacitly, in consciousness.

Fundamentally, intentionality is a feature of consciousness that is prior to the exercise of will because it is more elemental and sensory-driven and derived from experience (Woodfield, 1982). The expression of will becomes another layer of consciousness on top of the prior condition of intentionality. Another way of conceiving intentionality is to see it metaphorically as residing in a *channel* between the experience of a person and entities in the material world. Across the channel between inner and outer, intentionality is a means of making sense of the world and organising this sense as structures or patterns in consciousness.

This can be illustrated by considering the connection between a person and a digital device. When a person interacts with the digital device there is an act of doing (a corporeality) and a sense in the doing (a meaning) that is shaped by the *deviceness* of the object that is ascribed by the person experiencing the object as a device (Hansen, 2006). The phenomenon of being with the device and doing actions with it is structured in consciousness, with intentionality being the central and organising structure of this phenomenon. Intentionality becomes the dual sense of what the computer device *affords* and what it *becomes* for the person experiencing it in the temporal immediacy of the experiencing (Conole & Dyke, 2004). This is a preceding condition to decisions about its contextual use that might constitute an exercise of will or a volitional state.

Phenomenology is about the world as experienced in a phenomenon and the intentionality that is at the core of that experiencing. Both the experience of and the intentionality in engagement with the world are structured in consciousness according to meanings assigned to this engagement. A phenomenological researcher may examine both the whole and the parts of a phenomenon as experienced, describing the constituency of parts of its existence (its ontology), locating its essence as experienced in intentionality and applying an interpretive or hermeneutic framework to a phenomenon to understand its possible meanings. Within this investigative process, it is important to separate that which is contingent (or dependent) from that which is *essential* to a phenomenon, though both are part of the one phenomenon as experienced holistically (Landgrebe, 1973).

Phenomenological research is especially concerned with finding the essentiality of a phenomenon (its *eidetic* qualities), through a process of phenomenological *reduction*,

a process that is at the core of the phenomenological method as espoused by Husserl, and adopted as one method of textual analysis in this study (Giorgi, 1992, 1997; Groenewald, 2004). In *Shorter Logical Investigations* Husserl (2001) describes the reduction this way: "Phenomenological reduction yields the really self-enclosed, temporally growing unity of the stream of experience" (p. 208).

In other words, phenomenological reduction concerns the core unifying structures of the *experience of an event, object or process* and finding ways of understanding and interpreting such structures. Husserl, however, was of the view that we can only know a phenomenon in consciousness, such that the self that knows is transcendent from the materiality of the world. This approach to phenomenology is often termed *transcendental phenomenology* (Welton, 1983). The self or the ego that experiences and structures that experience in consciousness can only know the experience itself, not the world that contains the event, process or object. This differentiation between experience and the structures in consciousness on the one hand and the objects in the world on the other is suggested in Husserl's phrase, "self-enclosed". Through sensory input a person experiences objects in the world; however, such experience is then ordered in consciousness according to structures that are both instinctual (innately present) and evolving through the formation of meanings.

Schmitt (1959) synthesises Husserl's method this way:

The transcendental-phenomenological reduction is called "transcendental" because it uncovers the ego for which everything has meaning and existence. It is called "phenomenological" because it transforms the world into mere phenomenon. It is called "reduction" because it leads us back (Lat. *reducer*) to the source of the meaning of the experienced world, in so far as it is experienced, by uncovering intentionality (p. 240).

So, the reduction is about ascertaining what the world and objects in the world become (phenomena) because of the transformative sense that is brought to the world through the ego or the selfhood of a person.

For Husserl, a phenomenon is given through elemental intuitive structures in consciousness and is encountered through "pure seeing" (Pettit, 1969, pp. 16-26), meaning a sense that is given through intentionality. As Husserl states:

If higher, theoretical cognition is to begin at all, objects belonging to the sphere

in question must be intuited. Natural objects, for example, must be experienced before any theorizing about them can occur. Experiencing is consciousness that intuits something and values it to be actual (Moran & Mooney, 2002, p. 125).

As objects are given in consciousness through intentional encounter, through experiencing them directly, they can then take form and be intuited in *pure consciousness* (p. 129). In other words, objects in the world are experienced imminently and then they take structural form in consciousness, to which is added what Husserl calls higher, theoretical cognition. The phenomenological reduction serves to locate the structures in this intuiting, in the experiencing and in the intentionality.

In *Ideas: General Introduction to Pure Phenomenology*, Husserl (1969) proposes the ideas of *noema* and *noesis* to give conceptual formation to this intentional and dialectical experiential encounter that is the central structure in the phenomenological reduction. The noema represents the transcendent 'I' or ego of an intentional act, and the noesis is the object of that act. Noetic content is the import generated in the exchange between noema and noesis; it is the meaning that is produced out of this dialectic encounter. The structure of this phenomenological formation is schematised in Figure 3.1.1 below.

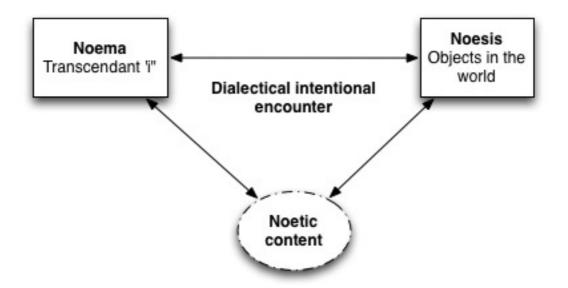


Figure 3.1.1: Noetic content

In the context of the participants of this study, the noema is the self (or ego) of a doctoral student intentionally negotiating his or her research, and the noesis may be the set of digital technologies that is encountered and deployed as part of this intentional

negotiation. The noetic content of the dialectical exchange is the substance of this study because it contains within it the experiences, strategies, negotiations and meanings that are embodied by participants in the context of their research and formation as scholars.

Only as the pure transcendental ego encounters a phenomenon in the world through action and interaction (as intentionality or *Selbsthabe*) imbued with sense do the essences (or *Wesen*) of that phenomenon surface in consciousness (Macann, 1993, pp. 1-54; Merleau-Ponty, 2014, xxviii). Husserl writes:

The only thing I can take note of, and therefore perceive, are the empirical ego and its empirical relations to its own experiences, or to such external objects as are receiving special attention at the moment (2001, p. 209).

This notion of "at the moment" suggests the centredness of the *present* or the present of things in the approach of Husserl (Staiti, 2010). For him an object is experienced in the temporal and structures in consciousness emerge out of this temporal experience. For this study, the experiences of participants and their intentionality in the world need to be located temporally, within the immediacy of being in the present, to be consistent with an Husserlian approach.

The goal of Husserlian phenomenological investigation, and phenomenological reduction as a discrete feature of this investigation, is to find the deepest organising principles, meanings or structures that are at the core of a phenomenon as experienced in the present. Husserl was adamant about the importance of the closeness of an encounter with a phenomenon. For Husserl, in *Ideas*, there is a full grasping of the world in consciousness, in a mind that is fine-tuned to the sensory data of the world (Bell, 1990; Mohanty, 1995; Priest, 2003; Vannatta, 2007). It is this grasping of the world of PhD students as they experience it and its givenness, and the organising principles of that experience (or essences or eidetic qualities), that was the core focus in this study.

Section 3.2 A critical examination of phenomenology

Husserl's transcendent view of the self in apprehending a phenomenon was not fully shared by those phenomenologists who followed him. For instance, the existential and hermeneutical phenomenologists, such as Sarte (2003), Heidegger (1996), Ricoeur

(1984, 1991) and Gadamer (Gadamer, 1982; Gadamer & Silverman, 1991), did not conceive the transcendent ego as the ground or foundation of being but instead argued that phenomenology should be embedded in broader notions of human identity, volition, action, experience, social interactions and embodiments in the world. Most recently Mark Vagle (2016) has taken up this re-interpretation of phenomenology as a theoretical framework for social research in his post-intentional phenomenological approach to research (see 4.5).

The self or ego is not, according to these post-Husserlian phenomenologists, transcendent from a phenomenon but is part of a body in the world or is an aspect of being-in-the-world. In other words, it is *imminent*. This differs from transcendental phenomenology where structures in consciousness are centred around a non-material ego. For French psychologist and phenomenologist, Merleau-Ponty (1962), the body and consciousness is fully in the world and fully in the body (is fully imminent), and not transcendent from it, such that there is no mind-body split but a unified and imminent subject-body. There is no transcendent ego but a self that is constructed as part of embodied experience and as part of intersubjectivity.

Immanuel Levinas (1991) extended this view of the body in the world and intersubjectivity through his ethics of phenomenological encounter with the human *other*, built on ideas from his contemporary, Jewish mystic philosopher, Martin Buber (2004). Humanistic and Gestalt psychology also have foundations in existential phenomenology in portraying human beings as fully embodied in the world and fully capable of change, authentic volition and actualisation (Schneider et al., 2001).

The essential feature of Husserl's work pivotal for this study is not the notion of a transcendent ego, which has considerable philosophical problems, but *transcendence of meaning*. Meaning is transcendent in the sense that it is grounded in significances that are ascribed to objects in the world that go beyond their ordinariness and move them to a disposition of otherness (Moran, 2000; Hyde, 2016).

Meaning is built on structures of consciousness that become *meaning structures* centred on intentionality as a core feature of meaning. As Welton (1983) points out about Husserl's concept of transcendence, mental representations that are referred to in psychology and the formal structures of language used in linguistics should be differentiated from the notion of meaning that is phenomenological. Meaning, for Husserl, is a transcendent quality of consciousness that comes out of immanent experience, and, as such, can be described almost as an experiential object. This is why Husserl's phenomenology is often described as a descriptive phenomenology (Giorgi. 1992; Moerer-Urdahl & Cresswell, 2004).

It is this Husserlian phenomenological sense of meaning as a transcendent attribute of consciousness, one that is describable, that was pivotal to this study. It is employed with cognizance of the divergence of approaches that come under the label of *phenomenology*. It is used in a complementary way with more interpretive or hermeneutic phenomenological approaches because it provides a cogent approach to locating the internality of participants as part of phenomenological reduction (Giorgi, 1992; Van Manen, 2016a).

To adopt this concept of transcendence may suggest the issue of how truth is established for a phenomenological researcher, especially regarding memory and the recall from individuals of their experiences (Feyles, 2012). The question of how the veracity of truth claims derived from a transcendent notion of meaning can be substantiated is a compelling criticism of phenomenological epistemology.

Given the focus of phenomenology on first-hand, embodied experience, and on intentionality as the core meaning structure in experience, there is a substantial self-referentiality evident in phenomenology: an understanding of selfhood in terms of the experiences from the embodied self (Fuenmayor, 1991). Thus, the accuracy of experiences reported by individuals, and the meanings attributed to such experiences and to interactions with the world, may be questionable because there is, seemingly, no empirical reference point external to experience to authenticate the declarations of a person reporting; indeed, there may be a level of reconstruction and phantasm possible that affects what is collected.

However, the point of phenomenology and phenomenological research is not to establish identifiable or verifiable truth, as if the meaning objects of consciousness were accessible as part of a scientific investigation (Vahabzadeh, 2009). The scientific

notions of veracity and authenticity are not applicable to phenomenological investigation because the phenomenological implies a mode of experiencing and a conceptualisation of truth that lie outside of the usual methods of scientific research (Gadamer, 1982; Ehrich, 1996; Vagle, 2016).

Therefore, phenomenology could be conceived as beyond or apart from (transcendent to) the naturalism central to the scientific method. What is important is the subjective, internal realm, and what is centralised is the attributions of meaning (or the significances) that a person brings to the world through experiencing it via the body as a living and permeable medium (Fuchs, 2005; Küpers, 2005). Part of these attributions may be reconstructions and fictions, as meaning is constructed and deconstructed as truth for that person. These constructions, deconstructions and fictions are not problematic because they are part of the fundamental transcendent landscape of meanings that are essential to understanding a person's take on the world and the ascription of significance to objects in the world. Fictions, narratives, feelings, symbols and opinions are the very substance that constitute the meanings that emerge in phenomenological description and analysis.

As Fuller (1990) points out, the bifurcation between the so-called objective space of nature and the subjective realm of consciousness and experience that had its origins in the philosophy of Descartes, sets up a misleading binary: that there is both an objective meaning and a subjective meaning. However, in phenomenology there is no binary and meaning is located holistically as part of an intentional process of interaction with the world that is both individualistic and inter-subjective. Indeed, the so-called objective space of nature is only known meaningfully in the arcs of intentional action and experience that reside with each person and are subject to the interplay of memory and imagination. It is in these arcs of action in and experience of the world that phenomenology unfolds as description and as a mode of interpretative practice.

Section 3.3 The *Gestalt* theory of Wertheimer

To understand and interpret the noetic content offered by the participants in the study, I identified three phenomenological perspectives as hermeneutical lenses to complement and give interpretive substance to the descriptive transcendental phenomenological approach of Husserl. The selection of these three perspectives was based on their applicability to contexts of learning and negotiation, their consistency with phenomenology as an expansive category of knowing and their usability as lenses to examine textual materials produced in the processes of data gathering.

The first of these lenses is *Gestalt* theory. According to this theory, learning is a process of forming a unified sense of meaning and adapting self to the world. *Gestalt* is a German word that refers to a pattern or a configuration. *Gestalt* theory is a psychological theory, significantly influenced by phenomenology, which describes the human tendency towards perceiving unified wholes or to finding *gestalten* or whole forms (Hamlyn, 1961).

Gestalt theory concerns ideas about visual perception developed and popularised by German psychologists in the 1920s, especially the work of Max Wertheimer, Wolfgang Köhler and others (Humphrey, 1924; Köhler & Emory, 1947; Wertheimer & Riezler, 1944). The original ideas go back to the work of German philosopher and psychologist Franz Brentano and Austrian philosopher, Christian von Ehrenfels, who published his essay "On 'Gestalt Qualities'" in 1890 (Smith, 1988). These theories describe how humans tend to unify visual elements into groups based on certain discrete principles (O'Leary & Knopek, 1992). Like Husserl, Wertheimer and his colleagues conceived a set of structural principles that operate in consciousness and emerge directly out of experience, especially perceptual experience.

According to Wertheimer (Wertheimer & Riezler, 1944), the visual world is complex, unpredictable and varied, and so the mind has developed strategies for dealing with this complexity. The tendency is to locate the simplest holistic solution to a perceptual problem. One of the ways it does this is to form whole groups of items that have certain characteristics in common, so that there is a clear holistic organising tendency in human perception.

There are many situations where what is perceived is the whole, not just the parts. Indeed, Wertheimer conceived that *gestalten* are primary in perceptual experience: the person tends to see the whole even before the parts (King & Wertheimer, 2005). As Wertheimer said in a speech in 1924 (Wertheimer & Riezler, 1944):

The basic thesis of gestalt theory might be formulated thus: there are contexts in which what is happening in the whole cannot be deduced from the characteristics of the separate pieces, but conversely; what happens to a part of the whole is, in clear-cut cases, determined by the laws of the inner structure of the whole (p. 84).

Put simply, the parts are important for the whole and the whole is more than the parts, and this is an innate structure of perception that occurs in consciousness. From a *Gestalt* perspective, both the whole and the parts require investigation. For example, in the person-digital technology relationship that is explored in this research, the whole of a PhD student's experience of using digital technologies and the parts, or constituent elements, of that experience are equally important to consider. This level of investigation is achieved in this study through ontological analysis of the constituency of experience as described more fully in Chapter 4, followed by specific interpretation using *Gestalt* principles.

Aspects of *Gestalt* theory are of interest to designers, especially in regard to the relationship between the parts and the whole of visual experience (Adorno, 1970; Bhrens, 1998; Fishwick, 2006). In terms of computers and learning, Chang, *et al* (2002) researched educational visual screen design to teach student nurses wound management, using *Gestalt* principles such as balance-symmetry, continuation, closure, figure-ground to redesign visual screens for teaching in consultation with students.

They concluded that using these principles was overwhelmingly successful with students in the design of learning materials such that better learning occurred. This supports earlier research by Moore and Fitz (1993), who found the *Gestalt* approach not only suitable for simplifying design but also as a means of analysing the design of visual instructional materials.

Considering the focus of this research, the study could include the visual aspects of digital technologies, as well as other visual aspects of the unifying experiences of PhD students in negotiating their research and writing. The notions of design embodied in *Gestalt* theory are employed in a comprehensive examination of the structures of experience in the chapters that follow.

However, it would be a mistake to confine the notion of *Gestalt* to the visual, even though it has been used extensively in visual and architectural design. Wertheimer

applied these ideas to a range of human perceptual fields, including the aural. He noted, for example, that we do not hear individual notes but the whole of a piece of music (Leman, 1997; Hartman, 1959). Therefore, perception is often based on sets of unified perceptual inputs that form whole patterns.

Given the wider application of *Gestalt* ideas, this theory has also been applied to human learning and therapeutic contexts in what is called *Gestalt* therapy (Brownell, 2008). Just as a person perceives the world visually or aurally in wholes, according to *Gestalt* theory, a person is also inclined to view the self in terms of a whole and attempts to sustain a unified self. The concept of restoring a holistic and healthy sense of self, a unified self, has been used by German psychologists, Perls and Goldstein, to create a distinct psycho-therapeutic practice that is still widely used in counselling and psychology today. It is also applied to notions of learning and how students adapt to diverse environments (Aldridge, 1993; Link, 2016).

Importantly for this study, learning in *Gestalt* theory is about how the self develops through creative adjustment across personal boundaries or fields in terms of other people and the environment (Boring, 1930; Wertheimer, 1980; Ikehara, 1999). A person attempts to maintain actively a holistic view of self (a *gestalt*) and, consequently, can assimilate or block information across the boundaries or fields between the self and the world strategically to preserve or modify this image of self. Effective learning, from the point of view of *Gestalt* theory, is about cohesive and stable adjustments and changes that enhance the self and the capacity of the self to function effectively in the world. Learning, from a *Gestalt* perspective, also concerns establishing appropriate barriers and being selective about what information is important and what is not, such that the integrity of the self is maintained. In terms of conceiving learning, *Gestalt* theory is close to ideas espoused in existential phenomenology about the active adjustment to and volitional awareness of a person to the conditions of the world, as seen in the ideas of many phenomenologists (Ikehra, 1999), including Merleau-Ponty (1962) and Sartre (2003).

In sum, the core ideas about learning in *Gestalt* theory, such as *adjustment*, *assimilation* and *adaptation*, can be used to describe the attempts of an individual to sustain a unified self in the context of change. Learning and selfhood are thus closely linked in *Gestalt* thinking, making this theoretical interpretive lens apt for understanding the experiences

of early doctoral students and the contexts in which adaptation and adjustment to the demands of candidature are necessary.

In terms of this research, *Gestalt* theory has two potential applications. First, there is application to design and visual perception. *Gestalt* theory provides a theoretical basis for understanding the ways that design elements in digital technologies and the presentation of information relate to user sensory experience, especially, but not exclusively, visual perception. This may be a significant factor in how doctoral students negotiate their studies and adapt to the various real and virtual environments that are part of the milieu of university and research life.

Second, there is the hermeneutical perspective of viewing the self as capable of adapting to the world. *Gestalt* theory is thus deployed as a framework for understanding learning as an adaptive process emerging from and related to the construction of a self, and in the case of doctoral students, an emerging self as scholar. It has potential value in understanding what participants believe is of value in terms of adapting to the demands of candidature and coping with the complexities of dealing with mixed delivery and multiple modality information systems through which universities now operate.

Section 3.4 The hermeneutical phenomenology of Ricoeur

Not only can learning and negotiation be conceived as about adapting the self to the world (as is espoused in *Gestalt* theory), it can also be regarded as how meaning is constructed and how language is formative to such constructions.

One thread in the work of Paul Ricoeur is that learning is about active meaning making, action and agency in relation to the world and other beings, and that language is integral to the expression of this action. Paul Ricoeur was a French philosopher and leading proponent of existential and hermeneutical phenomenology, whose work has been influential not only in philosophy but in a range of other disciplines (Reagan, 1996; Simms, 2003). His corpus of writing is extensive in its scope and content, so this brief analysis of his work, by necessity, focuses on ideas that directly relate to the needs of this study, such as human action, narrative, agency, memory and language.

According to Ricoeur, humans, as agents in the world, act in the temporality of time and understand such action hermeneutically through the symbolic control of language (Klemm, 1983). This concept is clear in *The Rule of Metaphor* (Ricoeur, 1978), where he argues for the close link between discourse and action. As such, speaking, writing, communicating and action go together inextricably, a point that seems highly useful in conceiving what it is that is happening for early PhD students in the processes of negotiation and formation.

The fusion of action and language creates for a person, according to Ricoeur, an unfolding narrative of self that is linked to human agency and intentionality in the world (Jervolino, 1990). The notion of an unfolding narrative of self is a significant concept in this research since it is central to doctoral students' sense of who they are in the hereand-now and who they want to be. Their action in the world, indeed their action with digital technology and the strictures of candidature, is part of the content of this unfolding narrative. Whilst in *Gestalt* theory the self is more-or-less a fixed entity that then undergoes adaptation to the world, in Ricoeur's thinking the self is a *construction* that evolves out of the immediacy of being in the world (Venema, 2000). However, these two perspectives are not contradictory; rather, they are complementary ways of conceiving the self. Ricoeur's concept is about the emergence of self to a stable form, and *Gestalt* theory considers what happens to the stable self through change.

The idea of a *person* should not be confused with self, though they are, of course, closely related. In *Oneself as Another*, Ricoeur (1992) argues that a person is readily identifiable because a person relates to the primitive referentiality of body. The self is also identifiable through "the power of self-designation that makes the person not merely a unique type of thing but a self" (p. 32). Thus, according to Ricoeur, a person is constituted in both body (or corporeality) and in an ascription of self, or a pointing to self that is especially emblematic in the use of the proper name of a person. Simply put, I am me as *body*, I am me because *I locate me* as me in terms of the world and other beings in the world and I am me because my name says that I am me. In a sense, then the Cartesian notion of the *cogito, ergo sum* (I think, therefore I am), misses the essential corporeal and volitional aspects of being identified as a person (Jervolino, 1990).

In *From Text to Action: Essays in Hermeneutics*, Ricoeur (1991) argues that human intentional action in the world is built temporally, in the experience of the here-and-now, but also in the attempt to look forward through *expectation*. In effect, experiences in the now are constantly tempered by and evolve into a set of expectations about what-might-be. Ricoeur connects this intentional action and expectation with desire. He states: "desire can be treated as a reason for acting" (p. 134). He suggests that desire is also a *force* in acting. According to Ricoeur, humans experience in the now and act in the now due to various motivations, including desire, but there is also a projection into expectation of what might be (Wells, 1972). Significant in this concept is the connection that Ricoeur makes between the affective dimensions of a person and that person's actions in the world. Put crudely, actions are coloured by feelings.

While action, intention, desire and expectation are experienced in the immediacy of being in the world, they are also diegetic in the sense of being reported, narrated, constructed, and fictionalised through the articulation in language and as text. Both the temporal experiences of being an early stage PhD student and the diegetic representations of those experiences are central features of the investigation of this study. Ricoeur's ideas about the connection between experience/action and language/text have significantly influenced the design of the methodology and development of textual analysis tools for the study. For example, the reflexive online journal is intended to encompass the temporal experiences of students and their personal narratives of living and constructing self.

The narrative of self, as Ricoeur conceives it, is concomitant with time, a view shared with his contemporary, Heidegger (1996), who was a student of Husserl. In *Time and Narrative*, Ricoeur (1984) suggests that humans experience time in two ways: firstly, as a cosmological experience of the linear passing of time as days, weeks and years, that are ascribed in language and culturally located; and, secondly, as a temporal experience in which, as self-aware beings, humans experience constructions from the past, states of internality in the present and conjectures about the future. Past, present and future are fluidly woven in the experience of being in the world in the present. These notions of time are totally connected and humans act volitionally in time, conscious of their own finiteness and their own personal narrative. Ricoeur proposes that humans desire a stable self (which is an idea akin to *Gestalt* theory), but they also

understand that the self is necessarily changed in time and becomes an unfolding narrative of personal evolution and transformation (Wood, 1991).

Ricoeur maintains that each person has limited volitional control over changes to the self in the flux of time. Furthermore, the self is fully embodied and embedded in time, temporally and cosmically. The self is also contingent on the collective social memories of and contingencies from the past, a position he made clear in his last book, *Memory, History, Forgetting* (Ricoeur, 2004). Ricoeur suggests that while human interpretations emerge from temporal experiences they also arise from a position in history, so they have an indelible historicity. He writes:

We have nothing better than memory to guarantee that something has taken place before we call to mind a memory of it...the final referent of memory remains the past, whatever the pastness of the past may signify (p.7).

Thus, human action and experience ineradicably lead back to language because history and memory are interpreted and recorded in language (whether in oral or written traditions). This notion of the historical link between text and experience has been influential in the way that I regard the place of text in conveying human experience in this study.

Ricoeur's notions of time and history, and human immersion in both, are also important concepts for this study. Indeed, PhD students tend to experience the worlds of study, of work and of personal life in intervals of time (semesters, due dates, appointments, work shifts, and the like) that shape their experiences, actions, expectations and desires. Part of the investigation was to understand how time (cosmologically and temporally) is negotiated, and the place of digital technologies in mediating the experience of time in consciousness.

Despite these limitations in time, Ricoeur argues that humans have the existential capacity and endeavour for creative change. In *Freedom and Nature*, Ricoeur (1966) suggests that humans are shaped by voluntary and involuntary elements that construct who they are and who they can become, including the intersubjective nature of existence as part of society (Cohen & Marsh, 2002). He argues that humans must struggle with these elements as part of the process of becoming. These elements become

part of the narrative constitution of the self along with experiences of time discussed above.

Humans are partially free and partially bound in their circumstances, and consequently experience limited agency, but a potentially generative agency, nevertheless. Indeed, human freedom and its attendant boundedness are unequivocal in Ricoeur's writing. In Ricoeur's *Fallible Man* (1986) the notions of *bios* (human limited spatiotemporal life) and *logos* (human potential to conceive in universal terms) are held in creative juxtaposition. Human identity, for Ricoeur, is forged in the ground between human spatiotemporal limitations of the bios, including human biological constraints, and the craving for the universal and, by implication, the eternal, in the logos. And humans are ever aware of their finitude in the circumstances of the bios. Indeed, as Ricoeur puts it: "It is finite man himself who speaks of his own finitude" (p. 24). In other words, humans are self-aware of limitations, but in that self-awareness, there is the potential for creative transcendence beyond finitude.

In this study the tension between doctoral students' spatiotemporal limitations on the one hand and their desire for the universal and the expansive on the other is one horizon of investigation that is in accordance with Ricoeur's ideas. This idea was explored, for example, in the strategies that students used to deal with their circumstances and then move beyond them, or how they conceived, out of their past and history, what was possible in their future.

Another possibility is that the expansive and the universal, the transcendent, could be facilitated in the capacity afforded by digital technologies for creative expression (writing, art, drawing, composing, thinking, planning, imagining and many more), in the ubiquity of digital technologies in connecting the life spaces of a student (personal, educational or work) and in fostering community and connectedness (online or corporally). The ideas of Ricoeur thus provide an existential lens for interpreting the scope of participants' lives and the place of digital technologies within that scope.

Ricoeur's ideas about self, time and the constitution of identity also appear germane for understanding how digital technologies become a means of agency and action, and how, hermeneutically, such technologies can be employed to construct users' experience and sense of self in the world and in time. For instance, the ideas of *bios* and *logos* appear to be pertinent in terms of understanding the capacity of a person with digital devices to transcend the boundedness of the human spatiotemporal condition and locate connectedness and meaning beyond the body. Of course, this is only ever partial or could be viewed as an experience or mental act of transcendence which supports individual meaning formation.

In addition, implied in Ricoeur's thinking is a specific notion about human learning. While he is not categorical about this notion, Ricoeur appears to suggest that learning occurs in that temporal ground between recognising human limitations and embracing human capacities for change that happens in the *logos*. In terms of the doctoral students who are the core of this study, their human limitations and boundedness in the conditions of candidature were important to investigate; but it was equally important to explore ideas about potentiality and transcendence that might also be part of the constitution of their experience.

Section 3.5 Husserl and Schütz's notion of Lifeworld

In the study, learning and negotiation are core concepts that were used to understand the experiences of doctoral students in early candidature. Learning can be understood as about *Gestalten*: the patterns of adjustment of the self to the world. Learning can also be conceived as being about existential existence as expressed hermeneutically in language as it reflects movement between the potential for change and human limitations (the Ricoeurian idea). But learning can be understood as located in the horizons of living together as fellow beings in the world and with the objects in the world, in what is termed a Lifeworld, an important phenomenological construct defined in Chapter One (see 1.4).

This phenomenological notion, originated by Edmund Husserl (1970) and developed and modified by sociologist Alfred Schütz (1967, 1970), means the horizons of living in the world and together as fellow subjects (or intersubjectivity) in the physical universe as an inextricable *given* of existence. As Husserl states: "In whatever way we may be conscious of the world as universal horizon, as coherent universe of existing objects, we, each "I-the-man" and all of us together, belong to the world as living with one another in the world; and the world is our world, valid for our consciousness as existing precisely through this living together" (1970, p. 108).

The self is defined in terms of the social structure of *all of us together*. Existence and our consciousness of existence is formed in this social horizon, according to Husserl. This *Lebenswelt* encompasses human subjectivities, social relationships, linguistic understandings and the physical objects of the universe, as they impinge on the Lifeworld of each person.

While Husserl conceived this phenomenologically in terms of a world of objects and relationships that subsequently form as structures in consciousness, Schütz regarded this social horizon epistemologically. Part of this world, according to Schütz, is how we create knowledge, or personal epistemologies, in relation to the other (socially-derived knowledge), the notion of being a citizen and the boundaries that shape knowledge making (Wilson, 2002). Schütz (1973) states in *The Structures of the Life-World*:

The everyday reality of the life-world includes, therefore, not only the "nature" experienced by me but also the social (and therefore the cultural) world in which I find myself; the life-world is not created out of the merely material objects and events which I encounter in my environment. Certainly these are together one component of my surrounding world; nevertheless, there also belong to this all the meaning-strata which transform natural things into cultural Objects, human bodies into fellow-men, and the movements of fellow-men into acts, gesture and communications (p. 5).

Meaning, for Schütz, has a transformational consequence in imbuing objects and people with certain textures of meaning, including cultural meanings, such that a particular and unique Lifeworld is formed by each person. Moreover, Schütz's notion of the transformation of material objects to cultural objects through what he calls "meaning-strata" appears to have application to contemporary digital technologies, which can be interpreted as material and mental objects that become personal tools of exploration and connection through layers of meaning that are attributed to them.

More recently, Ihde (1990) extends the ideas of Husserl and Schütz to technology and the phenomenology of technology. He apprehends the Lifeworld as also encompassing the technological existence of the human species (Ferré, 1988). He suggests that human life, and the Lifeworlds of individuals, are "technologically textured" (p. 1), or have an

inbuilt technological orientation, and it has been this way ever since humankind evolved and moved geographically into civilised societies (Ihde, 1990, 2009).

In conceptualising this research, the idea of Lifeworld includes all that impinges on or is contingent to doctoral students' pursuit of their research and writing programs, including their experience with and use of technologies. A doctoral student can thus be considered not just a person with a device, or using an app, a modality or software, but also a person with bounded socio-cultural-technological world of contemporary tertiary education.

The nature of how this boundedness shapes a person and constructs her or his learning and the pathways of negotiation that form as part of doctoral research can only be understood idiosyncratically through the recollections and experiences of each person. The inductive phenomenological and qualitative approach to understanding doctoral participants in this study was conducted with such a focus on individual experiences as they are expressed in the Lifeworld.

CHAPTER FOUR METHODOLOGY

This research focused on what early PhD students experienced of their candidature and how such experiences were shown in the external embodiments of doing doctoral work during a one-month period. The study also examined the negotiations of these candidates, which included strategies and approaches of getting through the demands of candidature, as well as adaptive behaviours, including those related to integrating study with their personal lives. In all these experiences and negotiations, the role of digital technologies in the context of online communicating systems was a concern, especially regarding the efficacy of how digital technologies operated for participants. Finally, this study was concerned with the expressed needs of the doctoral participants and what they viewed as important for their lives and their study goals.

In order to identify and understand these complex internal experiences and external embodiments from experience, ideas from phenomenology, hermeneutics and *Gestalt theory* were selected and used as part of an integrated approach to analysis. These ideas are explained in the previous chapter. This chapter describes the methodology of the study and positions the research as a small-scale qualitative phenomenological case study with consideration all that constitutes and impinges on the experiences and the Lifeworlds of the six participants. The approaches and tools of ethnography are employed to gather data from participants. These tools include the semi-structured interview and the reflexive journal.

The notion of understanding human experience as expressed in the world is at the heart of holistic phenomenological research. It evokes profoundly personal questions about the nature of human existence, about what makes us who we are and about what constitutes the meanings of phenomena in the world. Phenomenological research has a significant existential and experiential element that co-exists, in a complementary way, with trying to understand the world through observation and analysis (Crotty, 1996; Van Manen, 1990; Creswell, 2007, 2009; Marshall & Rossman, 2011).

Phenomenological research can be about more than observing the externality of what humans do and how they communicate, learn and behave; it can also concern what humans experience in all its ontological parts and the intentionality behind action. Both observing and experiencing can be conceived as part of educational research; but educational research is also about how observation and experience are *represented* in language (the semantic dimension), given meaning in human contexts (the hermeneutic dimension) and constructed socially and politically for a context in specialised forms of writing (the discourse dimension).

One objective of this research project was to encompass all the aforementioned aspects of research in order to understand the complexity of how early stage doctoral students conceive their learning, negotiations and textual output. This objective was supported by a methodological approach to inquiry that facilitates such a level of complexity. The way of doing the research was afforded by using a qualitative systematic phenomenological approach, incorporating research tools typically used in ethnography.

A phenomenological qualitative approach to research has been used extensively across a range of social research contexts, including education (Boland, 1986; Crotty, 1996; Prus, 1996; Collingridge & Gantt, 2008; Vahabzadeh, 2009; Skinner, 2010; Desjarlais & Throop, 2011; Finlay, 2011; Hesse-Biber, 2016). The aim of the methodology, explicated in detail below, was to provide a comprehensive means of examining the experiences and identifying the negotiations and strategies that are part of being in the tertiary world and learning as a doctoral student. The use of data gathering tools derived from ethnography enabled me to collect textual content that reflected the experiences of participants in a variety of contexts. The use of ideas derived from phenomenology orientated the research towards individual human embodied experiences and intentional engagement of a person with the world and with other beings. It also garnered meaning from the perspective of the research participants themselves.

The question arises whether phenomenological research and ethnographic research are compatible as approaches to investigating educational issues and learning. Ethnography is a research approach that focuses on culture and writing about culture, and on groups with shared patterns of beliefs, values and feelings (McGranahan, 2014). By contrast, phenomenology is an approach that examines the essential meaning structures of specific human experience, focusing on individuals within a social, cultural and

historical context and how they make sense of the world.

Ethnography has been used to study a range of social, educational, cultural and political contexts, whilst phenomenology focuses on the specificities of individual experience of phenomena within such contexts. However, while having differences of perspective, the two approaches share a common concern about human experience in groups or in societies, and many of the ethnographic approaches to data gathering are useful for phenomenological research. Employing these two approaches in the research enabled a complex understanding of the contextualised experiences of doctoral students.

The phenomenological ideas discussed in the previous chapter not only provided a theoretical framework for the textual analysis described below (see 4.5), but also influenced the conduct of the entire research process which included ethnographic techniques. For example, in interviewing participants the focus and orientation was on the experiential content associated with negotiating early candidature. The focus was on *internality* and how this internality was articulated in *externality*, through the actions and embodiments that were shown in the world and would be typically a part of the focus of ethnographic analysis. Both internality and externality constituted the phenomenology of the participants' experiences of coping, adapting and learning through this early candidature period within the frame of their Lifeworld. The phenomenological textual approach was then applied in analysing and interpreting the textual materials they produced. Thus, there was a close integration of the phenomenological aspect with the ethnographic elements of the research approach.

In conceiving the integration of phenomenological research with ethnography, it is important to provide a fuller elaboration of what is meant by *ethnography* (see 4.1), given that this study involves the use of ethnographic tools and techniques with a case study approach (see 4.2).

Section 4.1 Ethnography

Ethnography is taken to mean a systematic description of and interpretive writing about social and cultural worlds and about individuals within those social and cultural worlds. Tertiary educational contexts comprise one such world. As an approach to research that

has been influenced by poststructuralist and postmodernist thought, it is now employed in a diverse range of contexts and is trans-disciplinary (Lather, 2001). It is also extensively used as part of current investigations of technology (Boellstorff & Marcus, 2012).

The origins of ethnography are located in the academic traditions of Anthropology, which are often referenced to non-Western, indigenous cultures. Indeed, for this reason, Fetterman (1982) is critical of educational research in the 1970s, suggesting that some so-called educational ethnographic studies were not really ethnography at all in the sense that the practices were derived from Anthropology. Education, along with other social research traditions, has, according to Fetterman, merely appropriated parts of ethnography without considering it as a holistic approach to social research that has a distinct history and set of traditions. However, according to Hammersley and Atkinson (2007), ethnography does not have a "standard, well-defined meaning" (p.2), and is better described fluidly as having a "complex and shifting role in the dynamic tapestry that the social sciences have become in the twenty-first century" (p.2). Thus, a researcher could speak about *ethnographies* and about what ethnographers do (Crang & Cook, 2007). There is not just a singular ethnography, as some sort of immutable approach, but multiple ethnographies; and the contexts of application of ethnographies are as many and varied as the diversity of human societies, educational contexts and personal experiences. Thus, the notion can be employed to understand the experiences of doctoral students within a university context, alongside, and complementary to, a phenomenological approach to description, analysis and interpretation of data.

Denzin (2007) suggests that ethnography is not only about a state of doing or work in the field but it is also about *writing* and the production of texts, and thus about interpretative and discursive practices. Indeed, ethnography might be conceived as a writing strategy within the broader social sciences and within fields such as education, one in which temporal events are composed into a written account that can be re-examined (Geertz, 1993). It reflects the concerns to do with both the writer and the social context (Goodall, 2000).

The writing could take the form of academic discourse or it could be more artistic or performative, employing such genres as fiction (Watson, 2011) or film in what could

be termed experimental ethnography (Crawford & Turton, 1992). Eisner (1991, 1997) has pointed out that a significant issue for researchers is about how knowledge is *represented* in research, and creative forms of representation have strengths as well as weaknesses: they offer possibilities as well as problems. Ethnography is thus concerned with how research is presented and represented as a form of social communication, including artistic forms of communication and sensibility. Indeed, as Scheper-Hughes, (1992), puts it: "The ethnographer, like the artist, is engaged in a special kind of vision quest through which a specific interpretation of the human condition, an entire sensibility, is forged" (p. xii).

Ethnography is not only about representation but also about *context*. Ethnographic researchers aggregate data that reflect everyday contexts but with an awareness of political and economic processes that are always "in here, constituted by variously connected localities" (Crang & Cook, 2007, p.16). Ethnographic research is thus multifaceted: embracing the social, cultural, political, educational and economic contingencies to human phenomena and describing actual or functional human contexts, including media and communications (Berger, 2000). It is thus a suitable companion approach to the descriptive and introspective focus of phenomenological research.

Informed by the understandings of ethnography elaborated above, the study engaged with the actual everyday contexts of PhD students and the localities and processes that constituted these contexts, as identified, most importantly, by the students themselves. The study also emphasised the ways their experiences were represented in language and the interpretations that the participants conveyed through language in what could be termed *thick* descriptions (Geertz, 1993; Ponterroto, 2006), although phenomenological research moves beyond such descriptions to the experiential essences located in the language.

The study was thus holistic in considering both processes and outcomes. However, it is clear that meaning was mutually constructed between the researcher and each participant; meaning was not just a construction on the part of the researcher. In this sense, the participants effectively became co-phenomenologists with the researcher: exploring their own experiences and engagement with the world, identifying their

negotiations and strategies of coping and describing their use digital technologies to do the work of being a doctoral student.

Section 4.2 Case study

A case study is a *focused investigation* of a person, a phenomenon or an entity with the goal of recognising emergent threads of meaning from the case data and elucidating characteristics of the case. Yin (1984) views the case study research method as an *empirical inquiry* that studies a contemporary phenomenon within its real-life context so that it is grounded in localised circumstances. For Yin, the phenomenon and its everyday context are important in case study research.

Thomas (2011a, 2011b) suggests that a case study concerns a class of phenomena, which provides an *analytical frame* through which the research is conducted. In conducting a case study, a range of methodological approaches could be taken, from qualitative to quantitative. The selection of accompanying methodologies is determined by the disposition of the research and what the researcher wants to explain from the research.

In this study, a phenomenological approach and ethnography were selected as the accompanying methodologies because they appeared to be most apt for the investigating both the internality and externality of individual participants. At the same time, comparison of participants within that analytical frame was also a goal of the research, and a focus of Chapter Eight. This comparison was undertaken to investigate the common ground between the experiences of all the participants. This is especially important in educational research because it allows for the broader application of the research, though I was aware that generalisability was not possible based on a cohort of six participants.

Given that the focus of the research (early stage doctoral students) involved human participants and was based on their experiences of candidature in everyday contexts, phenomenology and ethnography were appropriate accompanying approaches. This assemblage of approaches to research enabled the gathering of experiential data and facilitated hermeneutical analysis because the emphasis was on both experience and meaning. The selection of a small number of participants for study was consistent with the goal of having a narrow and defined frame that gave boundaries to the research (the case study orientation), but, at the same time, was seeking a 'deep' penetration into individual human experience and the structures of consciousness (the phenomenological orientation).

There was the prior question of the appropriateness of case study methodology for this research context. According to Foster (2002), who writes in the field of technology education research, case study methodology is appropriate for research that requires:

- in-depth or detailed treatment
- examination of foundational questions in education that remain unanswered

The foundational question about the strategies, negotiations and ways that students used to get through the early candidature period, as well as the serious issues of wellbeing and coping that they confronted, appeared to be best understood through a case study that employed thickness of data and depth of analysis, together with comparisons within the case.

In overview, this research centred on a case study of six doctoral students and their early experiences doing a PhD and fulfilling the requirements of candidature. To understand these experiences in the context of their candidature and broader Lifeworlds, including the place of digital technologies in those experiences, ethnographic and phenomenological approaches appeared to be the most appropriate as they provided a detailed understanding of both context and lived experiences, and made available the capacity for a comparison and differentiation of experiences within the case.

Section 4.3 Research processes and data gathering tools

In this section the processes of carrying out the research with participants and the concepts that underlie this process are explained in detail. The explication of the processes includes: ways of working with participants, the tools used to gather the research data (the interviews and the online journal), the steps in gathering data and dealing with transcripts and core concepts such as reflexivity.

4.3.1 Preliminary processes with participants

The case study was built on a set of human collaborative relationships (cophenomenologists) that needed to be sustained over an extended period to produce the *thick* and *deep* data discussed above and the narrow focus on the experiences of the six participants. For this reason, positive early contact with the participants was crucial, from recruitment (see Appendix A), to induction into the research (see Appendix B) and to signing permission forms (see Appendix G). This relational, person-centred approach is important to describe because it is central to the phenomenological disposition of working with participants who become co-constructors of the data and writing.

Prior to data gathering, PhD students as potential participants were selected from volunteers recruited through the education faculty newsletter and a post on the education faculty's graduate Facebook page, with a clear indication that the students should be in the period of candidature up to and including confirmation (see Appendix A). The Facebook post drew 15 initial inquiries from students. Facebook is emerging as a useful, though sometimes problematic, way of facilitating recruitment (Forgasz et al., 2017). These inquiries were followed up via text messages and email, including an offer to attend a briefing meeting at the university of the students, several days after the initial post.

At the briefing and induction meeting eight of the initial 15 participants attended. The research was introduced, the Explanatory Statement (Appendix B) distributed, and a non-technical explanation of the research and its aims provided. At the meeting, I explained the research focus, the goals of the study and specific requirements of participants, including the time frame in which research events would take place. The possible time commitment, the work involved and potential benefits of the research were shared with the participants, and time was given for the students to share their perspectives and pose questions about the research. It was made clear to the attendees that there was significant time commitment across the one-month of the research period but that this commitment was never biding and that they could withdraw at any time, and what they offered to the researcher was entirely their choice. While there were positive responses from all eight attendees, only six participants, in the end, made a

commitment to be involved. Finally, in compliance with the ethical requirements of the University, the participants signed permission forms (Appendix G) agreeing to participate in the research under the conditions set out in the Explanatory Statement.

The processes and the values that undergirded this preliminary process are schematized in Figure 4.3.1.1. The two key values of voluntary involvement and open communication were practiced throughout this preliminary and indeed throughout the whole research project.

4.3.2 Research processes

To access the social worlds, the experiences and the interpretations of the six participants, data gathering tools were selected that focus on the creation of textual output suitable for descriptive and interpretive analysis orientated to phenomenological research. These tools are discussed briefly in this section, with attention to sequence and rationale, and elaborated in more detail in sections to follow.

The relationship between these ethnographic tools and participants is schematised in Figure 4.3.2.1. The figure shows both the *linear progression* of the research process across a defined period as a series of research events and the *retroductive* nature of the data gathering processes, textual analysis and writing up.

Miller and Brewer (2003) describe retroduction in this way:

The writing-up of the research for presentation or publication, rather than a true depiction of the process of logical interference that took place during the research, can be seen more accurately as a specialised account: the employing of a set of literary conventions in order to communicate the research findings in a recognised manner to an expert audience. Research is not pure with distinct stages of deduction, induction or abduction, but a combination of all three, often going on simultaneously. Retroduction is a term applied to this process that recognises its "retro" or constant backtracking nature (p. 3).

What Miller and Brewer suggest is that each research event, each participant's perspective and writing output, and each tool selected to gather data are woven together as a series of highly interrelated interpretive processes. These processes are built on or

employ deduction, induction, abduction, backtracking, and writing conventions to create a set of interpretive writings that sit in the ethnographic tradition.

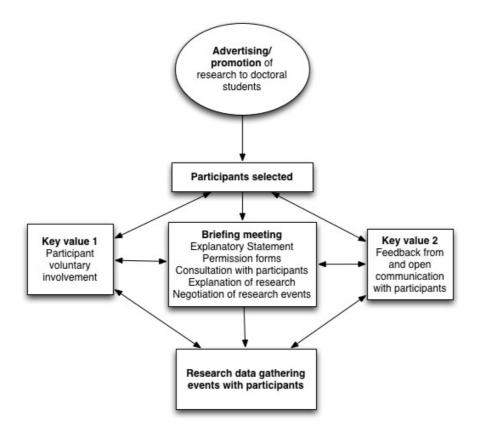


Figure 4.3.1.1: Preliminary research processes with participants

The bi-directional arrows in Figure 4.3.2.1 indicate this retroactivity in the process of producing this research report from the data marshalled via the research tools. What is ultimately being told is a crafted research story that reflects not only the narratives of the participants but also the interpretive frameworks and particularities idiosyncratic to the researcher. In other words, I am telling my story of research through the stories of the participants.

The research began with a series of preliminary meetings with each of the participants to establish their role in the research process, familarise them with the research tools, especially the online journal, and to get to know them. Times and places for conducting interviews were then arranged.

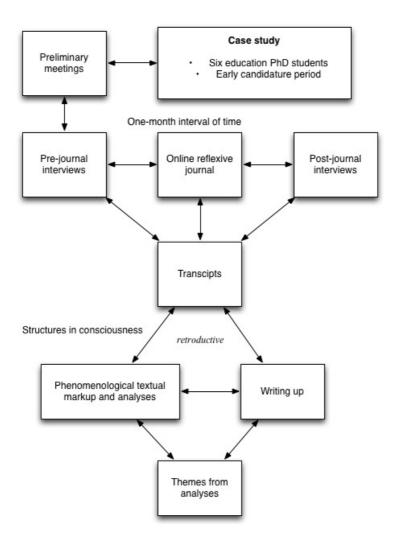


Figure 4.3.2.1: Research data gathering processes

The data gathering sessions commenced with the pre-journal, semi-structured interview of 30-60 minutes (see Appendix C). This interview preceded each participant's completion of an online reflexive journal about experiences and daily activities. As for all the ethnographic tools selected for this study, the pre-journal interview was both a data-gathering tool and an *event* in time that reflected each participant's temporal circumstances and thus was inimitable in character. Essentially, each interview became a distinct phenomenon that was bracketed for investigation. But because there was a core set of questions and similar structures and processes in the case, comparison between participants and their experiences was possible as part of the case study. Theoretical aspects of semi-structured interviews are discussed in section 4.3.3.

One purpose of the pre-journal, semi-structured interviews was to understand the *narratives* of each participant's academic journey and the meanings attached to those

narratives, especially as linked to experiences of becoming a doctoral candidate and the background which led to that point in personal narratives. These narratives and meanings include participants' past experiences of study and their learning proclivities and life circumstances, together with the particularities of their doctoral research focus and the technological demands of being in involved in a university graduate research program. In other words, the Lifeworlds of these six doctoral students prior to a systematic investigation in four-week block in their study programs was a core concern in the pre-journal semi-structured interviews.

Another purpose of the pre-journal interviews was to consider the background of and attitudes to the use of technologies with emphasis given to the place of mobile technologies and online resources as part of their experience of being a student in the multifarious world of contemporary tertiary education.

The pre-journal interview constituted an instrument for getting to know the participants' educational, personal and technological worlds *before* specific data was gathered about actual experiences during the one-month research period. It thus provided an important baseline and contextualisation for the data given in the online journals.

Following the pre-journal interviews, participants were asked to complete an online reflexive journal (see Appendix D) facilitated through the online proprietary survey software, Qualtrics, (at www.qualtrics.com), and purpose-built for the research task (see 4.3.2). The aim of this reflexive written journal was to establish an active discourse involving both internality and externality about the experiences and negotiations experienced by the six doctoral students over one month in their early candidature. The journal operated as both a textual online repository for descriptions about what the participants did and a place for personal expression about what they experienced.

Finally, there were post-journal interviews that were 30-60 minutes in duration (see Appendix E). The function of these interviews was quite distinct from the pre-journal interviews. The post-journal interviews were conducted through a *temporal frame*. In other words, they were limited to and explored the participants' experiences within the four-week block of time bracketed for each participant from early candidature period.

These experiences within this bracketed time included, but were not exclusive to, the following:

- The negotiations through and means of coping with the day-to-day happenings in the life of being a doctoral student
- Managing research and writing as part of candidature
- Maintaining study/life balance, aspects of personal lives and wellbeing issues
- Use of digital technologies as part of conducting study and research, as well as being part of an array of professional and personal communications
- Connecting with peer and academic communities
- Attitudes to doctoral study, the university environment and policies
- Learning-space choices related to the conduct of candidature
- Feelings and corporeal states that accompany and are part of day-to-day movement through candidature

The post-journal interviews were conducted in the final week of the four-weeks. The interviews were organised at this time so that the immediacy of experience could be captured while participants were still in the process of reflexive engagement. The timing also facilitated more focus on concrete examples in the reflexive journal and brought emphasis to a meta-understanding of what was happening in this temporal block of time.

In summary, the pre-journal interview focused on the background of participants, including their educational experiences, their understandings about digital technology in their candidature, and their prior experiences relevant to the research, as well as their views about the state of their candidature at the time the research was conducted. The post-journal interviews centred on participant experiences in the four nominated weeks that were bracketed for research, including discussion about and clarification of the online reflexive journal entries. The purpose of the interviews was to explore the experiences and actions of participants with greater depth and with an awareness of the context and its complexities as a complement to the online reflexive journal entries.

The interviews also allowed for an exploration of the self-narratives of participants and the layer of interpretation that was afforded by these narratives, especially about the early part of candidature and formation in an emergent academic identity. The two interviews were also used to gauge changes in the awareness the participants had about their negotiations and learning experiences, and to examine the nature of what they experienced and did during the four-weeks, including meanings participants formed regarding their experiences and actions.

4.3.3 The reflexive online journal

In this section, the rationale for and the specifics of using an online reflexive journal as a qualitative research tool are discussed. The notion of reflexivity and its connections to a phenomenological approach are discussed later in this section (see 4.3.3.1), followed by the purpose of using the reflexive journal as a research tool (see 4.3.3.2).

The six early candidature PhD students were asked to keep an online reflexive journal chronicling both their experiences of learning and their means of negotiating their way through their doctoral studies, together with their accompanying use of and experience with digital technologies. The participants were briefed on what the reflexive writing entailed and the researcher's expectations (see Appendices B and D), together with the process of working with on online Qualtrics entry form, the link to which was emailed to participants each day during the four weeks of the research period.

Participants agreed to provide a minimum of one entry per day of at least 100 words to document their experiences, with entries detailing both internal experiences and external actions. Participants were encouraged to write freely at greater length or use creative forms of writing if they so wished.

A key aspect of phenomenological research is to gain a window into the internality of the participants with the aim of understanding their structures of consciousness and the sense that such structures bring to objects in the world through intentionality, and then how this making sense of the world is woven into the doctoral stories of participants. The purpose of a reflexive journal is to facilitate this phenomenological goal through a concrete gathering of textual materials related to participant experiences that is written in an autobiographical form.

The online reflexive journal or diary was constructed to facilitate ease of textual entries that record a blow-by-blow, time-dated account of the thoughts, feelings, actions, reactions, awarenesses, attitudes and intentions of research participants *in situ*. An online reflexive journal allows access to participants' embodied experiences and actions in the temporality of the everyday.

The use of a reflexive journal or diary by research participants has been successfully employed in a range of qualitative research contexts (Smith, 1999; Pillow, 2003; Nadin & Cassell, 2006; Etherington, 2007). The reflexive journal has also had extensive use as a tool for developing reflexive practice (Barry & O'Callaghan, 2008). Further, a reflexive journal can be employed as a means of researcher self-reflection and critical examination of the research. The use of a reflexive journal in phenomenological research can provide an effective mechanism for conducting intimate and deep situated exploration.

Much of the scholarly work suggests that not only is a reflexive journal or diary effectual in conducting narrow and deep qualitative research, and gathering *rich* data that allows for *thick* description, but it is also empowering for participants, possibly enhancing the degree of disclosure and increasing authenticity (Caetano, 2015a, 2015b; Ponterotto, 2006; Beckers, et al, 2016; Nielsen & Angel, 2016). On one level this may be due to being able to actively self-inquire and externalize such inquiry in language. Or, on a more essential level, it is an opportunity to share experience for a purpose and in a form that is not often made available to graduate students.

The journal also allowed participants to become, more-or-less, co-phenomenologists because, while the online form in Qualtrics used to construct the journal had categories for experiential content, there was also an unequivocal open-ended emphasis. This was conveyed to the participants in the initial meetings. They were encouraged to write as much or as little as they deemed important, and they were also allowed to use creative forms of textual discourse.

It was their prerogative as to what they disclosed about their authentic and embodied experiences in the one-month period, and meta-experiential comment was also encouraged in the journal, as part of this reflexive textual engagement. In this sense the participants became fellow travellers on this journey of discovery about candidature. Indeed, what became clear in the process of the participants doing the journal/diaries is that they were exploring, in quite a self-aware way, their subjectivities or how they saw themselves in their lives. In the end, they were creating ethnographies of the experiences of being early doctoral students.

4.3.3.1 Reflexivity as a concept

The core foundational concept behind the online journal, as well as to the two interviews, was reflexivity. Reflexivity is a significant concept for this study and central to a phenomenological approach to educational and social research (Laverty, 2003; Shaw, 2010; Hoffman, 2011). Reflexivity has several definitions in the literature but is taken to mean, in this study, a cultural practice, a reflective state of consciousness and a self-referentiality that are built on the existential phenomenon of the human individual in social life (Babcock, 1980; Lanzo, 1995; Gough, 2016).

Reflexivity is about asking the question: Who am I (and what am I) in all of this? It is about both subjectivities and corporealities. The *this* is the total environment of interactions. As such, the term accounts for issues of identity, agency, gender, self-reflection, positionality and the relationship of the individual to surrounding social conditions, the environment and institutional life (Gill & McLean, 2002; Luttrell, 2010). It is about self-inquiry, self-aware subjectivity and adjustment to the circumstances of living in a community that are, most importantly, articulated and given voice in accepted discourses of communication (and sometimes unaccepted discourses). Reflexivity includes subjective understandings of the impact of the assumptions, values and understandings of others (Cunliffe, 2004; Archer, 2007, 2010).

Reflexivity also concerns active awareness of a series of social and environmental networks that contain expectations and thus it can shift to a critical reflexivity because there may be a critique of these expectations. It is a process of personal ecology written about by anthropologists such as Bateson (1972, 1979) and Geertz (1993).

From a phenomenological perspective, reflexivity also encompasses the bringing of what is inner to the outer, and allowing what is outer to modify the inner, or, conversely, active resistance to or critique of the outer, which might include, for instance, exercising agency within institutional life. Existentialist, Paul Tillich, takes this notion of inner and outer further by suggesting that the inner self and the outer world have their own structures and that humans live in the dynamic of these structures and attempt to conceive meaning beyond them. He writes: "In every encounter with reality the structures of self and the world are interdependently present....in every encounter with reality man [sic] is already beyond this encounter...This is his freedom...It is the source of his vitality" (Tillich, 1984, p. 85).

This concept of *inner and outer* has recently been explored extensively by Wilson (2016) in her doctoral study of the experiences of dancers. She challenged the notion that the psychological states of dancers could not be explored using qualitative phenomenological research. Her work reflects a body of work by performance academic, Phillip Zarrilli (2004), who theorised the internality and externality of the experiences of stage performance by actors.

The concept of intentionality in phenomenology, an active and embodied engagement with the world and with other subjects, inflected with a directedness or sense, contains within it a core of reflexivity or at least an assumed reflexivity. In other words, as a person engages with and acts in the world and with other subjects there is a fluctuating set of self-representations that becomes infused with this engagement and form part of the structures in consciousness.

4.3.3.2 The purpose of the reflexive journal

The online reflexive journal aimed to reveal the processes and acts experienced and embodied by the participants; through the journal participants could become cognizant of these processes and acts. The journal was designed to provide a critical space or forum in which to express such reflexivity, so that actions and events in the participants' lives could be imbued with critical engagement, learning and meaning (Vicary, et al, 2016).

The term *negotiation* (see 1.5) implies substantial reflexivity because it is grounded in the processes of self-inquiry, mindful embodied action and contextual awareness. All three processes were likely to be substantive in candidature.

The use of a reflexive journal enabled the researcher to be privy to at least some of participants' negotiations about temporal and concrete events in their lives. The regular completion of time-dated entries in the journal thus created an immediacy that may not have been as significant in an interview. The unfolding of experiences and actions in the world was more likely to be concrete and authentic in a reflexive journal because such experiences and actions may not be as subject to the performative layer attached to the phenomenon that can occur in an interview. Indeed, it could be argued that an interview is an interpretive performance by two or more individuals that follows a prescribed structure and set of expectations (Riach et al., 2016). This perspective is not to suggest that this interpretive layer in the interviews is unimportant. Indeed, it provides a meaning space for connecting experiences-as-embodied-in-time-and-place and the narratives-about-self-and-the-world that develop out of such experiences.

Finally, along with accessing reflexivity in participants that already existed and providing a mechanism for recording negotiations in an immediate and temporal form, the online reflexive journal enabled ease of access and provided a means of recording that could be completed from a range of digital computing devices. The aim of this ease of access and simplicity of use was to be as unobtrusive as possible in conducting the research across the one-month period of early candidature, given the busy lives and pressures associated with being an early stage PhD student.

4.3.4 The interviews

The two interviews conducted with each participant in this study were semi-structured in approach. Each interview was grounded in a planned and discrete set of interview questions (see Appendices C and E) but was also open to the individual interests of each participant in the closeness of the conversation with the researcher. This combination of expected and unexpected elements in the interviews allowed for anticipated coverage of content and process but also fostered sufficient flexibility to explore the particularities of each participant's experience in more depth. It permitted participants to have more autonomy in the interview process and thus have greater control over the data that was generated. Certainly, there appeared to be a willingness to disclose and to participate generously in the interview process.

The semi-structured interviews in this study were conducted with the following characteristics:

- two interviews: a pre-reflexive journal interview and a post-reflexive journal interview
- 30-60 minutes in length
- Each interview was video-taped
- Interviews were conducted in a relatively neutral room at the university of the participant, one that was quiet and comfortable
- As researcher, I offered no overt interpretive comments or attempted to lead participants, except through what was afforded by the interview questions. Rather, active listening skills, summarising, precise questioning and clarifying follow up questions were the predominate modes of exchange

The semi-structured interview used in this study has a long-established history as an effectual technique of gathering thick data in social and qualitative research in general and ethnographic research especially (Siedman, 2006; Crang & Cook, 2007; O'Reilly, 2012; Spradley, 2016). *Thick* is taken to mean data that is rich with detailed description, expressions of meaning and subjective perspectives and interpretations based in a culture (Geetz, 1993).

One goal of phenomenological research is to go deep into the experience of participants. Phenomenological research thus shares many features with thick qualitative research. Consequently, the semi-structured interview, with its history and set of techniques, is well suited to phenomenological research, since it focuses on the individual and on personal experience, creativity, values and perspectives (Eisner, 1981; Kvale, 1983; Hesse-Biber, 2016; Vagle, 2016).

As part of seeking thick data, video recording was used to document the semi-structured interviews. The use of video recording of interviews, rather than audio recording, was

to facilitate understanding of participants holistically, including voice, gesture and facial expressions (Pink, 2001; DuFon, 2002; Ratcliff, 2003; Pink et al., 2004).

Anthropologist, Gregory Bateson, proposes that in interpersonal communication there is a meta-communication layer that revolves around corporeality: the body and its cues (in facial expressions, stance, posture and gesture) in constructions of meaning, including the nuances and inflection of voice other than words (Bateson, 1972; Ruesch & Bateson, 1968). The ability of video to capture this corporeality is an aspect of the meanings generated in interviews. It is an important aspect because intentionality and the translation of internality to externality can be revealed in non-verbal corporeality as much as what is said and thus recorded as text.

Section 4.4 Selection of participants and the set-up of the research

Sampling for and selection of participants in this study was *purposeful*, though not fully predictable. Participants were selected on the basis of being doctoral students in the early or probationary period of candidature, but also on the basis of their voluntary willingness to participate in the research. According to Patton (1990), there are several categories for purposeful sampling. These include: *intensity*, which means information-rich cases that intensely manifest the phenomenon under investigation; *typical Case*, which illustrates or highlights what is typical, normal, or average; and *criterion*, which means selection based on a pre-selected condition.

In this study, Patton's category of *criterion* appears to be the most definitive approach to sampling and selection. The participants for this study were selected on the basis of two criteria: first, they were doctoral students yet to complete or having just completed their confirmation of candidature; and, second, participants had a reasonable level of facility with and understanding of digital technologies and digital devices and their functionality, and used such technologies and devices on at least some occasions as part of their academic and research work.

The rationale for the second criterion was that in examining the phenomenon of doctoral negotiations of their research programs and in understanding the role of digital

technologies in these negotiations, it would have been problematic if digital technologies were not used at all. Having participants who used digital technologies at least some of the time, or for some purposes, allowed individual participants to share a common process of doing and a mutual set of modalities, facilitating a degree of comparison in terms of the analysis of experience. The application of this criterion should not suggest that participants had to be resolutely positive about digital technologies or should have been using them for all tasks, on all occasions. Indeed, it could be that when digital technologies are not used is as interesting a research focus as when they are employed.

Pattern's category of *snowball* or *chain* is also useful in describing the disposition of the selection process; in particular, that cases of interest are generated from a chain or network of people who are able to identify potentially information-rich participants who willing to be subjects. The idea of setting specific criteria and then pursuing a chain or network to establish worthwhile participants (ones that would commit to the requirements, would be active and interested and would be reflexive) operated significantly in the selection of participants for this research in a closed Facebook group.

Networking was established initially by the Facebook page for graduate students in the faculty of education at the university and in the faculty's online news site. The twin requirements of being an early PhD student and having reasonable facility with digital technologies was explicit in the early communication. Several doctoral whom I spoke to said that they could not participate themselves but that they knew someone who might be interested.

Section 4.5 Textual analysis of data

In this study the notion of a *text* is important as data was gathered for analysis in the form of textual transcripts. *Text* is taken to mean *written communication* with limited formatting, with a focus on *content*, rather than presentation. This elaboration of text is intended to differentiate the notion of text as understood in this study from other concepts of text that may include a range of modalities and presentational forms. The texts formed as part of this study were conceived to contain *traces* of events and

experiences or as artefacts of events that had occurred. In this sense the texts had a *historicity* and certitude, though the texts themselves may have contained the subjective beliefs, opinions and interpretations of the participants that were then interpreted by the researcher-reader (Hammersley, 1998; Butler, 2015).

A central focus was a systematic analysis of a range of texts produced by participants in interviews and in the reflexive online journals. The purpose of this analysis was to examine *experience*, *intentionality* and *action* as linked to the Lifeworlds of participants. The focus on internality and how it related to externality and embodiments distinguishes this study from other approaches to textual analysis in qualitative educational research, though, undoubtedly what I did shares common concerns about human experience. As such, in terms of textual analysis, the study employed a distinctly phenomenological approach, the particularities of which are discussed below.

To differentiate this approach to textual analysis from other approaches in social research in general and educational research in particular, I now briefly elaborate the following approaches to textual analysis: critical discourse analysis, schema analysis, interpretative phenomenological analysis and post-intentional phenomenological analysis. Though there are a significant number of approaches to textual analysis that could have been examined, these four approaches appeared most suited to the type of phenomenological analysis integral to the study.

Critical discourse analysis is a species of linguistic analysis often associated with the work of Norman Fairclough. Fairclough (1992, 1993, 2003) argues that texts are part of social events and are shaped by social structures (including language), social practices (including discourses and discursive practices) and social agents. Texts are imbued, according to Fairclough's critical discourse approach to textual analysis, with meaning at the level of representation, identification and action or ways of showing, existing and relating. Textual analysis involves identifying the linguistic features of texts and then relating these to the social and political occasion in which the texts are produced, with the aim of understanding the operation of power and control as revealed by the written texts themselves.

Fairclough, however, never gets to the level of examining the experiential disposition of the agents who operate politically and socially through discourse, though he does identify attitudes and values that are evident in texts. His textual analysis is external to experience and operates outside of the phenomenology of person as revealed in experience and embodiments. Critical discourse analysis is useful for analysis of documents related to contextual and political factors that impinge on experience, to intertextuality, and for identifying themes as they emerge in texts, especially in relation to the exercise of power.

Schema analysis (or schema theory), based on the original work of Bartlett (1932) and later by Minsky (1975) and Lakoff and Johnson (1980), is about the identification (and coding) of symbolic, metaphoric and analogical language in texts that are linked to human behaviours, thoughts and experiences (Casson, 1983; Semino, 1995; Strauss & Quinn, 1997). Such identification can reveal the underlying mental model that is operating in text and by extension in the experience of a person (Johnson-Laird, 1983). In schema theory, mental and knowledge patterns from what was known and learnt are often imposed on the acquisition of new knowledge.

This approach to textual analysis has similarities to the process for textual analysis used in this study. Like Husserl's transcendent notion of consciousness, there is a deep focus on core essences of experience, and there is an emphasis on consciousness and the structures of consciousness as they are shown in mental blocks or schemata of knowing.

However, schema analysis is essentially cognitive in orientation and is most associated with cognitive psychology. There is less emphasis on embodied experiences of being in the world corporeally and on intentional action in the world. For Husserl, and especially the phenomenologists who followed him, the task of phenomenology is as much about the subject-body in the world, and its inter-connectedness with other subject-bodies, as it is about the mind in the world, and especially the mind's imagistic structuring of the world.

Interpretive phenomenological analysis (IPA) is an approach to textual analysis in the qualitative tradition that draws ideas from phenomenology and hermeneutics to examine the lived experiences of one or more participants as these are revealed in texts

produced by participants (Eatough & Smith, 2006; Smith et al., 2009). As a method of research and textual analysis it privileges the individual and has tended to be favoured in research that deals with the helping, teaching and caring professions, especially nursing and education.

The focus of the analysis is on the *meaning* that participants ascribe to their everyday experiences and what they do with those experiences, so that there is an overt hermeneutical function in the analysis. Texts are coded with attention to both experience and meaning within the natural context of each participant (Smith, et al., 1999). IPA tends to be an inductive process in which themes emerge for the researcher in the process of examining texts. IPA has many similarities to the type of analysis used in this study, especially in regard to descriptions of lived experience, interpretation (or the hermeneutic function) and idiographic analysis. As such, it has been an important influence in the construction of the process of textual description and analysis.

However, while in IPA emergent themes from individual lived experience are a focus of textual coding, in this study phenomenological *reduction* (as espoused by Husserl), or the *bracketing* of data to locate the *essences* of experience, was a locus of attention for the coding and annotation of texts (see 4.5.4). Essences are not themes and are not necessarily emergent form the data: they must, according to Husserl's view, be located through a reduction process of bracketing out. The question becomes this: if a researcher strips back or brackets out the obvious features of a participant's life and experience, then what is left—what is at the core or fundamental to experience? There is also ontological analysis of embodied experiences to reveal its constituency and establish a detailed and methodical inventory of experiential content. This approach is not employed in IPA.

In addition, there is considerable attention given to *intentionality* or the ways that humans engage meaningfully with objects in the world. Intentionality in this study was a core consideration because it was about how a person relates with body and mind to the world. Intentionality (see 3.1) is fundamental to the work of all the twentieth century phenomenologists, but appears to have less traction in IPA. It is thus debatable whether IPA is phenomenological analysis as Husserl understood it but just another species of

linguistic analysis, even though it draws on phenomenological ideas and examines lived experience (Pringle et al., 2011).

Phenomenological textual analysis, as envisioned in this research, is imbued with a *phenomenological attitude*. By this I mean inquisitiveness about the underlying disposition of things and fundamental questions about what is elemental to experience or precedes experience and interaction with the world. So, the primary question of this study (How do participants negotiate their way through and experience their doctoral studies?) implies a more fundamental question: What is the disposition of how participants come to their negotiations? IPA focuses on the experience itself and the themes that emerge in an examination of experience, not what precedes it or is elemental to experience.

Finally, I want to consider the post-intentional phenomenological approach of Mark Vagle (2010, 2015, 2016). His ideas have spurned a recent new phenomenological approach to qualitative research (Kennedy, 2016; Zuchowski, 2016). Vagle suggests that Husserl's notions of the reduction and of the phenomenologist as distanced from the phenomena do not account for the dynamic nature and inter-play of the way a researcher and participants really work in the practice of meaning making together after a phenomenon has unfolded. His view is that knowledge and knowing are always emergent, imaginatively constructed, unstable and never complete. He writes:

It [phenomenological research] involves an embodied relation with the world and all things in it—and it is a creative act that cannot be mapped out in a once-for-all sort of way. The craft is practiced in many different ways and produces all sorts of representations, and like other artistic forms, whether it be the visual, the theatrical, or the instrumental, sometimes what is produced tends towards the more linear, technical and conventional, and at other times tends toward the more abstract, creative and unconventional. In this way, the phenomenologist is continually honing her craft, not simply learning steps Ito a methodological process and then carrying them out (2016, p. 3).

In this sense, according to Vagle, the meanings generated within phenomenological research and understandings about intentionality are intrinsically shifting and being refined and redefined by the circumstances, creativities and social manifestations within the research process. In terms of intentionality, Vagle is essentially questioning

whether intentionality can really be caught in research at all because of its post-factorial constructedness. Put simply, all considerations of intentionality are really language constructions and social manifestations, post-phenomena.

Phenomena are always tentative and difficult to tie down in place and time, and continually in flux and created in the interactions of text, researcher, research participants and the positionality of agents in the process, suggesting the poststructuralist and postmodernist orientation of Vagle's ideas. Vagle thus critiques Husserl's notion of essence because it implies a stable (even rigid) set of understandings about the nature of phenomena and about the ensuing structures in consciousness, understandings that do not appear to reflect the social constuctedness and shifting perspectives of how we understand experience, meaning creation and knowing.

In terms of this research, the social and cultural embeddedness of all phenomena and all human experience is acknowledged, and has been incorporated into the theoretical framework and methodology of the study through recognising researcher subjectivity, retroactivity, co-researching with participants and reflexivity. However, Vagle's view of intentionality as substantially constructed and his seeming uncertainty about the veracity of individual human experience appear to differ from the positions taken in this study.

In addition, there are two other aspects of Vagle's thinking that should be differentiated from the approach to phenomenological research adopted in this research. First, intentional action in the world does, I argue, have historicity and thus can be located through event, place and memory, as is suggested in the analysis of memory by Ricoeur (2004). As Bakhtin (1992) points out, we are fashioned as humans through our verifiable acts in the world, and while such acts are subject to shifting frames of reference, it is reasonable to point to the located-ness of such acts for those who experience them. As such, intentionality, as connected to specific events and acts, is both immediate, located and temporal, as well as post-intentional and constructed. Intentionality begins with, as Merleau-Ponty (1962) points out, perception, embodiments and groundedness in the corporeality of the world, so that there is a validity to human experience that is prior to its social constuctedness. It begins here because, as is clear in the work of *Gestalt* theorists (Palmer, 1990) and contemporary

brain research (Ciaramidaro et al., 2007), there is an innate and biological basis to intentional engagement with the world (Searle, 1998).

Second, Husserl's notion of *essence* in his concept of reduction is *always interpretive* because it is about the sense bought to it from the internal to the external of a person's experience of living. Thus, an *essence* is not an object that can be ascertained through investigation but a set of meanings that a person brings and attaches to their actions and places in the world (Kleiman, 2004). These meanings, I argue, can be caught in the research processes but are also subject to, as Vagle rightly points out, the nuances of socially-situated uses of language and interpretive repositionings.

In sum, Vagle's thinking is useful in appreciating that the process of phenomenological research is post-factorial, creative and co-constructed, socially and culturally; but this perspective does not, in my view, invalidate recognition of the extant and located nature of personal experiences and of intentional engagement with the world.

4.5.1 Textual analysis

The textual transcripts created from interviews and reflexive journals or diaries underwent four levels of textual description, analysis, and interpretation to examine the nature of the participants' experiences, understand intentionality and analyse the systems, procedures, heuristics and strategies they used in negotiating their studies, including those involving in using digital technologies.

The process of textual analysis is schematized in Figure 4.5.1.1. It begins with ontological experiential content description, then proceeds to phenomenological *reduction*, followed by hermeneutical analysis, using concepts derived from *Gestalt* theory and the ideas of Paul Ricoeur. All three of these descriptive, analytical and hermeneutical processes lead to a final synthesis about the experiences of the participants. The diagram suggests a linear process. In practice, however, the three forms of textual analysis are inter-dependent and retroactive, so that the process might best be described as dialogic.

Ontological description and phenomenological reduction form the essential *content* for hermeneutical analysis because through these lenses the key experiences and essences

of experiences expressed by the participants were identified. Once this content had been identified and labelled, the meanings within the texts could then be discussed.

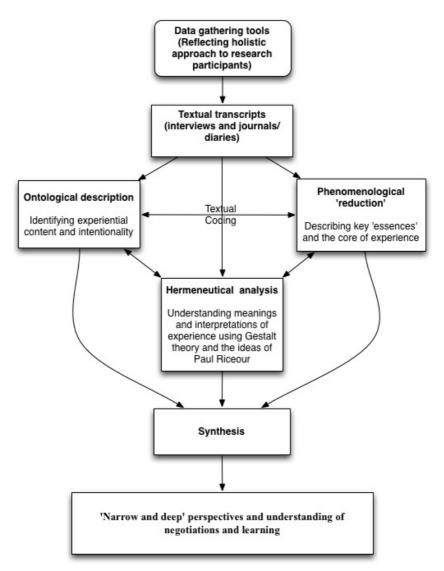


Figure 4.5.1.1: Process of textual analysis

The four inter-woven levels of textual analysis provide the evidential basis for a series of perspectives and understandings about the question of how doctoral participants negotiated their studies and what participants understood by negotiation in terms of their experiences of candidature.

4.5.2 Ontological description

In this study, phenomenological textual analysis began with the identification and labelling of *specific experiential content* as derived from the participants' recollections and textual recordings of their experiences. The content was important to identify and categorize because it led to the *sense* and thus the *meaning* given out of internality to objects in the external world or what is termed *intentionality*.

In Figure 4.5.2.1, this givenness from internality and from the experience of a person to objects in a person's Lifeworld is schematized. Objects in the Lifeworld of a person are given significance through the sense that is directed to them by a person. In this way, the object becomes meaningfully constructed or has a meaning-shape in a person's consciousness. Equally, as suggested by the two-way arrow, objects shape a person and a person's consciousness of objects. Without a consideration of this specific experiential content and the inter-play between person and object, it is difficult to explore the intentionality of a participant with any precision or detail, making phenomenological analysis difficult.

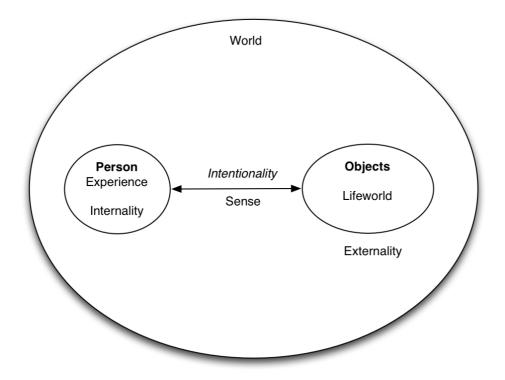


Figure 4.5.2.1: Intentionality and experience

Ontological description in this research focused on an elucidation and categorisation of experience. The word *experience* is taken in its tacit or unified sense of being holistic embodied knowing that is subjective and internal, but also contextualised in externality. This holistic totality designated as *experience* is, however, composed of parts or categories of knowing and awareness. In this elaboration, there are *experiences* of different orders. These include sensorial perception (especially touch, sight and hearing), felt states and emotion, somatic or corporeal states, cognition, volition, expectancies and thought (Valle & Von Eckartsberg, 1989). The term *internality* is employed throughout the study to encompass this diversity of such internal states of experiencing, embodying and being. Further, the vicissitudes of experience include both an immediate temporal state with its varying levels of awareness (Leder, 1990; Throop, 2003) and a long-term accumulation of experiences in memory (Dewey, 1958; Turner & Bruner, 1986; Clore & Parrott, 1991).

The identification and coding of participant experience was ontological in approach (Krippendorff, 2004; Hsieh & Shannon, 2005; Mayan, 2016). The *ontological* refers to developing a systematic understanding of the categories or parts that make up the being of a phenomenon and then finding relationships between these parts and the phenomenon (Simons, 1987; Soteriou, 2013; Gallagher, 2016). It is acknowledged that these categories or parts may not necessarily fully constitute the entirety of a phenomenon and that the process of producing categories is interpretive (Lather, 2016; Sugden, 2016). Despite these limitations, however, through examining parts and categories, there is significant potential to understand the whole of what a phenomenon is. In other words, the unfolding of the whole can be substantially comprehended in cognizance of its parts and the connection between parts.

Based on the discussion above, and notions about the temporal and memoric organisation of experience, the categories or parts identified for ontological analysis in this study were as follows:

1. To *act*. This sub-category includes bodily actions connected to intentionality and volition. It involves a movement from internality to an externality that can be observed.

- 2. To *be*. This sub-category is about participants' awareness of self and body as a visceral state of temporal being in space, and its links to identity and who a user believes he or she is as a person.
- 3. To sense. This sub-category concerns states of perception and sensory input.
- 4. To *feel*. This sub-category includes somatic or corporal states, felt states and emotional categories (or the affective).
- 5. To *think*. This sub-category is about the *cogito*: about contemplation, strategic problem solving, thoughts and cognitive processes in consciousness.
- 6. To *connect*. This sub-category concerns inter-subjectivity and inter-corporeality or being with others through digital or disembodied (as well as corporeal) connections.
- 7. To *learn*. This sub-category is about awareness of the changes, adjustments, acquisitions and skills that are considered by a participant as educative.
- 8. To *create*. This sub-category is about the making of discrete digital texts, media content or objects that have existence apart from a participant.
- 9. To *imagine*. This subcategory refers to imagery and metaphor (Lakoff & Johnson (1980) and the function of language constructs in consciousness.

These nine categories were used to mark-up texts as a set of coding classes (see Appendix F). Important was the link between these categories of experience and the objects in a participant's Lifeworld, especially objects deemed instrumental for negotiating candidature. This is not to suggest that all experience and consciousness point to an object, but that such links were part of the coding where appropriate and evident.

4.5.3 Phenomenological reduction

Chapter Three presented a discussion of the ideas of Edmund Husserl and his notion of phenomenological *reduction*. Based on these ideas, a second component of textual analysis in this study was a Husserlian-like reduction of the texts generated by each participant. This means that the essences or foundational structures of the participants' experiences and intentionality were identified and analysed (Schacht, 1972; Reeder, 1979; Rahilly, 1993).

Reduction is a process of finding and harvesting *essences*, which are the deep, absolutely necessary, and substantive structures that reside in consciousness and in thought about an object, process or event. They are the frameworks on which experience, learning and consciousness are based. This process of reduction is really a process of generative abstraction from experience (from internality) and from the materiality of an object that is the focus of intentional experience.

For instance, a doctoral student's experience of negotiating her research might include the essence or eidetic structure of *connection*, which has become manifest due to its significance or prominence in the textual transcripts as a deep existential core in consciousness. The use of digital technologies could be associated with this essence, represented in transcripts as creative and flexible tools for facilitating connection, which is shown in externality as the use of social media.

Or digital technologies may, in fact, be viewed as inhibitors of this core connective structure, and students may thus experience frustration with and resistance to technology. The important question in this research in terms of locating essences was this: What was the *ground* of participants' experiences of negotiating that period of their early doctoral experiences and how did digital technologies impinge on this ground? It is this elemental level as the necessary and prior foundation of experience and intentionality which is the focus of reduction.

These essences are traced in phenomenological research through a process called *bracketing* (Sorsa et al., 2015; Ashworth, 2016; O'Halloran et al., 2016). This process of textual analysis is schematized in Figure 4.5.4.1. Bracketing is a procedure of taking out what is not core or essential to experience and action in the world and then examining what is left. I have designated this process as containing both *bracketing in* and *bracketing out*: what is left in as essence and what is left out as contingent to this essence.

To facilitate the procedure of bracketing, the following techniques have been applied:

• Bracketing out what is immediate in experience and contingent to context

- Bracketing in what participants identify as the core or the ground of their experiences (or reflexive bracketing)
- Bracketing out aspects of the Lifeworld that are not the essential ground of a participant's experience
- Bracketing in what are repeated patterns in consciousness that appear to be prior to or support experience

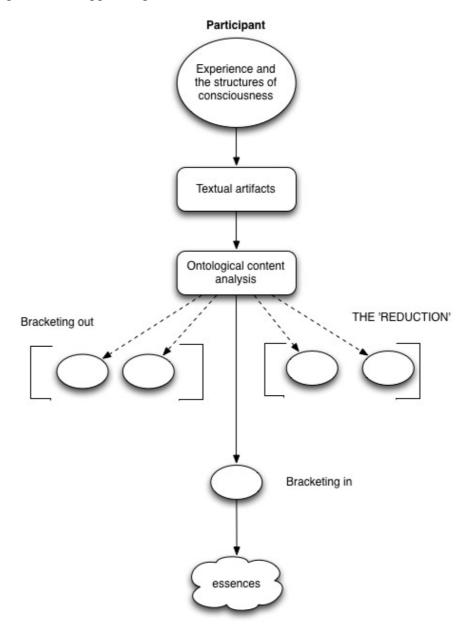


Figure 4.5.3.1: Bracketing and reduction

It is important to recognise that reduction does not mean excluding experiences. All the participants' experiences were significant and were analysed as part of an inclusive and

holistic treatment of the totality of the Lifeworld of each of them. The reduction operates only to determine the ground of such experiences or the core structures in consciousness that support or forge experience.

It is important to locate and analyse essences because these essences, in a phenomenological textual analysis, were critical to understand the *prehension* (or a taking hold) of the Lifeworld by a participant and thus vital for engaging with meaning. A significant part of a participant's Lifeworld could, for instance, be the strategic use of digital technology. Essences may point to the meanings that the participants brought to their embodied use of and experience with such technology. Essences also point to the deepest structures in consciousness out of which navigations and learning emerge.

4.5.4 Hermeneutical analysis

Hermeneutics is a vast field of philosophical and textual analysis, a full treatment of which is beyond the scope of this study. Hermeneutics concerns investigation of the meanings in, understandings of and interpretations about texts in juxtaposition to the worlds of human participants, culture and the social occasions in which such texts are formed (Gadamer, 1991; Howard, 1982; Wiklund et al., 2002; Wills & Jost, 2007). It is particularly linked to epistemology, or how we *know* in terms of our relating to the world. This knowing is ineradicably constituted in the social and physical matrices that comprised the Lifeworlds of the participants, and includes a range of objects, processes and events in that Lifeworld, which were experienced and then understood.

Hermeneutical analysis is employed in many disciples, including educational research, as an analytical textual practice for understanding meaning and how we come to know and learn (Schostk, 2002; Rennie, 2012). For this research, phenomenological hermeneutical analysis was emergent from both ontological description of experience and phenomenological reduction. As such, it provided an interpretation of embodied experiences and intentional action in the world as caught and revealed in the language of texts.

In Chapter Three (see 3.3, 3.4, 3.5), three phenomenological positions were elucidated as *lenses* for engaging in a hermeneutical analysis of the transcripts produced through interaction with the participants in this study. In summary, these three lenses are:

Lens one: *Gestalt theory*. This involves an understanding of the shifting unified self in adaptation to the world and accommodation to the inconstant environments, demands and needs that constitute engagement with the world.

Lens two: *The Lifeworld notion of Husserl and Schutz*. This involves human knowing and the structures of consciousness as being constituted in the social and environmental circumstances of human lives and in the horizons of human perceptual understanding.

Lens three: *Hermeneutical phenomenology of Ricoeur*. This involves recognition that humans create fluid narratives of their lives in the freedom of being and that these narratives, constituted in experience and from memory, are the basis for understanding the world and conceiving the limitations and potentialities of being human.

These three lenses were employed to understand how the participants apprehended their doctoral experiences, how they negotiated their research, how they adapted to and coped with the demands of candidature, and then what place they attributed to digital technologies in facilitating all these aspects.

4.5.5 Synthesis

The final part of the systematic approach to phenomenological description and analysis offered in this study was *synthesis*. This term is used in a theorised way

- To indicate a *bringing together* of the disparate parts of the phenomenological descriptions and analyses in order to constitute a *new whole*
- To reveal the intuitive *totality* of the impression of a person as given in the descriptions and the analyses
- To offer a *perspective* about a research participant that considers all the data

As such, while there was some level of summarising as an inevitable part of the writing of syntheses, what was offered beyond summary was a holistic understanding of or point-of-view about each participant's experiences and Lifeworld, as revealed in the transcripts and personal exchanges. The italicised words in the dot-points above represent the key emphases of the synthesis writing in the study.

Such a notion of synthesis should be distinguished from use of the term to indicate interdisciplinary connections in research (Richards, 1996). It should also be differentiated from the notion of thematic synthesis often used in social research, which is the bringing together of findings and understandings within a body of research and around a discrete area of knowledge (Bryman, 2016). This is regularly seen, for instance, in a review of the literature.

Rather, it is tacit knowing about a phenomenon built on all that is apprehended and understood by the researcher in nexus with participants. In my view, this theorisation of synthesis is consistent with how Husserl understood it. Indeed, he states in *Ideas*: "In the end the conjectures [of phenomenological investigation] must be redeemed by the real vision of the essential connections." (Husserl, 1969, p.145; Mohanty, 1995). It is this seeing of the "essential connections" which was at the heart of syntheses as written in this study. I thus regard synthesis as a critical part of a phenomenological understanding of participants in the study.

CHAPTER FIVE DATA ANALYSIS: INTERNATIONAL FOCUS

This chapter is the first of three data analysis chapters. Each of the data chapters is conceived around a broad thematic connection or thread. The first of the three, Chapter Five, focuses on the theme of international students and their experience of coming to Australia to complete their doctoral program. This chapter also provides brief explanations of the phenomenological analysis process discussed in detail in the previous chapter.

The significance of digital technologies in the experience of the two participants is one of the concerns in the analysis. However, consistent with a phenomenological approach, the analysis is envisioned holistically within the Lifeworld of each participant and includes an array of issues and circumstances that surround the life of each participant. The Lifeworld is described in all its parts, as far as the transcripts of the interviews and journals allow.

Following the release of advertising to attract doctoral participants to this research project (see Appendix A), Sonya and Miguel, two international students, responded on the first day. They both were enthusiastic about the research and wanted to participate not only to support a fellow research student but also (as they both were at pains to suggest) to experience what it feels like to be a research participant. Thus, they ascribed possible benefit to their own research projects through being participants in another project.

Sonya and Miguel are doctoral students from South American countries, studying at an Australian university in an education faculty. At the time of the research, both students were in the first half of a three-year doctoral degree. Sonya and Miguel attained government scholarships from their home countries, and were studying in Australia with the expectation that they would return to their respective countries and apply for academic or teaching roles. For both, coming to Australia to take up doctoral research ensued from a personal connection to an Australian education academic who gave an academic paper at an international conference.

Prior to the formal research process beginning, I met with each participant informally, not only to explain the intent of the study and to outline the expectations of participants in the research but also to establish a rapport with both participants, since disclosure and openness in phenomenological research is important for accessing the content of experience. In these preliminary conversations, it was evident that there were differences in the life circumstances and outlook of the two participants. Sonya is older than Miguel, and she had a partner and children who came with her to live in Australia during the period of her candidature. Miguel was without a partner at the time of the research and came to Australia with no family or pre-existing connections and local networks. These broader life circumstances would undoubtedly influence their reception of the cultural and educational milieu of Australia.

Certainly, as overseas students, the two participants explicitly identified the need for adjustment to Australian culture and language, with Miguel apparently experiencing cultural dissonance more acutely than Sonya. Most importantly, both participants emphasised the negative impact of separation from networks, colleagues and friendships long established in their respective home countries. Also evident from this initial meeting was that Sonya was significantly more fluent, expressive and confident in English than Miguel, who expressed, at the time, his concern about his spoken and written English proficiency.

Section 5.1 Ontological descriptions of Sonya and Miguel

The first part of the phenomenological analysis of the transcripts of the interviews and online journals is ontological description. As explicated in Chapter Four (see 4.5.3), ontological description is a systematic phenomenological exploration of the parts or segments of experience as offered by participants in two individual interviews (prejournal and post-journal) and an online journal (see Appendix F). Ontological description is an examination of the content of experience without recourse to the explicit interpretative lenses that are offered later in this chapter. However, some interpretative material accompanies the exploration and description of experience, especially in relation to the interpretations offered by the participants in their discourses about experience. Nine discrete ontological categories of experience are identified to segment or demarcate experience, and these categories are referred to explicitly throughout the analyses that follow. I list these categories again in shortened form from that presented in 4.5.2:

- 1. To act. This sub-category includes bodily actions connected to intentionality.
- 2. To be. This sub-category is about participants' awareness of self and body.
- 3. To sense. This sub-category concerns states of perception and sensory input.
- 4. To feel. This sub-category includes somatic, corporal states and felt states.
- 5. To think. This sub-category is about the cogito.
- 6. To connect. This sub-category concerns inter-subjectivity and inter-corporeality.
- 7. To learn. This sub-category is about changes, adjustments, acquisitions and skills.
- 8. To create. This sub-category is about the making of content.
- 9. To *imagine*. This subcategory refers to imagery and metaphor.

Only the categories of experience that are especially manifest in the textual artefacts are included. Whilst, for the sake of analysis and description, these categories are used to distinguish different orders of experience, the integrated and holistic disposition of human experience is stressed. This tacit sense that all experience is integrated and interconnected is dealt with in the sections of this chapter that focus on interpretation and synthesis.

5.1.1 Pre-journal interviews

The pre-journal interview was designed to explore the person's life and experiences of candidature. The narrative of the person's life and academic experiences was also prominent in the interview so that the contextual features of the doctoral candidate could be identified and thus an understanding of each participant's Lifeworld established.

The first interview with Sonya was 45 minutes in duration. It began with questions that enabled Sonya to sketch a narrative of her experiences of being in Australia, and in Melbourne, from her home country. Having previously completed a master's degree in linguistics in Australia in 2001, Sonya, who began her career in district secondary schools in her home country, went on to work in a local university teaching linguistics, English, and social linguistics. Her interest in coming to Australia to complete a doctorate evolved from "all internet research" and especially coming across a book by her supervisor at the time of the conduct of the research. Her sense of connection to Melbourne was not only because of her previous study but also that she had family there. She expressed her positive regard for the city this way: "I also liked Melbourne the first time I came here."

In terms of the ontological categories for analysis, for the first Category (To act) intentional action tended to be associated with Sonya's university work space in which she resided in a room, with a desk and with a number of other doctoral students. She spoke this way about her routines or her morning intentional acts: "The first thing I do in the morning is to turn on the computer and go to emails, then I start working...so that's the first thing I do...And then I start working and I use Google a lot. I am a very good finder." There is a sense of purposeful action about Sonia's discourse here. This purposefulness appears to be linked, at least in the initial part of her candidature, to the bibliographical software, Endnote. She said: "I have a very rich library on my endnote of about 1000 articles, books and notes...almost every article I read went into endnote. It was very helpful." So, the software became for her a pivotal tool for collation and a depository for her work, a digital mechanism for organising her reading, note taking, organisational tasks and planning.

For Category 2 (To be) there were some indications in the interview of her embodied sense of who she was and her identity formation as a person and as a professional English and linguistic educator. She stated early in the interview: "From the time I was working there [a secondary school for mostly disadvantaged students] I felt that I needed to be a better teacher and to know more about how to teach them because I care about them." Sonya thus consciously positioned herself as skilled teacher-practitioner, with indelible roots in secondary and tertiary education. This sense of identity as teacher in her consciousness appeared quite pervasive, even as a doctoral student in Australia. About her former tertiary level students in her home country she said: "I communicate with my friends [most of whom are former students] all over the world. I want to be a better teacher for my students." In terms of her conceptualisation of technology in her identity, praxis and research interests she said: "I was looking to do something about technology [for her doctoral research]. Its use in teaching. But I did not want that technology. I wanted to look at the social vision of what technology is." So, technology

seemed to be conceived by Sonya in terms of its social and educational affordances and not for its intrinsic interest as an instrumental phenomenon.

Category Four (To feel) was significantly represented in this pre-journal interview. In the interview, there was significant disclosure of Sonya's affective states. In writing about the software drivers for her Sony transcription equipment used in her ethnographic research, Sonya said: "[It] has been a pain in the neck because I have had problems with the drivers...could not download the drivers." Her emotive responses to aspects of her candidature experience were also shown in her collegial relationships. In writing about what she conceived to be insensitive behaviours of another graduate student in her office space, Sonya said: "I think that's what has bothered me...I am disconnected...sometimes I feel bad when I am concentrating...I have an instant reaction." She was at pains to point out, however, that she has made a strong connection with her colleagues in the office and that there were "no cultural issues". It was just that the prayer practices and food habits of this student were, for her, off-putting. Throughout the interview, there was a significant range of these affective responses, which tended to reveal the substrate of anxiety beneath her well-mannered exterior.

When asked whether she felt comfortable in Australia, she answered: "Oh yeah. I feel comfortable here. I would really like to stay here after I finish." This affirmative response contrasts markedly from her responses concerning her candidature work. She declared: "It's really difficult for me to focus on work." This dissolution of her concentration she associated with her somatic state in terms of her work as a doctoral student: "I am tired sometimes, so it is difficult for me to focus." This comment suggested the significance of fatigue as an issue in her experience. Late in the interview she repeated the phrase "I am tired", this time linking it with her family and to what she describes as a "breakdown" that she had, suggesting some form of effusive negative event. The context for this affective response was her reflections about the impact on her family of coming to Australia, especially in regard to her partner. She said: "My husband had many difficulties in coming to this country...in a way I feel guilty for having him come here." This candid exploration of her intimate familial experience was strongly attended by tears, which flowed strongly during this part of the interview as a clear external manifestation of the potency of her inner felt state. She linked this intense emotion to what she conceived to be her responsibility for her partner's

disposition in Australia: "I tried very hard to pull him out of that gloom...I have to make him happy...I'm just trying to be supportive."

This emotional tenor or intense level of feeling in her statements is also evident in her comments about the circumstances of her scholarship and the support provisions from her home country. She said: "I have to go back to my country to pay back for the years that I did here. I am an investment you know. I am this advanced capital for my country. I am not very happy with that. But what do you want me to do. At least they are paying for my studies." There is a level of acrimony in the tone of her language about her circumstances and her obligations, perhaps suggesting that she would rather remain in Australia, following the completion of her PhD. This desire to remain in Australia appears obviated partially, however, by the multiplicity of her connections back to her home country, connections sustained and maintained by her extensive use of social media, especially Facebook.

For Category five (To think), much of Sonya's references to thinking and cognition concerned her use of language, especially the interstices of Spanish and English. As part of her doctoral research she had to transcribe interviews from a school in her home country into Spanish. She stated that instead of direct transcribing she did the following: "I was listening to it and I was transcribing it and I didn't notice that I was transcribing into English...my brain changed, switched, from Spanish into English... Sonya thus slipped from the mode of transcription to the mode of translation without, it seems, conscious awareness and intentional choice. She also noted that even though she was brought up speaking Spanish, culturally and linguistically, her self-talk has shifted into English. She said in the interview: "I try to speak to myself in English and no one knows what I'm talking about." This phenomenon of transitional language use appears to be part of a shifting conceptualisation of herself as English teacher and linguist from a non-English speaking background moving to a language base that is predominately English.

For Category Seven (To learn), Sonya presented what seemed like a well-rehearsed position on how she believes she learns. She stated the following about her ability to search for information: "I use Google a lot. I am a very good finder. I can actually say that. Could be Google Academic but not always. It is good to see other people's

perspectives." This strong active voice and agency is also shown in discussion of her note taking strategies and the role of technologies. She said: "I do not use it [her tablet] to take notes when I am at seminars. I like the paper and pencil...I used to do that when reading...I prefer paper and pen so that I can highlight things....I use them [digital devices such as iPad] not that often, basically for checking Facebook or probably checking email." Mobile digital devices appear more peripheral to her functionality as a research student than more time-honoured modalities such as a desktop computer, software, and pen and paper.

In terms of her ability with language and its relationship to learning, as suggested in the previous paragraph, Sonya positions herself as having a high level of proficiency and adeptness with language tasks, building on her academic study in linguistics and language teaching. She said the following about her transcription of interviews for her doctoral research: "When I was at university I got a minor in interpretation. So, my brain is kind of trained to save long pieces of sentences, like long chunks." In sum, Sonya conceived herself as an adept learning, with strong proficiency in language and a practised ability to integrate digital and online technologies into her learning, though there is a clear demarcation between her use of old technologies (pen and paper) and newer technologies (tablets) in terms of her life spaces.

The first interview with Miguel was 65 minutes in length. Structurally, the interview contained a significant number of pauses, unfinished ideas in half-sentences, stuttered beginnings and reiterations, perhaps suggesting his lack of ease in explaining his experiences to me (as a native English speaker) or maybe doubts about his own sense of verbal poise. In the first part of the interview Miguel explored his research interests and the nature of his doctoral research. Drawing from his linguistics background and interest in digital technologies, he explained his penchant for researching how disadvantaged young people use social media and technology for creative and critical purposes, especially involving YouTube. His "hope", as he labelled it, was to explore possible pedagogies for how disadvantaged young people could use YouTube and other social media to "link and make connections between their local realities and more global issues." His passion for meaningfully connecting the globalising potential afforded through digital media and the tangible local concerns of a particular socio-cultural group was evident throughout the interview.

For the first category (To act) there seem to be three focal points for intentional action for Miguel. The first concerns his use of computer technologies. He said: "I use my computer and my laptop all the time". This suggested how embedded computer technologies were in his learning and discourse practices and in his construction of an academic identity. In terms of the library database and online books and articles he said: "I can use my iPad and this helps a lot because I can read...on my iPad and then use my computer to write." He extended this use of his iPad to social media, claiming that he used "Facebook the most...for personal stuff" but then went on to describe professional contacts he made using Facebook. The second focal point of his action with computer technologies was with self-learning ventures. For example, Miguel described an iTunes course on philosophy he did to help him understand "different epistemological positions." The third focal point is his intentional action and volition was about his academic writing. He described his early writing forays as containing "long sentences using lots of jargon." Miguel concluded that he acted to break down "ideas in shorter sentences so that they are clear and the reader can follow my argument."

The fourth category (To feel) was prominent in the interview with Miguel. In regard to his feelings about being in Melbourne to undertake his research he described them this way: "I don't feel part of this...part of Melbourne. I like the city very much but I don't feel that being part of this but also not part of [his home country] because I'm not there, so it's kind of an ambivalent position...it's something quite weird. I still see myself as an outsider." This sense of being between cultures, in a liminal state, was shared by Sonya, but was especially prominent for Miguel, who came to Australia alone, with no obvious social connections. He described the people he had met in Melbourne as "very polite but...a little bit reserved" compared to people in his home country who he represented as "more expansive, more extraverted, and they talk a lot." There were issues to do with the character of social exchange in Australia, as compared with the country of his orgin, which were significant in his emotional disposition.

The issue of loneliness appeared to be a significant substrate in Miguel's experience. He said emphatically: "I only have the PhD [and it] consumes all my time but it's also very lonely." He goes on to talk about the "extremes of feelings and contradictory feelings" that accompany his "journey as a PhD student." Although concluding that it was a "good choice" to come to Australia, nevertheless, he also reflected that "being so far away from my family and friends and not feeling part of here." He concluded that it was more "personal feelings than academic feelings" that had affected him the most and that in terms of his candidature he believed he has "done well so far."

This sense of not-feeling-at-home extended, for Miguel, to the way the doctoral programs in Australian universities are regulated. In regard to his learning that the doctorate in Australia is based on milestones, with no coursework, he said: "I was really anxious about the processes because it was based on milestones." Later, however, he said: "after three or four months I realised how good that was." The shift in his body language from his first statement to the second was explicit. Regarding a major milestone, confirmation, he expressed with emotion: "I was really nervous doing confirmation" but it became an opportunity "for getting feedback on things." Overall, however, Miguel concluded that while "there is challenge, lots of challenge...I feel like I am accomplishing things and I feel like I'm overcoming this challenge."

The proclivity towards relationships and connectivity (Category 6) was significant in the experiences of Miguel. He revealed that he came to Australia because of an academic he connected with in that he "liked her workshop." In coming to Australia he noted: "It took me a while to make friends here" and that "the fact of being alone" was difficult for him coming from a culture which he described as having a high level of inter-personal connectivity. Miguel said, with considerable passion: "It was very hard not having people to discuss my ideas." However, using Facebook, he also mused about how he maintained contact with former academic colleagues: "I have two friends back in [his home country] and we usually discuss [ideas] through Facebook chats. Sometimes we share excerpts and we discuss that." When asked, "What do you see as your needs as a research student?", Miguel responded with the following: "I guess the possibility to discuss with other people...I think it helps me try to find my thinking." Regarding his view of a series of seminars, a formal set of research orientated, skills-based colloquiums offered to support research students, he stated: "My purpose in going to them is more a social thing...it's good to see other people."

In reference to his self-identified need for relationships and connectivity, he discussed the importance of his supervisors. About one of them he stated: "It's a very good relationship...I like the idea of sending something to them and getting feedback through emails. She was very helpful and very patient in relation to writing." The efficacy of this relationship appeared significant for Miguel in the early part of his candidature, especially in light of his apparent vulnerability in coming to another cultural context where there was a sense of isolation.

The last ontological category significantly represented in the interview is Category Seven (To Learn). In responding to a question about the cultural or language issues that he had faced since coming to Australia, Miguel noted his difficulty with the Australian accent: "I had to make an effort to listen to every word…but as time passed by it got better." He also observed that his issues with language included "understanding the Anglo-Saxon context", even though earlier in the interview he noted his need to adjust to the multi-ethnic milieu of Melbourne, which is different from the monocultural context of his country of origin. This learning to adjust to language, culture and ethnic diversity, to "see people from different nationalities", was central to the learning adaptations evident in the interview.

Seemingly at the core of these learning adjustments is the issue of Miguel's identity as an English educator. He said: "Another issue...it's related to my professional identity because [I] used to be an English teacher in my country, and when I came here and started to read, write and draft different versions of my proposal, I realised how many problems I have learning English." It is apparent, then, that Miguel cast doubt about identifying as an English teacher considering expectations about language fluency that might be understood in an Australian context, even though he was considered such a teacher in his home country. This shifting territory of professional identity was an essential part of Miguel's learning experience and could be viewed as part of his experience of liminality, of being in-between. He said later in the interview: "I don't know whether I will ever be an English teacher again. It became a contradiction between what I thought I was and the problems I started to see in my professional tools as an English teacher...I knew that I had English problems but it is very different from knowing something to experiencing it." Thus, boundaries of personal and professional identity were challenged and considerable accommodation had ensued from this challenge that impinged on his agency as an English educator.

In terms of his perspective on the educational research approaches or practices he encountered in his graduate studies in Australia, compared to his home country, Miguel noted "some differences in how people [academics] see concepts." He stated that with "linguistics and teacher education in languages [in his country of origin] it's very common to have interventionist approaches to research", but that he had encountered resistance to this approach in Australia.

5.1.2 The online journals

This section offers a systematic ontological analysis of the experiences of Sonya and Miguel as articulated in their journal transcripts produced during a one-month designated timeframe. As described in Chapter Four (see 4.3.3), the online journal functions as a tool for capturing a blow-by-blow, temporal narrative of the activities of participants during a period of 30 days, including work on their research project and thesis, the specifics of their use of digital technology and the interleaving of their lives with the demands of academic work. A structured set of questions, administered through the online survey tool, Qualtrics (Appendix D), which participants completed, served to prompt participants to identify and describe aspects of their experience, but was also designed to allow for open-ended responses and interpretations.

During the one-month timeframe, Sonya, completed 10 entries. Whilst the expectation was to complete at least 15-20, 100 word daily entries over the one-month period, Sonya's writing for each entry was of much greater length and detail, often covering a range of days and offering extended explanations about her experiences.

Of the nine ontological categories used to describe experience in this study, the first category (To act) was the most frequent and effusive in her writing. Sonya wrote in her opening journal entry: "I got to uni and turned on the PC, I checked my emails [repeated many times]...I opened my Facebook...I started focusing on my work...". In subsequent entries, she consistently employed language of action, engaging with the reader using an overtly active voice. Her entries included the following: "I came to

university", "I kept on working [on her thesis]", "I skyped with my parents", "I drove my older son to school", "I use Google Calendar", "I was talking to a friend", "I read the [South American country] newspapers online" and "I cooked for today". This active, task-centred construction of self and an affirmative sense of agency was often linked to specific software: "I used word today. I went through my writing checking and updating stuff". Indeed, Sonya nominated "Word, Google, the Library website, Endnote [and] Google Calendar" as the most important software in terms of her productivity. She wrote: "I couldn't work without them."

In terms of textual responses that fitted into the second category (To be), there were several journal entries that were concerned with the self and body in temporality. Sonya wrote: "At uni, my desktop, it's the best place for me to work", suggesting that the university was designated in her consciousness as her preferred temporal space for her academic self and that it was "the most peaceful place for me to work." She wrote the following in a later entry about this university space she shared with other graduate students: "At my desk. It's the best place for me to work...no children around (or husband!)."

This description of her university workspace and its construction as an academic work space in her consciousness contrasted with her domestic space, which she described this way: "I cannot work at home because I have to take care of the little ones while my husband is working...even if he is not working, I still take that 'shift' and deal with the kids in the afternoon and evening." In a later entry Sonya wrote: "I had a good and busy weekend with my family. I knew I should probably be working on my research during this time too but I have a family and I'm not willing to miss any of my children's stages. Not even for a PhD." In a further entry, after a busy family weekend she wrote: "I didn't set any goals [for PhD work] because I knew it would be impossible for me to work at home." These journal entries suggest not only a conscious prioritising of her time but also a strategic demarcation of roles and a purposeful navigation through activities such that the intentionality that she brings to each temporal space is markedly different.

She wrote in a one entry that a couple of her former students had sent her a monograph "for checking their English." This seemingly dislocated, digitally mediated, identity as teacher and mentor to contacts in her home country was prevalent throughout both the

interviews and in general conversations with her. Coincidently, she also wrote about her struggle with focus: "As usual. Just time...and to keep focus on my work...I get easily distracted and I want to do lots of things at the same time. When I get here [uni] I am soooo clear on what I have to do but then it fades away." There appeared to be a contingent relationship between these two seemingly discrete features of her experience.

For the fourth category (To feel) there were a significant number of journal entries. About her self-judgement that she could not focus on her research and thesis writing, Sonya wrote: "It is a problem to focus on my work and that strange feeling in my stomach which wouldn't go away...I guess I'm a bit stressed." Her somatic state appeared to be linked in her consciousness with her apparent awareness of a lack of initiative to do her work, which, in another journal entry she described like this: "I feel stuck, I'm not sure where to head to." Regarding her draft writing for her thesis, which she sent to her supervisors, she wrote: "I've always been so sure of my capabilities and I love challenges but this time I didn't know what to do...I wrote, yes. I sent it to my supervisors, yes. I felt good about what I had written, no. I can't see myself reflected [in] my writing and that scares me." Expectations about the reception of the writing by her supervisors appeared to have significant affective consequences for Sonya, and she appeared caught in the liminal territory between the act of doing the work and trepidation that the writing will be deficient.

By contrast, Sonya wrote these words about a proposal for a research article that she wanted to create: "Inspiring...working with my friends in that proposal was very exciting and it's interesting how we can complement each other and make something good (at least we think it was good). I was also worried for a long period of time, but now I'm much better." The overt euphoric tone of her language here and the strong intentional action of "working with friends" contrasted with her state of apprehension about the proposal. Sonya's articulation of these disparate states seemed to emerge with clarity, perhaps aided by the register of a diary implied in completing an online journal.

These contrasting somatic states appeared to have also been experienced in her domestic space. About watching a movie online with her partner, one that she had been searching for, she wrote: "So we watched it and enjoyed it to the most. It was a happy moment for me." Having this discrete time with her partner is evidently a source of pleasure and delight for her. At another time in her domestic space she wrote about her tiredness: "It was extremely exhausting...but mainly because of dealing with both my children by myself, especially when the younger one has some of his 'episodes'." Later, she summed up her felt state this way: "I'm tired. I think I just need to have some rest and forgive myself for doing it." The use of the word "forgive" suggested the conflictual nature inherent in the various roles Sonya carried and the tension between her apparent existential need to accomplish academic goals, her wish to sustain her familial relationships and the somatic state that delimited both.

For Category Five (To think) there were less references to thinking, compared to somatic and affective states discussed under Category Four above, though there were some allusions to cognition, thought and establishing connections between concepts. In one journal entry, for instance, Sonya reflected on the plight of a PhD student who had difficulty with writing her thesis in English. She described the grammar of this student as "truly bad" and that the chapter was "very poor". This evaluative mode, with its teacherly stance, was operative about her own thesis writing: "To finish a decent piece of writing to send to my supervisors. I finished but I don't think it was really decent." The use of the infinitive verbal structure suggests the lack of finiteness and certainty in her experiences of writing. On her own practices as a research student she reflected strategically in one journal entry: "It is necessary to take a sort of break from my research from time to time."

In terms of her articulated awareness of a lack of focus on her thesis writing, she wrote the following in another entry, this time adopting a quite detached approach of thinking about experience (or adopting the meta-experiential): "So, I fought against my lack of focus and I think I was able to succeed (this time)", and later, "I would probably do more BUT it's also likely to depend on how focused I can be at the time." She said that she wished that she could take "some medicine that would help me focus." However, her capacity to innovate in her research and navigate towards efficacy in her approach was also evident. In a later journal entry, her intentional and strategic thinking about her research came to the fore in her deliberations about linking an online article about leadership with her research perspective and then in deciding to include more material about contextualisation in her research: "I should start adding a bit more about the school itself before talking about my data." In sum, her thinking, as suggested by her journal entries across the 30-day period, tended to focus on her capacities to do what was expected of her as a doctoral student, to innovate and to evaluate those capacities through the lens of the quality of writing output and the textual presentation of her research.

Category Six (To connect) was thematically well represented in Sonya's journal entries. At the end of a journal entry, which contained an extended narrative about a day in her life, including her use of a range of software and work on her research, she discussed three significant sets of human connections in her life during the one month of the journal entries. The first was the set of her research participants. She described her connection with some of them this way: "I use Facebook for research as well since some of my participants are my Facebook friends and I have found it interesting that they answer faster via Facebook than through email..." Social media and digital technologies had become a prime inter-subjective modality for Sonya in her academic space, especially Facebook, which Sonya described in a later entry as "extremely useful". The references to her Facebook research participants, colleagues and friends were evident in all the journal entries in the one-month period.

By contrast, the second set of human connections, her family and children, were conceived in a much more corporeal form. In the following journal entry, she wrote about her child, who has some unspecified behavioural issue: "having my kid helped by someone with his condition is a real blessing...even taking into account that I was here for 4 hours [at a paediatrician] was to know that he was doing ok...." The needs of her son were particularly present in her consciousness, across all her work and living spaces. These needs appeared to intrude into her university space, and made doing her thesis work in her home space almost untenable.

Likewise, the third set of human connections, which Sonya described as "the three Aussie women who share the office with me", was also a significant corporeal and inter-personal connection, especially in terms of Sonya's integration into an Australian academic research environment. In informal conversations with Sonya, it was clear that this set of female colleagues became an important source of support, feedback and stability for her, considering the distance from friends and colleagues in her home country. These colleagues, from different ethnic backgrounds and languages, appeared, from Sonya's point-of-view, to have been united around the core experience of their shared liminality: being away from home and culture and thus needing each other.

Category Seven (To learn) is an extension of the issues and content discussed under category Five above. There seemed to be an overt awareness in Sonya's consciousness of herself as a learner and of the exigencies to her learning and work as a doctoral student. She wrote for one journal entry: "I need to be able to focus on my own research...as I have enough time to work...I know it will change now that my supervisor is back." The operative word here is "change" which she linked intentionally to her supervisor, implying that the strength of that relationship could promote purposeful action. In a later entry in the month she wrote: "I think that life as a student would be easier if I weren't a mom and a wife as well or if my children were older...but that cannot be solved right???...I'll have to talk to a counsellor or someone to give some strategies to focus more on my work...." Here, her needs as a student seemed in tension with her parental role and, significantly, she showed awareness of the existential dimensions of that dispute such that she needed "strategies" to deal with the issue of a lack of "focus".

Much like Sonya the issue of achieving focus in writing, reading and research was also resident in Miguel's journal writing about his experience of being a doctoral student. Miguel wrote 11 journal entries in the 30-day period of the research journal activity, and like Sonya his entries were long and extensively detailed, with a distinct focus on his use of online, virtual communication technologies. The central narrative thread of the entries during this month was the issue of his difficulties meeting the requirements of the university's ethics policy about his research proposal.

For Category One (To act) there was a strong use of the active voice in chronicling his action as doctoral student, a voice that appeared to be more overt than Sonya's. In his first journal entry, Miguel offered a point-form list of active achievements: "meeting with two other PhD students", "writing theoretical chapter" and "I used search engines to help me find relevant policy documents." This writing strategy of listing his achievements and positioning himself with significant agency was evident throughout his 11 journal entries, as manifest in this one: "I worked on a final draft of a chapter

I'm authoring with my co-supervisor for publication in [her home country]." This sense of agency seems to be constructed around a defined online digital presence and the use of digital resources. In one journal entry, Miguel wrote at length about his active engagement with a variety of tasks: "an online book chapter", "online dictionaries to check for words", "Facebook sometimes during the day but not for academic purposes", "a blog post from the New Media Research page" and "eBooks from the [university] library." Miguel's engagement with his research appeared to be driven by his capacity to deploy online, digital modalities.

In terms of Category Two (To be), Miguel manifested in his writing less overt references to his sense of being and identity compared to those offered by Sonya. He did, however, write about his awareness of ease in working in his university office, which he described in the following ways: "helped me focus" and "because it helps me to concentrate on what I have to do. Knowing that I'm in the place that I'm supposed to study helps...." Miguel ascribed the place itself with the functional attribute of being the domain for study where his mind was focused. In another entry, he described his decision to stay at home for the day: "I read in the morning in my bed because it was comfortable...." This attentiveness to his visceral state was also shown in another entry: "I could have written the section of theoretical chapter I had planned to do but I was just too tired by the end of the day." In a later entry, he wrote about his bodily state in working in his university office: "I struggled to concentrate on what I was reading/writing in the afternoon...I stretched a little bit to see if I could concentrate better." For Miguel, it was important for him to feel at ease, not under too much expectation or stress. This felt state was a core concern in all the transcripts.

For Category Four (To Feel), most of Miguel's affective states were directed towards issues related to being a doctoral student, which was significantly different from Sonya's, whose emotional texture was created mostly through the dissonance between the duel spheres of family life and university life. He wrote about his frustration at not being able to manage a simple technical issue in preparation for a university presentation: "I felt kind of frustrated because I couldn't manage to make a simple connection between my laptop and the data projector." Later, in the same entry, his disposition seemed altered when he described his day in this way: "It was a good and productive day. I felt satisfied with my writing today. And I also felt good because we

managed to finalise the chapter proposal and send it." His journal account suggested that an achievement orientation drove his affective state.

However, in a later entry, upon receiving an email that there was an issue with his ethics application and he needed to go for an interview with the ethics committee at the university, his mood changed: "It was an email that made me feel anxious and worried. I had never heard anybody talking about the need of going for an interview with the ethics committee...Both my supervisors calmed me down and were really supportive...Ethics is really serious for Australian universities. It is a good point of contrast to [South American] universities...I'm not really sure what they [ethics] are worried about...I'm worried about ethics." Miguel's anxiety about his status and progress as a doctoral student appeared to drive his affective states, attended by his experience of inter-cultural differences between expectations in his home country and Australia. In another journal entry, concern with his progress centred on his consciousness of the vast literature in his field of research: "I feel kind of desperate because I have so many things to read and some days, like today, I read but I didn't produce much in terms of writing."

Category Six (To connect) was overt and extensive in his journal entries. In one he wrote: "I also helped a friend in [his home country] to prepare a presentation in Prezi...I used Prezi to prepare a conference presentation with a friend." Miguel also used Facebook to assist a friend in [his country of origin] "who's also doing her PhD" and Skype to "talk to a friend because it allows synchronous interaction." The fact that he used Prezi (the online presentation software tool at prezi.com) rather than conventional software programs, such as Apple's Keynote or Microsoft's PowerPoint, suggests the collaborative orientation and intra-country focus of his conference presentational work. He described Facebook in this way: "Facebook is good in this sense because I can keep in touch back in [his country of origin] even if we're really far geographically from each other." Throughout the 11 journal entries his focus on collaboration and connection with friends, fellow students and academics in his home country was extensive and highly woven into his written discourse and emotional disposition. This digital, online, mediated connection concerned more than scholastic issues. As Miguel wrote in one journal entry: "I used Skype to call two friends and we talked for a while. We didn't really discuss my research but we supported each other in emotional terms."

Before going in for his interview with the ethics committee, he spoke to a friend in home country via his mobile phone and Facebook to garner some perspective and discuss strategies.

In terms of Category Seven (To learn), Miguel showed substantial awareness of himself as a learner. In writing a book chapter with colleagues, he described "being stuck": "I kind of got stuck [in my writing]. So, I decided instead to watch some online lectures." His strategic thinking about his work, his temporal understanding of mood and his learning is summed up in an observation: "I need to find ways to write more productively." There was also awareness of the level of affordance of technology in his productivity and learning. For instance, he wrote about the limitations of his iPad: "The only problem with my iPad is that I cannot make comments on the articles…Not being able to write or use Microsoft word on my iPad is something that I don't like very much." For Miguel the iPad was a complementary tool to his laptop and desktop, primarily geared to communication technologies, rather than textual production.

His learning was also connected to his immediate needs in terms of candidature requirements. Reflecting on a letter he was writing to the ethics committee about issues to do with his research methodology, he wrote in a journal entry late in the month: "I need to write a good response to the ethics committee. At the same time, I need to acknowledge I know how important it is to consider ethical issues involved in doing research with social media." He positioned this issue as one both to navigate carefully and to evoke the critical skills needed in working with bureaucracies outside his familiar cultural frame. The issue of adapting to and accommodating alternate cultural and academic contexts caused Miguel considerable emotional stress and appeared significant for him in developing an academic persona.

5.1.3 The post-journal interviews

The post-journal interview was conducted a few days after the 30-day period of the online journal ended and was designed to be supplementary (see Appendix E). Whereas the pre-journal interview was essentially about establishing the context and circumstances of each participant, the Lifeworld, the post-journal interview was grounded in reflexivity about the experiences that took place over the month.

The post-journal interview with Sonya was 35 minutes in length. The interview demonstrated not only regard for the circumstances of the 30-day research period but also encompassed broader themes that extended on and amplified what was shared in the first interview. Perhaps the most significant theme in the second interview with Sonya was the extent and depth of her connection to friends, former students and colleagues in her home country, despite the impediment of distance, and the role of social media (Facebook) in that connection.

For Category 1 (To act) clear in the interview was the structured way in which Sonya conceived her work habits and intentionality during the timeframe of the research. To the question, 'So, your day is very structured?', Sonya responded by saying, "It is. I always do the same." Even completing the online journal every other day became part of her order and methodical sequence of action. When the link to the next online journal was not sent to Sonya by email, she responded: "I noticed that you forgot. Because it was part of my routine. I work like that. I'm very structured." A similar approach was taken in her familial sphere or domestic space. Sonya outlined the structures of dealing with the everyday demands of parenting, including picking up her children and organising childcare around her partner's work. Ostensibly, living a structured life appeared critical to navigating the complexities that Sonya faced as an international student in Australia with significant family responsibilities.

As also evident in her online journal, there was a strong use of the active voice in Sonya's post-journal interview to describe the structured sequence of actions in her day. She said the following about her use of Endnote as a central organising piece of software: "I use Endnote because I generally borrow books from the library and upload them into Endnote. I love Endnote." She had an active and regulated approach to her work that was also evident in her use of this bibliographic software. Sonya said that she "loves" it, perhaps because it provided her with surety and a sense of efficiency in that, given the complexities of her life, time must be used well. For her it seemed that the efficacy of the software was most significant in this emotive response.

In terms of Category 2 (To be) Sonya spoke about her shifting sense of identity in Australia: "It's like there [her home country] I'm a teacher and here I'm a student." She

also identified strongly with herself as parent: "All I wanted to do [after working a long day as a university teacher in her home country] was go home and be with my family because they are the most important people in my life; the reason why I am alive." This empathetic maternal mode of being, collocated together with her essential narrative of self as pedagogue, was evident in her dealings with her former students: "I wanted them [her students in her home country] to come here...I'm here and I wanted them to come here and see what I've seen." Later in the interview she stated: "But I'm a mother in the sense that I am protective of them and strict as well...I miss being a teacher...that's the only thing that's wrong about being here."

She universalised this role to encompass one that was international in scope: "I love teaching, yes, I love this other part that I've found recently. I'd love to work in international engagement." This pedagogical frame of her discourse about self appeared to be tempered by the complexity and the relational disposition of her life. After a long exposition about her family, South American community and friends Sonya said: "I think that life gets in the way of a PhD student...I'm not just a PhD student: I'm a mother, a wife, a woman, a teacher, a teacher of so many other students, that's life." Her embodiment of earnestness was especially palpable at this moment. Sonya's ability to traverse this complex of roles seemed to revolve around her use of social media. For her, Facebook was not just recreational but a deliberative tool used to navigate her life and to maintain her status as teacher, lecturer, research student and distant colleague, much like it was for Miguel, except that his life spaces and sets of relationships were less convoluted.

Expressions in the affective realm that could be labelled as Category 4 (To feel) focused mainly on negative feelings related specifically to the deleterious side of her work as a doctoral student. Sonya spoke about being "very, very sick" just before a conference she was attending in another state, which indicated issues to do with her physical wellness. However, her interlocutions centred predominantly on her difficulties with mental concentration, a theme echoed throughout the descriptions offered above. She said: "I have, very like, a lot of difficulties focusing on my work." The felt states that accompanied this sense of a lack of focus included feelings of guilt, deadline pressure and frustration. Sonya claimed that she "needs to be pushed" and that it was in her best interests to be "forced to focus."

For Category Five (To think) Sonya positioned herself as a person who could think and cogitate: "Even though my writing may not be working very well, I have ideas." Her strategic thinking and navigation of her research project was evident in her reflexivity about her research story and about herself as researcher in the research. In exploring the narrative of the school in her country of origin she was researching, she said: "I'm actually telling the story from my perspective. I don't know if that is the right thing to do. But I want to be in the writing." Throughout the interview there were numerous examples of this reflexivity that revealed the deliberative nature of how she traversed her world as an international doctoral student.

By far the largest number of references in the interview about the one-month period was to intersubjectivity or connectivity as part of Category Six (To connect). Sonya's interpersonal orientation was established in the many references to her consciousness of the other and her responsibility for the other, both in Australia and in her home country. In this regard, it was her family that had primacy. Sonya spoke about going to an academic conference in Adelaide from Melbourne: "[I could not] leave my husband here with my kids for a whole week." This statement suggests that not only did her family have primacy in her experience but it was her core concern in juxtaposition to her emergence as an academic.

She also described her frequent collaborations via Facebook with an academic colleague in her home country: "We generally work together on ideas or brain storming...." When asked the question, "You've got this new life in Australia and the connections here. Where do you see yourself with these two?" she responded: "I have to go back to [her country of origin] and I need to have connections there...I love when I work with my friends here too." One of her substantive sets of connections was with her former tertiary students at her home university: "What I get through Facebook are former students of mine. Lots. Lots. You would die to see that every day [there are] 3 or 4 students [that I help]." In evaluating these connections, Facebook became the conduit through which her teacher and academic personas were facilitated and sustained.

For Category Seven (To learn), Sonya expressed awareness of herself as a learner. In considering her limitations, she said: "I am not very good at summarising...my problem is to short it up." She also identified her need for structure in her approach to engaging with doctoral related tasks. About the notion of structure she said: "I need the structure first...I need the structure first to fill it in...my brain works like that." This may be why she identified Endnote as her preferred research software, given its highly structured interface and ability to link to associates and online content.

Miguel's second interview was 30 minutes in length and contained not only his recall about what he did during the one-month period but also his aspirations for the future. Moreover, evident was manifest awareness of himself as a learner, as well as consideration of the status of his research as a student 11 months into his PhD.

For Category One (To Act), Miguel strongly constructed himself through intentional action and being assiduous. When asked what he had done in terms of his writing and research during the one-month period, his reply focused on his language needs as second language English reader and writer and his consequent use of online dictionaries and Google. This focus was especially about the writing of his theoretical chapters that preoccupied his consciousness at the time of the interview, especially in regard to his judgement that his English writing skills could have been stronger.

This intentional action, built on the sense that systematically competing tasks is crucial for successful progress in a PhD, was also evident in his description of a typical day. Miguel described his preference for doing work in the morning: "I usually come here [to the university space] at 9 and then I usually start with coffee." He described his actions of doing much of his reading and writing then, and that for him the afternoons were "too difficult...to concentrate", and so he liked to do "different things" related to his academic work. About his evenings he said: "I try not to work in the evening...because in the evening I try to forget my PhD." He claimed that this working from 9 AM to 6 PM, with most focus in the morning "helps me to get things done" and that it then became a "commitment". This description of his typical weekday suggested the overt segmentation of his PhD study into discrete temporal frames of activity.

At the end of the interview, when asked to comment on what he saw for his future, Miguel showed awareness of himself as temporal being (Category Two, To be) moving forward to what he regarded as an uncertain future of applying for jobs in his home universities, once he finished his PhD. There appeared to be some underlying apprehension about this future: "I came here and I did what I had to do. When I return to [his home country] I will start looking for jobs as a university teacher because that's what I want to do...I will almost be 30 by then. I won't have a job and I won't have a house, so I will have to start my life." This suggested the level of risk in coming to Australia and uncertainty that appeared to accompany that decision.

As in his first interview and his online journal, states of feeling (Category Four, To feel) accompanied much of Miguel's discourse about his experience. Regarding his efforts to put together a cohesive theory chapter he said: "I'm still struggling in getting things together." However, he also said later: "I'm happy with what I have accomplished in 11 months." By far, the most significant affective responses were, first, his struggle to get ethics approval for his project and second, his social disconnection in leaving his country of origin and coming to study in Australia. He said, with a lot of expression and gesturing:

It was a tension at the beginning...and it took me a while to get used to it. I have made some friends, so people can talk about my research...It's very nice to discuss different perceptions of reality from different countries...I feel more comfortable than when I started...some days I feel more pessimistic. In the last few weeks I've been more optimistic.

Here the sense of dislocation appeared to be present but over the 11 months in Australia his social and collegial connections seemed to be forming.

Finally, for Category Seven (To Learn) there was extensive description and reflexion about his learning processes and accomplishments in the second interview. Most of these comments were about his use of digital technologies. He described in detail his strategies around using digital technologies. He said that he stored "everything in the Cloud" but that he also preferred "everything on one physical device", his laptop. He used an iPad but strategically for taking notes so that he could more easily find and recall the notes that he had made, rather than paper notes that he found did not facilitate recall and usefulness. However, he also expressed his wish to have greater knowledge of "tactical stuff" to do with technology, which he linked particularly to digital presentation skills and using peripherals such as printers more effectively.

However, he was somewhat incredulous about the oft-claimed benefits of technology. He said emphatically: "It doesn't seem that technology has changed a lot of research activities. There isn't anything that makes me feel, wow! I guess there is some discrepancy; there is a gap between what we research and the uses we make of digital technologies." His thinking was that digital technologies do not appear to be as effectual for research or offer as much potential in research as the claims would suggest.

Finally, there was also a strong sense of awareness of his own learning and strategic needs in navigating through his thesis. He said: "I will do my best to try to have as much done because once I go to collect data I'm not half way through my candidature yet. But as soon as I get my data I will feel okay. When I have analysed my data, I will have accomplished half of what I have to do." Later he stated: "I know that it will be very challenging to write the analysis and discussion chapters. I'm trying to prepare my mind for that." These comments suggested a sense of where he saw his temporal experience of the thesis in relation to the long-term and the whole, and there appeared to be a sense of negotiating through conscious steps to move him forward to the second half of his candidature.

Section 5.2 Phenomenological reductions of Sonya and Miguel

The section above provides an extensive ontological description of the transcripts and the experiences suggested in them. This description was undertaken in order to identify the detail of experience and thus provide content for later analysis. The second part of phenomenological analysis of transcripts is the phenomenological reduction or *epoch*ė (see 3.1). This involves the bracketing of the essences of human experience away from the actual first-hand objects and away from the layers of symbolic meaning that might accompany the experience of the objects. What is left is that which is primordially present as a core structure within consciousness.

The reduction is not about a taking away or denuding but more of finding the essential in experience that is transcendent to the content of the experience itself, or what might be termed *meta-experiential* or an abstraction from experience. It is a burrowing down through experience to find the essential core structures or the principles around which the experience of the person is built. This seeing of the essences is, in Husserl's thinking, a pure process that is intuitive in the researcher once the empirical data of experience has been fully apprehended and pondered, as I have done in the ontological content description.

5.2.1 Phenomenological reduction of Sonya

The resident essences in Sonya's experience are schematised in Figure 5.2.1.1. In the diagram Sonya is depicted as living and experiencing across the liminality of negotiating three discrete worlds, with digital technologies and communications being the conduit or digital medium for transaction between the worlds and constructing identity within each of these worlds. The central academic world is in tangential relationship to the other worlds and each of these worlds is contingent to inter-country issues such as language, cultural differences and the loss of familial and friendship ties, among a range of issues that face international students.

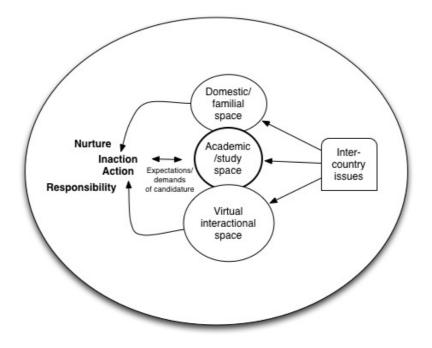


Figure 5.2.1.1: Essences of Sonya

In examining the content of Sonya's experiences, and in bracketing the metaexperiential within her experiences, two sets of quite closely related essences appeared to be arrayed in apposition at the delineated bracket of the one-month period of time. The first set involved the essences of *action* and *inaction*. Sonya constructed a core of intentional action in her consciousness; a construction of *doing* that revolved around her university workspace and included discrete use of computer technologies and software that she considered apt for the practicalities of completing thesis work. Action was thus allied with selected technologies and software, which she imbued with the sense of purposeful productivity and which, in turn, have within them affordances that suited Sonya's action. This core of action was especially evident in the online journal, where Sonya's adopted an active voice with lexical patterns that direct the reader to a series of admirable tasks. The ordered processes of action were framed as providing a moral imperative for Sonya, who wanted to produce worthwhile or good work: work that creditably reflected her commitment to her candidature and to her supervisors.

However, as clearly suggested in all the transcripts, *inaction* was also a core essence in her experience, and stood ineffably in juxtaposition to it. The inaction was experienced as a profound lack of focus on writing and research tasks or inertia in fulfilling expectations. Inaction as an essence functioned in counter-point to her active intentionality: to infuse her workspace with operational behaviours so that the expectations of candidature were completed. In the nexus between action and inaction Sonya experienced states of concern and anxiety, leading to what she described as a "breakdown". The mechanism of inaction seemed to revolve around, at least in part, the intrusion of her domestic space (her partner and children) and her virtual interactive space (her contacts in her home country) with her university research space. In sum, the desire for differentiated meaning spaces was only partially achieved for Sonya, and the overlaps and intrusions between spaces, and thus the concomitant complexity of demands, was reflected in the emotional tenor of much of her discourse.

The second set of essences that appeared to operate in counter-point were *nurture* and *responsibility*. While these two concepts overlapped to come extent, nurture implies a desire to enhance the wellbeing of another person, while responsibility suggests the level of ownership for one's decisions and the related extent of accountability that is associated with this decision-making. In her role as teacher of English, including her

facility with language and linguistics, there was an enduring nurturing of former students and contacts in her home country via Facebook, Skype and email. Likewise, in her role as parent of a child with special needs and in her position as partner to a person who was experiencing existential difficulties in being in Australia, the nurturing essence in her experience emerged overpoweringly. In apposition to nurture is the essence of responsibility. As a doctoral candidate, there were explicit and implicit expectations about Sonya's progress, including published milestones for candidature and the demands of her supervisors. Within her experience, nurture and responsibility appeared often at odds. In terms of her use of communication technologies, nurture was expressed in disembodied digital connections with her South American colleagues and students mediated through Facebook in what amounts to a virtual interactional space.

5.2.2 Phenomenological reduction of Miguel

The essences of Miguel are explored in Figure 5.2.2.1. Like Sonya, the essences of his experiences of being a PhD student in Australia were found in the liminal experiential territory between the cultural and educational context of his country of origin and that of Australia.

In this territory, Miguel actively negotiated a social sense of self, or a social and relational disposition, and a professional sense of self, which formed his disposition as an English language educator in his home country. This professional construction became problematic for him as he deconstructed himself as English educator through an evaluation of his competency with English within the new context of Australia as an English-speaking country.

Core to these fluid constructs about self were two sets of existential essences in dialectic formation in Miguel's consciousness, through which he negotiated his life as a doctoral student in Australia. The first was the sense of emotional dissonance in being in Australia and isolated by distance from home. This dissonance appeared to affect and shape both Miguel's social being and his professional persona. This dissonance was evident in his reflexivity, identifiable through the shifts in emotional disposition, especially regarding the overt loneliness that suffused his discourse as a visceral experience.

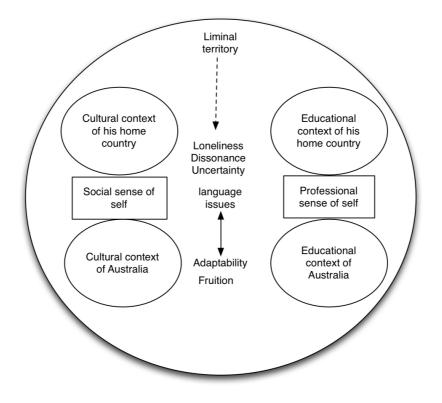


Figure 5.2.2.1: Essences of Miguel

The second was the expressed desire to find fruition in the candidature process and thus develop as an academic and educator. This desire was not mere fancy but emerged out of the challenge of adaptability, specifically in terms of cultural, academic and language competencies, as well as an aspiration to develop his skills with the use of digital technologies. It was the confluence of emotional dissonance and the desire for fruition that seemed to be an essential structure in the consciousness of Miguel, linked to the uncertainty of his future in returning to his country of origin and attempting to gain employment as an academic.

Section 5.3 Hermeneutical analyses of Sonya and Miguel

The final part of phenomenological analysis of the transcripts is hermeneutical analysis. The ontological description of the content of experience explicated above (see 5.2 and Appendix F) is mainly concerned with the identification, description and exploration of the empirical and symbolic content of experience, including the thread of technology in that experience. Phenomenological reduction is about locating the essences or eidetic core in experience. Hermeneutical analysis is also concerned with apprehending the sense in or meaning of that experiential content. It is about offering interpretations or an understanding of experience from the point of view of the participants themselves in conjunction with the researcher's interpretive perspective which is informed by discrete theoretical standpoints.

As explained in Chapter Four, this hermeneutical analysis is supported and given focus using three distinct but interrelated phenomenological lenses (see 4.5.4). The first lens is based on the notion of Lifeworld or *Lebenswelt*. This concept is about examining the totality of that which is encompassed in and impinges on experience or is contingent to it, including the objects and relationships in a person's world. This Husserlian notion includes both what each participant experienced of the world and what participants may have shared as a common epistemological enquiry with the researcher.

The second lens is that of *Gestalt* theory. This phenomenologically orientated theory of mind suggests that humans understand the world tacitly, in wholes, despite the fragmentation encountered in the world, and that the self is also constructed as a whole and as part of a self-adaptive system of accommodating the world (see 3.3). Humans, according to *Gestalt* theory, are constantly making and remaking *gestalts* through adjustments to the demands of the world, but there is also an essential core of identity whose integrity humans want to maintain.

The final lens is that of Paul Ricoeur's hermeneutical analysis. Ricoeur positioned humans as constructing an unfolding self-narrative that they are only partially able to control temporally. This narrative construction and vision of self, finds particular form in the fluidity of language and is historically and culturally positioned. Ricoeur argues that we are bounded by our cultural, linguistic, historical and geographical circumstances but that there is desire to transcend these circumstances, a desire that drives the human narrative forward. For Ricoeur, boundedness, temporally and corporally, is juxtaposed to transcendence in creating a personal narrative of meaning.

5.3.1 The lens of the Lifeworld

As suggested earlier (see 5.2.1), Sonya's Lifeworld appeared to be demarcated around three discrete life spaces. She designated her academic/study space as the place of

academic action and engagement with academic projects. Her university office became more than just a geographical place; it was also a space in consciousness, a mindscape imbued with the attributes of being a student and performing the role as academic colleague. Within this space, there was a distinct orientation in terms of technology conceived as a utility for productive work. In her domestic/familial space the traditional roles and performance as partner and mother, Sonya's experience was differentiated as maternal and distinctly gendered, with her practical care for her children and the intercountry issues experienced by her partner, as compared to the academic/study space.

The virtual interactional space was distinctly inter-country and mediated through social media, especially Facebook. This space was constructed digitally and was a space of consciousness conceived virtually. This space tended to overlap with the other two spaces, in Sonya's experience, and contained within it performativity as teacher and mentor linked back to her country of origin. In this space, technology was conceived not in terms of productivity but in terms of connectivity and interaction or as a potent affordance for her self-conception as teacher and mentor.

Thus, Sonya had clearly demarcated life spaces with discrete uses of different technologies in each space with strategic intentional acts, which were part of her consciousness of herself. Sonya's inter-cultural navigation was driven by her fluency with English, which, in turn, found a conduit in social media, especially Facebook.

For Miguel, his Lifeworld as a doctoral student coming from his home country to Australia appeared to be constructed as a singularity, with little of the overlapping complex worlds or meaning spaces experienced by Sonya; except that there was, as with Sonya, a disembodied and demarcated world of connection mediated through social media where he associated with his South American colleagues. This singularity provided a meaning space centred on his candidature and the writing up of his research. At the time of the conduct of this research, a discrete social space in the cultural context of Australia had not yet fully formed for Miguel, perhaps as part of his affective experience of loneliness and a sense of dislocation from friends and family.

This singular space, demarcated for doing his PhD work, appeared to be significantly mediated by digital technologies, such that even his academic collaborations were conducted in virtual spaces though digital media with both his colleagues in Australia

and those in his country of origin. Like Sonya, his social media platform of choice was Facebook. However, the range and integration of digital technologies, software and apps into his doctoral writing, research exchanges and communication patterns were more extensive than Sonya's.

Within this purpose-driven interval of candidature, Miguel was especially concerned about meeting expectations for an academic culture, which was, at least partially, unfamiliar to him. His angst about issues with his ethics approval, for instance, was testament to his concern about fulfilling his regulatory candidature obligations. Yet experiencing this singular space became challenging for Miguel due to what he considered to be significant language issues and a facility with English that was, from his perspective, more limited than he had envisaged before coming to Australia.

5.3.2 The lens of Gestalt theory

For Sonya, a significant operant in her consciousness and in the construction of self was the gestalt of her national culture and her Spanish linguistic roots. This was evidenced not only in her explicit statements about her home country but also in the extensive virtual connectivity to her South American students that was overt in the period of collecting research data. Embedded within this gestalt was her role as an educator, especially an English educator for a non-English speaking context. Her situated linguistic knowledge was formed and grounded in her home country, and it was in this cultural space that her former role as teacher and language educator was formed.

However, her praxis as language educator was also fashioned in Australia: in the postgraduate programs in which Sonya participated at two universities and in the less formal cultural and collegial exchanges, some of which she spoke about in the interviews and wrote about in the online journal. The tether to her home country and to her role as educator, so fervently maintained through Facebook, appeared to be somewhat at odds with her formation as an emerging academic with Australian ties. It was in this territory of change and accommodation between two cultural and linguistic contexts that Sonya's candidature experiences were formed. Whilst her inter-country formation as an English language educator may have fostered language coherence and accommodation wrought through cultural adjustment between her home country and Australia, it could also have had the effect of fragmenting and disturbing the core gestalt formed in linguistic and cultural heritage of her home country. It is possible that in coming to Australia Sonya began to conceive herself as a global digital pedagogue, whose reach through social media was transforming her core gestalt. Indeed, there appeared to be a self-organising principle operative in the interplay between Sonya as educator, student researcher, partner, mother and colleague that was forging a new conceptualisation of self and consequently an altered cultural gestalt. This was produced in the accommodations necessary through negotiating the various roles and expectations experienced by Sonya.

Miguel's gestalt of self as English and linguistics educator was similar to that of Sonya in the sense that both conceived their primary functionality as working in the semiotic gap between English and their national language. However, there was a significant difference between how each participant experienced doctoral education in the wake of this gestalt in Australia. Because of Miguel's linguistic encounter with Australia and its culture his gestalt about himself as an English educator had come under considerable self-analysis, such that he recognised the need for adaptation and adjustment towards the formation of a new gestalt about himself. Thus, in comparison to Sonya, he conceived himself in the structures of his consciousness as being in formation. This conceptualisation as being a language learner as well as learning to be a researcher, appeared pivotal to the formation of a new gestalt because of his time in Australia.

5.3.3 The lens of Ricoeur's hermeneutical phenomenology

For Sonya, the temporal location of Australia and the ensuing issues of language, family, geographical distance, work, friends and culture, the *bios*, were pivotal in negotiating her life as a research student. She lived in that liminal territory between two geographical and cultural locations or temporal frames; and that liminality had existential consequences for Sonya as a person attempting to accommodate the complexities of her Lifeworld. In this living with complexity and in finding agency within that complexity, Sonya was also vulnerable and susceptible to the uncertainty of trying to find an authentic self or, perhaps, a set of selves. Sonya captured this liminality, this sense of the in-between and the trans-cultural, in the fluid discourse of

her language, which was situated in the various actions that constituted her evolving notions of herself.

Her actions thus resided in two competing spheres of activity: in the domestic and familial, where Spanish and the culture of her home country were infused with English, and in the academic sphere, where English and Australian culture coalesced with the international texture of her experience as a new form of being that was evolving and transmutative.

The cultural frame of Australia and its English language forms shaped her selfidentification and her disposition about what she would be when she returned to her country of origin. Indeed, the input of this Australian cultural-temporal frame, including her candidature at an Australian university, may have orientated Sonya towards the *logos*, towards the possibilities in thought about what she could be or might become. Sonya was certainly bounded by her cultural background and by her obligations to her home country. Indeed, she was indentured to the government for the cost of her research and study in Australia. She was also tied to her familial commitments and contingencies that were ever-present in her consciousness in her living in Australia.

At the same time, there was an imagining of a future outside the frame of her temporal *bios*. This possible future emerged in her interviews where she used more universal, rather than country-specific, language to describe what she wanted for herself as a language educator and academic. There was a sense that she wished to transcend the confines of her cultural boundaries but, at the same time, there was a desire to retain her nationality and to constantly affirm her South American connections. Transcendence of culture and affinity with culture appeared to be competing intentions within Sonya's consciousness that were creating a new narrative of self as educator and emerging academic.

By contrast, Miguel's *bios* involved a temporary geographical relocation to Australia, and it was the mobility of the interval of candidature that drove his intentional action. Candidature became a mechanism for driving this intentional action because in the doctoral qualification there is an inherent opening of possibilities, as well as uncertainties. Clearly, then, his *logos* was orientated towards his ambition to become a

teacher or pursue academic work in his country of origin; so, unlike Sonya, there was not the same degree of dissonance between various life spaces.

Operative for Miguel was the existential and affective negotiations needed to work effectively in this necessary but temporary *bios*. There was evident a suspension of his aspiration to work as an English/linguistics educator in his home country for the duration of candidature, and in that suspended state there was a need to cope with all its contingencies, such as the requirements of ethics and fulfilling the research and writing requirements. At the same time, while completing his doctoral work formed an interval in his life prior to an envisioned state of being, there was also a recognition that his immediate temporal need for connection (through friendship and collegiality) both in Australia and with his colleagues in South America resided in his consciousness.

Section 5.4 Syntheses of Sonya and Miguel

For both participants, who were from South America, there was an explicit sense of *interculturality* regarding their felt experiences and conceptualisation as international students. *Interculturality* is a term used to express the transitional sense of being inbetween or in a liminal space between what is known and constructed in consciousness as a cultural/linguistic location and what impinges on experience now in a different cultural, linguistic and temporal frame (Holliday, 2016). Clear strategic negotiations and adjustments in their lives between these two cultural spheres were evident, mediated for both participants through exchanges in social media that formed for them an essential substrate in experience and a convenient strategy for maintaining connection.

The will to traverse both worlds, the home country and the study country, appeared to drive the digital, virtual exchange, creating another meaning space that straddled the two. For Sonya, this space was underpinned by her wish to sustain her role formation as pedagogue in her home country, while, at the same time avouching the intricate interpersonal and professional connections established in Australia, including wanting to be in Australia as opposed to the obligation to go back to South America. By contrast, Miguel operated across these two cultural spaces with intentional action formed in light

of the delimitation of the candidature time frame. He wanted to make the most of this interval in time and place because of what it would lead to in his home country.

However, for Sonya there was complexity, revolving around a strong demarcation between her doctoral space and her familial space, all constructed through diverse uses of digital technologies that were deployed with different intentionalities that were highly contextualised and utilised according to the discrete affordances offered. There was also a third meaning space, a virtual media space shaped to accommodate her interactional connections in her country of origin. Miguel shared this space but for him it was a means of maintaining a presence while away, rather than sustaining a persona that had been forged in the past.

For both participants, there appeared to be three distinct threads in their experiences of candidature in Australia. The first was the need to develop a new narrative of self within the emergent formation of developing an academic identity in a connected world. For Sonya, this formation was problematised by the exigencies of being a partner and mother, as well as a professional and doctoral student. In the case of Miguel there was a singularity about this experience but one, nevertheless, complicated by his affective needs, including the need to connect due to loneliness.

The second was the critical and central function of digital technologies in relation to PhD candidature - the means of navigating researching, writing, connecting and living through these technologies or at least accommodating them. However, as became clear in listening to both participants, the relationship to technology was fraught and complex. It could be both a means of essential connection and facilitation of research and academic ambitions and a mechanism for distraction and disengagement from work.

Finally, candidature appeared to be a shifting temporal frame attended by significant emotional states and experiences of liminality (between-ness) and uncertainty. Doubt and self-deprecation tended to characterise the emotional tenor of the experience of being a doctoral student for both participants. Such experiential states were also complicated by their personal circumstances, ultimately contingent on "interculturality", the state of being in a place between culture.

CHAPTER SIX DATA ANALYSIS: LIFE TRANSITION FOCUS

Jane and Susan were two mature age doctoral students who had had long careers in teaching before coming to graduate study. Jane worked in the TAFE (technical and further education in the Australian context) sector as a trainer, professional development facilitator and administrator, and Susan had a diverse career as an English teacher, educational leader, pre-school administrator and wellbeing team member. Both participants in this research left full-time work to become full-time students, making a substantial change from their previous occupations. Jane's research was in education and concerned the TAFE sector; whilst Susan's was in Psychology, an investigation into children of parents with mental illness.

For Jane, doing a doctorate was driven by her profound interest in transformative learning, especially as related to TAFE teachers and students. It was also related to curiosity about her own capacity to learn and forge a new career as an academic in the face of uncertainty about her own ability. Susan, on the other hand, was certain about her capacity to do the work but less certain about where doing a doctorate might take her. Having completed undergraduate and then an honours in psychology while working full time, and having achieved strongly in her studies, she felt well placed to do her doctorate, converting from a master's degree to a doctorate when offered the option.

At the time of this research, Susan was in the period leading up to her confirmation presentation, the first of three milestones in candidature at the university where the study was located. During this probationary time of candidature, Susan was in the process of producing a confirmation document which outlined her research, as well as an audio-visual presentation for a progress review panel. She completed her confirmation successfully just at the end of the one-month period of the research. By contrast, Jane was still uncertain about the timing of her confirmation, and during the one-month period her research focus, methodology and search for relevant academic literature were still forming.

Whilst for Sonya and Miguel (see Chapter Five), PhD work was an extension of, or an interlude in, their career goals, for these two women doing a PhD was a departure from what they had previously been doing in their professional roles. As such, there was considerable discontinuity articulated in the experiences of both women.

The focus of this chapter is describing and interpreting the experiences of Jane and Susan, taking account of the shift in their lives from a state of continuity and regular income to a state of less certainty, both financially and existentially. This theme of life transition, and the implications of this transition for the disposition of both women, is explored in the context of their Lifeworlds and in terms of how digital technologies were employed by them.

Section 6.1 Ontological descriptions of Jane and Susan

This section provides a detailed content description of the experiences of Jane and Susan, as revealed in the two semi-structured interviews and the online journal. The purpose of these descriptions is to specify and identify a range of experiences relevant to understanding the Lifeworlds of both participants, and to provide a substrate for subsequent analysis.

6.1.1 The pre-journal interviews

Jane's interview of 29 minutes began with an overview of how she came to do a doctorate. For Category 1 (To act), in building a narrative of her life in the interview, she focused on the actions and intentionality of constructing her career as an educator. She said: "I became a hair dresser", "got married", "I started working as a facilitator", "I started to do some teaching" and "I stayed there [her job at a TAFE college] for 12 years working in professional development". Likewise, in describing her foundational work for her PhD, she adopted an active voice and displayed animated facial expressions and gestures: "I do my reading", "I can make snapshots of my notes that go into Endnote" and "I save to Dropbox". In this latter set of actions, digital technology appeared to be a core means of acting in the world and constructing meaning from the world. However, apart from these two examples in the interview, there was little other reference to action.

In terms of Category 2 (To be) there were more sustained responses in terms of her descriptions of her state of being and her identity. For Jane, the PhD meant that she had to "navigate and balance sessional teaching opportunities" to "pay the bills". At the same time, she described issues with caring for her health and well-being. She noted her former obsession with fitness and that she had "rejected all of that". She said: "Finding better ways of caring for myself, while I am undertaking all these challenging projects." Wellbeing was a concern for Jane and for the sustainability of her doctoral work.

With Jane, there appeared to be a sense of objectification of self, observed as a discrete state of awareness about who she was or who she believed she was becoming. For instance, in commenting on what worked for her in terms of making sense of new ideas, she said: "If something is not relevant to me or meaningful in my life, I struggle...I am a very associative person." This strategy of objectifying and categorising what she identified herself as was also evident in her comments about management of research data:

It is a really critical thing that I can come up with these electronic programs that can help me manage to store and to retrieve and to organise all my information. Otherwise, my head is always swimming with all sorts of information. So, I need to be able to pull these things down and make sense of them...and associate them in some way. The electronic stuff is really critical for that for me.

This state, which she labelled as "swimming with all sorts of information", was a disposition that she conceived as being ameliorated by digital technologies ("the electronic stuff"), couched in the language of categorising and structure.

Later in the interview she made this reference to the benefits of technology even more explicit: "[This] is how my brain works. I can be scattered...I need to know that I'm as organised as possible and that it's all there for me." Jane centred this organisation on synchronisation of her various digital devices and expected technology "to be reliable...to be transferable...and synchronised" to assist her lack of organisation. A possible genesis of this self-conception was what she identified as a "lack of study skills" or "study practice in any shape or form", which Jane attributed to being "a single mother where everything's been done on the fly". However, she noted that her

transformative learning was built on "disorientating dilemmas that turn us upside down and we have to find new ways of doing things". It seemed to be the case that for Jane digital technology became the prime means of negotiating through the demands of doing a doctorate.

In terms of awareness of self and her body, Jane conceived herself as "a very kinaesthetic person" but, at the same time, she spoke of health issues to do with her neck and back which forced her to work on her couch at home with her laptop and iPad, lying down, rather than working at a desk. Clearly, bodily wellbeing was a pivotal factor for Jane in the efficacy of how work was done, and the strategies she used to do her reading and writing were critical for her success as a doctoral student.

For Category 4 (To feel), affective states appeared to be a significant substrate in Jane's consciousness. To the question, "Are you excited by your research?", she responded with an emphatic "Love it. Love being here". Later she said: "I am proud of my endeavour." This emotional exuberance, embodied in the interview, suggested the importance Jane attached to being a doctoral student. Conversely, there were also less positive felt states. Regarding her impending confirmation milestone, she said: "I worry that I'm behind, like every PhD I know. I think about confirmation and that I'm not there yet. Maybe I think bad." Clearly, along with her enthusiasm for being a research student, there was also uncertainty about her status and her progress in this transitional time of probation. To the question, "What do you see as your needs as a student?" Jane responded: "I feel challenged...very disorientated coming into the process". This level of disorientation appeared to be exacerbated by disaffection with technology. Jane found the issue of negotiating exchange of information between her laptop and her university desktop computer "really frustrating".

Jane spoke candidly with me about the doubts that arose with her taking up candidature, especially in relation to her choice of supervisor and her skill level to undertake doctoral work:

I have had doubts about it and ...whether I have chosen the right supervisor...because she is so different to me which caused me to have doubts about myself. My gaps have been exposed. The gaps in my knowledge and skills have been exposed.

This emotional dynamism and suggestion of vulnerability in the word "exposed" recurred in the interview. She repeated the words "disorientating" and "self-doubt" several times, juxtaposed with an overarching sense that this was part of her journey and a central object in her consciousness. She said: "It's part of my life, so I really have to do it" and "I see all the challenges and the disorientation as part of me rising to the next stage of life".

Her thinking (Category 5) or her thinking about her thinking (her metacognition) was evident throughout the interview. She said that she was "always sucking in new knowledge" and finding ways of "managing knowledge". One of the preoccupations of her thinking was about learning to use Nvivo (the qualitative research software) as part of managing her research data and readings. Her thinking was also focused on developing her organisational skills and synchronising her various digital devices so that they worked for her efficiently and were "telling the same story". Much of Jane's thinking concerned navigating through information and data organisation and control.

References within Category 6 (To connect) were frequent within the interview. Her previous connections from past educational roles seemed pivotal to her research orientation. Indeed, Jane identified "people who struggle to be recognised" as her core interest in the frame of her research on lifelong learning. Her interest seemed to come out of her own experiences or what she identified as "my own story, my history". There was, then, an affinity between her own narratives and that of her potential research participants.

Jane spoke quite frankly about her supervision relationships. She described her main supervisor as an "awesome woman" and that she was "in awe of her and what she does". However, at the same time, she also described the relationship as "a bit of a challenge" because in comparison to Jane's "perspective of the individual and how they engage with learning and development" her main supervisor presented a more "external perspective" or a "sociological perspective". By contrast, she viewed her associate supervisor as someone who "appreciates story" and "appreciates individual's experiences". All in all, Jane believed her supervision relationships were "a great balance of challenge" and a "perfect complement of people to help me, to challenge me, support me and give me encouragement". In terms of her connection with her peers, because she moved to a room in another centre at the university, away from other research students in the faculty, Jane felt that she was "not involved in what is going on here every day". However, she also said that she had "established a good relationship with a core of people" and that she learned best by "talking with people". Having tried a reading group that did not meet her needs because she could not "give as much as they were after", Jane found a group that she had "more affinity with" because they "support each other through the process". Her connection with her peers seemed to depend for her, however, "on my other commitments". This suggested a tension between wanting interpersonal connection and the practicalities of living and doing her research.

Finally, there were many references in the interview to learning (Category 7, To learn). Jane saw herself as "fascinated about understanding the foundations of people" and motivated to "understand things for themselves". She believed that she learned by "being immersed in things" She said that she "can't just take on information" but learned by "finding meaning in things". She described this take on her learning disposition as a "transformational thing". Jane linked this hands-on approach to learning to her use of Evernote, which she described as "a great way of capturing key things" and "a little collection point" from which she could put things "in the associated place". However, she also noted the "gaps" in her skill base and, taking on, what she identified as, the theoretical perspective of Michael Grove of the University of Birmingham, she questioned the "many assumptions made about the skills that people" have in tertiary education.

By contrast, there was no discernible evidence of doubt in Susan's statements about her ability to do a doctorate. Indeed, she began her interview with an extended and authoritative exposition on the intentional actions (Category 1, To Act) that shaped the disposition of her life as an educator. Using an active voice Susan explicated her life up to the point of becoming a PhD student: "I started an undergraduate university course...I did arts and literature...I decided to give teaching a go...my methods were English and History." Then, with the same assured voice she spoke about her career change to "a stock broking firm" and then "early childhood education". Susan described the point in 2006 when she "decided to go back to study" which was also aligned with

her work in "student welfare and student wellbeing". Throughout the interview there was a clarity about her actions, intentionality and choices, epitomised by words such as "I developed a curiosity...I decided...I applied...in a month's time I am going to do my confirmation".

The same active and direct voice was evident when she spoke about her use of technology in general and the iPad in particular. When speaking about iPad apps that she used as part of her doctoral work she said: "I tried a few. I use iAnnotate for when I'm downloading an article...I used [it] every night this year...VJournal is what I use [when] I have thoughts that I just want to write down." However, she also said: "I still use paper and pen and still have little books...and I use them in combination [with technology]. I think that it is me. I haven't evolved to just using the iPad." Susan's actions with technology resided in that transitional territory between old and new writing technologies, or ways of inputting text and working with text. Indeed, as she said: "In my study and research it [the iPad] is important but it hasn't replaced anything yet. It just enhances it."

In terms of Category 2 (To be), this resolute and intentional decision making about her life and the path that she had chosen, so evident in the interview, was juxtaposed with the exigencies of living with the demands of a family and all the expectations that ensued from that state of being. Susan said: "I have found it [her doctoral work] challenging, and of course its juggling it with life. You've got a family, children and parents that are unwell...difficult to negotiate between all of those commitments and your study...find a balance and prioritising." Writing about the period just before confirmation she described her domestic circumstances candidly: "This whole process can consume you totally...dinner hasn't been cooked, shopping hasn't been done...so that's kind of hard. I'm distracted by my research." Apparently, for Susan, at critical times in her early candidature, there had been instances where the balance of domestic and research life had not been achievable.

Given the evident tensions in her consciousness about this struggle, she also focused on the issue of her wellbeing: "And then there is fatigue...some people are workaholics but I try not to be. You work and then you collapse. And you're really tired...you have to really look after yourself and exercise a bit of self-care." This emphasis on self-care extended to Susan's use of digital technologies. For instance, she said, about her use of her iPad: "I'm not a real fan of reading on the iPad. It's hard on my eyes...if I'm really serious about using that article I really have to print it off."

In summing up her state of being as a doctoral researcher, Susan said: "I know it sounds strange but it's like this thing that's always there, that I like being there, that I can switch to when I want to escape...that I really love...and that centres me. I love that." At the end of the interview she summed up her feelings about her doctoral work exuberantly, with animated gestures: "I think I really enjoy the process. The experience so far has been gratifying for me personally in pursuing that passion for learning." It seemed that, despite the machinations of arranging her life and the personal wellbeing issues that were in her consciousness as a doctoral student, the quest to pursue her research, and the accompanying pleasure that gave her, was core to her evolving sense of a new emergent self.

This quest for self-discovery has a well-defined emotional or affective character to it (Category 4, To feel). As Susan said about her return to study: "I felt that I really needed to do it; I really needed to go back to school, to education." Indeed, she described her returning to study after many years this way:

It fulfils my desire and passion for learning and it keeps me vibrant and motivated...It propped me up...I love the experience of reading and learning and challenging my preconceived ideas. And I love writing...It's something that I really enjoy and it fulfils my soul.

This buoyant affective state contrasted with her decision to let go of educational leadership aspirations, which she described as not giving her "the same satisfaction". It seemed likely that the existential decision to leave her full-time career and her leadership aspirations and pursue academic work was made because of what would bring the greatest happiness for her at this stage in her life.

However, once *in situ*, the demands of doing doctoral work and meeting the requirements of candidature appeared to weigh heavy on Susan. She spoke openly about her feelings coming up to her confirmation presentation: "We all get nervous and worry about what we are going to present." Susan also experienced what she described as a "confidence crisis" in the period leading up to her confirmation: "It was at that

point of my research when you've done a lot of reading and a lot of literature searches and still not sure...how you are going to pull it all together." She summed up her feelings: "I think, am I worthy, am I good enough to do a PhD? So, the confidence side of it...plays a big role." This lack of confidence in her ability as an early stage PhD student and her expressions of doubt about being able to bring the material for the confirmation presentation together into a coherent whole appear to be related. In the searching for a unified approach to presenting her research, one that fits within the academic field of educational psychology, Susan's struggles with the work took on an evaluative mode that was directed against her own capacity to be an academic.

About her use of digital technologies for her doctoral work, she said: "I love writing on a laptop. I think that's why I've grown to enjoy the writing process...I love that process of creating something on a computer." By contrast, there was some reticence about her use of social media, especially Facebook. Whilst acknowledging the benefit of university postgraduate Facebook pages, she nevertheless concluded that she had "a bit of anxiety about writing on social media" and that she remained "a little nervous about being overexposed in those forums". This she attributed to her time in educational administration, where issues to do with social media were especially sensitive. This attribution contrasts significantly with the reliance on Facebook in the experiences of Sonya and Miguel explored in Chapter Five.

In regard to her thinking and cognition (Category 5, To think), Susan employed overt topographical imagery throughout the interview (Category 9, To imagine) to describe her candidature experience and to explain the new unfolding narrative in her life. In regard to the question about why she was doing her doctorate, she said: "I was really at a fork in the road: do I continue down the line...of doing my PhD...or do I source assistant principal positions...I chose to go down the road of research and I haven't regretted it." Her decision, portrayed in concrete images, became an object in her consciousness. This same volition was evident in her working out the focus of her research project. She argued that her project had "to be a viable and practical working with education". She had to think through and "decide what topic to settle on". Within her consciousness, there appeared to be a measured sense of rationality evident throughout the interview transcript.

Reflections that fit within Category 6 (To connect) were frequent. In the early part of the interview, after her extensive exposition of her professional life story, Susan enthusiastically expressed how she missed the inter-personal connection of her previous school work context: "I was missing my school, my colleagues, my position there and I guess some of the relationships that you foster in that environment, and a sense of being able to work as a team." Later she said that she "felt very disconnected" in the early part of her candidature and that it took "6-10 months to work through some of those emotions". Later, she explored this need for connection: "I found that I need to have colleagues around me. I need to have that personal contact…I am used to being connected with people, used to working in teams and collaborating."

For Susan, the transition from her former role as an educator and leader, one that was evidently imbued with significant meaningful connections, to a different setting where inter-personal connections needed to be forged and were not intrinsically part of taking on the role of doctoral student was challenging. What is especially evident is the substantive emotional basis for this existential challenge that she experienced at the beginning of her candidature. What is also apparent is the lack of institutional resources and programs to assist the development of meaningful collegial connections.

In the context of her doctoral program, the importance of connection for Susan was especially shown in her references to her relationship with her supervisor, which she compared to "a marriage": "I feel kind of safe with her supervising me." In the explanation about this connection, including how the recommendations of her supervisor shaped her research topic, she frequently used the word "we" in describing her working relationship with her supervisor, suggesting the level of engagement and familiarity in the relationship. Susan suggested that compared to the "really bad stories" of some of her colleagues, her selection of supervisor has been pivotal to her continuing with her doctorate. As Susan said, "we work well together" as a "tag team".

It was clear to Susan that her supervisor has a pivotal strategic and emotional role in the emergent story of her candidature: "I think that's [the relationship with the supervisor] such an incredible part of this journey, having that right person that can motivate you when you are really down...I can kind of get through and they push you through it." This fundamental relationship was supported by digital technologies, which allowed "constant communication with my supervisor" and "kind of quickened up everything".

Finally, there was Susan's awareness of herself as a learner (Category 7). In terms of her research focus and interest, she described her "curiosity about how children and how teenagers learn". Curiosity was a key motivating feature in her consciousness of herself as a learner. Moreover, she described how she operated best under situations of pressure: "I probably do my best when I'm under a bit of pressure. I think more creatively and things start to make more sense to me." Later in the interview Susan portrayed herself as a "very systematic, organised individual in how I study, and that was the only way I can get through". Regarding her research and its focus, she said that she wanted to do a thesis by publications and that she had a plan. She stated: "I have that plan sitting in front of me on my desk."

In regard to learning with technologies, not only did she ascribe different affordances to different technological platforms but she was also active in finding new ways to utilise technologies to serve her plan for her candidature. When commenting on using an iPad as part of her doctoral work she asked: "How can I use the iPad in the scheme of things here [at university]?" She described, how, as a secondary school teacher "she was learning [using an iPad] with the kids" but that in the context of her university work she "didn't feel as comfortable with the iPad as the laptop", suggesting that the nature of her writing and productive function had changed markedly and that there were limitations in using an iPad in the realm of the lengthy textual production required in doctoral writing and research.

6.1.2 The online journals

Both participants completed online journal entries that were designed to facilitate a dayto-day account of their experiences and thoughts, as well as documenting their use of technology. In the one-month period of the research, Jane completed nine online journal entries. Compared to her pre-journal interview, there was much more focus on detailing day-to-day actions of doing her work (Category 1 To act). These actions were often described in phrases and single words such as "to work on my proposal", "refining my project plan", "I have captured" or a list of the software Jane used on a particular day to "capture, annotate and organise" her work. The use of the infinitive, such as "To tick off one of the many things on my 'To do List'" and "To earn money", perhaps suggests a strong purposefulness or resolve to get things done for her impending confirmation milestone.

For Category 2 (To be) Jane offered considerable detail about her state of being in the month of completing the online journal. From her initial journal entry, she appeared to be aware of significant distraction from her doctoral study related to her supervision arrangements, domestic life, work commitments and health concerns. Jane summed up her observations:

I am always so easily distracted by the demands of family life, social connections, body...hungry. Thirsty. Tired, need to exercise, work and economic concerns. Might seem distant, but I see them as foundational.

It seemed that wellbeing and her ability to focus on her academic work were interrelated in her consciousness; and her use of the word "foundational" suggested how central she placed health concerns in this period of her early candidature.

In a subsequent entry, she wrote: "Health-related matters...optometrist appointment to address computer-weary eyes, and the need to get up and walk to limber up my tight, computer-weary body." This entry further indicated the weight of her physical state of being on her research work. Later she wrote about "cultivating health and wellbeing", "remaining mindful of my health", and "establishing financial stability". The issues of health and financial viability were significant in the journal, although she admitted that these concerns had not "not translated to much progress on my PhD", pointing to her belief that they were affecting her academic work.

The affective nature of her journal entries (Category 4, To feel) was evident throughout. She wrote that she "feels tired and wants to go home and sleep" and that "everything keeps intruding on my brain space" to such an extent that she was "frustrated". However, her emotional disposition appeared more positive and elevated when she wrote about her office space in which "she thinks well" and described it as "delicious for my...scattered, 100mph brain". Here, she explains how she successfully used digital technology to organise her thinking such as being "able to code relevant parts [of an article] in Nvivo" or use google effectively: "Google!! Beautiful, found what I needed".

The sense of spontaneous joy in her learning was also evident in one of the latter journal entries where she tells of discovering new literature that expanded her thinking about her research. She wrote: "I love these journeys of discovery and clarity about one's chosen path."

Jane also wrote with jauntiness about her meeting with her associate supervisor: "Good fruitful, productive morning...good insight into how to respond to my style and passions...and that resonates with me. My needs have been met...I am satisfied and raring to go...." However, in a later entry she wrote about her anxiety about getting her "participants to participate regularly". She found the transition from discussion of the research to its enacting on the ground difficult.

In counterpoint to this mixed emotional state, there was a strong thread of intentional thinking and strategic planning (Category 5, To think) evident in her journal. In the early entries, Nvivo was the core of her planning and thought, which was "to establish a reliable database", but she also described the software as "a big stumbling block for me" because of issues she experienced with using her various devices in an integrated fashion with Nvivo.

In terms of her thinking about her life and her candidature, her goal, as she articulated it, was "to promote success across all areas of my life", and it was evident that there was a considerable range of strategic thinking about her candidature, work and personal wellbeing. This strategic thinking, as revealed in the journal, focused on how all the facets of her life might work together and about how digital technologies might assist in the integration.

In Jane's conceptual framework for her doctoral research, there was evidence of metacognition, perhaps prompted by completing the online journal itself, which became a method of recording her negotiations. In the final journal entry, she described her thinking process: "Each day more bits come into focus, and I am still figuring out how they all fit together." Later in the entry she wrote: "thinking continues to expand to draw in other thinkers...I am starting to marry some interesting concepts and theorists...still fuzzy, but becoming clearer."

For Category 6 (To connect) there was a little reference to involvement in the life of her university faculty, except for descriptions of her relationship with her supervisors. She wrote: "I have a meeting next week with my associate-soon-to-be-elsewhere supervisor, and much should have been done that has had to wait while I clarify thinking and organise myself." The uncertainty generated by one supervisor being on leave and another retiring was palpable in Jane's response, especially the words "soon-to-be-elsewhere". Clearly, her associate supervisor connected with her more because of what Jane described as a "more flexible, interpretive approach".

Finally, for Category 7 (To learn) there was only one overt reference to learning, though in Jane's many descriptions of her thinking (Category 5) there was an implicit sense of the character of her learning. She wrote: "I can see that I'm learning a few new skills and becoming aware of new digital options and techniques. However, there is no satisfaction yet, in terms that something was achieved." Clearly, Jane linked her skill acquisitions and developing awarenesses of the efficacy of digital technologies in her work; however, here, as elsewhere, there was a sense that in her learning she felt a sense of inadequacy or an awareness that she was lacking what she considered to be the core skill set of a doctoral student.

For Susan, the focus of the 13 entries was almost exclusively concerned with her working towards her confirmation, including the completion of the required outline of her research and methodology to be read by the confirmation academic panel. As such, action (Category 1, To do) was a primary focus of the discourse in the journal. Susan wrote: "I try to plan realistically...I look at what the day brings me." The next day she wrote: "I worked on my confirmation document. I find when I'm under pressure...I need to block out days to commit to my writing and thinking." This concentration on the immediacy of her doctoral milestone requirements was juxtaposed to other scholastic activates related to her transition to becoming an academic, including her research assistant work and activities to do with the research student community. She wrote: "This tends to disrupt the flow of my research related work" as did working in her university office with other staff around. Consequently, she did her work in the context of competing obligations and impositions on her time.

Susan wrote candidly about prioritising of her time in the lead up to producing her confirmation document: "I have been writing for three days without a break. I didn't participate [in] normal weekend activities: no yoga, no gym and no family time. I set myself a deadline and postponed everything else until I achieved the goals set for my research writing." She had a systematic and unwavering approach to her research writing that could also be described as uncompromising. At the same time, she wrote: "Saturdays are very full with family activities", suggesting some demarcation of personal and working spaces in her consciousness.

In terms of technology, the journal contained systematic lists (with frequent numbering) of how she used technology to achieve her academic/writing goals. For Susan, her use of her laptop, desktop computer and iPad were orientated to achieving her academic goal of finishing her confirmation document and devising her presentation. She described some IT issues about Endnote working with Microsoft Word when using a "Template", for which she developed a strategy: "shut down and reopen the document. Rebooting and shutting down seems to set things right."

Susan's response to these technological issues, as well as other issues and pressures in her life, seemed to be located in finding a calm state of being (Category 2, To be). In response to the recurrent problem described above she wrote: "When I'm in trouble with technology, I take a deep breath, use keep calm strategies like meditation. Once I'm calm I start to think about people I can ask, or use Google to find an answer to my problem." Indeed, she emphasised the importance of personal wellbeing: "To practise a little self-care...in the morning, I went to the gym and [then] had coffee with my daughters." This state is in apposition with the tendency of her academic work to draw her away. She wrote in one journal entry: "I tend to just naturally gravitate towards my computer and before I realise it, I have spent several hours writing or researching." But she also framed her writing work this way: "My writing for the last couple of days has re-energized me...I am eager to get back to it."

Category 4 (To feel) appeared to be a core component of Susan's experiences in the journal. The overt intentional actions of doing candidature work, as documented in the journal, appear to be embedded in an affective substrate of experiences. She wrote the following about the somatic impact of her work: "I was feeling fatigued and this

impacted my ability to work after dinner." At the same time, she wrote: "I feel most content [when] life allows me to prioritise my research...I'm feeling hopeful and energised by the work done!"

This state of emotional elevation and positivity about her research sat in tension with the interposition of living and meeting non-research responsibilities. She articulated this in the context of the pressure of confirmation bearing down on her: "All I needed today was time to write...I don't have a problem getting motivated to write. I love the process but I get frustrated when life interrupts, e.g making dinner, shopping etc....and just being 'present' with my family." In a later entry, she expressed what seemed to be an emotional attachment to her research work: "I do feel a sense of guilt that I'm not spending time on my confirmation paper." Two days later, Susan wrote: "Today was a very frustrating and non-productive day in terms of my research. I really want to get back to writing and finish my confirmation paper, but this wasn't meant to be today, too much going on! This has probably been the most exhausting and frustrating day because I did not achieve my goal to work on my paper." The reflection suggested her research writing as pivotal to her consciousness, in constant tension with the roles and obligations that evidently mitigated against it.

Susan showed awareness of the need for self-care as a balance to the demands of her research work, even in the face of a major deadline. She wrote:

I started the day early as I wanted to get as much done as possible before my other weekend commitments. For example, yoga and other house keeping. I have to admit that although I feel rushed getting to yoga on Saturday afternoons, I feel so much better after the session. I feel more relaxed and calm, but I also feel better physically. I've a break from my research writing for a few days now, and it has been good to step back from it, however I'm really keen to get back into it soon. I plan to have my final draft completed by next Sunday ready for submission.

Later she wrote affirmatively about her self-care strategies: "I am proud of myself with regards to managing my anxiety...I use a lot of relaxation strategies and mindfulness meditations. I still feel nervous but overall I enjoyed the experience."

Nevertheless, the imperative of completing the confirmation document appeared to have overwhelming traction in her consciousness. In one of her last journal entries completed after submitting the document she wrote:

At the time of writing this journal entry, I feel relaxed and relieved. I finished my paper and emailed it. Finally! While I feel tired and stressed when I'm working on my research, particularly the writing, I enjoy feeling satisfied and quite proud that I did it! That's why I'm decided to continue studying and do my PhD. I love that feeling. I love the challenge and feeling that deep sense of achievement!

The words "I love that feeling" epitomised the euphoric state Susan experienced in getting to the place in her candidature for which she had been striving, despite the evident discordance in her affective states across the course of the one-month research period.

6.1.3 The post-journal interviews

Both Jane and Susan completed a second interview at the end of the one-month period of journal entries. The focus was especially on what was experienced in the month, but participants were free to explore ideas, issues and experiences beyond that frame.

Jane's post-journal interview seemed to have a more positive tonal quality compared to her first interview and some parts of the online journal. This tone was especially expressed in the sense of action (Category 1, To act) and increased certainty about her purpose as a doctoral student. She said at the beginning of the interview that there "has been lots of clarifying of thinking and gathering of resources". Later, this dynamic voice continued: "I've done a lot of searching...I have gathered...I've started to transfer... I have been trying to get it organised...I can save them into Evernote...I get here [her university office] by about 10...here doing a lot of organising." In this interview, her purposeful action and her use of digital technologies seemed to be directly linked, such that intentional action appeared to be intentional action with technology.

Jane's sense of her visceral state of being (Category 2, To be) was articulated in her assessment of her physical limitations: "I need to look after my back and so I am comfortable with a piece of paper and pen." Because of her physical limitations, she

used printouts of articles in a reclining position to do her reading work. This awareness of her being was also evident in her evaluation of her mental state. As was clear in her first interview, she constructed her mental processes as being disordered. She said: "I'll get very easily distracted by thinking about something I haven't done...because I've got a brain that is firing all over the place." However, there is also a consideration of her wellbeing as a person: "I enjoy waking up and having a little time of gratitude", and later, "I spend 30 minutes every day juicing, which is another lovely way where a lot of thinking gets processed".

Unlike the first interview and then the journal entries, there seemed fewer overt references to affective states (Category 4). When asked about how she was feeling about her research she responded with: "I'm feeling more solid and what contribution I'm going to make." In response to the final question of the interview, "How would you sum up your last four weeks?", feeling states were also evident. Jane said: "I'm really loving my research...I'm really excited on the journey. When I first started with my supervisor I felt very inadequate...in the last 4 weeks...I've had more clarity and confidence...I feel that I'm back when I started my undergraduate degree." Her reflection suggests the shifting states of emotion that Jane felt as her candidature unfolded and the growing confidence that was emerging in her consciousness of herself as a candidate.

For Category 5 (To think), Jane contemplated the nature of her life as a student and what informed her thinking. About the apparent instability of her supervision arrangements she reflected: "It is what it is; I am where I am.... When I look at myself now compared to two months ago or six months ago, I've got a better idea of what a PhD is." While she identified "gaps in my knowledge", Jane also had come to a more definitive place in terms of her theoretical framework. She said with assurance: "Bourdieu's theory is my theoretical framework and transformative learning is the tool that I'm going to be using." In the final part of the interview she summed up her thinking about her candidature over the previous four weeks with: "I've really hit a really profound shift in my thinking about myself firstly and looking after myself...a massive transformation [is] taking place."

In terms of connection (Category 6), the key issue for Jane was the continuity of her supervision arrangements: "[her main supervisor] is away till next year and my associate supervisor is away, so that's probably been percolating underneath." Because of this uncertainty, her supervisors suggested a delay in completing her confirmation presentation, which may have added to her experience of inadequacy. Jane's connection with her peers appeared to have been constructed around her needs as a student: "I started off with a small group of people who were in the office together. I didn't feel that what they were doing had much to do with where I was at. Having realised that such a connection was "really, really valuable" she spoke about a second group where she could "just turn up and be there" to "support each other in the journey". Jane also found social media, such as Facebook, LinkedIn, ResearchGate and Academia "a great way of professional networking" and "finding people who connect with my work". Indeed, it was notable that given the constraints of being a full-time student without a scholarship and having to work as a sessional teacher, Jane preferred connection through social media and the efficiencies that it afforded.

Throughout this final interview there were several references to learning (Category 7) and to the educative processes that she was experiencing, including her difficulties in making digital technology work for her. She spoke about her technology preferences: "I do some things on my iPad and other things on my laptop. My laptop has a smallish screen, limiting my thinking. I enjoy going to the library centre and using the larger screen."

She also spoke about issues with making technology work for her in terms of her learning and work needs. This included "learning to save Nvivo" so that it could be accessed locally, and "how to write things" on her iPad as annotations, meaning that she could avoid a "mix of paper and digital technologies". Part of her learning was about making technology support her research needs and facilitate the connection of not only her data but her thinking.

Because of her research focus on teachers in the training sector, Jane found her own sessional work and previous experience highly relevant and connected to her doctoral research. As she pointed out: "All my teaching...and all the delivery and support of my students, I'm finding that it's just so relevant to what I'm doing in my research about

teachers and learning...even though I spend a lot of time not working on PhD, it is indirectly helping me." In this sense her professional educational memories, going back many years, had shaped the nature of her research and had been pivotal to developing an investigative focus.

Reflecting on the four weeks of the research period, Jane described and explained the change and the growth that she experienced: "I am confident that I will be able to get everything done, everything packaged ready to go when I get my confirmation. So, a lot of growth in the last four weeks." Coincidentally, she found that the online journal research tool used in this research project became useful as a reflexive, metacognitive tool for assessing her own learning. She said the following about it: "Doing your reflections has actually been a really good thing to have to do. It made me sit down and think about my thinking."

Finally, her use of some imagery in the interview appeared to fit Category 9 (To imagine). Jane said about her discovery of anthropologist and philosopher, Pierre Bourdieu: "That's given me some good meat." This image of "meat" suggested her search for substantial theory to support her thinking about learning. This search into the possibilities, and this quest for certainty, were also suggested in the following: "I can't quite see it yet. It's up there somewhere. It hasn't quite dropped yet, dropped down from the clouds yet, but I know it is something that will come." The image of "clouds" implied the forming of cohesive ideas about her research, supported in theory, that she knew she must find.

For Susan, her post-journal interview tended to be more focused on her state of being and on her learning, compared to the emphasis on action and emotion in the online journal. In terms of action (Category 1, To act), there were some references to her intentional action centred on technology, or, more precisely, her shifting of certain technologies to the periphery for the sake of prioritising her research work and avoiding distractions. About the place of her smart phone in day-to-day activities, for instance, she said: "When I'm really working intensely, I put my phone on silent. Turn it off."

There were also references to action in her discussion of what a typical day might look like over the one-month period of the research. She said: "I would be getting up at 7.30

and have my breakfast...and start work at 9.30 at the latest...I try to see it just like a job. I really keep office hours...and before I know it is 5 o'clock and I have to think about getting dinner ready...I take myself away from the computer and go outside...to think about things and process them." Clearly, Susan took a highly strategic approach to her study, one that progressively intensified in the four weeks leading to confirmation: "I tried to discipline myself to just doing work during the day." However, she found that in creating the confirmation document, she "had to do some extra work in the evening". She declared about the build-up of momentum to the confirmation over the four weeks of the research: "If I wasn't eating, I was at my laptop, and that's what the last four weeks have been like."

Susan's sense of her research story, her goals and her identity were clearly on display in the interview (Category 2, To be). She described the four weeks of the research as "the most hard and intense time in my PhD". With this intensity also came the rigor of her organisation and the precise planning of the writing process. She described herself as "very disciplined" in doing her work, but added a cautionary note in that she did not want "the slippery slope" of neglecting her "health and wellbeing". After being asked, "Where do you see yourself and your own story?", she responded: "I do see myself at an exciting point in my life...I see the PhD journey as another challenge to get excited by...I'm on my way and I'm feeling some exciting times over the next couple of years...and see how I manage and how I navigate through."

The elucidation of her state of being was especially clear in the final part of the interview, where her transitional journey as an older woman experiencing career change was articulated:

I don't know what the end of the story is but it's kind of exciting and that is what I enjoy. I do get in a bit of a rut when I've done things and then I think what else is there. There is a lot of other things, a lot of possibilities that I've never known about before and I'm excited by them and what the possibilities are in terms of where my PhD could take me. From a personal perspective, in terms of my story, semi-retiring in a way. PhD is kind of my semi-retirement plan. I see myself in a different spot from some of my colleagues who are in their 20s or early 30s and just starting a career...I want to enjoy the journey. If it got to a point where it was stressing me and making me feel uncomfortable and not giving me pluses in my life, I think I would stop. Susan expressed a sense of enjoyment in the possibilities of learning. This state of enjoyment, which was overt in her facial expressions and gestures in the interview, underscored her comment about the new, positive, "semi-retiring" professional space which she was entering. Susan appears to be forming a new set of narratives about what she could become, narratives that certainly were only just forming in this early period of her candidature, but nevertheless contain a "lot of possibilities". These new emerging narratives are framed to move her away from getting "in a bit of a rut". Yet, as an older woman, she positions her entering the PhD journey as existentially different to her younger colleagues because it is not fully about forming a career as much as it is about exploring "possibilities".

However, with that optimism came the affective consequences of what doctoral research produces for a candidate (Category 4, To feel). Susan spoke about the "fatigue and tiredness" and "wanting to do more but not having the energy". She also described the "highs and lows" and the "self-doubt and those little voices" that played in her consciousness, though she distanced herself from using the word "stressful". To maintain the continuity of her wellbeing, Susan described how "she saw a psychiatrist" who helped her with "strategies, including meditation and deep breathing and mindfulness exercises", such that she had "the emotional energy to keep going". As Susan described it: "Physical is one thing but the emotional is about being able to push yourself through those self-doubts that we have, that I have."

Most of the references to the *cogito* in the interview (Category 5, To Think) were about the use of digital technology. Susan described how she uses her laptop and iPad for different purposes: the laptop for productive tasks and the iPad for viewing and short periods of reading text. While she said that she would "feel lost" without her iPad, she noted that the "majority of the time" was with her "laptop, Windows, Endnote and Chrome". Computer technologies seemed to serve her academic and work goals, but offered a set of affordances that were not necessarily connected to her identity as they were for Jane, who saw in the connective function of digital technologies a means to organise her scattered thoughts and integrate her research. However, Susan described her well worked out and systematic approach of doing online searches for academic articles. She described how she would find relevant references through a streamlined process of accessing databases, then cross referencing, checking referencing, going to Google Scholar and then focusing on "who else cited the work".

In terms of Category 6 (To connect), Susan considered in the interview the consequences of her academic work and the pressure of meeting deadlines on her family life. She said: "Over the last month my family has kind of gone AWOL. I'm using the expression 'off the grid'. I think my family is kind of used to it because I have been studying for 6 years...so they are kind of used to me having these intense weeks and months of working right through the weekend...and just not being present." There were times of significant emotional separation from her intimate others that facilitated her study and writing goals. At the same time, this separation was a source of concern for Susan, despite acknowledging the capacity of her family to cope with the separation.

Regarding digital technology and connection, the differentiation of her personal life and her academic work seemed to follow the pattern of separation. Showing reticence about and disavowing extensive use of social media such as Facebook, Susan said that she only used social media in the form of an inbox or text message, where necessary. She seemed to adopt the same attitude to mobile phone connection with friends. She wrote about her mobile phone usage at an intense time of work: "I do have it [mobile phone] next to me. I have some friends texting me for coffee and I said I can't...Because we've been friends for such a long time they kind of understand. They don't understand why I'm doing this but I dare say respect. That's important to me." Susan thus overtly adopted the strategy of avoiding the use of digital devices in instances where they were a potential distraction to her core academic work. Indeed, she is reflexive about this potential for distraction, and thus loss of focus, that may be afforded by reliance on digital technologies.

Reflections about her learning (Category 7, To learn) formed a significant part of the second interview with Susan. She "learnt a lot about time management and organisation in the last four weeks" but also developed awareness of her tendency for "reworking things over and over again". This pedantic quality in her behaviour suggested that the notion of perfection was important in her consciousness, and that research objects, such as her confirmation document, had to be "done the best".

Susan reflected on her preference for different types of spaces for different tasks in her academic work: "For my own work I really needed to block everything off...I'm still crafting and shaping the writing the way I want it. I really need a lot of quiet with no distractions...when it's that critical mass time." This she attributed to her home space, whereas her office space at the university served the need for "notetaking and organisation" but could not provide the quiet that she sought. In sum, there was an understanding of the varying dispositions of her two working environments. However, these demarcations and separations of space and time, reflected the segmentation of her academic writing work and all else in her consciousness. As she said: "I really need to be totally immersed...I like it being all consuming...I don't like being distracted by other things...that's why I work in blocks of time."

Regarding how she learned best to achieve her writing goals, Susan spoke reflexively: "Just need to have all that ready in my head as you come to write documents. It is really important. And you can't do all that reading in a week or two. It takes a long time...for me it does." The process of formation of ideas for writing and an understanding of the academic literature formed slowly for Susan, or, at least, that was her stated learning preference. However, she also said: "When it came time to write the document I kind of knew what I wanted to write and what studies to focus on."

Susan, in her reflexivity about her learning and her writing, focused on her awareness of the reader of her writing. She said: "One of the things I'm concerned about is to respect the reader of your work. I guess that's why I like to polish my work as much as possible." She also believed that "she has learnt to write from marking over the years." Susan considered that her work with marking undergraduate students had fostered this regard for writing: "This is actually helping me a lot with the crafting and construction of my document."

Section 6.2 Phenomenological reductions of Jane and Susan

Drawing together the ontological description and the texts concerning Jane presented above, I now identify five key essences that seemed to construct her consciousness. Each of these essential objects in consciousness seemed to be accompanied by affective states and strategic actions which moved from her internality to externality. These five essences are depicted in Figure 6.2.1.

The first essence was her awareness of knowledge gaps, by which Jane meant those understandings and skills that she conceived should have already had formation in her as a doctoral student. Given her belief that she did not come to be a doctoral student through the usual path, there was apparent a sense of inadequacy that she felt, which led to a clear strategic action to ameliorate this condition.

The second was bodily wellbeing. Throughout the two interviews and in the online journal there were frequent and direct references to her health issues (such as her back problems), wellbeing practices and somatic states, accompanied by expressions of apprehension. She linked this wellbeing to the disposition of doing her doctoral work, and especially the idea that looking after herself was integral to her success as a student. She spoke in the interviews at length about her wellness practices as a clear intentional action in her life.

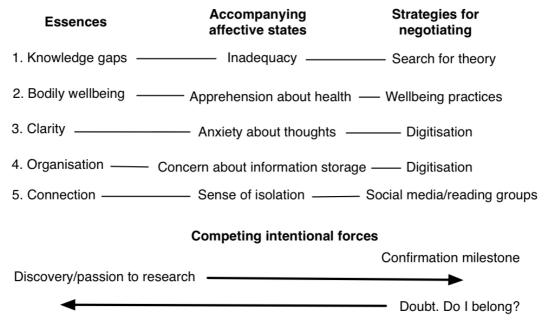


Figure 6.2.1: Essences of Jane

Third, and perhaps one of the most significant structures in her consciousness, was the notion of clarity, which included mental focus and a sense of unified purpose. Jane

represented her mental state or thought life as lacking clarity and being scattered, such that a state of anxiety was suggested in the interviews and in the transcript of the online journal. The action of a systematic digitisation of her data and information, in programs such as Nvivo and Evernote, could be viewed as part of an attempt to bring efficiency, unification and focus to her mental state.

Fourth, organisation appeared to be a key focus in all interactions with Jane. The desire for centralisation and robust digital storage was an important concern in her consciousness This was connected to her wish to integrate her various devices and digital platforms so that, in a busy life of competing demands, there was no wasted time, loss of data or doubling up.

Finally, connection was also an essential construction in her view of herself as a student. Jane felt a sense of isolation and uncertainty about where she fitted with her peers and indeed in the expectations of her supervisors. In dealing with this isolation and uncertainty, connection through a dedicated reading group and through formal academic web sites or social media appeared to be preferred strategies for Jane.

Figure 6.2.1 also schematises two competing intentional forces in Jane's consciousness. The first was her articulated passion for and curiosity about research, and her research interest in transformational learning, that drove her research project to meet the confirmation milestone of candidature. The second appeared in counterpoint with this passion. This was the deep essence of self-doubt that weighed on her, driven by the question of whether she belonged in the academy.

The essences of Susan came from her existential decision to move out of her educator and leadership role in a school and shifting into the world of academia. From the ontological descriptions in the previous section, six essences were identified. These essences seemed to operate within Susan's Lifeworld and are represented in Figure 6.2.2.

In the diagram, the boxes and arrows depict the overarching narrative of Susan's life and include her existential decision to leave her teaching and administrative career and follow a path to academia. The first of these six essences was disjunction. This represented the shifting connection from the world of Susan's professional teaching career to the new unfolding world of academia. For Susan, this disjunction had affective consequences, as she shifted from one mode of being in a socio-cultural setting, with all the situated expectations, to another way of being in a new discursive setting.

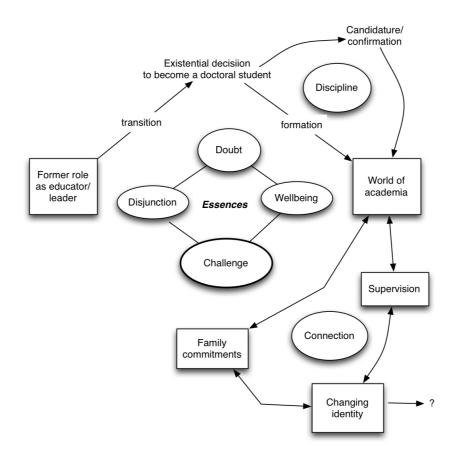


Figure 6.2.2: Essences of Susan

The second essence, one that came out of the existential decision for change, was doubt. In the liminal territory between the decision and then the requirements of the academic milestone of candidature came feelings about whether she had made the right decision, and whether she had the emotional capacity to complete the work. She attributed the disposition of this capacity to her ability to work through doubt with the support of her supervisor.

The third essence was that of discipline. In the experiential substrate surrounding disjunction and doubt came the unrelenting need, as Susan saw it, for discipline, in order to be accepted into the world of academia. Part of this essence of discipline was an unrelenting regime of work that reflected her commitment. At times her sense of

discipline was intrusive in her other spaces of human engagement and experience, especially in her familial relationships.

The fourth essence was that of wellbeing. Susan demonstrated an awareness of the somatic and psychological consequences of the new commitment in her life, which was doctoral candidature. Like Jane, mindfulness techniques particularly came to the fore in her consciousness about wellbeing. Indeed, Susan saw her wellbeing practices as pivotal to her survival as an early PhD student and her negotiation of her confirmation.

The fifth essence was that of connection. There was the constancy of her family life which was inexorably affected by the existential decision to become a doctoral student. There was also the loss of connection associated with her formal role as an educator and leader. It took time to establish a new set of connections and the relationship with her supervisor was not only important in terms of her academic progress but also in terms of connection to the world of academia and to forming her confidence in being part of the learning community.

The final essence, and arguably the most elemental in terms of Susan's consciousness, was that of challenge. Her apparent love of learning and the challenge of entering new spaces of experience and dimensions of learning appeared to be directly linked to her existential decision to pursue doctoral studies and seemed to substantially account for her underlying motivation to persevere with her early stage doctoral studies.

In coming to terms with the disjunction of moving to doctoral study and in establishing new modes of being through forming new connections, there was a consequential shifting of identity. This identity was forged in the assertion of agency required for success in the academic world. The use of a question mark in the diagram is suggestive of the uncertainty of where this path will take her and what will be the outcome; nevertheless, Susan appeared to be open to the possibilities imbued in the route that her life had taken.

Section 6.3 Hermeneutical analyses of Jane and Susan

This section explores the experiences and the consciousness of Jane and Susan through the lenses of the Lifeworld, *Gestalt* theory and the hermeneutical phenomenology of Ricoeur. The section moves to a set of interpretive frames built on the ontological descriptions of experience and the location of essences in experience.

6.3.1 The lens of the Lifeworld

In this section, the Lifeworlds of Jane and Susan are explicated to see the totality of that which impinged on their lives and the meanings that were associated with those Lifeworlds.

The transcripts produced as part of contact with Jane revealed three discrete spaces in Jane's Lifeworld. There was her university space in the library which she described as a place of serenity away from the din of being in a common student area. There was also her sessional teaching space, which Jane spoke about but not in detail other than to say that it was how she paid the bills and that working with her students inspired her research. Finally, there was her home or domestic space, the centre of which was her couch, on which she lay to ease her back and neck. In none of her exchanges with me did she mention her family life, her friendships or anything especially personal about her life, except her concerns about her health. The focus was her research and career goals and the internal states which accompanied these foci.

The core concerns about the construction of her Lifeworld appeared to be centred on her learning and growth as a doctoral student. As part of this learning, there was an urgency to unify and integrate her life spaces. A significant need for Jane efficiency and not wasting time, given the demands of being a sessional teacher, full time doctoral candidate and parent (although this aspect was mentioned only once). Digital devices, software, and digital technologies became, for Jane, the mechanism for forming a conduit between worlds and connecting her various meaning spaces.

As part of an exploration of Jane's Lifeworld, it seemed that she also resided in a noncorporeal space in consciousness or in the psychological border territory between her identity as a TAFE educator in the training sector and her emerging and tenuous identity in the university sector. This border transition, and the ensuing doubts about whether she belonged in this new sector, appeared to have characterised Jane's existential experience and shaped her consciousness of herself as an academic in training. Likewise, Susan's Lifeworld appeared to be constructed around a set of psychological spaces formed in consciousness, driven by the challenge of attaining her learning goals. One such space was that of her doctoral work and included the relationship with her supervisor. This was the space of formation, of a new way of being in the world, and was built on a regime of commitment and disciplined work. In the time leading up to her confirmation this became the pre-eminent or dominant space which constructed her temporal thinking. This psychical space in consciousness fashioned the physical spaces of her world, such that her home became the place for focused writing and her university office afforded organisational and connectivity dimensions to her experience as a doctoral student. Regarding technology, Susan orientated her use of computer technologies to serve the needs of meeting her doctoral milestone.

Susan's teaching and tutoring space, as a teaching associate at the university, was compartmentalised from her doctoral research space, though there was some cross-connectivity conceptually, especially in terms of her reflexivity about the process of academic writing. However, there was also a sense that this teaching space, while necessary, was intrusive in the elemental learning challenge of completing her doctoral requirements.

Her family space appeared to have a central presence in her consciousness. Her obligations to family and to intimate relationships often ran counter to duties to her doctoral work, with affective outcomes such as self-reproach that she was not present for her family members. However, the demarcation of her working week from her weekends, where she tended to allocate time for connection in the family space, may have ameliorated this situation.

6.3.2 The lens of *Gestalt* theory

The second lens through which to examine the experiences of Jane and Susan is *Gestalt* theory. For Jane, there was a desire to find unified connection between not only the physical and psychological spaces of her life but also between her personal experience and the various theoretical positions that she was encountering in her reading and research work as part of her doctoral research. Indeed, it was clear that Jane was actively linking encounters with theory with her life and experiences, and using these

theoretical positions as a heuristic or stratagem for judging where she was as an early PhD student.

In addition, the *gestalt* of the safe place was evident in the structures of her consciousness. In Jane's case this was about the preservation of information, articles and data relevant to her research. The mechanism of preservation, integration and safety was located for Jane in the digital, in software such as Nvivo and Evernote, and in cloud storage such as Dropbox. There was a quest within Jane to find the safety of the ultimate repository, perhaps to shore up the uncertainties in her candidature and reduce inefficient work practices which she believed detracted from her performance as a doctoral student.

Finally, there was a sense of the integration of the corporeal and thought in her consciousness. Jane appeared to express the idea that there was a unity of body and mind, and an understanding that wellbeing was commensurate with active engagement of mind with body and body with mind. Perhaps, in part, this came from her meditation practice and the degree of circumspection about her health issues.

For Susan, the key point of change in her life was in the disjunction of leaving what she had known as an educator in schools and then forming a new gestalt as an academic. This formation of a new pattern or shape to her life was part of a transformation of identity and a reorientation for an older woman who had already experienced a substantial career in the early childhood and secondary education sectors. However, in examining her narrative as an educator, it became apparent that change had been a characteristic pattern in her life, with her decision to become a doctoral student the latest expression of her wish to find new vistas of experience and to push the boundaries of her capabilities. This pattern of self-challenge and the accompanying experiences of inquisitiveness and love for learning, appeared to have driven the decision to take on doctoral candidature.

Susan was also a self-aware, reflexive educator who wanted to turn her hand to examining the psychological basis of what she had encountered in her previous roles in education. In the case of her doctoral research, it was her experiences as a pre-school educator with an interest in children whose parents have a mental illness. It seemsthat the professional experiences and memories from the past that had formed in her consciousness were also shaping her disposition as a researcher in the present. In other words, the past, and memories of significance from it, was a substantial unifying pattern in creating research content and may also have been a factor in her desire for the effective collegiality that she emphasised in her current relationship with her supervisor.

Her focus was preparation for confirmation. What characterised her experiences in this period leading up to the first academic review was her resolute and unequivocal approach to preparing the confirmation document. That she wrote and rewrote, edited and polished, this document until she was satisfied with it, suggested that Susan functioned according to an idealisation of what is expected of doctoral students; or, to put it another way, she sought perfection and this became a core part of her experience and drove her intentional action in the present. This pattern of perfection appeared to be an overriding element in her experience.

There is, however, the possibility of a more fundamental *gestalt* in her consciousness. At the end of the entire research process, after the camera was stopped, Susan shared that she had suffered breast cancer and that this had significantly shaken her being and outlook. I asked and she gave me permission to refer to this disclosure. Perhaps it was the case that in the face of major illness Susan felt that she wanted to test the boundaries of her capability and explore fresh possibilities as a late career educator. It was within the realms of possibility that mortality became for Susan the existential nub of her intentionality, as she moved forward to form a different life, one built on some of the patterns of the old but also containing innovative formations of experience. In this sense, she challenged the patterns of being that had shaped the outcomes of her life. There had emerged a resistance to fixity in her life and an openness to the possibilities in adapting her existence to a new identity.

6.3.3 The lens of Ricoeur's hermeneutical phenomenology

The final lens used to provide interpretive perspectives on the experiences of Jane and Susan is Ricoeur's hermeneutical phenomenology. Throughout the two interviews and the entries in the online journal, Jane wove a personal and highly internalised narrative of herself. Her story was about a being transcending her circumstances and living in the uncertainty of moving to a future that she desired. Her *bios* (the state of her life in the past and in the temporality of now) was operative in her overt affective and corporeal states and awareness of herself as a person in transition, with some degree of angst in the period of her early doctorate, before confirmation. At the same time, the *logos* of conceptualising her path of transcendence, from where she was as a hairdresser to now being in the academy, provided an emerging layer to her unfolding narrative.

This construction of a narrative, within the consciousness of where she was and where she had been, was formed in the memories of past ways of being (hairdresser, mother, teacher in the training sector) which were used to construct new unfolding transformations of her selfhood. Indeed, she referred to her role as a TAFE training teacher as the impetus for her current research focus. Moreover, Jane's volition to do her doctorate as a full-time student, with all the financial and personal risks that entailed, to move into the undetermined, seemed driven by her passionate curiosity, which was unrelenting throughout the interviews and in her overt embodiments.

In this articulation of a subjective narrative, Jane positioned herself as subject for contemplation, such that there was an overt sense of self-representation in her discourse. She thus embodied a reflexive interpreting of herself as a person in dialogue with her past and with the possibilities in her future but also living in the emergent reality of the present. The past operates as a reference point for knowing in the present. This narrativity was constructed and performed through what she had chosen to offer in the temporality of the research; but it was also evident to me that there was much undisclosed about her past and about the effect of these memories on her present sense of self.

Susan fashioned quite a sophisticated narrative of herself as educator who was now taking the academic turn. Indeed, her opening statement in the first interview felt quite studied and constructed. In taking on doctoral candidature, and moving beyond her existential decision to leave her employment as teacher and educational leader, and in committing herself to full-time research, there was a deliberateness that was communicated quite explicitly. In other words, Susan showed explicit awareness of her agency and saw herself as the constructor of her own nascent narrative as an academic. Unlike Jane, there was never any doubt about her ability to do the doctoral work at a purely scholarly level. The doubt lay, as fashioned in her narrative, in her embodied states: in her capacity to cope with the intensity needed and its consequences for her psychologically. Her use of techniques, such as mindfulness, to improve the mental consequences of the intensity of her research, reading and writing was skilfully integrated into her story about herself as a developing academic who was learning to cope with life.

In the embodied state of being in the world (the *geos*) which was part of living her life corporeally as an educator on the one hand and being in a family on the other, there was a desire for challenge and change that appeared to impel Susan (the *logos*). She seemed to have existed, prior to her taking on candidature, in a dialectic between herself as an embodied mortal being and the vision for a self that moves to something beyond. There was evident a desire for transcendence from all that she had come to know to a new state of being as a researcher.

In describing this self-conversation about her life and the monumental nature of the changes that were shifting their course, there was a clear awareness of time, both in the sense of where her life had been, where it was in the present and the prospects for the future. The memories of both what was and what could be for her life, had presence in both interviews; it was remembering that seemed to emerge out of an eye to the future, to what might be as a transformative ideal.

Finally, in the embodied experiences as articulated by Susan, there seemed to be a hermeneutical exchange or dialectic between her awareness of her historicity as a being and the disposition of her life in temporality. This amounted to a transcendent sense of her life and her memories as a text for study and interpretation, resulting in the creation of a set of self-aware or reflexive narratives and then interpretations of those narratives that positioned her in time and helped to forge new possibilities and identities. In this story, there was emergence as a new being (the academic self) still open to change and learning and fragility in the wake of issues of sickness and getting older (the corporeal self). Having divested herself of wanting to progress on the same path in her life, as an

educator in schools, she became the agent of creating an embryonic narrative of transition.

Section 6.4 Syntheses of Jane and Susan

Jane and Susan were both experienced and fluently spoken educators who reached a point of change and reorientation in their lives which led to their decision to become doctoral students. For both, this amounted to a comprehensive shift in their economic and professional circumstances, a shift that appeared to have significant existential outcomes for both women and in the shape of their Lifeworlds.

In their interviews, the two women spoke candidly, but also selectively, about their lives. In these interviews, and in the month-long online journals which tracked their activities and experiences, they created narratives of their lives in which their selected memories of the past were repositioned to make sense of their current circumstances as doctoral students. Indeed, memory seems to have been an influential component in the flux of what Jane and Susan wanted to become as doctoral students.

Over the four-week research period, there was a notable change of confidence and assuredness with both participants. In that time of probation in candidature, with momentum gathering towards confirmation, there appeared to be a vulnerability in both Jane and Susan, which shifted to some extent at the end of the four weeks, especially for Susan, who successfully completed her candidature.

For Jane, there was a self-effacing quality to her narratives and awareness of what she believed was her lack or deficiency as a doctoral student. There was also considerable disaffection with what she described as her struggles with focus and consistency of approach to her doctoral work. At the same time, she was impelled by her wish to go beyond what she expected of herself and to transcend her circumstances. There appeared to be uncertainty and doubt juxtaposed with an implacable drive to succeed.

For Susan, there was greater confidence in her capacity as a doctoral student. This selfassurance was reflected in the well-rehearsed reflexivity apparent in the construction of her self-narrative in the interviews. In part, this articulate and neat construction may have reflected her past role as an English teacher, but it also suggested that there was a strong foundation of independent learning and active agency in Susan's understanding of herself and her life. Her strong volition and curiosity, so embodied in her research and in her disciplined approach to her work, pointed to a notion of fulfilment that was not grounded in career, money or ambition, but in self-actualisation.

For both participants, there were consistent references to wellbeing and to strategies they employed to deal with issues. The most important strategy was their use of mindfulness practices, including meditation, which appeared to be an important therapeutic modality for coping. The inexorable workload and the constant evaluative frame that applies in candidature are a part of the emotional and somatic outcomes of being a full-time doctoral student.

Finally, there was a significant and essential place for digital technology in the work of both women, though the nature of connection to and integration with technology was different for each. Jane and Susan employed both analogue and digital technologies for different viewing and input purposes to create, gather and store their research information and ideas. There was a sense in which they were in transition between the two forms.

For Jane, technology was existentially unifying in her life as a doctoral candidate. It became the core of her strategies for achieving focus, clarity and organisation, strategies that she represented as significant for her progress in the light of her doubts about her capacity to be a doctoral student. She was also aware of what technology could not do for her and this became a source of frustration and anxiety. Jane certainly looked to digital and communication technologies as core to or a unifying function in her work as a doctoral student and as a way of navigating through requirements. This relationship with technology was important especially in terms of finding software that would bring coherent storage of information and connection between her devices so that she could use her time most efficiently.

For Susan, technology served a more functional role and was utilised for what it could do to facilitate her research and her writing. As such, she selected devices and software that were especially designed to get the job done, rather than explore the affordances that digital technologies might offer her research. In the case of social media, unlike Jane, there was some reticence and suspicion, though Susan was aware of its potential as a vehicle for promoting and enhancing her research.

CHAPTER SEVEN DATA ANALYSIS: PRACTITIONER FOCUS

The previous data analysis chapters focused on two international doctoral students (Chapter Five) and two doctoral students in life transitions from one career and path to another (Chapter Six), all of whom were in the early period of doing their research, just before or just after confirmation of candidature. This chapter examines the experiences, essences and structural features in consciousness of two doctoral students, Eva and Richard, who were completing a doctorate to extend or develop their practice as educators in a specialised field. Both were older students and shared the goal of wanting to enhance their understanding of teaching and learning in their secondary school teaching subject areas, graphic communication and mathematics, through doctoral research.

The first practitioner was Eva, an older woman who lived in a rural area of Australia. In the pre-journal interview, Eva identified herself as an illustrator and digital artist who had taught communication and design subjects at two private secondary schools, as well as having "worked as a digital artist for publishing companies." She had undertaken a doctorate to develop not only her capacities as a self-reflexive practitioner but also to understand how "creativity is affected by the use of digital media." She explained that she was especially interested in why teachers were "reluctant to implement digital media" and "where the conflict is and where it started".

Eva's research was a "self-study and a feedback [study] using...participants that are contacted using a Facebook closed group that involves discussions." Eva also brought to the research her immigrant experience, having come from an eastern European country to Australia, a cultural milieu she described as "very different from Australian culture." She was at the point between confirmation and the mid-candidature review, which meant that she was moving from the early formation of her research focus to the point of gathering data and beginning to analyse it.

Richard was an older male who specialised in secondary IT and mathematics education, which he had taught in several public schools and at a TAFE college for over a decade. He described his coming to a PhD: "It has been a 30-year journey of like getting in and

starting something and then having to pull back because you have to make money." However, this journey did not begin for Richard in teaching, as it did for Eva and Susan. After completing a Bachelor of Applied Science, he worked for the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and for the State Electricity Commission (SEC), before redundancy led to a Diploma of Education, which began his teaching career.

Following the completions of several qualifications, including a Master of Statistics and a Master of Education, Richard finally started his PhD. The focus of the PhD was "mathematics classroom learning environments and…how they intersect with help seeking behaviour". While his initial interest was in TAFE students, he shifted to conceiving a large scale quantitative study of secondary school mathematics students.

Richard's two interviews and online journal reflected a highly expository style with detailed descriptions of achievements and acts of doing, rather than discussion about his personal feelings about his PhD research. In his interviews, he was also quite digressive in approach and would often launch into an exposition and critique of a research approach or area of concern in education.

Section 7.1 Ontological descriptions of Eva and Richard

In this final data chapter the experiential content that reflects one-month in the lives of Eva and Richard is identified and described. The focus is on identification and experience; however, some interpretive material is given, especially as offered by the two participants themselves.

7.1.1 The pre-journal interviews

The pre-journal interview with Eva was 35 minutes in length and notable for its sparse detail, in contrast to the highly elaborated and specific online journal material that she completed during the one-month period of the research. As researcher, I felt a significant reserve on her part in the first interview. Nevertheless, core issues that constructed her sense of identity and her conception of doing a doctorate in the first half of candidature emerged.

For Category 1 (To act), most of the references to action were about digital media. To a question about the part of the iPad and other digital technologies in her study life, Eva replied: "A huge part. First, Kindle...I can immediately go to the Kindle library and check if this book or that material is available...if I am on the train, I can always read. My research is there and I can come back to it." So, Eva's actions in the world were prompted by and seemed to be mediated through her access to digital texts. For her, ready and efficient access to this material was one issue in her ability to do her research efficiently.

This same focus on action and her volition to engage through digital technologies was also noted in her description of her activities as a digital artist. Eva said: "Because my research is on media and the diversity of digital media…I'm trying to use the iPad for sketching and for drawing and also for self-analysis." It appeared that the nature of the research itself was mitigating actions towards the use of digital technologies. However, equally, Eva noted what she described as "the shortcomings of the tools", fixes to which she optimistically said "will probably come very soon." This sense of optimism, but also frustration with the deficiencies of digital technology, is something she shared with Jane.

In the interview, there was some suggestion of awareness of herself (Category 2, To be). At the beginning of the interview, she positioned herself as emergent out of her immigrant experience: "In regard to Australian culture, it has had a tremendous impact on how I see myself. I didn't know who I am really." She noted the difference in values between her eastern European/Russian cultural origins, especially regarding accepting diversity of perspective and opinion. She said: "Russian culture is yes or no. But now I accept diversity of opinion. I learnt how to be objective in working." I sensed that for Eva adaptation to Australian culture had come slowly, as she laughingly said: "I still don't understand a lot of the jokes." However, she attributed her shift of identity to her "candidature work" for not only becoming an academic but also feeling connected with living in Australia. About the role of her candidature, she said: "It helps me to see myself in a different light. Which I like to see myself in."

This sense of her being in a process of cultural adaptation, juxtaposed to the importance of her candidature for her emergent identity, was attended by an array of affective states

(Category 4, To feel). She said about her research: I think that it is substantial study and I think it is an exciting study, and I'm not in any way frightened. Feeling like I haven't done enough." Confidence in her work was intimated. However, later she revealed that this confidence was not always present. She attributed this developing confidence to her supervisor, describing his role: "He is a very gentle person in dealing with people. I was very vulnerable when I started. I came with all my language and cultural background and he made me feel confident." It would seem that her vulnerability and her sense of her seeing her cultural background as an impediment in Australia were obviated by the inclusiveness and support evident in her supervision relationship at the point in her candidature leading to her mid-candidature review.

For Category 5 (To think) there was evident reflexivity about her needed skill base as a PhD student. To the question, "What do you need as a research student?", Eva focused on her needs in terms of interactive and digital technologies, suggesting that she wanted to enrol in skills-based courses that supported her research, especially in digital media and creativity. Her impression was that such courses did not exist. Given that she aimed to "develop some educational materials...to assist teachers to develop creativity" after she finished her PhD, this was an important point of reflexive understanding about formation in her specialised educational field.

One of the most significant issues that she identified as defining her identity as a doctoral student, was connectivity (Category 6, To connect). At the start of the interview, she spoke briefly about her partner going to live and work in the country, which meant that she had to relinquish work as a teacher and relocate with him. She viewed taking up a doctorate as a way of compensating for this change in her circumstances. However, the fact of living in a rural area meant that she also had to strategically deal with what she labelled as the "difficulty of distance." She said: "I feel quite isolated and I don't think I have any really strong connections with anyone else except my supervisors." In addition, she identified problems with getting a consistent Internet connection to do her digital artwork. For Eva "the Internet was too slow and there were interruptions". She acknowledged that while she was "an independent learner", at the same time, there was a need to improve her communication with other students and with other researchers.

This sense of isolation and lack of adequate access to the Internet did not appear to have diminished Eva's creative imperative in her research (Category 8, To create). As a digital illustrator and researcher, she focused on her wish to create directly. She described as her major production tool her "computer with a big screen" with which she was "making illustrations...using a drawing tablet and stylus" and "planning to send them to participants...to get feedback". Eva viewed herself as a creative individual who could "use the potential of media for making something useful". Affirming the potential of digital media as a creative matrix, she described herself as "not being a grey sort of shadow but doing something that makes a difference". She identified the focus of her work as VCE Visual and Communications teachers who may be resistant to using digital, online forms of media.

The pre-journal interview with Richard was 45 minutes in length and was notable for its long exposition of his research ideas and his excursion into views about a range of subject matters, a characteristic which was not reflected in the other five interviews of doctoral students. There was also an absence of expression of emotion.

For Category One (To act), Richard presented as a person with a strong sense of decisive action and highly focused intentional engagement with ideas and digital tools that met his needs. In terms of his use of online digital technologies as part of his doctoral research, his preferred use was expressed quite emphatically: "I use Google Scholar in preference to the library catalogue...I download the PDF documents all the time...I use Endnote...I've got something like 3000 to 4000 PDF documents linked to Endnote." Later in the interview he also identified social media type digital environments, such as LinkedIn, Academia and ResearchGate as important for "setting up a CV" online, for establishing his credentials as a beginning academic. However, he was quite scathing of Facebook as a medium: "I don't use Facebook because I don't like the conditions of use of Facebook, and I'm always surprised that any research would actually be using Facebook". This was ironic, given that Eva's research was based in Facebook and she expressed none of these reservations.

Richard had a clear and precise sense of being a person with history (Category Two, To be). In his opening comments about his background and personal history there was evident a disposition about his life that seemed like an historical treatise. He described

in great detail going to a secondary school that was "pretty tough" and that he came from a working-class background. Richard took pride in being able to remember his schooling: "I can actually remember the names of my teachers. I'm very good at remembering names." He then linked this early experience of what he regarded as the good and not so good teachers of mathematics and science with his own experiences as a teacher, part of a group of educators "who basically questioned everything about their practices". Throughout the interview much of what Richard articulated was imbued with a sense of history and his place in this narrative of his life.

In terms of Category Four (To Feel) there was little reference of the affective dimension in his experience, except when he mentioned that one of his "bugbears" was a lack of research "that is useful for teachers". Even when he disclosed that there was a major illness of a family member during his confirmation, this was described in a detached voice, with no feelings, except in saying that "everyone was really emotional". This contrasted with the expressed experiences of Eva, and indeed all the other participants in this research, who was grounded in the affective, especially in her enjoyment of doctoral work.

Throughout most of the interview Richard focused on his thinking about his research project and the issues that emerged from it (Category Five, To think). This thinking tended be evaluative in tone and concentrated on what he saw as "the best approach" for making his research work in the school contexts that might be open to a large-scale project on seeking behaviours in mathematics teaching. At one point, he said: "I have found in my classes...." This link between his own experiences as an educator and his beliefs about the classroom and learning environments and the research project he was undertaking was present throughout the interview, and appeared to be pivotal to the way he framed his concerns in the research. Indeed, as I have already indicated, expositions of his thinking and values about research and education were a predominant aspect of the interview.

This definitive thinking based on a set of beliefs about what was important for him in his Lifeworld was also evident in his views about technology: "I've never needed to have the Internet at home. A waste of money putting on the Internet when I wouldn't really use it." This, he argued, meant that he would not "get distracted by looking at social networking sites or checking...emails". He had clearly delineated his home and university study spaces, with his Internet use purposeful and associated with his study space in the university setting.

For Category Six (To connect) there were only a few mentions of interaction, most of which were about his relationship with his supervisors that centred on his research work. He spoke about his associate supervisor, or what he called "a supervisor in training", whom he described as "actually good as a sounding board because he doesn't know anything about the learning environment research area." He also noted his openness to learning from his peers: "When I'm talking to other PhD students, I can understand lots of things." This suggested that for Richard his learning and reflexivity about learning through human interaction complemented his reading and understanding of what he was reading.

Richard showed great propensity for reflection on his own learning and decisions about his learning practices (Category Seven, To learn). For instance, he decided for his PhD methodology to "do a quantitative type one" so that he could be "skilled in both", which would enhance his "future career prospects". After his initial change of research focus to classroom learning environments in mathematics and help-seeking behaviours, he said that "in six months I had to read a lot in the Psychology area about motivation and self-regulation". Indeed, he categorised himself as a reader, not especially a writer: "I tend to be a reader. I love reading and finding out about different areas. I can get distracted and can follow paths that interest me...I read in a lot of areas. It's good."

In his evaluation of his ability to present for his confirmation he suggested that "he wasn't going to get through the first time" because of his lack of presentational skills, perhaps suggesting some underlying doubt about his abilities in the academic sphere. However, later he described how he spoke fluidly from a few points on a slide, suggesting his transferable skills from teaching, though he also noted a propensity to get side-tracked, which he described as "a constant bane when I am doing presentations".

7.1.2 The online journals

Over the one-month period of the research, Eva made 11 detailed entries in her online journal. These entries were long and often contained a complex array of discussion about the logistics of doing the research and the emotional substrate that underlay that doing.

For Category One (To act), there was extensive use of the active voice depicting what appeared to be dynamic researcher functionality. For instance, Eva wrote: "I finalised", "I finished", "I restructured", "I was busy", "I continued working", "I did some alterations", "I wrote" and many more with the directness that appeared to present a doctoral student on the move and actively doing the research. This reflected, on one level, Eva's highly goal-orientated approach to doing her research work. She wrote in one journal entry: "I've managed to do what was planned to do today." The use of the notion of planning was extensive throughout the 11 entries in the journal. However, Eva also admitted, in contrast to this construction: "I try to convince myself that I can do in a day only as much as I can do. It doesn't really help much, but I stick to it anyway."

An examination of Category Four (To feel), revealed the underlying emotional tenor of her experience of being a PhD student. In writing about her preference to be at home in the regional area where she lived she wrote: "I like being in my own study room. Everything at hand and I feel comfortable here." This affirmation of her home work space was repeated in the journal entries. This contrasted markedly with her apprehension about the progress of her data collection and the reliability of her Internet connection in a regional area. She wrote that these limitations were "frustrating". Indeed, the lack of a reliable Internet connection made her "very anxious", especially since her research and data collection were centred in Facebook as the primary platform. She wrote: "Enjoyed doing my artwork but felt very anxious about my data generation." This undercurrent of anxiety was also evident in a later entry, where she wrote about the production of her artwork for the Facebook discussion group: "I feel that the step was too little and I spent too much thinking and doubting. In terms of data collection, I don't know yet if I have achieved anything."

Apparent here were two seemingly paradoxical states of feeling: being at home as a secure and pleasant place that suited her personal circumstances and experiencing anxiety about the uncertainties of her research work, which depended on a reliable Internet connection. After a difficult day with her Internet connection she wrote: "I'm getting paranoid with a dreadful thought that if it will stop working, I won't be able to think about anything else that I could do to fix it."

This anxiety was exacerbated by her dependence on Facebook for research data and what she saw as her need to facilitate regular interactions with her participants on the closed Facebook group. She wrote: "I'm quite anxious with my participants to participate regularly." This concern that her research processes were not conducive to regular and meaningful data collection was expressed often in her journal entries, with one of the last entries revealing that she was "worrying about the participants' involvement."

At the same time, in terms of Category Five (To think), there was also evident a contemplative process that accompanied the affective domain. She described her research focus and goals in the second entry in the journal, which appeared to be both an explanation to me as the researcher, as well as a neat summative device for her as a doctoral student. Later, she wrote about her research processes of getting her participants, professionals in the visual arts field, to comment on her own development of digital illustrations. What appeared in this entry was a meta-analysis of what she was doing in the research that might function to consolidate, even justify, her thinking about it. In another entry, she described her strategic approach of overtly showing her activity on the Facebook timelines so that her research participants would be reminded to offer ideas and opinions about the questions of creative process she posed. This reflexivity was a characteristic feature of most of the journal entries, and perhaps revealed Eva's emergent strategic awareness of the progress of the research and her navigations through it.

Regarding Category Six (To connect), throughout the journal entries there was little reference to connection, except for positioning her participants as research agents and commenting on the level of their participation in the research exchanges on Facebook. Indeed, there was a sense of isolation in the way her research and her life were

described. Only at one point did she reveal empathetic engagement with her research participants: "The participants could be overwhelmed perhaps not exactly knowing how to deal with all the aspect of the question."

For Category Seven (To learn), Eva engaged in quite detailed discussion about learning practices as part of her reflexion on her work. She wrote that she wanted to read tactically to "hone my skills" to prepare "the next question for my participants." She also lauded digital technologies and digital devices as her preferred way of leaning. Indeed, she wrote: "Love all these software [Adobe products in particular] and apps." There appeared to be an interrelationship of digital technologies and software with the affective in her experience and with the sense of who she was as a doctoral student. At the same time, she described her digital creative environment at home, with its devices and software, as "very useful" for doing her research and artwork, suggesting a clear focus on the utility value of the digital for doing the tasks she needed and circumventing the limits of geographical distance that were part of her Lifeworld.

An aspect of her learning in and navigation through doing her artwork was designing the art within the affordances and limitations of Facebook as an online digital medium. For one entry, she wrote about files she posted on Facebook that were "a bit big" and "some interactive elements didn't work", so she had to adjust and redesign the files for the audience. Later she wrote that she was "learning a few new skills and becoming aware of new digital options and techniques."

This strident self-learning, and active negotiation, was evident in the difficulties she faced in composing and presenting her art in her "digital visual diary". She wrote about her chat with an "InDesign Secrets representative" undertaken so that she could best present her thesis material. She also wrote about doing Lynda online courses to learn Adobe Muse. Later she described her accessing of support on InDesign this way: "I'm especially thrilled with how I can talk directly to Adobe World's giants such as David Blatner who is one of the authors of InDesign." Eva directly contacted key people at Adobe to deal with her specialised need to design her artwork for her research participants. This indicated her manifest intentionality of making active and embodied that which she felt she needed to do using digital tools.

However, one area in which she felt she needed to learn innovative strategies was in motivating her participants to respond to her questions about her artwork. She wrote: "I wish we could be trained on how to motivate the participants...I don't think we were ever offered a seminar on this." She was suggesting an area of personal engagement and strategic involvement with people that needed to be part of the seminar or training offerings at the university.

For Category Nine (To imagine), there was very little in the way of imaginative use of language in the journal, with most language being about research specifics and ensuing feelings. However, at one point in a late journal entry, Eva wrote:

Confirmations are very useful experience and I feel that I need to go especially because I am quite isolated and need to have some physical contact with the people at uni. But my data generation reminds me being a young botanists who sits behind a bush with a net ready to sweep it down every moment the insect gets in a range. That's what I do with my participants' comments - I have to be on alert every moment and not to miss an opportunity to get people into a conversation. I will think about it in the morning and see if I will get lucky to 'catch some valuable species' and then go to the confirmation in the afternoon.

Here Eva clearly identified her isolation and her need, despite feeling most at ease in her home space, for embodied human contact. However, interesting for me was her use of the image of the "young botanists" observing "the insect", and her intent to "catch some valuable species". In doing web-based, interactive qualitative research there was, in Eva's words, a sense of distance between her as researcher and her participants. Her frustration at her participants not responding as she would like to her digital diary and artwork could be viewed in the light of her view of the role of a researcher and how the researcher views research subjects.

Whilst Eva's disclosures in the research texts tended to be imbued with the affective, Richard's 19 online journal entries were inclined to be descriptive and matter-of-fact in approach and style. There was considerable detail about the machinations of using software, exploring databases and collecting articles for his literature review. Digital technologies were foregrounded in his recounting of what he experienced during the research period. Given his approach to writing the online journal, it was not surprising that most of the entries were concerned with action, intentionality and volition (Category one, To act), and what he did in terms of his research and his use of software. Richard used the past and present participle to suggest a sense of perfect completion. For instance, he wrote: "Exported Help seeking references from Endnote and imported same into NVivo 10." The many references to action, searching and deployment of software and databases suggested a researcher who was an explorer and a doer. I felt that the completion of the online journal became, for Richard, a useful device for recording his own research activities, rather than revealing much about his thinking or states of feeling. The use of attenuated sentence structures in the journal supported this view that the journal functioned as a checklist of accomplishments.

However, in a few places this stylistic and content approach shifted slightly towards the affective (Category Four, To feel). For example, he wrote the following about being ill: "Currently recovering from a chest infection, which reduces capacity for creative work", and later, "Sore neck—pinched nerve". In both these examples he showed awareness of his somatic state of being and the implications for his research output, but there was little by the way of engagement with the accompanying feeling states. He did express a strong emotional state about the IT support at the university: "Frustrated with eSolutions. An easy request was made more complex and time consuming." In a later entry, Richard's states of feeling overtly emerged:

Got distracted by emails and social networking. Tried finding the desired articles but was unable to locate them. Went home. Had a late lunch and fell asleep. Tried doing some more work later that night but couldn't concentrate. Went to bed and had a good night's sleep. Depressing.

Like the other participants in this research, issues such as distraction, tiredness and the frustration about not achieving what was desired were also resident in Richard's experience, though much more implicit, even elusive, in his communications with me.

In terms of Category Seven (To learn), much of what Richard wrote in the journal was to do with his learning: his trying out of software, his grappling with issues to do with Endnote, his planning of his literature review and his attendance at workshops. Richard was a highly independent learner who used a decidedly exploratory approach. This approach sat intentionally behind his overt actions in doing all that needed to be done to establish the conceptual base for his PhD.

7.1.3 The post-journal interviews

The final interview with Eva was virtually without reference to the constituency of her doing and was almost entirely about her being as a person and a doctoral student. The tone of the interview was positive and warm, with more emphatic embodiments than in the first interview, and there was an implied sense in which the research process itself had drawn her attention to the value of being a doctoral student in her life. She said that the online journal "helped me see how I'm organising my day…helps me to rationalise what I am doing and how I am structuring my day." Indeed, the online journal became for Eva "a research devise itself to be reflective on your own work".

However, while there was not much reference to action in the interview (Category One, To do), she did address the formation of her day and the habits that constituted it. She said that she started her "work at 9 O'clock" in the morning which she believed "make it easier" to get a range of tasks done without distraction. Her mornings were thus seen as focused on research work, as was noted in the work of Miguel in Chapter Five. However, her afternoons she described as "more flexible, so I can continue my work or I can stop and do [other] work I need to do at home".

In terms of Category Two (To be), Eva reflected on her doctoral work and her domestic life more extensively than in the online journal. She wrote that being at home as her primary work space was "convenient for me" and that she only worked at the university "when everything is quiet and I can sit and think". Consequently, her selection of a work space appeared based on convenience and comfort, especially because of the distance and inconvenience of travelling to the university.

About her strategies of balancing her life across its various dimensions, she suggested that "they overlap" but that since her "children are grown up and her husband is working the whole day" she had the "whole day for herself". She attributed her ability to do a PhD as an older woman to this space in her life and that she was "dreaming about it before but could never do it". Her formation as a PhD student was then contingent on

the availability of time and opportunity, which she said was previously missing. However, she also expressed her familial or relational obligations: "I can continue my work or I can stop and do work at home. I am trying to balance this way. I am trying to make my husband not feel that he is neglected, because he works hard and supports me so much with my studies."

Furthermore, Eva overtly framed her experience of taking up candidature as transformational, like both Susan and Jane. In the interview she said: "I think it is a fantastic opportunity for me, and being a very spiritual person...I consider it to be a huge blessing, really. It allows me to explore myself...and I love it very much." She then went on to articulate her post-doctoral ambitions, including publishing for the secondary school area of visual design and graphic communication. Eva was looking forward to what her PhD might afford for her, though she was never definitive about the future. It was apparent that the opportunity to do a PhD was reward enough at this point in her candidature.

Much of her affective references in the interview (Category Four, To feel) were about her enjoyment in doing her doctoral studies: "I feel like doing it all the time", "I feel very strong urgency", "I enjoy it very much" and "I think that [it] is given to me as a blessing and in no way do I see it as a problem". Her strong affirmation of her doctoral studies seemed related to her positive view of her supervisors, who allowed her "selfexploration", but also because of her age and her wish to "feel self-realisation".

For Category Five (To think) there was a strong focus on meta-cognition throughout the interview. Given that her research project was about "self-analysis or self-study and feedback" related to her visual/art online diary, this appeared a core *modus operandi* for her research work. Eva had the same view of the use of digital technologies, which she described as "my main tools" for doing her self-reflective work.

Her thinking was especially focused on the facilitation of her participants in giving feedback via Facebook. She found that she was struggling to get adequate feedback and that her participants were more "willing to talk about their own work and their own problems and achievements". She theorised that this might be a way of "presenting themselves, advertising themselves and making contacts", given the professionals that

were included in the closed Facebook page. Given this state of play, she suggested to her participants the setting up of a communal digital gallery, which she claimed met with highly positive feedback from participants. Evident in this dealing with her participants was her adaptability to and navigating through research problems, such as the lack of response from participants when it was only her work as the focus of discussion.

As suggested above, there was a significant level of meta-analysis in the Eva's discourse about her own experiences and strategies of coping with doctoral work. She spoke about her issues with "staying connected on the Internet", and how that problem was a source of anxiety for her that she had to learn to deal with as part of negotiating her research. In effect, there was a strong impetus for learning and adjusting to issues (Category Seven) that became part of her experiences of being a doctoral student, considering her isolation and her issues with Internet access.

For Eva, digital technologies and digital devices where her prime means of not only doing her research but also for accessing academic sources. When asked what digital device she tended to use for reading academic materials, she said, "Kindle and my iPad". Indeed, she preferred to access and buy academic books, for instance, on the Kindle as her key reading platform: "It is cheaper and I can afford to buy books in Kindle. I can get them immediately in 60 seconds…I think Kindle is an amazing platform for researchers to create their libraries, and I can read it all the time." Given her distance from the university and the apparent unreliability of her Internet connection in a regional area, Kindle (with its stand-alone wireless technology for accessing books) became for Eva a workable technology and literacy platform that compensated for her isolation and facilitated the immediacy of her learning goals.

Richard's post-journal interview contained a detailed elucidation of his thinking, not just about his research and candidature but also about his views on a range of matters, from technology, his experience of acting in the past (which seemed pivotal for him) to his fascination with new data gathering tools. The middle part of the interview diverged from the expected focus on the four weeks of the research period and focused on his thinking and personal history. When asked what happened for him on a typical day he returned to the core concerns of the interview, that being his research and experiences

in the previous four weeks. I never interrupted or tried to direct these excursions, since they revealed much about his consciousness and disposition as a PhD student who was older and with a long history and experience. This interview felt like a performance as it revealed Richard's preferred mode of discourse in discussing his research work.

For Category One (To do) Richard's references to action in the interview were sparse. However, he did elucidate in detail the workings of his "typical day". Whilst laughing as he remarked that there "is no typical day", he went on to describe with precision how his day usually started at 7.00 or 8.00 am, then he did his "thinking type stuff", including his writing, but in the afternoon, following lunch, it was more about "administrative work type stuff". For Richard, it appeared that mornings were best for thinking, "writing notes about articles", and exploration of possibilities related to his research, so there was a clear demarcation about how he constituted his days.

At the beginning of the interview Richard disclosed some aspects of his state of being (Category Two, To be). He spoke about a "few family crises" but never elaborated, briefly touched on his financial circumstances and the implied difficulties of not having a scholarship and thus having to work, and identified his concerns about getting ethics approval for his project. He also described the character of his research and written work in that it was done in "spurts of doing lots of work" and then times of doing "all the administrative sorts of things". The apparent hold up of getting ethics approval seemed to be a source of frustration for Richard, but throughout the interview, there never was an overt disclosure of feelings or affective states (Category Four, To feel), as was evident in Eva's discourse. He also disclosed that at times he suffered from hayfever and ended up "falling asleep" by 3 o'clock in the afternoon.

By far the greatest amount of time in the interview was devoted to Richard's extensive thinking and cognitions about his work and views on research and technology (Category Five, To think). He said: "I think everything I do is related to my research...I am always thinking about how this could apply or be useful." One of the central concerns for Richard in the interview was technology. He spent a lot of time discussing his use of Google Scholar and collecting materials through that online digital medium. Given his extensive background in IT, he claimed that the use of technology was for him "second nature". He went on to say that in terms of using technology to do his

research work: "You don't think about it; you just do it." However, throughout the interview he spent much time thinking about the positives and negatives of contemporary digital technology, including a scathing evaluation of social media, especially Facebook, some derogatory comments about Microsoft products, which he described as "crap".

Interestingly, he used the analogy of interstate travel to suggest that problems with technology should be considered normal, similar to problems in travelling long distances, and that it was all about "regulating your workflow" in a systematic way that accounted for the deficiencies of software and digital technologies. When asked whether he ever got anxious about problems with technology he replied with an emphatic, "No!".

In terms of the plan he had for his PhD he said: "I had my ideal and then I had my backup plan. I knew the ideal of getting things done this term [his data collection] was tight, so I already had a backup plan for what I was going to do." This exquisite level of planning he said came out in his confirmation presentation to the academic panel, where, instead of presenting a single timeline for the research, he said: "I actually put my alternative pathways into my timeline, instead of putting down one things that I was going to do." It might well be the case that Richard found a strong level of security and certainly in being over planned and having contingencies if anything went wrong.

There were several references to the connectivity that he experienced (Category six, To connect). At one point in the interview he said: "There is quite a few times when I've talked to another student about their research and then they ask me about mine, and then a couple of days later they come in with an article that they think I might be interested in. I also take them an article they might be interested in." Later he said, after being asked what connects for him: "Finding and meeting that are interesting or finding information from [them] that is interesting." He then gave a detailed exposition about communication in society and the place of language and ethnic background. For Richard connectivity and collegiality were conceived in the interview in terms of their instrumental function and benefits for his research, though his references to connection with his peers, in blogs and online forums, suggested his quite extensive involvement with his fellow PhD students.

Richard had a strategic approach to self-learning (Category 7, To learn). About his use of technology, he said: "I'm always on the look-out for new technology and software and new approaches; new things I can do with IT, like Qualtrics." He then gave details of the intricacies of his designing and programming of Qualtrics to produce a survey for his research participants. He also explained how he helped a former student of his, who was a PhD student, use Qualtrics effectively for his research. In terms of his learning and his negotiation through an online digital resource such as Qualtrics, there was a sense of both a playfulness and inquisitiveness, in juxtaposition to his seemingly authoritative control over the resource. What he did not know about Qualtrics, he researched through online discussion forum, one of which was on LinkedIn.

Richard had an independent and inquiry based style or approach to learning. He also described how he preferred to read paper copies of articles and annotate them with a pen, and that he did this in his backyard: "When I do things physically, I tend to remember that I've done them."

In terms of his approach to writing, he admitted that he did not like the type of writing involved in producing a literature review, but was looking forward to analysing the data when he collected it: "I'm already looking at doing the analysis...analysis is my thing...it's all the ways from my first uni degree. I like looking at the nitty-gritty of things." However, at the very end of the interview, he said that, as his family, he liked "telling stories and reading books." He noted: "I tend to write in that way [narrative], as well as being able to write in analytical ways." So there was an awareness in Richard's consciousness of the preferences and the difficulties he faced in navigating his way through the expectations of writing his thesis.

For Richard, there was an imbued sense of history that undergirded his approach to learning and his sense of himself as a learner. He commented with laughter about his experience with technology: "My extensive experience, my 30 years! I've been around longer than PCs." How he had always learned influenced how he approached learning in his doctoral research and writing thesis.

Section 7.2 Phenomenological reductions of Eva and Richard

The analysis of Eva's transcripts revealed three discrete essences to her experience that were part of her internality and drove her intentional action in her Lifeworld. These essences, together with the contextual frame of the essences (her existential life space) and the narrative frame (self-realisation), are depicted in Figure 7.3.1.

The existential life space is Eva's conceptualisation of that time in her life which was conductive to doing a PhD. She understood that this time was possible due to her age and through the change to her domestic circumstances; thus, her knowing was situated within this life space. I have labelled this a contextual frame through which she positioned, that is, located her doctoral studies. Her home work space, which she discussed so fondly in the interviews and the online journal, seemed to have become an embodiment or localisation of this life space.

Three essences formed the experiential hubs in her consciousness. The first was isolation, both geographical and personal. Eva operated as an isolated entity, forming herself alone, complete in her space. However, this sense of isolation was associated with the need for connectivity as an object of weight in her consciousness, especially regarding her research participants and her supervisors. Isolation and connectivity co-existed but were at times in tension.

The second essence was artistic expression and self-analysis. Eva created an online visual diary containing her art work, which became a reference point for self-reflection and evaluation. In her consciousness, there were two modes of considering her work: the creative and the evaluative, and the two appeared to be co-extensive. As part of this evaluative mode, she evoked external evaluation and reflection (from her participants) in juxtaposition to her own self-reflection.

The final essence was that of independence. This was not the same as isolation because it was not a state of being but an attitude to learning in consciousness. Throughout the interviews and the online journal, Eva expressed a highly self-initiated and pragmatic view of learning that appeared to be fostered by the needs of her research. She endeavoured to acquire skills and learn approaches, especially in software such as Adobe, that facilitated her research needs.

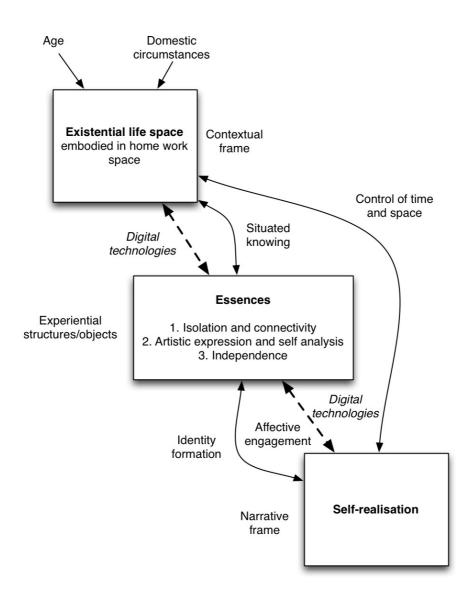


Figure 7.2.1: Essences of Eva

The pinnacle goal that Eva articulated in the research process was that of selfrealisation. This was a narrative frame of her being that appeared to direct all her activities and thinking, a point that I develop below (see 7.4.3). It was especially embedded in affective engagement and in expressions of affirmation about the opportunity afforded by doctoral studies. Her identity formation in consciousness was thus not necessarily framed as being an academic but was more aspirational and directed to her own personal achievements. Her existential life space became for Eva a part of this self-realisation through overt control over time and space. Most importantly, digital technologies and digital devices served as a living spine of thinking and intentional action in her consciousness. In other words, her use and incorporation of digital technologies into her research work and art practice were core in her consciousness, and tended to link all the disparate aspect of her thinking, feeling and being together.

Like Eva, Richard carefully constructed his resources and learning around the use of digital technologies, and like Eva he constructed his home space as his primary production space in terms of the progress of his PhD. Richard's essences in consciousness are conceptualised in Figure 7.3.2. In the diagram Richard's work on his quantitative research project is tightly constructed around his home space and university space, linked with the organisational digital tool Endnote, a recurrent theme with other participants in this research as well. There was a defined set of routines and learning practices that Richard engaged in within this construction.

At the centre of this ordered, seemingly rational, research process, are sets of essences which I have grouped as explicit and implicit. In the research texts, the core explicit aspects of Richard's consciousness appeared to be about his self as curious explorer, active doer, and evaluator of ideas. As a curious explorer, he seemed to be fascinated, and sometimes distracted by, a range of ideas. As systematic doer, he constructed himself as an intentional agent in the world, systematically creating the frame of his research and the supporting resources. This essence of systematic doer seemed, at times, to be in tension with the essence of playful curiosity. As evaluator, he judged all ideas, and even approaches to research, in terms of his deeply grounded notions of what constituted worthwhile research.

However, there appeared to be a set of essences that undergirded the explicit ones. This set of essences was somewhat hidden or elusive and centred on the constructions in consciousness afforded by his long history as an educator and researcher, and the ensuing values and thinking about what matters in research and education: for instance, that educational research has practical outcomes and his orientation to solutions in education appeared to mitigate his consciousness of his research and self as researcher.

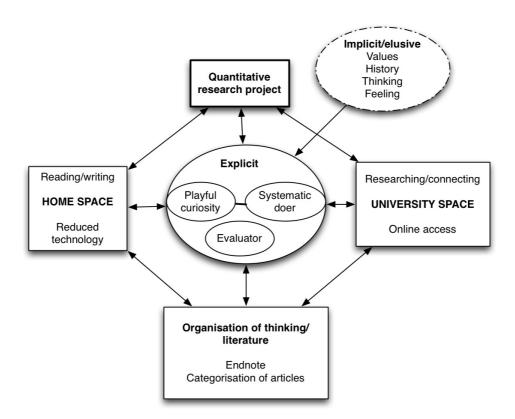


Figure 7.2.2: Essences of Richard

Finally, the state of feeling was highly elusive in my dealings with Richard, but enough emerged to suggest that while it appeared to be latent, it was an active element in his consciousness of himself as research agent.

Section 7.3 Hermeneutical analyses of Eva and Richard

The final data chapter continues the employment of the lenses of the Lifeworld, *Gestalt* theory and the hermeneutical perspectives of Paul Ricoeur. The Lifeworld encompasses all that appears to impinge on the experience of the six doctoral participants. *Gestalt* theory brings attention to the patterns of embodied existence that reside in consciousness. Finally, Ricoeur's ideas provide a frame for understanding the creation of narratives in the identity formation of a doctoral candidate.

7.3.1 The lens of the Lifeworld

Eva's Lifeworld, as I began to argue above, was constructed around two spaces that seemed to overlap. She lived in a regional area with limitations in Internet access and significant travel time to the university. Within this isolated area, she constructed a home space that fitted with the creative and reflexive space of consciousness she needed to do the art work and research pivotal for PhD research. Though Eva claimed that this life space overlapped with her domestic responsibilities, there was little evidence in the research texts that this overlapping was significant. Indeed, she appeared to have neatly compartmentalised it as her transformational space, separate from the familial and relational aspects of her Lifeworld.

Eva's Lifeworld was directed to doing her doctorate and at the core of this Lifeworld was the use of digital technologies and a set of computers and devices that suited her realm of comfort and convenience. Her use of a closed Facebook group to conduct her research fitted with the level of control that she could exert from her existential life space, which meant, effectively, she did not have to leave her home work space.

Richard's Lifeworld shared similarities with Eva's. First, his life and work spaces seemed to be highly regulated and controlled. This regulation even went to the point of seeing his home space as having limited technological function, especially regarding the Internet, with his online use attached to his university space. The use of technologies to do his doctoral work was thus strictly differentiated between spaces, with the technological link being his use of a portable storage device. In his discussion about his home space and its disposition little reference was made to his financial circumstances, except that he said that having the internet at home was too expensive. He also made only fleeting reference to his familial relationships, and his discourse was almost exclusively about research-related matters, which were elaborated in the interviews in detail.

Second, there was a high level of focus on the systematic collection and ordering of research materials and the formation of a database of articles, centred in Endnote. This appeared to fit with Richard's conceptualisation that he was a reader and explorer of ideas, but perhaps the references to the systematic collection of articles and its overt

presence in his consciousness was due to the fact that he wrote his literature review during the research timeframe.

Both Eva and Richard appeared to operate in quite delimited Lifeworlds which were designed around the needs of doing a PhD. It is possible that this delimitation was a conscious construction driven by the sense of what they considered necessary to be successful as a PhD student, especially in the first half of candidature.

7.3.2 The lens of *Gestalt* theory

Using *Gestalt* theory to examine Eva's experiences, it was apparent that two interrelated gestalts operated for her. The first was the gestalt around her home work space and ways of working within this home space. This space formed an embodied and located point of stability and dependability, a nexus for control over her push to selfrealisation through doctoral research. Eva shaped her day and patterns of her life around this space, so that it became a highly defined existential life space in consciousness.

The second gestalt was the one surrounding the design of her research. Eva was a creative agent and researcher in setting up the purpose-designed Facebook closed group where she could display her art, deposit her self-reflections and garner feedback in a textual form that was immediately available and required no transcription. In a sense this gestalt structured the researcher as somewhat distant from the participants, with the focus the work of the researcher. There was a level of resistance to this structure, this gestalt, with participants not giving feedback as timely or as much as Eva had anticipated. Evident in the online journal and the second interview was the beginnings of movement to accommodate and shift this pervasive gestalt. At the heart of this movement was the need to shift the nature of the researcher's self as distanced observer and to adapt to and navigate through the research as a more dialectic entity.

For Richard, two gestalts appeared to operate in his consciousness. The first was a gestalt about what constituted worthwhile research in education. This gestalt seemed to be related to his previous roles working in government bodies and in the secondary education and TAFE sectors. For Richard, educational research needed to be directed to the needs of teaching and students in the mathematics classroom, so there was a

strong practitioner focus in his research interests and what he deemed should be a legitimate focus for all educational research. This gestalt was constituted in a pragmatic and practice-focused view of research: that research should be about solving problems and finding practical solutions for issues that are faced by educators in the field.

The second was a gestalt formed from Richard's notion of a researcher that shared similarities with Eva's. In this gestalt the researcher was a rational agent of action who solved problems through a coherent process of inquiry focused in practical issues of teaching and learning. This gestalt reflected Richard's search for a strong, autonomous academic self that was formed and legitimised in the process of doing the work. It is clear, also, that this gestalt was somewhat challenged by Richard's curiosity and diverse interests in terms of academic ideas.

7.3.3 The lens of Ricoeur's hermeneutical phenomenology

Interpreting Eva's experiences, using ideas from Paul Ricoeur, revealed two discrete themes. The first was her creation of a new narrative of disciplined achievement. Eva, in this early to mid-candidature period, was attempting to form an identity conceived in her notion of personal growth, the taking up of an opportunity and self-realisation. She positioned herself as the author and the constructor of this new identity quite apart from the connectivity and collegiality that is the usual path to forming an academic identity as part of a research community. This storying was partially built around her control of time and the actual and virtual spaces she used to construct a narrative of Eva as a self-made woman capable of new learning.

Second, Eva was caught in the restrictions of being in a regional area with more limited resources, included problematic Internet access, so that isolation became for her the *geos* of her existence as a person, who once had a teaching career but now needed to create a new identity space. She created a sense of transcendence of these embodied limitations through her construction of a virtual Facebook space and the creation of her own work space built around and mediated through digital technologies.

In all the research texts related to Eva, there was little in the way of memories about her life before, unlike all the other participants in the study. This amounted to a significant de-historicising of the way she presented herself in the research; instead, she constructed an immediacy about her work and research which placed emphasis on the process of creating a new narrative of the researcher-self.

Unlike Eva, for whom her geographical isolation and reliance on digital technologies were primary in the creation of her researcher narratives, Richard's narratives seemed to be more actuated from memory derived from and highly constituted from his previous work experiences, especially those of being a mathematics educator in a range of government schools and in the TAFE sector. Having been on the ground and having witnessed the difficulties experienced by himself and other mathematics teachers, he had a fervent belief that research focus should be centred there.

His PhD also appeared to be a continuation and a fulfilment of a narrative about himself as investigator that had its antecedents in his days working at the CSIRO explain and the SEC explain. That narrative seemed to be a driving force in his PhD to such an extent that there were moments of disappointment and frustration that emerged when, from his perspective, he failed to complete his set agenda for his PhD research.

This insurgence of memory into his consciousness, and selectivity of memory about his past and his desires to be a researcher, constructed a transcendent view of himself as researcher - transcendent in the sense that it was a narrative about being a researcher that was quite distinct from the practicalities of doing research.

Section 7.4 Syntheses of Eva and Richard

At the time of the conduct of this research, Eva was an older PhD student who was in the period of candidature just after confirmation, moving toward her mid-candidature review. Her highly independent self-study based around her creation of an online visual diary mediated through a closed Facebook page with research participant feedback about her work, was the focus of the two interviews and the online journal. Eva constructed an engaging and positive story about her candidature, constructing it as transformative and a "blessing" in her life, despite the limitations of life in a rural area.

The spine of this creation of a meaningful and controlled research story was built around her pervasive use of digital technologies for creating her art, conducting the Facebook interactive pages and doing her research reading and writing; this use of technology was central to her thinking and her strong sense of independent learning evident in her articulations of her experience. In effect, Eva's aspirational self was in juxtaposition to the sometimes impulsive and sometimes systematic present self. Her strong gestalts may have been created to make the best of her experience of isolation but also because she had the time and the space to conduct research in an area of passionate interest.

Whereas Eva conveyed herself as a person constructed through passion and independence, Richard's affectivity was implicit, even elusive. He presented a construction of an academic self in which little was revealed about the more personal aspects of his life. This academic self was demonstrated in the systematic conduct of his reading and research processes and the tight construction of his time allocated between the two demarcated spaces of his home and his university. Richard constructed himself as a doer and a completer of tasks which seemed to dominate his consciousness.

Richard conveyed himself as a curious, even playful explorer of ideas, but, at the same time, he was an ardent evaluator of thinking and research practices, and in his interviews, he was willing to offer strong critiques about what he considered to be research and proper thinking about research, informed by his own experiences as an educator. There was also an ambivalence about his use and attitudes to digital technologies. Only online resources and software that facilitated his need as doer were affirmed, and he was dismissive of social media.

Part of this sense of being the explorer was his seeking of interactions with peers and with his supervisors. In the debates, elucidations and discussions with peers, he revealed that he understood the nature of his research and methodology. However, there was little indication that such interactions amounted to friendships or were conceived as being part of a personal support network. As with Eva, there was an inclination toward independence, even isolation, in his approach to doing his doctoral work.

A sense of history and memory pervaded Richard's discourses. The narratives of himself as beginning academic and researcher were formed from a history of himself as inquirer that ensued from his earlier work and teaching experiences. While there was

uncertainty about his wish to become a full-time academic following his PhD, there was, at the same time, a manifest sense that his research about the efficacy of mathematics education would be useful with practical outcomes for schools.

CHAPTER EIGHT FINDINGS AND DISCUSSION

Chapter Eight identifies and discusses findings about the experiences of the six doctoral students that emerged from the phenomenological descriptions and analyses of the data in the previous three chapters. It also offers qualified theorisations arising from a consideration of participant experiences, and from inferences drawn from the research literature about doctoral education.

The chapter considers 15 key findings that emerged from the data. These are listed in distinct numbered sections in the chapter. These findings consider concepts such as learning and adaptation in early candidature, candidature as an educational object, issues of wellbeing in candidature, the processes and difficulties of writing in candidature, balancing life and study for a PhD Student, the efficacy of digital technologies in navigating candidature, the concept of formation and developing narratives of identity.

Section 8.1 Learning, adaptation and the experiential

One key finding of this study is that an analysis of the core structures in consciousness yields deep understanding of what constituted learning and strategic adaptation for the early candidature doctoral students who participated in the study. The study examined what the students did to cope with their study, work and personal aspects of their Lifeworlds. By investigating the ontological features of the participants' experiences and their need to cope, and in linking such experiences to the externality of action in the world, a detailed understanding of learning, including the adjustments and accommodations that were part of its constitution, was achieved.

I conceived learning in the study to be about adaptation in the face of change (built on the *Gestalt* perspective developed in 3.4), personal transformation, including the development of agency and identity, and the acquisition of discrete skills needed for a task or a role. In all three of these definitional perspectives on learning, there is an inner and an outer quality. The *inner* is the experiential life of a person and the *outer* is the actioned expression of the inner as embodiments in the world. Intentionality, or the

sense or constructions of meaning that are occasioned from the inner experience to the outer action, is a pivotal aspect of the learning exchange. Intentionality enables external action based on the strategies, negotiations and adaptations that are conceived in consciousness. From analysis of the data, it is clear that the participants experienced both inner consciousness and outer embodiments as part of their learning to be doctoral students.

For instance, all the participants revealed intentional use of digital devices (laptops, tablet, smart phones and the like) in order to complete the external tasks needs for candidature, including writing and organising their thesis and engaging in academic communication. These outer embodiments were often done through the internal aspiration for attainment but were also completed with awareness of anxiety and doubt, which appeared to attend the doing of many of these external embodiments.

Further, this study identified and pointed to learning as a process of transformation that occurs through feedback in response to the external embodiments of a person's actions in the world. As feedback is received there is a reciprocal response by the person which can lead to restructuring and reframing of ideas in consciousness. These ideas are represented in Figure 8.1.1.

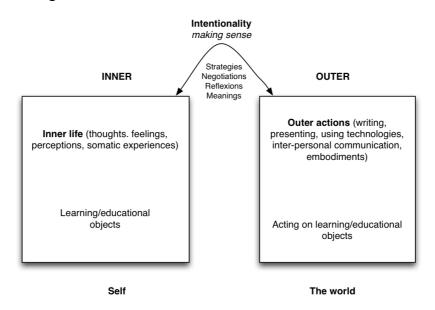


Figure 8.1.1: The inner and the outer of learning

In Figure 8.1.1, the conceptualisation of *inner and outer* is schematised with an orientation to adaptive change and learning. The doctoral students who were part of this study disclosed their inner life and related this life to their outer observable actions in the world. The intentional making sense of candidature came through strategies, negotiations, reflexions and meanings, which are the points of transaction between what is conceived in consciousness as the demands of being a doctoral student and what is actioned in the world as the doing of a doctorate in an academic institutional context.

In the case of the doctoral students who participated in the study, learning and educational objects, or entities that exist ideationally as abstract elements of cognition, were conceived in their consciousness. One such object, that seemed to be present in consciousness of all my participants, was the Confirmation Milestone. This was both a conceptual object and an event located in time which drove the expectations of each doctoral student. This object was stable in the sense of having a predictableness. At the same time the movement towards it, loaded as it was with expectations and the meeting of personal research and writing goals, had a set of inexorable effects on all the participants. Not the least of these effects was uncertainty. Distinct in the consideration of confirmation is that it was not just an institutional process external to individual experience and but an entity intimately affecting and constructing experience.

In conceptualising the inner and outer of learning, it is also important to note that the use of the category of *inner and outer* is not meant to suggest a binary. Indeed, the phenomenological conceptualisation of knowing is about this inner and outer being coextensive and integrated, with transparency, in a reflexive and reciprocal process of growth and change. John Dewey's influential naturalistic view of knowledge suggests this same holistic and integrated approach to leaning, adapting and knowing (Muhit, 2013). It is also central to *Gestalt* concepts of the relation of the person to the world and pivotal to Ricoeur's view of human forming narratives of self.

To sum up this section, the phenomenological approach employed in the research allowed me, first, to become aware of and gather data about the inner and outer of experience, which I consider to be important for understanding the negotiations and learning of the participants in this study. Second, the approach allowed me to identify and understand the role of the affective in shaping the existential concerns and meaning of participants. Finally, the phenomenological approach facilitated the identification and analysis of critical educational/learning objects for participants, including confirmation and candidature.

Section 8.2. Connectedness and belonging

A second significant finding of the study is the importance of connectedness for the participants. The narrow and deep approach to phenomenological inquiry employed in this study enabled a close examination of the significance of connectedness and inclusion in the lives of participants. For instance, Miguel experienced significant loneliness and a sense of disconnectedness, isolation and feelings of cultural alienation in his early candidature period, which contributed to doubts about both his decision to come to Australia and his capacity to communicate in academic English. Unlike Sonia, who came with her family, he had little or no support networks upon arrival in Australia. Only as he established friendships and collegial connections among his peers did it become for him an optimistic experience of moving forward and establishing his academic identity and credibility in increasing cultural synergies.

At the centre for all six participants was their socially-situated Lifeworlds in which connection was layered at the institutional, cultural and personal levels. By examining the nature of these layers, it was possible to assess the place of belonging in the fabric of what constituted the social identity of each participant. Belonging means a recognition of and a need for connectivity as well as the social imperative that is associated with being with others and being part of cultural and institutional life. It also includes the ontological core of experiences and feelings that accompany being with others, connecting and being recognised by others.

Furthermore, belonging was important for the doctoral participants as a primary means of feedback and affirmation about the progress being made as a researcher and as a potential academic in a university. In that nexus of interaction that accompanied the participants as they began their doctoral studies, there was a sense that such connection and belonging mattered, and that in the networks established there were the possibilities of forging a distinctive academic and personal identity. However, such processes of socialisation and connection do not necessarily lead to positive outcomes for students (see 2.3). Indeed, several of the participants pointed to issues to do with social engagement and feelings of exclusion that operated inside and outside the university social and collegial context.

Belonging was thus was a core structure in consciousness of all participants, though the ontological features of that belonging and its significance in the constitution of their emergent academic identities were different. In the case of Susan, belonging was much more an existential experience of coming into and being accepted in the academy, with all the shifts and transitions that were entailed for her. By contrast, Eva's possibilities for belonging and connection were disrupted by her geographical distance from both her supervisors and her academic constituency. Moreover, her work online, that offered the possibilities of limited connection, was disrupted by the ineffectual Internet connection because of her regional location. Her identity as an emerging academic was thus forming in the tension between living regionally and connecting centrally.

Certainly, an important element of belonging is place. In the case of the international students, place and home were core to their consciousness and pivotal to that felt state of being-between: not located where it felt like home but being somewhere else because of career aspirations such that home and academic career live in tension. Partly this may have been the result of the shifting paradigm in doctoral education for international students (see 2.2), where going to a western country is viewed as critical to academic success or an important process for being internationally recognised and forming a global academic identity.

Becoming part of an academic learning community was seen by all participants as crucial to their progress as doctoral students. In the early period of candidature this need for connectedness and feeling a part of or belonging to a research community appeared to serve the dual need of, first, having a sounding board for ideas and thinking about research, and second, a place of shared stories about moving towards personal goals and institutional milestones.

However, there was also tension between the need to be part of an academic community and the requirement to work for significant periods alone. Susan noted that in the production of her report for her confirmation, having other postgraduate students around in her university office proved to be a hindrance rather than a help, especially when focused work towards a deadline needed to be done. Whereas Sonya and Miguel regarded this university work space as optimal for both writing and connecting, the other four students considered their private home space as more effectual at times of high text production. Thus, the demands of writing and research tasks tended to mitigate against communal belonging, at least in a temporal way.

Other factors also played a role in creating tension between belonging and individual solitary activity. One of the most important was distance. For Eva, who lived in a rural area and had a long commute to the university, connecting with her collegial community, and even her supervisors, was onerous. Much of her connection and interactions were not face-to-face, but digital, including extensive use of Facebook to manage the research with her participants. In this instance, distance was negotiated through enacting the affordances of technology. However, Eva also expressed a lack of satisfaction with Facebook as the primary way of communication, especially because of its unreliability.

Culture was also a factor in the level of connecting and belonging experienced by the participants. Within the university setting, with a significant number of doctoral students from Asia, South America and the Middle East, the level of cultural affinity was quite strong, according to participants, and found its expression online on a Facebook page, in reading groups, seminar presentations and collegial academic activities such as co-writing articles and book chapters. However, only the international participants appeared to be overtly active in engaging with the potential of this multicultural set of peers.

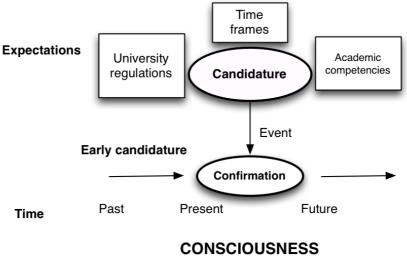
In sum, this study identified belonging as a substantial issue for the doctoral participants. Though the nature of belonging as a feature of consciousness varied among participants, its potency in constructing experiences was substantial and thus it could be considered an important element in the academic formation of the early stage doctoral students that were part of this research.

Section 8.3 Candidature as an educational object

A third finding of the study is about the phenomenology of candidature as an educational object in consciousness. Candidature is a transcendent object in consciousness that has an existential weight and is framed as an object in time. All the participants objectified the idea of candidature as a discrete entity that exists in consciousness and is part of the constitution of intentional action. This notion of candidature-as-object is schematized in Figure 8.3.1.

In the diagram, candidature is depicted as a transcendental object in consciousness, formed in the collocation of university regulations about doctoral studies, the overt, covert and implicit academic expectations that surround the conception of a PhD and the time frames that give the object its dimensionality. As a sub-part of this object, confirmation is both a process and a discrete event in the early part of candidature. As an event confirmation became a point of culmination for all the participants. As a process, there was the work and the pressure of time and commitment that led up to confirmation, an evaluative, academic panel-led event.

However, for the six participants the process leading to and the event of confirmation were punctuated with periods of hiatus, and times of frenetic writing, reading and research activity.



Experience of students

Figure 8.3.1: Candidature as an object in consciousness

Thus, time and expectations were in tension and constituted two potentialities that were in operation in the experiences of the participants.

Susan described in detail the overwhelming sense of working to that event, and the accompanying guilt she felt in depriving her family of precious time. The dimensionality of candidature, in terms of time frames and expectations around the volume and quality of text produced, appeared to have existential weight in the period moving toward confirmation.

To accommodate this ever-present transcendent object, the participants articulated various strategies, negotiations and learning practices. For example, Sonya dealt with the complexity of her candidature and living through the strategic compartmentalisation of her life by associating the object of candidature with her university work space in her consciousness. There was clear strategic demarcation between her personal space and her research and academic space.

For Susan, candidature became pivotal to her reordering and her reconceptualisation of who she was as an older female looking for a new identity. The object of candidature became intimately connected to the formation of a new set of identity narratives that began to operate in her consciousness in the early part of candidature. Also evident was the sense of history that imbued the transformation of her sense of self. Ricoeur writes about the centrality of history in the constitution of human identity and self. So it was for Susan, who positioned her former career as a senior educator, and then the pivotal point of change from that situation to being a full time doctoral student, as part of the unfolding history of her life from which would emerge narratives of a new academic self.

Richard also conceived his identity and emergent narratives of being a researcher in terms of his personal history and educational experiences, which appeared to profoundly constitute his conceptualisations of his research. Indeed, his candidature was positioned as a culmination and an outcome of a journey that he conceived he was on for most of his professional life.

Jane developed strategic digital learning practices through finding methods of digital storage and applications that facilitated the safe and ready availability of her readings and research data. For Jane, the systematic ordering of her emerging academic resources for candidature became connected to her need for assurance that she belonged in the academic world.

It seems that candidature is not just one journey but many, sometimes with closed paths and often with difficult ways to negotiate. The character of these paths and journeys seemed to be related to participants' understandings of what candidature is and what it offers them in terms of their life narratives and identities.

More broadly, the doctorate as an emblem of high level university and academic success was, for the four Australian participants, part of their life-long learning and personal aspirations that were not necessarily related to future academic job prospects. It was part of a self-challenge whose centre was personal transformative growth. However, given that the research was in the early period of candidature, it would be impossible to say whether this attitude would remain the same throughout candidature.

Section 8.4 The significance of uncertainty

A fourth finding of this study is the pivotal place of uncertainty in the experience of participants. For the six participants, uncertainty was part of their consciousness and shaped their experience of candidature as an object in consciousness. *Uncertainty* is a state of unpredictability and an experience of doubt often associated with transitioning between what is known to what is not fully known, or a shift in expectations (Abuhamdeh et al., 2015; Mengel et al., 2016). It is a state of *betweenness*, of being in a liminal territory between the familiar and the becoming familiar. This territory can be uncomfortable for students and in the case of the participants it was a key factor in the emergence of doubt. This doubt was about the legitimacy of their place in the academy, their ability to do the work or the effect of wellbeing on their capacity to cope.

For Richard, this uncertainty, this *betweenness*, was about finding a way forward as an older male, looking to leave mathematics and IT teaching at the TAFE level and trying to make sense of where his doctoral study might take him with cognizance of his own

sense of his history as an educator. By contrast, Sonya, as an international student, lived in the uncertain ground between wanting to be in Australia, supported by her family, and the commitments to her home country that had financed her study. She had a potential career waiting for her in a university in her home country, but her uncertainty was about whether she wanted it anymore. For her this uncertainty was multilayered (cultural, aspirational, familial) and was contextualised in terms of the distance of her home country from Australia and her connections there, in tension with her emerging cultural and family affinities within Australia.

All the participants were still forming narratives of their identity and formation as academics who were either gaining career-supporting qualifications or, for the Australian-based participants, looking to forge new narratives as academics or pedagogues in the post-secondary education sector. One cornerstone trope in these narratives was transformation or transition, a discernible shifting of life focus. Another was risk-taking, which was viewed by all participants as a necessary step in finding a space for new achievement. The existential thread in both these tropes was uncertainty as a fundamental experience of shifting towards acceptance in the academic discourse community. In speaking and writing about uncertainty as a thread in consciousness and experience, there was also a developing meta-awareness of its meaning and significance, especially in terms of the learning that could come out that experiential condition.

A sub-part in this thread is the idea of *where-to* or the sense of a concrete goal or outcome to obtaining a doctoral degree. Unlike other forms of training or education, that are often vocational or orientated to the skill sets needed for a career, completing a doctoral degree does not necessarily have an immediate job or career focus, and there are no guarantees of employment at a university, post-qualification. While there has been a shift to linking the PhD with industry, in the field of education (see 2.2), doctorates do not necessarily lead to employment outside of the academy, unlike with science, engineering and the like. In the liminal territory between the expectations of what it might offer and the realisation of those expectations at some point in the future, there is uncertainty.

One discernible outcome of this existential uncertainty was a sense of residual lowlevel crisis. During the early part of candidature, up to and after confirmation, it seemed that all the participants were existing in varying intensities of emotional dissonance about their doctoral research and about their progress in this university graduate program. Any instabilities in their lives, tended to exacerbate the crisis and make it especially manifest.

It seems that uncertainty was highly operative for all participants and this had consequences for their abilities to cope and for their experiences of early candidature. Each participant employed different strategies to negotiate their way through this uncertainty that appeared to be especially patent in the period up to confirmation.

Section 8.5 Wellbeing as a core existential issue

A fifth finding of this study, as a corollary to the points made in 8.4, is the importance of wellbeing in the experiences of participants. This was a fundamental essence in the internality of participants and was expressed in explicit embodied ways such as tiredness, lack of focus and anxiety. Its significance is clearly supported in the literature (see 2.7). Shifts and transitions in early candidature, and the ever-present sense of uncertainty, appeared to be connected to wellbeing effects. For all participants in this study, there was a sense of displacement that they felt as a dissonance between where they were and where they would like to be as doctoral students. Participants reported what they believed to be a direct connection between this sense of displacement and the wellbeing issues they experienced.

Participants identified three corporeal states that they linked to uncertainty and a sense of crisis:

- 1. Anxiety as a fundamental state of being linked to uncertainty
- 2. Apprehension about what was to come, especially regarding the confirmation review
- 3. Restlessness and inability to focus at times as an external and observable state that reflected the previous two.

Susan articulated her concerns about wellbeing and expressed the need to adopt wellbeing strategies as part of her ways of coping with this time of considerable transition in her life. She nominated meditation and mindfulness practices as important and as a means of achieving equanimity and focus. Jane also identified her meditation practices as helpful in achieving focus, which was a key issue in the early part of her candidature.

In the case of Sonya, this meant an attempt to separate and delineate between her various life spaces so that the space for academic work was not compromised by her family space. This strategy, which at the time of the research was only partially successful, was as much about dealing with issues of wellbeing as it was about completing the necessary work to fulfil her candidature requirements.

For all six participants, the need to bring strategic resources to bear on the processes of negotiating through early candidature, with the prevalence of uncertainties and transitions, was evident. There was an appreciation that internal states have embodied effects, and that these effects have consequences for actions in the world.

Section 8.6 The issue of survival

A sixth finding of this research is about the issue of *survival* for the participants. By this term I mean the financial considerations and exigencies of being a doctoral student, including personal and family implications surrounding core needs. The issue of survival involves a politics because it centres on a series of shifts, decisions and adaptations to circumstances that are negotiated across institutions, families and communities, and more particularly in the supervision relationship that is core to the progress of early PhD students.

Except for Miguel, all the participants had established families and an array of pressing financial commitments. Only the two international students, Miguel and Sonya, had scholarships from their home countries. While these scholarships provided basic coverage of fees and a living stipend, they did not provide more than the basics for living. Sonya's partner needed to work, outside his field of expertise in his home country, to provide for his family so that Sonya could be a fulltime doctoral student. To

these financial encumbrances was added the binding scholarship obligations from home countries: that they should return home to repay the investment made in them. In the case of Sonya, this led to ambivalence about whether she belonged in Australia or in her home county, as I discussed above.

The issue of financial survival was especially significant for Jane, who said that being a fulltime doctoral student, with continuing financial commitments and a family with needs, meant that financial considerations were foregrounded. Financial survival represented a significant part of her doubts about whether she belonged in the academic community and whether her personal and familial needs mitigated against her academic aspirations. It became part of the politics of compromise and negotiating she was forced to undertake.

For both Eva and Susan, taking on fulltime doctoral studies meant leaving well-paid teaching positions and entering the terrain of uncertainty that is doctoral research and thesis production. In Susan's case, she held a senior educational administration position, so she relinquished considerable financial and reputational security to become a fulltime doctoral student. Likewise, Richard, though not saying much about his financial status, suggested that he had to take on sessional teaching and research assistant work to pay the bills.

All the participants identified a correlation between financial security and doing a doctorate fulltime on the one hand and, on the other, the extended processes of establishing connection to and credibility in the academic community and ultimately finding employment as an academic. This tension between academic potential and actual realisation of the degree not only created self-doubt but also a sense of financial uncertainty.

Section 8.7 Formation in early candidature

A seventh finding of this study is the importance attributed to formation in early candidature. All six participants in this study identified and discussed aspects of formation that were critical to their own development as a doctoral student. For Susan,

wellbeing issues become core to her ability to negotiate candidature, and Eva identifies connection with the academic community as a formation priority for her.

Formation, in the context of early doctoral studies, is about the unfolding of, what I am labelling, a proficiency set of knowledges, communication, writing, research, wellbeing and work practices that are progressively learnt, acquired and embodied over time, and gradually embedded in praxis as a new researcher. This proficiency set functions in and through experience to prepare a doctoral student for both the completion of a competent thesis based on original research and contributes towards the possibility of an academic career after doctoral examination.

Elements of this theorised proficiency set are tabularised in Table 8.4.1. The content of the table reflects both the emphases in the academic literature discussed in Chapter Two and theorisations derived from the experiences of the participants about their doctoral studies. I have taken the stated experiences of participants and their views of what they considered was needed to be a successful doctoral student and theorised them into a set of formation criteria that can be used to understand the disposition of early doctoral students. It represents a discrete formative tool of assessment.

These knowledges, strategies, skills and practices are important throughout candidature, but may be especially momentous in early candidature as students adapt to the demands of being a researcher, and navigate within the expectations that are part of the regulations and culture of a university. This formation proficiency set is intended to suggest or describe the holistic nature of the students, their lives and their research orientated needs, as they approach the milestone of confirmation in the probationary phase of candidature.

These formation yardsticks became learning objects in the participants' consciousness and were constitutional in terms of formation. As objects, they functioned to shape experience within the Lifeworlds of participants, and then, through intentional action became embodied identifiable practices in which academic subjectivities were rehearsed and performed. These practices could be conceived as part of the extensive socialisation of candidates within the institutional and research communities.

1.Knowledge making and conceptual practices	2.Communication strategies and practices	3.Writing and literacy practices	4.Research practices	5.Wellbeing and work practices
1.1 Linking and conceiving theory within the frame of research	2.1 Connecting effectively with research participants	3.1 Adopting an appropriate academic style for writing	4.1 Developing an informed, focused and plausible research project	5.1 Working within the expectations of candidature
1.2 Understanding the nature of research and knowledge making	2.2 Communicating research to the discourse community	3.2 Writing a precise literature review in an interpretive and relevant form	4.2 Positioning the research project within a larger body of academic knowledge	5.2 Focusing on academic work in a systematic, efficient, and disciplined manner
1.3 Establishing the theoretical frame or platform for a research project	2.3 Forming cohesive collegial relationships and socialisation	3.3 Composing a research proposal with clarity and purpose	4.3 Forming a research profile, online and in person	5.3 Balancing time across various dimensions of life
1.4 Conceiving an appropriate methodology for a research project	2.4 Creating rapport and workability with a supervision team	3.4 Developing a structural, time- dated overview of a research project	4.4 Describing, evaluating and understanding the context for research	5.4 Assessing personal, mental and health needs

Table 8.7.1: Formation proficiency set for early candidature

For example, "Establishing the theoretical frame or platform for a research project" (1.3) became a core learning and aspiration object for Jane, who initially struggled to find an appropriate theoretical framework from which to her research interest. This proficiency descriptor appeared to be indicative of some tension between herself and her supervisors, as she struggled to find her way forward in the theoretical conceptualisation of her research.

There were external and internal influences on formation and on these embodied practices, as outlined in Table 8.7.1, that were identified in the interviews and journals of each participant. External influences are those apparently beyond the direct control of a student, whereas the internal influences are within the volition of a student. The two most identified external influences that emerged in the analyses were, first, the university regulations, especially those about candidature and probation and the confirmation panel event, and second, the selection of appropriate supervisors.

While it may appear to be the case that the selection of supervisors is a combination of what a student is interested in and needs as well as the willingness of an academic to take on that student, the experience of students in this study was overwhelmingly that the final constitution of a supervision team was, to a large extent, outside their power to decide or regulate. Factors such as the availability of an academic, expertise in a research area and willingness to commit to a student, were the most important in terms of the final constitution of a supervision team.

For Jane, the supervisors who managed her early period of candidature began with their affirmation. But she also expressed reservations that emerged early in her candidature. These concerns and reservations centred on her favoured methodological approach to her research concept and about her yet-to-be-fully-realised theoretical framework. She reported that her chosen methodological and theoretical approaches were at odds with those of one of her supervisors.

This circumstance could be viewed as part of her exploration of the possibilities within the complex territory of educational methodologies and theoretical perspectives. It might also be about adapting to the intellectual challenges which emerged because of the dissonance between what she wanted to do in terms of her research focus and methodology and what her supervisors thought was best for her. However, the differences of views led to significant doubt about her worth and place in the academy. This may suggest that supervision relationships are steeped in power and that the apprenticeship model does not necessarily reflect the complexity of what happens in supervision and the range of possibilities that such a critical relationship can embody (see 2.3).

To conclude, formation in the early period of candidature can be a time of substantial personal and professional challenge which involves, for one, a reframing of beliefs about self-competency and self-efficacy. Given the background and experience of all the participants, and the responsibilities and leadership roles that they enjoyed prior to undertaking doctoral study this personal challenge was even more pronounced. Formation in early candidature is also a period of substantial development of competencies and the gradual taking on of academic subjectivities, which I theorised as a set of identifiable proficiencies.

Section 8.8 Supervision

The eighth finding of this study is the pivotal place of supervision in formation. For all six participants, one of the most important factors in formation and in how early candidature was experienced, positively or negatively, was supervision. This is decisively supported by the research literature (see 2.3). The primacy of this triadic relationship (candidate, main supervisor and associate supervisor) was substantiated in the interviews and journal writing of the participants, and intricately linked to development of the formation set discussed in the previous section.

One of the most important essences to this set of relationships was stability, which was a linchpin in success leading up to confirmation. By this the participants meant a sense of continuity of support, timely critical feedback and sustained interest in the student's project. While five of the six participants spoke most favourably in their interviews about supervision, all recognised that sustaining the relationship was demanding, and, at times, required negotiation and awareness of the politics of the supervision team.

Certainly, research about supervision confirms its importance and affirms the role of a set of stable relationships being in the best interests of candidates. This is especially so regarding the connection between supervision and the emerging identity of the candidate in the academic community. Several participants mentioned the positive role of supervisors in mentoring and pointing the way to connection with the broader knowledge community. They also spoke about the importance of supervisors as critical friends who support and understand the difficulties that candidates face in the early period of their PhD research. Further, research investigating understandings of negotiation pedagogy suited to supervision would, thus, seem to be salutary.

Section 8.9 Adapting to early candidature

A ninth finding of the study is about the adaptive demands of being a doctoral student in early candidature. As a phenomenon, and as an educative object in consciousness, a PhD is a time-limited and highly regulated program of research and writing towards the production of a cohesive thesis, which also includes a thesis-by-publications (see 2.2). Students who come to do a PhD enter it with awareness of both the minimum and maximum periods of candidature (usually three to eight years) and the three milestones in Australian universities that accompany satisfactory progress through to submission to examiners.

Admission to a PhD, the satisfying of the three milestones (confirmation, midcandidature and final review) and the ultimate submission of the thesis, all depend on the self-directed learning of the candidate and navigation through this regulated process, in association with the exigencies of living. While supported by two supervisors and indeed the wider academic community and peers, it is the individual who must, in the end, complete a plausible, well-constructed and original piece of extended writing in a field of academic discourse. That inexorable fact was one significant essence in the consciousness of all participants in this study, and was a source of apprehension for all participants.

A doctorate thus places considerable demands on individual initiative and discipline. Indeed, in the early period of candidature the exacting process of research and writing was much more daunting for the six participants than I had expected. They all expressed this feeling candidly in their interviews, and documented it in their online journals. All six felt the arduous nature of entering and fulfilling the requirements of doing this program of study; and at times each of them felt overwhelmed with or perplexed by what they were required to do. With the appraisal of confirmation looming, the participants were caught in the space between becoming aware of what was required of them and doing it, in a movement from intentionality to embodied and evaluated action in the academic world.

However, rather than seeing this disquietude as a negative, it appeared that the temporal pressures to produce, brought an openness to possibilities and a willingness to shift, adapt and consult that was pivotal to their formation. In its demands to produce original research and in its time-limited structure in which to generate a cohesive thesis, the PhD creates the need for considerable personal adaptation, transformation and learning.

From a *Gestalt* approach to learning (see 3.3) as learners are confronted with environmental demands and impetus for change that are embodied in doing a PhD, they begin to shift ways of understanding that were formed prior to that change and then

reform it into a new intellectual gestalt that incorporates adaptations and shifts of knowing.

Jane was confronted with the conceptual demands of creating a piece of consistent research built on a viable intellectual foundation, that was cognizant of the academic literature and of relevant theorists. In her interviews, she noted her experience of challenge and doubt that accompanied this shifting to a new gestalt. Learning about the nature of research and about her own capacities for change and intellectual renewal were part of this shift.

Perhaps the nature of these changes in thinking and praxis need to find more formal expression in the candidature process itself. There need to be avenues for self-reflexion within the process that draw awareness to the specificities and content of change, so that the candidate becomes more aware of what is happening (at a meta-awareness level) and does not conceive this change in terms of doubt or uncertainty.

Section 8.10 The spaces and modularities of balancing life

The growth of a new gestalt as part of formation is only one part of the totality of the experiences of an early doctoral student. It is also important to see the student as a person with a life, not just a student, and to understand the place of connectedness in constituting the person's dynamic disposition. In this regard, a tenth finding of this study was the need of participants to balance life and study and find coherence of the various life and work spaces that constituted their Lifeworlds.

The dynamic disposition of the six participants is conceptualised and theorised in Figure 8.10.1. In the diagram, the entirety of the lives of the six participants is depicted as existing in consciousness as a Lifeworld. Within the Lifeworld, there are three spaces in which experiencing, embodying and intentional action are interwoven. They are labelled with capitals as modularities because they exist as discrete and bounded partitions of human existence and experience.

The relationally-orientated personal and familial space encompasses the intimate and social existence of the student. The work spaces constitute the set of work related

experiences and relationships that are about earning capacity or a job that might be related or not related to study. Finally, the research and learning space concerns the specificities of doctoral study and engagement with the university, with colleagues and with supervisors.

At the core of these three spaces, as an existential nub of existence in their Lifeworlds, is the question of emergent identity (Who am I?) as an early PhD student. In this core, there are burgeoning narratives of a self being constructed for the academic space. These emergent narratives have the capacity to reframe experience. Sonya's main academic narrative, for instance, was about creating herself as an academic with scope to work anywhere in the world, not just in her home university, to which she had to return as an international indentured student. In her nub of existence there were conflicting narratives about who she was and who she wanted to be that were formed by the decision to come to Australia.

At the core of the Lifeworld, digital technologies, including social media, software, online distributed digital resources and tablet apps, are an integral part of the interactions between the spaces. They provide a conduit between each module in the student's Lifeworld (see 2.5). However, the place of and affordances from digital technologies varied amongst the students, a point discussed in more detail below (see 8.5.2). Certainly, while there was a sense of the importance and ubiquity of digital technologies and online communication modalities, all the participants shared a scepticism about utopian discourses about technology.

In Figure 8.10.1, these spaces of living and meaning are depicted as fluid and shifting, not static or fixed. Within the lifeworld of each participant it is likely that the disposition of the modular spaces changes in the temporality of moments in the early part of candidature. At times this may mean that there is *conflation*, which is to say that there is a movement to overlap and coalesce spaces, with all the implications possible from the experience of one space intruding or compromising another.

At other times, this fluidity may mean a movement of separation and compartmentalisation to restore the integrity of each space, which I have labelled, *deflation*. Between conflation and deflation there are intentional actions towards

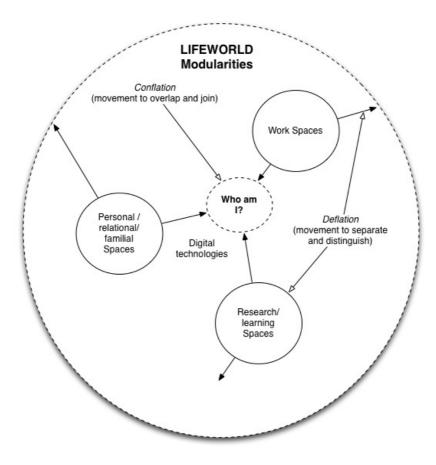


Figure 8.10.1: Lifeworld modular spaces

equilibrium or to balancing life, so that all modules of the Lifeworld retain their place in the identity of the student.

For the participants, this balance or equilibrium was a significant issue that attended their experience of early candidature. Susan spoke of the time close to when she was to present to the confirmation review panel. She spoke lucidly about how much her academic work took away from her family life. Susan recalled a moment when her adult child living at home spoke about the loss of her mother during this time in the context of their close and mutually supportive relationship. In this instance, the research space overlayed the domestic space in an act of conflation in which the needs inherent in the domestic space were subsumed.

Section 8.11 Writing and early candidature

Within the participants' research and learning space of the Lifeworld, writing had import, and fluent and efficient writing was valued, part of self-efficacy (see 2.4) and the development of a set of academic writing literacies. This focus on writing and its implications for students, is an eleventh finding of the study.

The intentional act of writing in the early part of candidature, proved to be a significant source of anxiety for all the participants, reflecting the findings of most academic studies in this area (see 2.4). Participants found the task of doing a literature review, for instance, both tedious and onerous, and the early descriptions of the focus of the research to be especially difficult to compose, as they struggled with locating an appropriate methodology to accompany their research focus. Richard, especially, found the writing of the literature review difficult because of his self-belief that this form of writing was not natural for him and that he preferred more descriptive or narrative forms of writing.

Notable was trepidation about the reception of their writing, particularly in the context of their supervisors' expectations of early drafts. There was a dual sense in which this apprehension was experienced. First, all six participants wanted to establish credibility with their supervisors in terms of the viability of their research concept. Second, the writing needed to be of a sufficiently high standard, reflecting the development of academic literacies. There was the difficulty of doing the writing and devising a research concept, and there was the apprehension about how the writing would be received, suggesting the complex nature of the power relationships and expectations that exist between supervisors and candidates.

Of the six participants, four described ambivalent feelings about their early writing experiences. They knew they had to write and to get this writing to their supervisors but, at the same time, they found themselves being distracted, or even looking for distractions, to avoid the writing that they knew they needed to do, resulting in a cycle of avoidance.

The other two participants who did not articulate this level of ambivalence, still expressed the difficulty they experienced in getting early drafts of writing completed. The consistency of work habits and the regimen of focus were significant issues for all the participants. While they expressed their sense of privilege in being a PhD student, at the same time, the set of habits and exactitudes that accompany the embodiments of being a doctoral student were challenging for them, as they formed as research students and potential academics.

Another common experience in terms of their early writing was the extent to which they needed to reframe their original research proposal used for their application to enter the PhD program. It meant considerable reconceiving and rewriting, and reading and writing about alternate territories of theory that participants found particularly difficult or thorny.

In sum, writing, focus and work habits were intricately tied together in the early phase of the participants' candidature. All six articulated the profound difficulties in beginning writing, sustaining writing and apprehension about how their writing would be received by their supervisors. This points to the complex interplay of text, existential experience and supervision that the early candidates in this study experienced.

Section 8.12 The place of digital technologies

A twelfth finding of this study is the intricacy of the place of digital technologies in the candidature experiences of students. Even in the data derived from the small number of doctoral students in this study, there was considerable variation in how they used digital technologies and how the technologies were conceived in their consciousness in the early stage of their doctoral degrees.

For Jane, the deployment of digital resources was a pivotal strategy for organising and storing important research information and her notes, and for cataloguing academic literature and readings. She conceived digital and online technologies to be fundamental to her ability to negotiate a doctorate, and in them she found assurance as a beginning doctoral student who was consumed with doubt about her capacity. The centrality of technology was emphasised even more by Eva, who needed online digital technologies

as a major dais through which to negotiate both the limitations of geographical distance she experienced and her use of Facebook as a primary means of connecting and negotiating her research with her online participants.

For Sonya and Miguel, as international doctoral students, social media became a conduit through which to maintain contiguity with their home countries and with the many personal and professional human connections that they needed to maintain there. Given that they were mandated to return to these countries following completion of their doctorates, the use of social media, especially, Facebook, had efficacy in terms of the conduct of these relationships. For Miguel the use of social media also functioned to ameliorate his issues with loneliness and with the disconnection he experienced in being so far from home. At the same time, the use of Facebook was overtly a source of distraction for both participants in this research, who identified their struggles with focus and linked this loss of focus, in part, to their use of social media.

By contrast, Susan, especially during periods of intense writing before her confirmation review, preferred to avoid all technologies, except Microsoft Word on her laptop and PDF reading software. For her, there was the potential in digital technologies for distraction and shifting the focus from the primary target of completing her confirmation report. She also disparaged the value of social media in conducting research and for communication networks, a view shared by Richard, who was derogatory about the place of Facebook, Twitter and the like in academic research.

Despite this variation, a variety of technologies, including online and social media platforms were crucial to the transactions, communications and negotiations for the participants who were beginning their doctorates and moving towards confirmation and beyond. There is certainly nothing surprising in this, especially given the shift to the delivery of academic publishing and university resources in digital form over the last 20 years.

However, what was surprising was the hybrid use of analogue and digital means for creating textual content, an aspect of the use of technologies that does not appear to be prominent in the research literature (see 2.5). All six participants preferred handwritten notes on printed academic articles that they deemed were critical to their research. They

also noted the inadequacy of current input methods for annotating PDF and other digital files, especially Eva, whose art work, which was core to her research project, could not be created digitally at the time of the research with the technology available.

Software, online resources and applications on personal devices were part of a multifarious mix of modalities used by the participants to read, communicate and construct text. However, the limitations of the technologies they used and the transitioning between analogue and digital means of text creation meant that there was some reticence with the use of technology evident in the experience of all the participants.

Section 8.13 Academic identity

Unequivocal for my participants was the potential in the digital and online world for the development of an academic identity. The formation of an academic identity and the pivotal place of digital technologies in that formation is a thirteenth finding of the study.

Academic identity reflects the currency of academic credibility, capability, esteem, and connectivity held by a person within an academic community. The phrase is much debated in the research literature (see 2.3), which suggests the differences of understanding about what taking on an academic persona means and the values that undergird it. Clearly, academic identity is increasingly constructed in online discourse communities (though blogs, forums, joint projects, social media), together with personal exchanges at academic conferences, online academic presence (such as Academia, ResearchGate and Google Scholar), the standing of an individual's academic institution, and the number, citations from and reach of peer-reviewed published work and conference papers, much of which now are published online.

However, my concern here is to examine the factors that the participants identified as pivotal to their early formation of an academic identity, including digital technologies. In Figure 8.13.1, I have schematised these factors as a set of interactive experiential categories built on reciprocity.

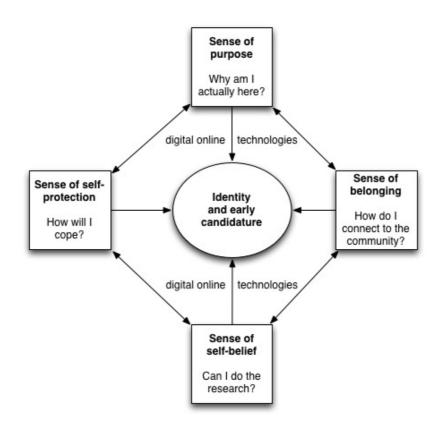


Figure 8.13.1: Academic identity and early candidature

The first factor (Sense of purpose) centres on the idea of why the candidate is doing a doctorate in the first place. In other words, what led the person to come into a graduate research program at this level? The answers to this question varied among the participants in this research, ranging from building on previous study, to a search to explore self-potential and a new way of being, and curiosity about what a doctorate might lead to.

The second (Sense of self-protection) and third (Sense of belonging) categories are an extension of the first, since once having made the decision to do a doctoral research project, a candidate must develop coping and communications strategies, for personal survival and for building a sense of belonging. The final category is about the self-belief: that they can do the research and succeed in the period up to and beyond confirmation. This category builds on the previous two in that developing coping strategies and linking with the wider academic community were seen by the participants as pivotal to their ability to do the doctoral work and to navigate through requirements. Knowledge and knowing are thus embodied in knowing-together.

Seeing that these categories have reciprocity is important. For instance, doubt was a common thread or essence in the experience of all the participants. Were they capable of doing the research? Did they belong? Doubt operated as an experience within the moving frames of self-belief, self-protection, belonging and purpose. These core existential categories shifted and moved in the participants' experience, with one mutually interacting with and reinforcing the others.

Central to the conceptualisation of Figure 8.13.1 is digital and online communication technologies. These technologies, including texting, email, Web sites, Facebook, Twitter, blogs, accessing online information repositories through a variety of devices, facilitated personal exchange, belonging and connection. The technologies permitted fluid connections between the four categories, and clearly impinged on the formation of academic identity for all the early candidature participants. It also included connecting to discourse or knowledge communities. In this way connection was afforded with disembodied communities that exist apart from an institutional setting.

The notion of academic identity should, perhaps, be problematised, as the term tends to convey the impression that it has a monolithic character or is an idealisation. However, there is no such thing as a stable academic identity, and it could be argued that the nature of this identity changes for individual PhD students, depending on a range of factors that construct what *academic* means within a knowledge community and academic institution. The idea of an academic identity is a theoretical construct that represents an emergent sense of professional status that a student gradually takes on throughout candidature and beyond.

Section 8.14 The uncertainty of academic becoming

One of the significant issues that emerged out of my conversations and exchanges with the participants was the uncertainty of *academic becoming*. This fourteenth finding of the research is a corollary of the discussion in the previous point. This uncertainty revolved around the question of what it means to be an academic and about the processes, publishing and networking needed to get there. Does being an academic mean being employed in that role? Or does the word imply a state of self-identification

where that role is taken on? In the latter sense this means that being an academic could be conceived as a de facto state of being, which may or may not be actualised.

For the two international students, the notion of being an academic had more clarity, for both were returning to their home countries to apply for academic posts in universities. In this sense, their PhDs were more targeted and had an instrumental function in their lives. Put crudely, their academic becoming, though not yet fully realised in attaining doctoral status, had a clearer terminus.

Academic becoming was less certain for the four Australian participants. All four spoke about their uncertainty in where their academic doctoral study would take them. Eva spoke about pursuing an interest in developing and conceptualising her art and graphical communication practice, which she explained could have implications for curriculum at the secondary school level. There appeared to be little awareness of herself as a possible career academic at this stage of her candidature, as her focus seemed to be development of herself as a specialist practitioner. Indeed, Eva's reckoning of herself and the disposition of being a doctoral student suggested that doing a PhD does not necessarily make a person an academic.

Furthermore, there is the question of where is the transition point between being a student and then considering oneself an academic. For all participants, this point seemed to be connected to navigating academic expectations, such as publishing, participating in research groups and forming an online academic presence.

One could surmise that the regulated milestones of candidature (confirmation, midcandidature and final review) could also become such points of transition, as affirmation in the academic community is acquired through achieving such milestones. However, for the participants, their thinking was about survival and uncertainty about what they were becoming and where they were going; and such thinking was not especially framed in terms of status, job or position in the fraternity.

Section 8.15 The significance of identity narratives

The last finding from this study is the significance accorded to forming narratives in the experiences of participants. One of the contributions that the hermeneutics of Paul Ricoeur (see 3.5 & 9.3.6) has made to my investigations of experience in this study, is to point to the function of narrative in experience and its proclivity for forming demarcated identities in human beings. These narratives, forged in experience, create meaning pathways that are not only temporal but project into possible futures. They are stories of place, connection, adaptation, success, failure, beginnings and the like.

If one accepts the influence of narratives in creating identity and forming meaning pathways, the question becomes, what is the content of these narratives? These doctoral narratives could be about connection and transformation, learning and growth, or they could be about alienation, disaffection or failure, perhaps accounting for, at least in part, the high dropout rate in doctoral programs world-wide. Ricoeur's idea that the human is both bounded and looking for transcendence is an important one in terms of the boundedness of candidature but also for the possibilities of looking ahead and imagining what the future might offer.

For Sonya and Miguel, the narratives of their early candidature were about establishing connection in another cultural setting and adapting to Australian society. These narratives of adaptation and inter-cultural negotiation were also woven with other stories of doubt and difficulties in completing writing work, in the context of a range of academic and language challenges.

There seems to be a need within supervision relationships, and more broadly in support programs for PhD students, to foster positive and cohesive doctoral narratives. This support might ensure that the student is forming an optimistic PhD story, with assurance in the present, an eye to the future and an understanding of the meaning pathways that are possible. In the early part of candidature, with its currents of uncertainty and transition, there may be a place for not just educative endeavours and new pedagogies geared for the skills needed to progress in writing and research but also for the attendant existential issues to be addressed, ones to do with building coherent and positive selfnarratives and wellness.

Section 8.16 Synthesis of findings

In this chapter I brought together the essential threads in the experiences of six doctoral students that were described and analysed in the previous data chapters, and I then formed 15 findings. I also contextualised these findings in terms of the literature reviewed in Chapter 2 and offered some theorisations based on both the findings and the research literature. These theorisations reflect the retroductive approach of going back and forward in creating the meanings that emerge from the research transcripts in juxtaposition to the research literature (see 4.3.2).

The focus of the findings is on what the participants experienced and did over one month of their early probationary PhD candidature up to confirmation and shortly after. The findings were also about how participants negotiated their way through and found meaning in this period of candidature, and this exploration was made possible by considering the inner and the outer of embodied experience and learning afforded by the phenomenological approach adopted in this study. This allowed for complexity of understanding of experience, negotiations and learning. Thus, the investigation and its findings might proffer an important complementary perspective about the experiences, negotiations and needs of doctoral students in juxtaposition to other research about doctoral education, a point that I consider further in the final chapter (see 9.1).

One of my theorisations is that candidature and confirmation are educative objects that exist as transcendent entities in consciousness and are responsible for shaping the embodied and affective experiences that are part of internality. As an integrated way of seeing the doctoral students who participated in this study, I also conceived the idea that structures and objects of consciousness are not just mental entities but are linked indubitably with all parts of being, including the affective, as part of each participant's Lifeworld. Indeed, affective essences such as anxiety, loneliness and the need for connection were found to be quite central in the experiences of the participants. There was also a significant finding that survival was central to the concerns and needs of the participants in this study, and this finding seemed to be connected, at least in part, to the financial circumstances of most of the participants. A related finding is that the embodied affective states of being associated with confirmation were imbued with uncertainty and doubt, and this state characterised the experience of all six participants and had significant effects on their wellbeing. It necessitated strategies of coping and navigating though difficulties, with the aim of survival and then learning. Here, ideas from *Gestalt* theory were useful in conceiving both the urge to find a unified and certain self as a doctoral student and the need to accommodate change that then resulted in learning. This need to survive and negotiate through difficulties was especially evident regard to writing. Reticence and anxiety about writing were common and all participants struggled with writing in terms of focus and achieving their academic goals.

Another theorisation is about what it means to be a doctoral student, including the factors that my participants expressed as essential to this identity formation. From their expressions about what was important in their formation, I developed a discrete set of early stage doctoral proficiencies that might be useful as a learning, teaching and monitoring tool (see Table 8.7.1). As part of this formation, I theorised about the life spaces of early doctoral candidates and what a balance in these spaces might mean for the wellbeing of doctoral students and their ability to negotiate the early period of doing a PhD. Indeed, it appears as if the structuring of discrete functional spaces within their Lifeworlds was a key coping strategy by participants and is thus an important finding of the research.

In addition, integral to much of the communicative transactions, strategies of learning and life balance was the role of digital and communication technologies, which functioned extensively as a primary mechanism for fashioning identity, maintaining belonging and negotiating university systems and knowledge communities. While this was presented as a discrete finding in the chapter, it should be viewed as being pervasive in its functional importance in the lives of the six participants, though there was some level of incredulity about its efficacy as a tool to solve the problems encountered in candidature. The use of digital and online modes of communication was considered by all participants as essential in establishing an academic identity and participating in online knowledge communities and academic projects. Finally, I discussed and theorised about the idea of the PhD and the notion of academic becoming. In this regard, I noted the significant roles of supervisors and the wider knowledge communities in the life and formation of the beginning doctoral students that were part of this study, though these connections were not always positive and in some cases reflected ambivalence of feelings. The function of creating positive doctoral narratives was explored as part of an idea about life meaning creation originating from Paul Ricoeur. I certainly consider the development of such stories to be crucial to the successful negotiation of candidature up to confirmation and beyond, and core to adaptive mechanisms that help doctoral students cope with their research and writing demands, in juxtaposition to the demands of non-academic commitments. Indeed, such narratives appeared to be significant and formative for all six participants, and were means of conceiving doctoral research as transformative, rather than just instrumental.

CHAPTER NINE

IMPLICATIONS, CONCLUSIONS AND RECOMMENDATIONS

In the previous chapter I identified 15 key findings that emerged from analysis of the data in Chapters 5-7, and I offered theorisations about doctoral education, especially about the early period of candidature, based on the data and my reading of the academic literature. Building on these findings and theorisations, I now consider a broader range of implications, conclusions and recommendations that are suggested by the nature of study and the philosophical and methodological ideas elaborated in it. To put it another way, Chapter Eight is a close look at the meanings in the data, whereas the final chapter has scope beyond such meanings.

In this chapter, I reflect on the significance and implications of this phenomenological study of six early candidature doctoral students. I begin by noting several implications of the research for understanding doctoral education in general and early candidature experience in particular, identifying the contribution of the study to this area of scholarly concern. In the second section I examine a range of limitations and issues that have become evident in the design and conduct of the study, by way of providing a critique of the research. Next, I discuss the key contributions of this study to knowledge, including the development of a distinctive phenomenological approach to qualitative educational research. Finally, I examine the possibilities for further research that come out of the findings of the study.

Section 9.1 The implications for doctoral education

This section discusses four implications of the study for understanding doctoral education. The focus is on what the six participants in this study had to say about the experience of being a doctoral student in the early period of candidature and the ensuing needs that they identified. It is also on the nature of the doctorate from the point of view of these participants and the role of supervision in dealing with their needs as doctoral students.

9.1.1 Understanding early doctoral experiences

The first implication of this study for understanding doctoral education is the significance of researching early doctoral experiences. There is an appreciable gap in the research literature regarding the early and probationary period of doctoral candidature. In my survey of the literature on doctoral education, it became evident that it tended to take a more-or-less global perspective on candidature, and the notion of early and probationary candidature was not accounted for in many studies. Researchers have explored thematic aspects of candidature, such as supervision relationships, methodology, writing strategies, gender issues, and reasons for dropping out of doctoral studies. While this study has employed these categories, it has also recognised that early candidature has its own particularities in terms of the needs of doctoral students, the skills of formation and the existential issues, such as uncertainty, that are emergent for them. This recognition is based on the actuality of doing a doctorate in the early stages from the point of view of the embodied and felt experiences of the candidates themselves, and how they understood their life and their study as early stage doctoral candidates.

In this study, the doctoral research participants articulated their felt experiences and how they constructed their lives after their decision to undertake a PhD. These experiences appeared to be about issues specific to the early candidature period, though, of course, the whole of candidature as a concept cannot be excluded from discussion, as its weight as an object in the consciousness of participants was pivotal. Though the early period of candidature had its particularities, there was also a sense in which the whole of the period of doctoral candidature as a narrative frame of existence had a bearing on all that was experienced by the candidates who participated in this study.

One of the core experiences of the participants was doubt. Doubt was a fundamental essence in the consciousness of nearly all the participants, apart from Eva, who in the formal data gathering process framed her doctoral studies as a blessing. However, by the time the formal processes of research had ended, there were expressions of doubt and uncertainty that emerged in the interstices of exchanges with Eva suggesting I did not get the fullest level of disclosure in the two interviews and the online journal.

Such experiences of doubt for early stage doctoral students may have implications for how universities understand the importance of wellbeing and connections with the academic community and with peers. Furthermore, the age of candidates is also an issue in terms of doubt, with extensive risk-taking involved in leaving an established career, in this case education, and taking the uncertain step of pursuing doctoral studies. The essence of doubt appeared to be an experiential object of considerable import that shaped the experiences and attitudes of participants but which might otherwise remain unobserved or not shared due to expectations of competence that often accompany participation in a PhD program.

9.1.2 Articulating key concerns of early doctoral students

A second implication of this study is the identification of several key concerns that are important for understanding the needs of the early doctoral participants in the study. These concerns are not especially featured in the academic literature.

There are three significant concerns emerging from the findings in Chapter Eight. First, all six participants experienced identity shifting, a phenomenon of personal and circumstantial change and repositioning of self, that they intimated to be of significance existentially, perhaps more than at any other stage in their lives. For all the participants, this was a momentous time of change and transition which came with risks and with only the distant possibility of reward. In Chapter Eight I discussed formation (see 8.7), with academic identity at its core. In the early candidature period, the participants identified issues about who they are and who they are becoming. They felt that these issues were pivotal to consciousness of themselves as doctoral students. This period of early candidature could thus be viewed as steeped in liminality, such that the early candidature period is that in-between territory of moving from one state of being to another.

Second, the emotional character of what it means to be a doctoral student needs to be better understood. The participants spoke positively about the opportunity to express their concerns about wellbeing issues and the anxiety that surrounds beginning a PhD. However, in looking across all the expositions of experience offered in this study, the affective domain of human experience is not just a part of the Lifeworlds of participants, it is the matrix in which the constituent elements are embedded. This was evident in the ontological descriptions of experience presented in the data chapters and underlines why the detail in these descriptions is so important. From the perspective of the participants in this study, thinking, intentionality and acting in the world, including the use of digital technologies, is situated inexorably in feeling.

There was an underlying layer of uncertainty, doubt and crisis that was apparent for most participants in this study, which suggests the possibility that wellbeing programs, alongside task-based instrumental teaching that usually focuses on the research and writing process, are needed for PhD students, especially in the vulnerable time of early candidature. This conclusion has implications for how the needs of early stage doctoral candidates are handled in institutional settings. In particular, the wellbeing and emotional needs of students in early candidature could be dealt with more proactively.

Finally, the notion of what a PhD provides was problematised by all six participants in this study. It was clear that doing a PhD was not necessarily conceived as vocational or career-oriented by the participants. Indeed, for the international students it was supplementary to forging their careers, and for the domestic students it was regarded as an end-in-itself or a testing ground of possibilities and potentialities. As the students in this study were studying in an education faculty, it is possible that this outlook may apply only to this discipline. In other areas of research, in the sciences for instance, the PhD has a different function in terms of an academic career. The experiential dimensions of students in other disciplines could also be investigated using a phenomenological approach to research.

9.1.3 The complexity of a PhD

Another implication for understanding doctoral education suggested by the findings of the study in Chapter Eight is to see the PhD as a discrete phenomenon. There are two perspectives in conceiving a PhD as a phenomenon. The first perspective is to see the PhD as a transcendent idea or object, carried in language and thought, whose dimensions and parameters are shared globally or internationally and then embodied in situated policies, frameworks and regulations that are nationally and culturally specific. Internationally, it is integral to entry into work as an academic, as a rite-of-passage. As a transcendent object, it has the potential to weigh in consciousness and construct the ways in which a PhD is experienced and negotiated by a student in the process of doing it.

The second perspective is that a PhD is a profoundly human experiential phenomenon embodied in the volition of a person who comes to investigate a research area or problem. Thus, it is imbued with human internality in all its convolutions, complicacy and individuality. One of the notable observations of this study is that the affective is interwoven into the process of doing a PhD.

When these two perspectives about the PhD as a phenomenon are brought together, then a PhD can be viewed as a highly complex phenomenon that embodies the complex intersection of a person with research interests and needs and a set of purpose-driven relationships and administrative processes and institutional policies. This is overlaid with international understandings of what a PhD is and does. When you add to the phenomenon the diversity of backgrounds of students who undertake a PhD, from full-time, part-time, mature-age, distance and international students, the intricacy of the phenomenon becomes apparent.

When designing seminar and support programs for PhD students, especially in the early part of candidature, this complexity might be considered. Programs about wellbeing, finding an authentic personal voice and identity, language and cultural diversity, dealing with the emotional and existential issues and the like, could be given equal weight with seminars about writing, structure, research methodology that are typical of doctoral support programs.

9.1.4 Candidate needs and supervision relationships

A third implication of the study for understanding the needs of early candidature is supervision. Supervision is one of the most significant factors, if not the most significant factor, in formation (see 2.3.2) and it was certainly given primacy by the participants. The findings are suggestive of some candidate-focused needs that ensue from the participants' experiences documented in the study.

First, there is a need for lucidity in the disposition of the functional relationships within the triad of supervision, especially in early candidature, when there are considerable ambiguities and unknowns for candidates. There is an implicit tension between supervision as surveillance, backed by institutional power, and supervision as a relational category of critical friend and mentor. The literature notes this tension and researchers differ in what they conceive to be the primary function of supervision (see 2.3.2). Michal Foucault's critical exposition of institutional, social and personal power would suggest that the force of surveillance is tangible for all those who participate in any institutional process (Olssen, 1999). This force or power is also potent regarding who exercises ultimate control over the academic orientation of a doctoral student's project. The nature of this tension and exercise of power and surveillance should be made explicit in the early part of the candidature relationships, as the rights and responsibilities implied in the triad are formed.

Second, and as an extension of the previous point, there may be a need for advocacy. Advocacy could be viewed as one important function of supervision as a source of support for the doctoral student, especially in early candidature, when students are still forming their research focus and story and attempting to establish an academic identity. This might function, for instance, in monitoring a candidate's connection with the research community or promoting learning opportunities and seminars to extend understanding and develop the set of formation proficiencies that I listed in Table 8.4.1. In addition, given the centrality of wellbeing issues in the consciousness of most of the participants in this research, wellbeing may well be an important advocacy focus of supervision.

Third, there is a need for early candidature students to be aware of what a supervision relationship is as a category of purposeful and framed interaction. There is also a need for transparent understanding about what are the possible gains and losses that are conceivable out of this set of relationships.

Taking these points further, there are additional issues of academic freedom located within the supervision triad. The academics of the supervision team have standing within their knowledge communities, so they come to the relationship with the candidate in a position of authority and power, as arbiters of academic credibility. Both Susan and Jane disclosed their reservations about where their supervisors were taking them in terms of the research focus and the methodology. They both felt that the curiosity that had compelled them to take up doctoral studies in the first place was being eroded. Conversely, other participants spoke in honorific terms about the place of their supervisors in helping them get through the early candidature humps and difficulties. While this can reasonably be viewed as an essential core mentoring relationship, it could also contain the danger of reifying the supervisors, such that essential emergent research independence could be compromised.

Supervisors need to point to appropriate and acceptable academic approaches that will serve the best interests of candidates. At the end of candidature, it is the supervisors who affirm that the research and thesis is suitable for examination, and it is a given that their academic reputation is also scrutinised in the examination process. There is a need, for this tension to be more overtly articulated and formalised in the early candidature process, so that these often-hidden apprehensions by candidates are disclosed.

Section 9.2 A critical evaluation of the research

This section offers a critique of the study, including its theoretical framework and methodological concerns. The ways the research is framed and the positioning of the participants and the researcher are considered. The limitations of what the research can offer is also explored, together with philosophical implications of using a phenomenological approach. Finally, the apparent silences of the research and what could have been engaged with as part of the analysis of participant experiences is discussed.

9.2.1 The framing of the study

This study has been positioned as a circumscribed piece of qualitative and phenomenological research focused on the case of a small group of six early candidature education doctoral students, using approaches and tools drawn from ethnography. The research is built around three textual transcripts formed during a period of one-month, which were then closely analysed with a set of conceptual tools derived from phenomenology. The six participants in this study were mostly older fulltime PhD students in an education faculty, including two international students from South America, who had scholarships to come to Australia.

Not only is this research about the experiences and embodiments of a small group of doctoral students, it is also concerned with the disposition of what is taken to be educational research. The study is an exploration into the nexus between theory (in this case a set of phenomenological perspectives) and the practical contexts of the lives of individual students and their experiences of early candidature told from a first-person perspective. It asks the question about the extent to which theory can inform and provide an interpretive frame for experience, and it explores how researchers can understand human experience and reconnoitre the interactions between self and the world.

In considering these parameters of the research, there are limitations on what I can claim about the experiences of PhD students in general. This study is narrow in scope and did not include part-time students, distance education students, younger students and those from diverse ethnic backgrounds. Clearly, my deliberations about PhD education need to be understood within this limited frame of the conduct of the study, and the same can be said about all attempts at theorisations offered in the previous chapter. However, at the same time, the study can be generative for thinking about early candidature and might lead other researchers to extrapolate to their own research settings.

9.2.2 Disclosure and text

The study's findings are primarily built on the set of textual transcripts which purported to reveal the internality of the six participants and the meanings and sense they made of their PhD studies within their Lifeworlds. Part of the authentic conduct of any research is to recognise what the research cannot do. In considering the nature of text and what can be understood from texts, I identify two issues.

The first issue emerges from a consideration of the design of this study: the nature of the revelation afforded by texts, that is, the detail about experience possible to locate in a text. Texts themselves are abstractions from experience, formed in the linguistic structures of language, that can only claim to capture some of experience: selective feelings, ideas, impressions and judgements. Given the time frame of this study, a period of one-month, not only does the text represent a delimited time-period but the most that can be claimed is that some moments and aspects of experience are caught in the interviews and in the online journal. Moreover, with recall of experiences comes a layer of interpretation and evaluation of those experiences that accompanies what was authentically experienced. Put crudely, it is unlikely, in the textual construction of experience based on memory, that the full actuality of the experience itself can be captured.

Part of the goal of phenomenological reduction in the analysis of data is to remove contingencies and get to the deepest and most authentic aspects or structures in experience. However, it is probably unrealistic to separate fully extant experiences, memories of experiences and interpretations of experiences, since all these aspects of being form the totality of what constitutes a person and how experiences have formed a person in embodiment, social interaction and thought, a point of critique that I have taken from the post-intentional phenomenology of Vagle (see 4.5). Indeed, the notion of humans as actively forming new narratives and re-forming old narratives out of experience, part of the thinking of Paul Ricoeur utilised in this study, would suggest that experience is always couched in narrative and may include fanciful inclusions. These inclusions, however, may not be an interpretive issue since they are themselves generative of meaning and revelatory about the nature of how participants view their lives in what amounts to an ongoing and fluid set of self-representations

A second issue of textual interpretation is about the nature of disclosure in research contexts. How can I be sure, as researcher, that what I am being offered in textual transcripts contains reasonable disclosure of thoughts, feelings, actions and events by participants? To be clear, I do not consider any human research free from issues about the veracity of disclosures and the legitimacy of the claims about experience made by participants. What is disclosed is what participants want to disclose and the level of disclosure is often framed within the political and institutional context in which the research occurs. However, such a recognition does not diminish the generative possibilities in the research texts; it acts, rather, to make the researcher aware of the contextual and personal constraints of doing human research.

In the case of this study, it was important to me to engage in trust with my participants, to foster a climate where disclosure is possible. Meeting with each participant before formal research meetings was part of not only the holistic way of seeing the research process but also about forming rapport and engagement with each person. The goal was to avert, as far as possible, undue distance between researcher and participants and to invite the participants to share their authentic stories. This decision reflects an important aspect of phenomenological research; it was effective, as I understood it, in creating genuine connection and trust in the research relationship and bringing me into the Lifeworlds of each participant with understanding.

9.2.3 Philosophical considerations

Phenomenology as a philosophical tradition and an analytical practice has its critics. In Chapter Three I addressed some of those critical responses by way of a general discussion about phenomenology (see 3.2). In this section I consider the version of phenomenological analysis developed as part of this study. There are two critical points to make regarding the phenomenological research practices at the core of the methodology of this study.

First, I offered a specific elaboration of phenomenological analysis, built around the notion of Lifeworld, and including internality, intentionality and externality in the context of first-hand embodied experience. This elaboration is definitionally close to that of Husserl and positions the researcher as somewhat transcendent from the phenomenon being described.

Throughout the research process and analysis, I felt this tension between trying to be more-or-less *distanced*, as Edmund Husserl suggests, and keeping the holistic connectedness, shared purposes and subjective embodiments that appear to work and have strong efficacy with the participants. This thesis and the analyses in it were forged in that tension, and reflect my grappling with my own subjectivity as a researcher. In the end, my approach was to bring my subjectivity much more to the foreground and to understand myself as a creative agent in the process of considering the experiences of

the participants. After all, this has become my research story, my PhD narrative, alongside and intersecting with the narratives of the participants.

On one level, the highly systematic four-stage process of analysis that I developed (ontological description, phenomenological reduction, hermeneutical analysis and synthesis), referencing Husserl and other theorists discussed in Chapter Three, could be viewed as reflecting a pseudo-scientific approach and discourse. As stated above, such an approach is consistent with Husserl's own view of phenomenology as a more-or-less *scientific* approach to analysing human experience and consciousness.

However, the existentialists, such as Sartre, who followed Husserl's work, and more contemporary constructivist and critical notions about human experiences and meaning-formation in the world, such as the post-intentional phenomenology of Vagle (2016), would suggest that meaning, language, and experience are highly interwoven and that experience and meaning are constructed in the nexus of social exchange that is part of a person's Lifeworld. While I have taken on much of the thinking of Husserl, at the same time, the approach to analysis devised for this study is cognizant of contemporary approaches to social theory and the construction of meaning in language.

Second, what is often emphasised in phenomenological analysis is description, an apprehending of experience and the structures of consciousness. However, it is my judgement that description is not enough in phenomenological analysis and thus the inclusion of thoroughgoing theoretical interpretive lenses on experience is crucial to develop understanding of participants, including their Lifeworlds, their negotiations and their deep learning.

9.2.4 Positioning of the researcher

A final critical consideration of this research and its methodological approach is an examination of how I, as researcher, am positioned in the research. I want to offer two points that clarify this consideration.

First, as a doctoral student examining the doctoral experiences of other doctoral students, I am positioned as peer. This disposition of the study contained the possibility

of diminishing trust, reducing a willingness to disclose and difficulty in fostering openness because of the disparity between being peer (fellow doctoral student) and educational researcher (taking on a researcher stance). In practice, however, I found that being a peer apparently reduced my presumed power as researcher and thus fostered more open and collegial exchange about doctoral experiences. Indeed, participants were fascinated about what I was doing and understood what I needed from them to conduct my research. Coincidently, several participants commented that being part of my project helped them conceive their own research.

Second, my own concerns and subjectivities have, to an extent, been reflected in this study (Hunt, 2016). I have an interest in what is experienced in being a doctoral student, and this has implications for how I too experience navigating through research, writing and thesis production. While I never included an overt self-study or auto-ethnography in this thesis, my own concerns as a doctoral student emerged implicitly and generated the incisive approaches to getting to experience that I attempted in this research.

9.2.5 Silences of the research

Like every piece of intimate qualitative research, so much of what is found is shaped by the sort of questions asked of participants (McCurdy et al., 2004). Different questions may have elicited different findings. My interest in the study was the internality of participants, including their experiences and strategies of coping with and navigating through doctoral study, an interest generated by my own experience of and involvement in the same journey. It was also about the broader Lifeworld of each participant, including their use of digital technologies as part of their life, study strategies and heuristics to achieve their goals. There is, in sum, a bracketing of the types of questions that were employed in conducting the study (see Appendices C, D, E).

What I did not fully account for were the critical distinctions between each participant, and the factor of representation that surrounds being a doctoral student. What I mean by this is the ways that doctoral students are depicted, depending on age, culture, gender, social class and other categories of social exchange and intersubjectivity, and thence how these depictions can differentiate between students. These became silences in the research because they were never explicit and were not part of the questions in interviews, nor intimated in the format of the online journal.

Four of the six participants were female, and in my descriptions and analyses of the data gender, as a critical and socio-cultural construct, did not feature prominently. However, the research literature about PhD study and academic careers positions gender as a significant issue in terms of equity and representation. Karataş-Özkan and Chell (2015), for instance, found significant gender-based inequalities in UK universities in science academia; and Pezzoni et al. (2016), in their US study, found that female graduate students had less research publication output than their male counterparts. These are just two amongst a large group of studies suggesting that gender is a substantial issue in outcomes for female graduate students, including PhD students.

In the case of the four female participants in my research, domestic responsibilities remained an important factor in how candidature was negotiated. The women were positioned as care-givers and homemakers, an issue that continues to face female doctoral students in a range of research areas (Gonzales et al., 2015; Holm, 2015). Eva relinquished her career as a teacher and moved to a regional area to support her partner's career. Sonya often felt overwhelmed by the weight of her home situation and the complex demands of her family, which had an impact on her wellbeing and the strategic interplay of the various participatory spaces in her life.

Perhaps, as part of juxtaposing the domestic fabric of their lives, female participants found research within an education faculty, with its orientation to schools and learning, more doable, given their personal circumstances. The education industry could be conceived as being more orientated to the needs of females, unlike, for example, industries such as engineering or finance. However, I also must question whether it is reasonable to consider research in the field of education a less-gendered option for prospective female academics. As Burke (2015) points out, this might be part of a misogynistic discourse steeped in a particularly masculinised view of the supposed feminisation of higher education.

Also, part of this discussion of gender must be the issue of age. Given that the four female participants were over the age of 35 and all had school age or older children, the

issue of finding an academic career that would be compatible with maintaining the integrity of family relationships was a distinct possibility. However, I did not explicitly engage with such questions of gender and age in my interviews with participants. All the female participants described their experiences of transition from one state of professional being to another state of being student and thus shifting in identity. However, the specific experiences of being a *female* in transition and the especially gendered factors that constructed that experience was not engaged with in this study. I thus made assumptions of similitude rather than differences in this study.

Section 9.3 The contributions of this study

This section focuses on the contributions of the study to knowledge and identifies a range of approaches and thinking about research that are distinctive. The discussion centres on the idiosyncratic emphasis of the study as small scale, qualitative phenomenological research. It also examines some of the key ideas, such as *negotiation*, and the use of philosophical theorists, such as Paul Ricoeur, that are employed to generate its distinctive qualities.

9.3.1 Orientation to a holistic view

This study has attempted to investigate holistically the experiences of six doctoral students to understand the negotiations and learning that were part of their ways of dealing with early candidature. By *holistic* I mean the totality of the Lifeworld and experiences of each participants as far as this is possible to access through the texts gathered as part of this research. One of the contributions of this research project is to conceive this understanding of negotiations and learning, adapting and coping, experienced by participants through the dynamics of internality (somatic, cognitive and feeling states), externality (through action in the world) and intentionality (the sense brought to objects in the world). These are core in the phenomenological understanding of a person promoted in this study. As such, learning is conceived as being in a body or in a set of embodiments, as well as in consciousness and in the states of feeling and thought that arise in consciousness.

The notion of holistic also includes the spaces in which participants live, work and do their research as part of their early candidature. The study identified that intricate and meaningful connections developed between these spaces and the experiences of participants. The spaces, the meaningful connections between spaces and the experiences with the spaces constituted a participant's Lifeworld. What surprised me in analysing the transcripts in the research was the extent to which the experiences of preferred ways of working and strategic doing were related to the disposition and efficacy of spaces.

I also conceptualised such spaces as not only being corporeal and located but also conceptual and existential; for some of the participants there was an overlapping of spaces that led to conflict between the demands of one space and another. This frequently necessitated adjustments and navigating through periods of intensity or need in terms of the meeting of requirements or personal goals of candidature.

The notion of holism also applies to the concept of life narrative and where doctoral studies were situated in the lives of the six participants. This idea that a person's life has historicity, with memories, temporality and future expectations, is a pivotal aspect of a holistic approach to conceiving each participant, and is often not emphasised in phenomenological approaches to research in education.

In terms of early candidature, this life narrative expressly includes the idea of transition from the life that was before candidature to the life that is now in candidature. The participants in this study spoke in detail about this transition period, and the importance of including this aspect of experience as part of a phenomenological holistic approach to understanding. Indeed time, especially as evident in threshold periods, appeared to have momentum in carrying a candidate forward within the regulatory framework of candidature.

In sum, this study offers much more than philosophical analysis of mind, or a phenomenology of consciousness; it offers a holistic examination of consciousness and all the embodiments that emerge from consciousness and find expression in the Lifeworld of each participant, including the affordances of digital technologies.

9.3.2 The value of deep and narrow research

A central proposition of this thesis, explicit in the theoretical position of phenomenology, is that internal human experience, or what has been termed *internality*, matters. When it comes to understanding the learning and adaptive practices involved with how early stage doctoral students negotiate their way through their research, their writing, their compliance responsibilities in the university and their relationships with supervisors and other academic staff, as well as with peers, the *deep and narrow* phenomenological approach developed in this research had efficacy. I want to illustrate this efficacy by reference to what was identified from the experiences of the participants in this study.

In explicating and analysing the experiences and disclosures of my participants, Sonya, Miguel, Susan, Jane, Eva and Richard, I have identified important issues, learning practices and core structures in consciousness. These issues, practices and structures point to the significance of their experiences of moving through the initial time of probation in their candidature towards their confirmation and beyond, as part of the gradual formation of an academic identity.

For Sonya, the core structures in her experience of candidature were, on the one hand, issues of balancing family commitments with her research and study program, and on the other, the sense of liminality in living between two geographical and cultural contexts, with the evident need for cultural adjustments. For Miguel, a core aspect of his experience was loneliness and distance from his home country, together with having to confront what he believed were his inadequate academic English literacy skills. As international students, they both had to strategically deal with the Australian cultural context as an interlude in their career and academic ambitions in the early period of their candidature.

Susan's experience of early candidature concerned transitioning and finding her way forward to a new identity as an academic, having taken the decision to leave behind her career in secondary teaching and administration. Issues of health and wellbeing, were central to Susan's experience. By contrast, Jane, as a core structure in her consciousness, experienced reticence about whether she belonged in the academy. She struggled to find theoretical models that assisted her research ideas. Both women articulated their understandings of shifting identities from their former educational roles to the uncertainty of new ways of being as beginning researchers in the university sector.

Eva and Richard were both looking to further their professional skills and competence by doing a doctoral degree. For Eva, geographical distance and the challenges of connectivity became core structures in her experience of candidature and could be viewed as mitigating factors in her connectivity across a range of necessary communicative functions. In the case of Richard, it was both his search for order in his research process and the question of the purpose of doing a doctorate as an older male that seemed to form the substrate to his experience.

For all six participants, affective and existential experiences related to their early candidature period, disclosed in the interviews and analysis of the transcripts, were pivotal to how candidature unfolded for them, indeed, as much as the academic and administrative factors external to their experience. Even for Richard, who was reticent in disclosure of emotion, the underlying existential and affective substrate to experience seemed present.

The use of a discrete phenomenological approach to examine consciousness and experience, and then to facilitate a deep and narrow analysis of the participants' negotiations and learning, as illustrated from examples above, was valuable for four reasons.

First, the approach enabled complexity of understanding of experience, in all its affective, cognitive, existential and somatic dimensions. The content of experience could be identified, described and categorised, to the extent of what could be ascertained through transcripts. The identification and analysis of content, the ontological description, led to an examination of the intentional structures of consciousness and the underlying essences in the experience of the six participants.

In turn, this phenomenological approach to description and analysis facilitated the identification of concerns and issues that were of import to each of the participants.

These concerns and issues may generate ideas for research about the needs, concerns, attitudes, disposition and demands of early stage doctoral students in other contexts with different methodologies. In getting access to the experiences that mattered for participants, I could appreciate the learning, the negotiations and the strategies they used to find their way through the contextual difficulties and existential concerns of being an early doctoral student.

Second, the holistic nature of the phenomenological research approach facilitated, at least partially, what I felt was a candid, intimate and open expressiveness from the participants about their Lifeworlds and the experiences associated with them. I am not suggesting that they disclosed all temporal experiences and thoughts, and it is likely that they withheld what was not pertinent or appropriate to disclose. Nevertheless, all six participants seemed willing to share their experiences and document their day-to-day incarnations, in most cases in profuse detail, as was my objective (see 4.2.3).

Indeed, I felt, tacitly, their authentic sense of agency afforded by the opportunity to speak and share as research participants, evidenced by three participants thanking me for the opportunity to share their stories. Of course, such openness and expressiveness is also possible with other methodological approaches that are part of qualitative research practices and ethnographies. However, the focus on the whole person and on each participant's deep authentic experiences and intentional actions in the world, created a willingness to disclose. I was interested in what mattered in experience for the participants themselves and it seemed that this translated into their high level of engagement with the research process.

The idea of my participants as co-phenomenologists, exploring their experiences with me and driving what they wanted to talk about, was made explicit in the explanatory exchanges at the beginning of the research process and in its set-up (see Appendix B). The participants took that opportunity not only to be part of a research project but also saw the study as a chance for self-exploration and expression, or a kind of ownership of the research as a personal transformative tool.

Overall, there was considerable depth of disclosure about what mattered and what was pivotal to their experiences because of the agency occasioned by the research process itself.

Third, the research explored the totality of each participant's Lifeworld over a period of 30 days in which each participant completed a comprehensive online reflexive journal (see Appendix D). The analyses of these journals revealed the interactions between internality (inner life of experience) and externality (outer acts of engaging with the world), as evident in the intentional sense that each person brought to the research. These ideas, originally adapted from Husserl (see 3.6), provided insights into the features of how the doctoral students learned from, adapted to and dealt with their life and study demands, and, most importantly, how these processes were reflected in both actions and internal states of being. In particular, the use of digital technologies as an external set of actions in response to the inner life of dealing with candidature and forming an academic identity, was especially evident in each participants' spoken and written exchanges.

Fourth, the use of ideas from Ricoeur (see 9.3.6) and from *Gestalt* theory enabled me to develop a set of cogent hermeneutical or interpretive frameworks from which to understand the meanings that emerged out of the transcripts that were part of the research. These interpretive frameworks or lenses on experience were an important step to extend on and provide an understanding of the meanings in ontological descriptions of experiential content. In this way theory was integral to informing and giving rigor to the cogitations about experience generated in the study.

9.3.3 Significance of small scale research

A further contribution of this project is in developing a piece of highly generative small scale research. Deep phenomenological research in small scale contexts has, I argue, an important place in the gamut of approaches to conducting qualitative educational research. This is especially so in the context of the learning and negotiations that appears to be such an integral part of the work and life of the doctoral students who participated in this study. The systematic process of doing the research and analysing textual transcripts discussed in Chapter Four, the deep and narrow phenomenological

analyses in the data chapters, and then the broader discussion generated from the finding discussed in Chapter Eight, appear to have been effective in identifying key issues as experienced and understood by the participants involved in the research.

There is a long tradition of small scale research in education that aims to examine a specialised case of research participants or a localised setting in significant detail. This tradition also includes self-studies or auto-ethnographic research and action research approaches that are designed for scaled-down analysis of practical learning contexts. This qualitative phenomenological study fits within that tradition.

There are two benefits of this type of small scale research. The first is its ability to generate a range of ideas and issues that emerge out of a deep examination of experience. Implicit in this study is that while the number of students is small, the contexts in which these students operate in their Lifeworlds is expansive. Indeed, the issues opened by the study are quite extensive, even for a small group of participants, including those of wellbeing, specific needs, diverse approaches to technology, different career contexts, goals and research stories and an international perspective.

This small and narrow case of early stage PhD students shared common experiences of being in an education faculty at the same university, and being part of the Australian doctoral education framework. At the same time, there is a range of perspectives evident in the experiences of these participants that might be generative of ideas possibly useful for other researchers examining early stage doctoral education.

It is as if in burrowing down into experiences there is, at the same time, a broadening out to a range of issues that can go well beyond what seems likely from the original group of participants. The scale of a research project is not necessarily indicative of what it can offer more generally. Because of its depth of treatment of participant data and the notion of seeing the participants through the holistic frame of a Lifeworld that encompasses a range of contexts and experiences, the study is generative in terms of what it open up for further research.

Let me make it clear, however, that I make no claim of generalisability. What I am saying is that holistic phenomenological research has the potential to be highly

generative and thus it could be a most useful approach to research in conjunction with studies of a larger scale. Such a linking of small scale phenomenological research with large scale research projects is not particularly evident in the academic literature.

A second benefit is the depth of examination of individual experiences of learning and negotiation. The study is about each person and the idiosyncratic experiences and disposition of that person or what could be described as an idiographic approach to analysis that is especially individualistic.

As I have argued in the early chapters of this thesis, and then demonstrated in the data analysis chapters, a benefit of the phenomenological methodology used in this study is that it has facilitated a deep and narrow examination of negotiation and learning. Such a detailed examination may be difficult to execute through other methodological approaches to learning and education that have broader frames of reference or much larger cohorts of participants.

9.3.4 Digital technologies and consciousness

There is an extensive body of literature about digital technologies and learning, including how graduate students use technology to do their research work. There is considerably less literature about the function of digital technologies in the experiences and consciousness of students. Another contribution of this study is to examine in depth how digital technologies and digital devices functioned experientially for the participants of the study.

There are two conclusions that emerge out of the analysis of the data of the study. First, and a point that has been made emphatically by Don Idhe (see 2.5), technology is not extrinsic to human experience as some sort of add-on or adjunct, but part of the core of human experience and consciousness. If we encounter the world as structures in consciousness, a view pivotal to the phenomenological approach to conceiving human experiencing, then we construct technological engagement indubitably in the structures of consciousness through the two sides of the phenomenon of technology. There is the side of the human perception and embodying of technology and there is also the side of the technology itself. In other words, there is the human coming to the technology

through intentionality and viscerally using it (especially in haptic engagement), and there is the technology coming to the human through what it allows as possibilities for action, or what could be termed the affordances of technology. Tacit experiences of technology are formed in the entanglement of these two sides.

To varying degrees, the participants in this research centralised digital technologies in their consciousness and experiences, and the importance accorded to digital technologies in the actioning of doctoral study tasks and communication needs was extensive, with most of the participants embodying what I saw as a quite totalised view of their research and their lives in terms of the affordances of digital technologies. All participants deployed digital technologies extensively and at specific times as part of their negotiations through candidature, including textual production, storage, reading and interactions with data and text within institutional educational delivery systems and other communication networks.

Second, this relationship with and conceptualising of technology was also attended by ambiguities about what technologies can accomplish to enhance negotiations of candidature, and to facilitate learning and the doing of tasks. Indeed, for all participants, there was strong affective engagement with technology and with the affordances of computer devices, engagement ranging from frustration to gratitude. The technology side of the phenomenon of using technologies seemed to come to the foreground at times in consciousness of participants. Indeed, there was a significant awareness of the limitations of what the technologies (computers, digital devices, operating systems, software, online educational delivery systems and apps) could provide or might allow.

Critically, it became apparent that there were what I call *dis-affordances* that accompanied the use of technologies of various types. The technologies seemed to constrain what participants needed to do to meet their candidature needs and obligations. One of the dis-affordances identified by participants, for instance, was loss of focus because of the distraction possible in the myriad world of online communications and social media. Another dis-affordance was the limitations of input when using tablet devices such as the iPad.

While digital technologies were centralised in the structures of consciousness of participants and seen as essential tools for navigating the demands of candidature, they were, at the same time, the source of apprehension, palpable in my exchanges with participants.

9.3.5 Developing a distinctive systematic approach

A fifth contribution of this study is the development of a distinctive systematic approach to phenomenological research. The use of phenomenological ideas for small scale human research is not exactly new and has been employed extensively and theorised in methodologies such as Phenomenography, Post-intentional phenomenological analysis and Interpretive Phenomenological Analysis (IPA). Phenomenological approaches have been employed in research in health disciplines, especially in nursing, in the social sciences, and in research in education.

I have developed an approach to phenomenological analysis that I label as a Holistic Phenomenological Approach to Understanding (HPAU). It comprises a step-by-step method to facilitate connection with participants; and then it enables description, analysis, interpretation and synthetic understanding of textual materials produced as part of a research project. Finally, it allows interpretive feedback from participants (see below). I employed most of this approach to get inside the experiences, navigations and learning of a group of participants in early doctoral candidature. This approach formed and was developed in the conduct of doing this research project, though it had antecedents in previous academic research work.

I contend that this approach offers a broader and more holistic system of phenomenological analysis than IPA, while still providing thickness of data and depth of penetration into experience. The theoretical framework of HPAU and its application to real-life settings is a contribution of this study to the methodological area of phenomenological analysis and small scale qualitative research in education.

This systematic approach is conceptualised as encompassing both experiencing and embodying in the world, moving from connection and understanding of participants to a holistic synthesis of what was encountered by the researcher. The research platform is also overtly about the person: it evokes an idiographic approach for each of the participants and examines their idiosyncratic ways of navigating and learning. Moreover, there is an emphasis on body, and on research about embodiments and experiences from body, not just on body as text or as a set of significations (as in critical and feminist readings of body), though this approach to reading a signified body in the world is not rejected, and has been employed in places in this thesis.

One aspect of the approach that was not used in this study, but is an aspiration for future research, is to employ interpretive feedback from participants: to develop critical generative exchanges with participants, post-factorial, or post-intentionally (Vagle, 2016), once the primary research texts have been collected and analysed. This would be an integral part of the research process at the level of meta-textual reflexion in which participants become active co-phenomenologists, commenting on and analysing their own texts and the texts of the primary researcher in a new creative engagement.

HPAU is constituted in the following steps:

- 1. Holistic connection and rapport with participants
- 2. Ontological analysis of experiential content and intentional sense (noting the embodiments from and exteriority of experience)
- 3. Phenomenological reduction, locating essences
- 4. Hermeneutical analysis through a set of interpretive lenses
- 5. Feedback and meta-textual reflexion from participants, post-factorial
- 6. Synthesis that considers and integrates all of steps 1-5

It is my intention to publish this methodological approach further and deploy it fully in other educational and learning contexts.

9.3.6 Contribution of Paul Ricoeur's ideas

The decision to insert a manifestly interpretative aspect to the methodological approach in this study meant the selection of a theoretical position from which to do the interpretive work. Paul Ricoeur has proven to be apt in this regard because his interpretive approach has assisted in understanding identity formation in early candidature. It is evident in the research literature that the use of Ricoeur's thinking for interpretive analysis of research texts is not widespread, though there are innovative uses of his ideas in disciplines such as nursing (Wiklund, et al., 2002). Yet, he has much to offer educational research about learning and academic formation because of his philosophical analysis of self, identity, human fragility and memory, all of which proved to be pivotal concepts in understanding academic formation for the early candidature participants.

Ricoeur's thinking that humans create selves through language and thought and construct this selfhood in consciousness is important in contemporary critical, poststructuralist and postmodern theory. Indeed, as stated in Chapter Three, Ricoeur's ideas could be considered an important philosophical link between phenomenology and poststructuralism in understanding how human experience is manifested in language constructs, especially narrative, and in seeing humans in terms of their memories and historicity, which is this place from time and in time that each person constructs in self-narratives.

The ideas of historicity, narrative and memory have fostered insights into the experiences of early candidature PhD students, and are thus an important contribution of this study.

9.3.7 The metaphor of negotiation

A final contribution is the idea of *negotiation* as a conceptual framework for understanding the way the participants operated in thoughts and actions. I conceive this idea in terms of the strategic movements through early candidature, movements that have corporeal, cognitive and relational dimensions. The concept of negotiation is also linked with tactics that are used to deal with a range of life and study issues, which include coping with the concerns and changes that ensue from taking on candidature and dealing with its effects. I differentiated the concept of negotiation from learning, though they are intrinsically related. Negotiation is about a movement through, whereas learning is concerned with the substance of adaptation and acquisition.

The notion of learning adopted in this study is especially conceived in terms of *Gestalt* theory. Ideas of assimilation, adaptation and coherence are core to the theory and were useful for understanding the learning of the early candidature doctoral students. For instance, one aspect of being a full time doctoral student identified by the participants was how to balance different spheres and spaces of the Lifeworld through adaptive behaviours.

Section 9.4 Recommendations for further research

In this section I extend five recommendations for further research generated from the findings of this research but which are also suggested by the limitations of the study. First, given the limited literature that considers the early candidature period of PhD students, dedicated research on this fleeting but important period in the life of a doctoral student is needed. The possible correlation between the issues identified in this interval a doctoral student's candidature and dropout rates in doctoral education has not been established; as such, both qualitative and quantitative research is needed, large-scale and small-scale, to investigate whether there is such a link.

Second, the participants in this research were predominantly older doctoral students, and their reasons for doing a PhD and their ongoing specialised needs have not been given much research attention. Indeed, in this thesis I did not examine age as a significant issue, for it was peripheral to my concerns. However, the reasons for coming back to doctoral study, the consequences for the lives of such candidates and the ways of dealing with doctoral study as an older student could be addressed in future research.

Third, and an extension of the previous point, more research that investigates the diversity of doctoral candidates, especially those coming into early candidature, would be salutary. In exploring the Lifeworlds of six such diverse candidates and in taking what amounts to quite an individualistic approach to research with my participants, I became aware of just how differentiated the candidates were, even with commonalities of experience and perspective. There are a growing number of studies of female doctoral candidates and those with a range of ethnic backgrounds; however, given the importance of doctoral education and its impact on research outputs in universities, a better understanding of the profiles of doctoral candidates is needed.

A subset of this diversity, is the experiences, needs and disposition of international doctoral students. While there is a reasonable number of studies that have examined the experiences, attitudes and needs of international doctoral students, smaller scale, more focused research that can illuminate deep experiences and offer thick descriptions and interpretations of what is of consequence to such students, is less frequently seen in the research literature.

Fourth, there is only a small body of published research about the strategies of coping and dealing with wellbeing issues for early stage doctoral students. In the limited scope of this study, wellbeing was a central issue for such students, but the nature of the wellbeing issues experienced by this cohort of students does not appear to be well represented in the academic literature, particularly in regard to the early part of candidature. The underlying substrate of affectivity that appears to constitute the experiences of participants suggests that states of feeling were primary for participants in this research. The impact of such states on the ability of doctoral students to progress in their studies is an area that needs more research attention, not only in doctoral education but more broadly in analyses of learning and training.

Finally, and importantly in terms of what has been offered in this study, it would generative to see the model of phenomenological research developed in this thesis (HPAU) used in other educational research contexts because it offers a potentially cogent methodology for getting to learning and experiences of learning as understood by the learners themselves.

Section 9.5 Personal reflection about the research project

When this project began, I was interested in how doctoral students experienced and deployed digital technologies in their early candidature work (especially iPads), and that was the primary focus in the early period of my candidature. However, in meeting and then doing research work with participants, it became apparent that while digital technologies were important in what they experienced and were part of the substantive structures of consciousness involved in being a doctoral student, a wider range of issues, concerns and needs appeared to be equally important for participants, giving rise

in my thinking to the necessity for a more holistic approach to phenomenological research.

Since that early conceptualisation of the project, I came to realise that the phenomenological project that I have undertaken was driven by the offerings of the participants themselves, in a substantially bottom-up and inductive approach to educational research. My writing in the project became retroductive in character because theory, research literature and the analysis of experiential data were in generative interplay. Thus, my interests were modified and shifted by the participants themselves and my theorisations about doctoral research were formed in light of what participants disclosed to me, as well as by my reading of the research literature. What I also came to understood is that in doing this small-scale qualitative study, the whole of each participant's life and doctoral journey is important to investigate so that it can be adequately appreciated and understood. In turn, this has led to reflection on the totality of my own experiences as a doctoral student.

This research project suggests two broad contributions to knowledge which point forward to research possibilities. The first is the development of a distinct phenomenological methodology that evolved out of this study, one that I am calling a Holistic Phenomenological Approach to Understanding. This qualitative methodological approach is designed to study small scale education, social and learning contexts which require a narrow and deep perspective about the human beings who experience in those contexts. It might offer other education and social researchers a cogent tool for examining the inner and the outer of experience and for investigating the structures of consciousness that relate to learning, wellbeing or strategies of coping, for instance.

The second contribution is to bring academic research focus to the territory of seeing early candidature as a distinct and important phase in doctoral candidature, with its own particularities and needs base. This distinctiveness was clear from listening to the voices of the participants in this study as they discussed their experiences and in identifying the issues of transition and adaptation they encountered in the initial stages of being apprentice academic researchers. There remains considerable scope for new research about early stage doctoral students, including the unique concerns, needs and issues that they confront. It is hoped that the findings, theorisations and implications of this study are generative of such further research.

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Appendices

Appendix A—Advertising for participants

Advertising copy used for a faculty of education news stream, notice boards and HDR Facebook page

Edwin Creely, a PhD research student in the Faculty of Education, at Monash University, is looking for early stage doctoral students to participate in an innovative research project. The research examines how doctoral students negotiate their studies and balance the demands of study and living, including their use of digital technologies. Through two interviews and online journal entries, Edwin is hoping to find out what beginning PhD students experience and do in a period of one-month of their candidature, up to and including confirmation.

If you are interested, Edwin may be contacted o

Appendix B—Explanatory statement for participants

What is the title of the study?

A phenomenological study of doctoral students negotiating early candidature

Who is the researcher?

Edwin Creely is a PhD student in the Faculty of Education at Monash University. He has extensive experience as a researcher and as an educator at secondary level. He has a significant interest in technology in education, and especially in the new mobile technologies. Having completed a number of postgraduate qualifications he is also concerned with the experience of being a doctoral student and the challenges that students face in negotiating their studies in the context of the changing face of educational delivery.

How do I contact the student researcher?

Edwin Creely may be contacted at the following address.

Edwin Creely PhD Candidate Faculty of Education Monash University Clayton, Victoria

Who else is involved in the research?

The research also involves Professor Ilana Snyder and Dr. Jennifer Bleazby, both of the Faculty of Education at Monash University. They are the chief investigators in this research project.

What is the research about?

The purpose of this qualitative research project is to investigate the strategies, adjustments and accommodations that PhD students make in negotiating their research and balancing this research with the demands of life. The research also examines how early candidature students use digital technologies as part of negotiating what they do. The study will explore the experiences of PhD student through analysis of their reported lived experiences. The research will be for a period of one-month.

Who will be participating?

The qualitative study is designed for 6-8 education doctoral students in the early stage of candidature, up to and including confirmation.

Where participants do not speak English, qualified translation services and information cards in the participants first language will be provided.

How will participants be contacted?

You have learnt about this project and contact details of the research through advertising and promotion within your faculty of education and on the HDR Facebook page. If you wish to participate you can directly contact Edwin Creely, the researcher, who will then arrange a meeting time.

How is consent to participate in the research given?

All participants are required to read and sign a consent form and return it to the student researcher at the point of meeting with the researcher and agreeing to be part of the project.

What will be expected of participants?

Student participants will complete two research tasks:

Reflexive online journal

An online journal presented as a Qualtrix form can be completed by clicking on a URL send to participants each day of the one-month period of the research. Each URL is distinct for each participant.

The journal will include space to record

- day-to-day activities that are part of the negotiation of learning and study programs;
- experiences with study programs and candidature requirements;
- use of digital devices and digital technologies as part of study and communication;
- issues and concerns about candidature, including study and personal life;
- use of apps for a range of life, study and work functions, including communicating and working with others.

Interviews

Two 30-60 minute interviews will be conducted with participants, one before the reflexive journal and one after. The interviews will explore a range of issues to do with participants' background, their concerns and their experiences of candidature.

What levels of risk or inconvenience are involved in this research?

Participating in this research involves a moderate level of inconvenience, since there is regular (10 minute) reflective writing expected over a period of one-month as well as two interviews of 30-60 minutes.

What will happen with research data and how will it be reported to participants?

The text from the online journals and transcripts from interviews will be analysed using a set of phenomenological tools. Conclusions can then be made about the concerns and experiences of participants.

The data may be used as part of scholarly presentations, such as those given at conferences, and published work, such as refereed journals or book chapters. All data and research materials involving participants will be deemed highly confidential and will be secured appropriately. It will be held securely for a period of five years and then destroyed.

General conclusions from the research are available to all participants. Upon request to the researcher, individual feedback to a participant will be given.

What are some benefits of the research?

The research has the potential to contribute significantly to understanding how doctoral students function in the early candidature period and which strategies and means they use to cope with doctoral study.

For participants, being part of this study could enhance their understanding of how qualitative research works and might also provide an approach for reflecting on their progress in their doctoral studies.

Please note that there can be no financial remuneration in Monash University research projects.

What are your rights as a participant?

The research is voluntary and participants may withdraw from it at any time without consequence. Participants may refuse to answer questions that they deem to be too personal, intrusive or require the giving of confidential information.

Participants have right of access to audio-visual materials or texts produced in the research process directly involving them. Access will be given by contacting the student researcher.

No material from the research will be published or presented using the name of an individual participant, or using data likely to identify participants, without their written permission. No material of a highly personal or confidential nature will be published or presented without written permission from participants involved.

In sum, your privacy is critically important and the following steps will be adopted to protect it:

- Secure storage of all research data
- Access to data limited to the researchers as listed above
- Publishing or presentation of identifying data only with the written permission of participants involved

• Right of access to data involving individual participants

If you have a complaint concerning the manner in which this research (insert project number) is conducted, please contact:

Executive Officer, Human Research Ethics Monash University Human Research Ethics Committee (MUHREC) Building 3E, Room 111 Research Office Monash University VIC 3800 Tel: +61 3 9905 2052 Fax: +61 3 9905 3831 Email: <u>muhrec@monash.edu</u>

Appendix C—Pre-journal semi-structured interview questions

The following questions were used as a core or a substantive set of questions around which to conduct the semi-structured interview of 30-60 minutes at the beginning period of the study, before the online journal described in Appendix D. They were not used in a linear way but selected as appropriate to the circumstances of the interview. The use of questions varied from interview to interview. The first three questions, however, constituted a standard beginning in all six interviews. The responses to these questions shaped the type of questions selected after the first three.

Additional appropriate questions (not listed below) were added *in situ*, and participants were encouraged to explore areas of interest in the interview that may be prompted by the use of these questions or by their own temporal thinking.

A. Narratives and experiences of the PhD

- 1. Tell me about yourself: your educational and work background, the nature and focus of your doctoral research and what you are currently doing.
- 2. How did you come to doing a PhD? What are the circumstances that brought you here?
- 3. How would you describe your experiences of candidature so far?
- 4. What difficulties or issues have you faced in doing your doctoral work?
- 5. Where are you placed in relation to your confirmation milestone and your overall candidature?
- 6. Tell me about your experiences of being in your academic community or with your peers.
- 7. What are your experiences of working with your supervisors?
- 8. Where do you want to go with your doctoral work? What are your goals?
- B. Negotiations and learning
- 9. How do you think you learn best? What strategies do you use?
- 10. What do you think are your needs as an early stage doctoral student? How have you managed these needs?
- 11. How do you manage your work spaces to do your doctoral work?
- 12. How do you deal with or balance your work and personal life? Are there any issues or difficulties?
- C. Use of digital technologies
- 13. How do you use digital technologies and digital devices as part of your research and writing work?

- 14. How effective have digital technologies been in your research work and writing?
- 15. Apart from university, what else do you use digital technologies for?
- 16. How do you manage storage of data related to your studies?
- 17. What apps or software do you favour and how do you use them as part of your work?
- 18. How do you use these apps in practice?
- D. Additional
- 19. Can you recall an incident where you have had difficulty in your study, and how did you resolve it?
- 20. Are there other concerns, issues or reflections that you would like to add?

Appendix D—Online Qualtrics form

The writing of the reflexive online journal was conducted with the six participants over a period of 30 days. Each day a link with a URL was sent to every participant. This link connected to a Qualtrics online form (at https://www.qualtrics.com/). The form was one page (see the sample of the form below), but allowed unlimited amount of text to be entered in the boxes for the questions on the form. It was recommended that participants write about 100 words overall per day, though they were encouraged to write more if they so wished.

	ctParticipantJournal
	full name. This name will remain confidential and will not be used in any published form or the other than the researchers
Please write in the	e date of this journal entry
	oday? For what purposes? You can Include the use of technology, social media, research inter-personal exchanges.
What appa/aaftura	ra did yay yaa aa aad af yay ahydy (raaaarah yyad). Ta yybat aytaad yyara thaaa ama (aaftiya
useful?	re did you use as part of your study/research work? To what extend were these apps/softwa
	/
What are your goa	als for today? To what extent have you achieved them?
What are your goa	als for today? To what extent have you achieved them?
What are your goa	als for today? To what extent have you achieved them?
	als for today? To what extent have you achieved them?
In what places/loc	ations did you do your research/writing/reading today? Why did you choose these places?
In what places/loc	ations did you do your research/writing/reading today? Why did you choose these places?
In what places/loc	ations did you do your research/writing/reading today? Why did you choose these places?
In what places/loc	ations did you do your research/writing/reading today? Why did you choose these places?
In what places/loc What issues, diffic technology as part	ations did you do your research/writing/reading today? Why did you choose these places? culties or problems have you faced today in doing your research? You can include issues with t of your feedback.
In what places/loc What issues, diffic technology as part	ations did you do your research/writing/reading today? Why did you choose these places?
In what places/loc What issues, diffic technology as part	ations did you do your research/writing/reading today? Why did you choose these places? culties or problems have you faced today in doing your research? You can include issues with t of your feedback.
In what places/loc What issues, diffic technology as part	ations did you do your research/writing/reading today? Why did you choose these places? culties or problems have you faced today in doing your research? You can include issues with t of your feedback.

Appendix E—Post-journal semi-structured interview questions

The following questions were used as a core or a substantive set of questions around which to conduct the semi-structured interview of 30-60 minutes at the end the data-gathering period of the research, after the online journal described in Appendix D. As for the pre-journal set of questions, they were not used in a linear way but selected as appropriate to the circumstances of the interview and the interest and initiative of participants. The use of questions varied from interview to interview. The first three questions, however, constituted a standard beginning in all six interviews. The responses to these questions shaped the type of questions selected after the first three.

Additional appropriate questions (not listed below) were added *in situ*, often in response to the answers given by participants, and participants were encouraged to explore areas of interest in the interview that may be prompted by the use of these questions or by their own temporal thinking.

A. Narratives and experiences of the PhD

- 1. What have you achieved in the one-month period of the research?
- 2. How did you find doing the online journal?
- 3. How would you describe your experiences of candidature during this onemonth period?
- 4. Where are you now placed in relation to your confirmation milestone and your overall candidature?
- 5. How far did you get in working towards your goals?
- 6. Where do you sit in terms of your overall plan for your PhD? The unfolding story of your PhD?
- 7. What would be a highlight in terms of your study in the one-month period?
- 8. What were your experiences of working with your supervisors?
- 9. What has been your connections with the academic community or your peers?
- 10. How do you feel about being part of the community here? Where do you see yourself in terms of that now?
- 11. What has life been like for you in the month of the research?

B. Negotiations and learning

- 12. What do you believe you have learnt in the one month of the research period?
- 13. What do you think were your needs as an early stage doctoral student in the one-month period? How have you managed these needs?
- 14. In the month of the research, how would you describe a typical day?
- 15. How did you deal with or balance your work and personal life? Are there any issues or difficulties?

- 16. What difficulties or issues have you faced in doing your doctoral work?
- 17. Describe ways that you used to overcome the difficulties or issues that you faced?
- C. Use of digital technologies
- 18. What part did digital technologies play in your research and study during the one-month of the research?
- 19. How effective were digital technologies in doing you research work and writing?
- 20. Apart from university, what else do you use digital technologies for in the one-month period?
- E. Additional
- 21. Can you recall an incident where you have had difficulty in your study, and how did you resolve it?
- 22. Are there other concerns, issues or reflections that you would like to add?

Appendix F—Sample content analysis with coding/mark-up

A mark-up of an excerpt from a post-journal semi-structured interview transcript

The marking up of the excerpt below is designed to illustrate the process that was used to code and mark-up all the transcripts associated with this study. The experiential content of the interviews and the online reflexive journal was identified and labelled according to each category. In the sample below shades of grey and underlining are used to identify different experiential categories.

Brief descriptive and/or analytical notes from the researcher were attached at the point of identification of experiential content. These notes were used later as generative material for the construction of the ontological descriptions and the hermeneutical analyses.

The ontological categories used for coding/marking-up

- 1. To *act*. This sub-category includes bodily actions connected to intentionality and volition. It involves a movement from internality to an externality that can be observed.
- 2. To *be*. This sub-category is about participants' awareness of self and body as a visceral state of temporal being in space, and its links to identity and who a user believes he or she is as a person.
- 3. To sense. This sub-category concerns states of perception and sensory input.
- 4. To *feel*. This sub-category includes somatic or corporal states, felt states and emotional categories (or the affective).
- 5. To *think*. This sub-category is about the *cogito*: about contemplation, strategic problem solving, thoughts and cognitive processes in consciousness.
- 6. To *connect*. This sub-category concerns inter-subjectivity and inter-corporeality or being with others through digital or disembodied (as well as corporeal) connections.
- 7. To *learn*. This sub-category is about awareness of the changes, adjustments, acquisitions and skills that are considered by a participant as educative.
- 8. To *create*. This sub-category is about the making of discrete digital texts, media content or objects that have existence apart from a participant.
- 9. To *imagine*. This subcategory refers to imagery and metaphor (Lakoff & Johnson (1980) and the function of language constructs in consciousness.

The coded excerpt

Edwin: How do you feel within yourself about the coming and being part of this community here? Where do you see yourself in terms of that now?

Category 4

Contrasting affective states between the beginning of the PhD and now. Shifts in liminal experiences.

Repeated use of the word "feel", perhaps suggesting its import in consciousness. **Participant**: It was a tension at the beginning. I came here and it took me a while to get used to it. Now I feel much more comfortable. I have made some friends so people can talk that I can talk to about my research. Collaborating with PhD students on a book chapter. It's very nice to discuss different perceptions of reality from different countries. It is a very exciting thing. I feel more comfortable than when I started. I feel that I had many things to learn to read to write. I can see that there are <u>lot of things for me to understand</u>. I feel fulfilled with what I've done so far. Some days I may feel more pessimistic. In the last few weeks I've been more optimistic. It is good to think about that and that was okay. It's also good to get that support.

Category 6

Establishment of patterns of collegiality and friendship.

Strongly associated with the affective.

Reflexive links to research.

Category 7

Awareness of the strategic need to learn as a beginning PhD student.

Edwin: How would you describe a typical day in the last four weeks?

Category 1

Strong intentional action constructed around the immediacy of doing and prioritising of certain activities.

Repetition of the word "check", which may suggest a forming of identity in doing.

Significant links between digital technologies and tasks. **Participant**: I usually come here at 9 AM then I usually start with coffee. The first thing is to check my mail and check my Facebook. Check Twitter. I check everything when I arrive. Check everything. If there are important emails I have to reply to them. They are a priority. Once I have done that then I start working. The last few weeks I have been working on reading and writing. I start reading what I have to read. Or I start writing or I start rereading what I did last day. Then I will go for lunch. In the afternoons, most of the time it is difficult for me to concentrate. It's not every day that I try to read in the afternoon. I try to do different things if I can't concentrate very well. Sometimes I just go online and read different things, such as PhD sites, [and] Blog sites related to my research. Or look for something new. After some time, I [go] back to writing and then go home.

Category 7

Awareness of the disposition of learning in terms of the cycles of the day.

Description of the day framed in metaawareness of self as learner.

The day segmented into discrete temporal frames of activity and productivity.

Appendix F—Participant consent form

Project Title: A phenomenological study of six doctoral students negotiating early candidature

Institution: Monash University (Faculty of Education)

Researchers: Edwin Creely (student), Associate Professor Michael Henderson (Principal supervisor), Professor Ilana Snyder (Associate supervisor)

Statement: I give my consent to participate in this research project under the conditions as set out in the Explanatory Statement, which I have read and understood. I understand that participation in this project is voluntary and that I may withdraw at any time. I recognise that my involvement is for the purposes of research and that the data produced may be used as part of scholarly presentations and publications. I participate on the understanding that my name or any confidential or highly personal material will not be used in any presentation or publication without my written permission. Finally, I participate on the understanding that I will be able to view data produced as a result of my involvement.

I agree to complete

- Two interviews of approximately 30-60 minutes each
- An online journal with entries of at least 100 words once a day for a period of four weeks, with an expectation of 10 minutes of writing time **per** day

Date: / /

Name:

Signature: _____